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**DISIDENTIFICATION WITH DIABETES: DIABETIC PUBLICS IN THE  
U.S./MEXICO BORDERLANDS**

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of the requirements for the degree of

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in

ANTHROPOLOGY

by

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## **LIST OF ABBREVIATIONS AND KEY TERMINOLOGY**

AMRAP (as many rounds as possible)

BMI (Body Mass Index)

Box (a CrossFit gym)

BRFSS (Behavioral Risk Factor Surveillance System)

CDC (Centers for Disease Control & Prevention)

CDE (Certified Diabetes Educator)

EPA (Environmental Protection Agency)

HEB (Here Everything's Better. A Texas-based grocery-store chain)

HIPAA (Health Insurance Portability and Accountability Act)

HUD (Housing and Urban Development)

HBM (Health Beliefs Model)

IRB (Institutional Review Board)

NHANES (National Health and Nutrition Education Survey)

OGTT (Oral Glucose Tolerance Test)

PA (Physician's Assistant)

MA (Medical Assistant)

RGV (Rio Grande Valle)

Rx'd (As prescribed, abbreviation used in CrossFit)

USDA (United States Department of Agriculture)

WOD (Workout of the Day)

## ABSTRACT

### DISIDENTIFICATION WITH DIABETES: DIABETIC PUBLICS IN THE U.S./MEXICO BORDERLANDS

BY CELINA CALLAHAN-KAPOOR

Stories about the rates of diabetes in the Rio Grande Valley of south Texas abound. Type-2 diabetes is alternately described as a problem of Mexican culture, poverty, genetics, individual choice, or potential national ruination. In newspapers, on radio programs, and in everyday talk about proper self-care, multiple communicative communities—e.g., journalists, public health workers, diabetics, and non-diabetics—relate to diabetes differently. The category “Mexican-American in south Texas with diabetes” circulates persuasively among these multiple communities, at times binding them together through common response to it and at times producing spaces of separation. Sometimes the category is named and sometimes it is not; sometimes it is affirmed and sometimes it is denied. The practices through which the category is produced, circulated, and responded to lie at the heart of this dissertation.

Based on twenty-two months of multi-sited fieldwork, this dissertation presents an ethnography of how people both identify and *dis*-identify with diabetes, forming diabetic *publics* of “us” and “them.” The processes of identification and dis-identification are examined in narratives of the disease’s etiology; clinical treatment; its circulation in popular media and academic scholarship; the numbers that anchor its prevalence rates; its role in popular forms of exercise; and its presence in the lives of people in the region who do not have diabetes.

This dissertation’s central thesis is that people in the Rio Grande Valley form body-based *publics* in moments of identification and dis-identification with the category “Mexican-American in south Texas with diabetes” as it circulates in popular media and academic

scholarship. Whether in the United States/Mexico borderlands or in any number of regions with “endemic” diabetes, this dissertation demonstrates that diabetes is not just a biological disease process. Rather, diabetes transforms in multiple ways as it is produced and circulated in popular media, and as people respond to it in its multiply mediated forms. Through attention to the pragmatics of everyday talk and care practices, and the production, circulation, and reception of popular media and scholarship, this dissertation describes how people in the Rio Grande Valley enact membership in two seemingly incommensurable publics—“us” and “them.”

## DEDICATION

For *Bari Mama*, who was the only child of eleven to survive her Indian childhood, and who later shepherded her family through the 1947 Partition that created India and Pakistan. Through her stories of witchcraft, nation-making, and family drama, she taught me—before I realized what she was doing—that the world we think is an objective truth is one we make for ourselves and that we draw for ourselves the line between magic and realism.

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Being able to write acknowledgements to a dissertation is a privilege. It is the sweet spot in a grueling process, and I am beyond thrilled to finally be here. My first thanks go to Kimberly Koester, the liaison for an HIV Prevention Project I worked for in Chicago beginning in 2004. It was Kim who noticed the glimmer of an ethnographer in me and who mentored me intensively on field note writing, grounded theory, and interview guides.

While working at Mount Sinai in Chicago's North Lawndale neighborhood, I began to develop as an ethnographer, a medical anthropologist, and as a science and technology studies scholar, although I would not have put those labels on my work at the time. As Kim mentored me in interviewing and field note writing, the director of the Sinai Urban Health Institute, Steven Whitman, an epidemiologist who was suspicious of ethnography as "data," believed in me enough to find money to send me to trainings and to include qualitative data collection in the project. My four years on that project were spent doing many of the tasks that ethnographers engage in. I spent most days of one summer poring through patient files, wondering at simultaneous privacy and publicity of HIPAA-regulated files. I liaised with the hospital-based IRB, recruited study participants, administered computer-based surveys, and conducted in-depth interviews. When my days in that sparse, over-heated office ended, I was often so overwhelmed from my experience that all I could do was write field notes. So, in the midst of ethnography-sceptic epidemiologists and statisticians, I developed my understanding that there was something else I needed to attend to—something not

contained by epidemiology's boundaries—in order to grasp everyday life with chronic conditions and also belonging to a community. And thus it is no surprise that my academic work has developed as it has, into work that aims to critique and understand the grip that epidemiology and its numbers have on the truth of health.

My career as a graduate student has been a long one, beginning with courses at the University of North Texas, to a Master's program at Wayne State University, to my years of PhD coursework and fieldwork preparation at UC Santa Cruz. From my days as Masters student at Wayne State, my advisor and co-chair of my dissertation committee, Matthew Wolf-Meyer has consistently challenged me, offered creative approaches to academic quandaries, and reminded me of the pragmatic concerns of an academic life. Matthew's attention to the questions raised by feminist medical anthropologists, scholars of science and technology studies, and anthropologists of the United States indelibly mark my approach to ethnographic engagement and academic scholarship.

Danilyn Rutherford's exigent, generous, and careful reading marks every page. Although not a medical anthropologist by training, Danilyn joined my committee with her characteristic enthusiasm and rigor. Her precise approach to ethnographic analysis and her confidence that any analysis can always be made sharper has pushed me over the years. I thank Charles Briggs for consistently presenting me with difficult questions and counter-examples, for his steadfast support of my project, and for always asking about my family. Finally, I thank Nancy Chen.

Nancy came on board late in the game and spent hours with me on Skype and at conferences helping me think through my dissertation and the process of writing it.

I would never have made it through my first year at UC Santa Cruz without my cohort mates Drew Annis, Chris Cochran, Micha Rahder, and Craig Scheutze. I can imagine no other situation in which we all would have been in the same room for so many hours, and our great differences in life experience, theoretical sophistication, and ethnographic proclivities made us a wonderful group. I especially thank Micha Rahder for her persistent belief in my writing and my project, her willingness to think through thorny theoretical conundrums, and ultimately, for her friendship. The unlikeliness of our grouping helped me grow as a scholar and a writer. It was during that year, as we workshopped our writing with Jude Todd, that I began what would turn out to be an eight-year working relationship with Jude, who gently helped nudge my thoughts from muddled mess to coherence. From coursework, to grant applications, to dissertation, to job applications, Jude has been a consistent source of support and great humor.

It was also in those first two years at Santa Cruz that I began long-standing intellectual relationships with students in other cohorts. In particular, my greatest appreciation goes to Heath Cabot for her consistent encouragement, academic rigor, and willingness to laugh at the absurd. Noah Tamarkin and I, along with the aid of Mayanthi Fernando, developed Ethnographic Engagements, a workshop series designed as a space for graduate students to share work in progress and learn the fine arts of acting as a discussant and critiquing one another's work. My conversations

with Noah and Mayanthi helped me develop into the scholar I am today, teaching me to take a stand on what I value as important academic conversations and then work to make those conversations happen. I cannot imagine having traversed the bumpy terrain of graduate school, and graduate school with young children, without the institutional knowledge and support of Taylor Ainslie, Fred Deakin, and Alyson Ramage.

Thanks to UCSC Science and Justice Training Program Co-Director, Karen Barad for telling me, much to my surprise, that my project seemed to be about identity. Karen's comment pushed me to think about how to theorize identity through its practices and processes, not as an unchanging whole, a process that led me to Michael Warner's theorization of publics.

My debt to Carla Takaki-Richardson merits a chapter in and of itself. In my first year as a Teaching Assistant (TA), Carla was assigned to be my TA mentor. From that time, Carla and I have read hundreds of pages of one another's work. Her encouragement and detailed developmental editing was seemingly unending. Carla and I also became academic mothers at the same time, and together we devised strategies for living, learning, writing, and mothering. For her almost-daily text messages while I was in the field, I cannot thank her enough. Naomi Glenn-Levin Rodriguez has championed and supported my work from its inception, reading multiple chapter drafts. Her careful reading marks many of these pages. For their unending support, encouragement, and invigorating challenges, I thank Katherine Martineau, Nishita Trisal, and Anna Zogas.



My thinking and writing are influenced by so many Santa Cruzians, and I hope I have listed you all here: Sarah Bakker, for her intellectual rigor and her always insightful, precise, and brave insights not only on esoteric theoretical concerns but even more so on capitalism and parenting (2016). Thanks also to Colin and Corinne Hoag, Breje Van Ekelen, and to Aimée Villarreal whose comments about the region introduced me to the Rio Grande Valley.

For her Zumba enthusiasm and for inviting into the world of feminist STS and medical anthropology in the Pioneer Valley, I thank Jennifer Hamilton. For accompanying me in the process of dissertation writing, and helping me in more ways that they can truly know, I thank Stephie McCallum, Amy Moran-Thomas, Rapha Rabanes, and Stephen Kinglsey Scott.

My final acknowledgments go to people I met while conducting fieldwork and then to my family. My eternal gratitude goes to the 75 people I interviewed. To a person, they were shockingly forthcoming; and, to a person, they challenged the power dynamics of a formal interview, a microcosm of the racialized and citizenship-based dynamics within which we lived our everyday lives. The staff at the *Mariana Clinic* welcomed me from my first summer of research. My thanks go to all of the patients and staff, especially the director who, for reasons that are still unclear to me allowed me access to the entire world of the clinic. She invited me into her home, joined me on 5k runs, and drew me into the world of extreme athletics in the Rio Grande Valley. Without a knowledge of that world, this dissertation would offer an entirely different—and less nuanced—examination of diabetes in the Rio Grande.

I am forever thankful to Frank L. Speaking. He and his family helped me and my family find housing, introduced me to the Community Gardeners and invited me in to the world in which he circulates. Just as Frank did, many of the people I met as a part of Zumba classes and CrossFit not only expanded the range of my fieldwork but also helped me feel at home. In particular, I use this space to recall one such friend who died and another one became pregnant while I was in the Rio Grande Valley. Edgar (who appears in the pages of the dissertation) was diagnosed with non-Hodgkins lymphoma and died from the disease not long after I left the field. However, before he became ill, he turned his Shakespearean-like skill with language to explain the complexities of the Rio Grande Valley to me. Araceli, a woman I met as I participated in a Zumba class taught me a great deal about the complexities of life for a multi-status family. To do so, she introduced me to her extended family who spoke with candor about how they managed life, work, purchasing goods, and maintaining their health while dealing with the fact that only two of nine family members had legal permission to be in the United States.

The second summer of fieldwork, I lived with an older Anglo woman, Mary Cloud, who was extremely helpful to me in several ways, and whose untimely death marked the end of my time in the Rio Grande Valley. Mary introduced me to a gaggle of long-term Winter Texan ladies who, in turn drew me into the lives of older Anglos in the region, and descendants of German immigrants. The summer I lived with Mary I was pregnant with my first child. Mary and her mother, “Mama,” along with her friends Fina, Grace, Inés, and Gabriele, and Marianela gave me the nicest

room in Mary's bustling house and fed me well, hosting me as a special guest at all their Sunday post-church brunches. It was on my last day of fieldwork, when Mary and I were to finally conduct a formal interview after our years of informal conversations that she was hit by a car and killed while riding her bicycle.

Finally, I turn to my family. Through these years my extended kin network remained kindly impatient as I always had coursework to complete, grants to write, and ethnographies to read. As I moved from the south side of Chicago, to Detroit, to Ann Arbor, to Santa Cruz, to Oakland, to McAllen, TX, and finally to western Massachusetts, they kept my addresses and phone numbers in pencil. And even when I was sure it could not be done, they insisted that I could, indeed, write a dissertation. For her love of the craft of writing and her intuitive understanding of me, I thank my aunt, Liz Kirkpatrick. For her dogged determination to read my academic writing and engage with my theoretical interests, I thank Beatrix Hopkins, a woman who, had it not been for life circumstances might have a PhD of her own. Michele "Meechie" Callahan has taught me a great deal about how to support family and I thank her for her unwavering friendship. For reminding me that a dissertation is not an end, but a beginning, I thank my father, Ashok Kapoor. For her support, laughter, and commiseration, I thank my sister, Sonya K. Turner. My children, Flannery Hope and Mosley Daniel, have lived with my dissertation for their entire lives. Their babysitters, Hannah Davidson and Karissa Rajagopal will likely not understand unless they have children how much more doable my academic work has been when I can relax and know that my children are well cared for. Hannah, a one-time graphic

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**INTRODUCTION:  
PRODUCING, CIRCULATING, AND RESPONDING TO AN UNMOORED  
TRUTH**

*Dis-identifying with Diabetes*

Stories about the rates of diabetes in the Rio Grande Valley of south Texas abound. Type-2 diabetes is frequently described as a problem of Mexican culture, poverty, genetics, individual choice, and potential national ruination. In newspapers, on radio programs, in public health conferences, and in everyday talk about proper self-care, multiple communicative communities—e.g., journalists, public health workers, and diabetics and non-diabetics—relate to diabetes differently. The category “Mexican-American in south Texas with diabetes” circulates persuasively among these multiple communities, at times binding them together through communities’ common response to it and at times producing spaces of separation (Gaonkar and Povinelli 2003). Sometimes the category is named and sometimes it is not; sometimes it is affirmed and sometimes it is denied. The practices through which the category is produced, circulated, and responded to are at the heart of this dissertation.

The category “Mexican-American in south Texas with diabetes,” produced not only in institutions of public health but also in non-expert spaces of everyday life, is polysemic. It is a category produced at the constantly–shifting intersection of other categories, namely Mexican-American and diabetic. Mexican-American is a category of individual identity, of political clout, and one that demonstrates the limits of the nation as an idea that sufficiently holds the complexities of peoples’ identities—one is both Mexican and American, and neither. As Michael Montoya demonstrates in

*Making the Mexican Diabetic* (2011), the individual identity category of “Mexican” became a racialized genetic label through the practices involved in genetic epidemiology. Building on that insight, I argue that the “Mexican-American diabetic from south Texas” has become an *obligatory passage point* (Callon 1986), a moment in the process that translates individuals into an always-incomplete belonging in South Texas.

The complexity of the category “Mexican-American diabetic in south Texas,” and the complexity of peoples’ responses to it, became clear to me in late January 2013, about six months after arriving in the Rio Grande Valley. I had been asked to present “preliminary findings” to a local civic association<sup>1</sup>, after which I interviewed a journalist who had written a widely-circulated newspaper story about the region’s ranking by The Gallup Healthways Index as “the fattest” in the United States (Witters 2012).

The morning of the presentation was unusually cold. Dense, heavy fog clung to the roads. As I pulled into the parking lot, my car’s headlights shone onto a group of men in long winter coats huddled around what I could only identify as a very fancy sports car with doors that swing up. They took turns peering into the driver’s seat, patting the owner on the back, and laughing, their breath condensing in the air. The car indexed cash flow, credit access, and wealth. The men gathered around the car were members of the local civic association that had invited me to present my preliminary research findings. They all turned to squint into my headlights, no doubt assuming the car would be one they recognized, another association member. I

swung my silver Subaru hatchback into a parking spot, wishing I had a car that did not index what mine did: Anglo,<sup>ii</sup> not from the region, non-Spanish speaker (Paredes 1995[1977]). A part of me felt the urge to explain, to quell my ethnographic uneasiness with hollow claims of authenticity, to distance myself from the others who also fit the category of outsider (Jackson 2005). As I sensed my interpellation into a category I wanted to disavow, I wondered what categories they assumed I—the Anglo researcher—was placing around them. I quickly found out.

My experience at the presentation inadvertently became ethnomethodological (Garfinkel 1967) in that my statements undermined the association members' taken-for-granted assumptions about diabetes in the region and thus forced them to re-state and explain those assumptions to me; as they responded to my presentation, they schooled me on the proper use of the category. Although some of the Rio Grande Valley's civic associations are still made up mostly of Anglos, this group was mixed, comprised of Mexican-American members as well as both women and men. These individuals gathered not only to network, but also to figure out how to improve the lives of people in the region. One way they imagined doing the latter was by learning more about type-2 diabetes; many of these members themselves have diabetes.

After my presentation, I received no questions, but the suggestions poured in. And the kind of suggestions I received implied that I had been unsuccessful at making the familiar way of thinking about diabetes strange. For example, an Anglo man who is the owner of a *maquila* across the border told us all that he has diabetes but that he is not the right kind of person to study because as soon as he found out he was

diabetic, he radically altered his diet and lost thirty pounds; he could take care of himself and was well-controlled. He then described the kind of diabetic I should be interested in, suggesting that I should go to his factory and talk to a woman who is 40 years old and on dialysis because she did not listen to him or to her doctors. She did not check her blood sugar nor was she willing to change her eating habits.

The owner of a number of fast-food franchises in town built on his colleague's comments, shooting his hand up in the air and almost jumping out of his seat to join the group discussion. He was frustrated and his frustration was palpable. He said that he agreed that corporations needed to do more to make healthy food available—and noted that the parent company of his franchise did a lot. Ultimately, he said, it comes down to individual choice. Like the *maquila* owner, he shared his conversion story, one that backgrounded structural conditions and foregrounded individual choice. He said that as a Mexican-American, he knew he had to be careful and described how being diagnosed with *prediabetes*—being almost drawn into the category—changed his behavior and that he is now healthy. He then turned his attention toward a description of “them,” the diabetics who needed interventions. Referring to the gift cards to a grocery store that I gave to every person who completed an interview, he raised his eyebrows and asked

What do you think ‘they’ do with the HEB [Texas grocery store chain] cards you give them? Have you seen what people buy with foodstamps? I was behind a lady at HEB the other day paying with foodstamps, cart *full* of meat, Cheetos, Coke. She was wearing Ralph Lauren!



Gladys, a member who had sat attentively during my entire talk, said that I should make sure to visit the colonias (peri-urban settlements). The conditions there were horrible, she said. There are so many “illegals,” and they really need help; many don’t have running water. She described that her maid of 35 years is now blind from diabetes and that she (Gladys) still sends her hundreds of dollars a month to help. The members nodded in agreement, implicitly linking illegality, lack of potable water, and geography to diabetes. Their responses produced an “us” and a “them” from whom they hoped to demonstrate that they were clearly distinct.

The suggestions I received were organized mostly around a public health model of behavior change. First, there was what Paul Farmer has named a “geography of blame” (2006) in which a particular demarcated geographical area and the bodies of poor people who inhabit that region are deemed to be the cause or the vector of the illness: in this case, colonias and the people who inhabit them. The second type of suggestion I was given was based on the idea of individual, rational behavior change, one that demonstrates a particular sense of care for the self, particularly a willingness to radically transform one’s habits. Indeed, of the 75 people I interviewed in my fieldwork, all but three indicated that, at its core, diabetes is about individual people doing what they know they should do. The third suggestion I received demonstrated a slippage from type-2 diabetes to poverty, food stamps, and greed—a common popular narrative about families around the United States who receive government-subsidized food benefits. But, the audience members’ responses included an important addition to the standard logic of public health understandings

of chronic conditions—the narrative of self-conversion from “them” to “us.” In this dissertation, I call this rhetorical technique “Yes, but.” Yes, I have diabetes; Yes, I had pre-diabetes, but the diabetics who count as the “Mexican-American in south Texas with diabetes” are those people. Them. Not me.

In this dissertation, I examine how people in the Rio Grande Valley of south Texas respond to the category “Mexican diabetic in south Texas,” produced and circulated by epidemiologists, popular media, and everyday talk. I examine how this category circulates in multiple and interconnected communicative texts of public-making—talk, self-care practices, body movements, popular media, and academic scholarship. I demonstrate how, in a region where people otherwise cultivate strong identification with the identity of “Mexican,” people equivocate as they come up against the over-determined nature of the category “Mexican-American diabetic in south Texas.” As they equivocate, they claim membership as “Mexican from south Texas,” while *also* dis-identifying with diabetes, the condition most associated with that category. I suggest that, to a great extent, to be Mexican-American in south Texas means having a relationship to diabetes. Diabetes has become an essential part of this identification and dis-identification.

### ***Publics Formed through Identification and Dis-identification***

The category “Mexican-American diabetic in south Texas” is over-determined. It carries with it ossified assumptions of strictly causal relationships between diabetic Mexican-American-ness on the one hand, and race, socioeconomic status, citizenship, and rationality on the other hand. The civic association members

understood this, and they responded to my presentation by decrying my potential misrecognition of them as people who might fit into that category. However, the story does not end with this rejection of the category because they embrace it as well.

The ambivalence about the category “Mexican American diabetic in south Texas” circulates in tension with long-standing borderlands concern with conceptions of race and phenotypic difference from both Mexico and from the United States. The United States’ model of citizenship is based around bodily health, productivity, hypodescent (Hartigan 2013), and on racialized binary of whiteness and blackness (Stern 1999; Molina 2006, 2010). Mexico, on the other hand is built on a racial theory of *mestisaje* and/or a “cosmic” race made strong not through racial purity, but through intermarriage of people from different “races” (Menchaca 2011; Stavans 2011). In the Texas borderlands there are hints of both of these racialized notions of citizenship and belonging, in part because of the region’s location: for hundreds of miles north and south of the Valley there are few inhabitants. The landscape is brutally challenging for human and non-human life and has been for centuries. The regional population that lived in the Rio Grande Valley before the 1848 Treaty of Guadalupe Hidalgo produced a partition, the population was a mix of Mexicans of African descent, Native Americans, and Mexicans of Spanish descent (Menchaca 2011:20; Montejano 1987). When the region became part of the United States in 1848, although the U.S. Congress promised to give citizenship to all of the Mexicans who chose to stay, it did not fulfill this promise. Thus, they became part of the binaristic U.S. racial order of white and black. Although Mexicans who lived in the Rio Grande Valley had to find

creative ways to “pass” as white enough for citizenship without demonstrating their status as mixed<sup>iii</sup> (Menchaca 2011), their attempts always fell short: they could not be white (Montejano 1987).

This history of demonstrating one’s ability to pass didn’t end after the Treaty of Guadalupe Hidalgo. As Arnoldo De León (1987) demonstrates, the region became binaristic around “Anglos” and Mexicans with vitriol and violence occurring between the two, most at the hands of the Anglos. I address that complex history, and the contemporary politics of passing more thoroughly in Chapter One. Here I have provided a brief overview of that history to indicate that demonstrating authentic belonging to the region, to American-ness, to Mexican-ness, and to rationality have long had particular import in the region. As Lauren Berlant describes regarding sex, race, and U.S. citizenship, in the Rio Grande Valley there are “structural echoes and historical continuities” (2012:243).

Most people I met claimed a twinned authenticity: authentic knowledge of Mexican-American diabetes (through their own embodied experience or through family members’ experiences) and also authentic knowledge of the Rio Grande Valley. These two authenticities, for most people I met, go hand in hand: to truly know the region, one must also know Mexican-American diabetes, and to know Mexican-American diabetes, one must have an authentic knowledge of the region. But, this twinned authenticity places people in a bind because of the over-determined and negatively inflected category “Mexican-American diabetic in south Texas.” I know the region thus I know diabetes, and I am diabetic. But, I am not *that* kind of

diabetic. Recall the civic association members who were Mexican-American and have diabetes but described the “real” diabetics as the poor, those who live in colonias, those who receive foodstamps, and those who refuse biomedical intervention.

While the category “Mexican-American diabetic in south Texas” is over-determined, the etiology of type-2 diabetes is not. In fact, type-2 diabetes is described in public health scholarship, scientific findings, and popular media as “multifactorial,” meaning that its development is linked to an extensive list of known risk factors (Hansen 2002). Examples of these risk factors include genetic susceptibility (cf. Paredies et al. 2007; Weiss et al. 1984), Body Mass Index (BMI), age, race and ethnicity, pregnancy status (ADA 2025; CDC 2013), socioeconomic status (Krishnan et al. 2010; Link & Findlay 2009; Signorello et al. 2007), stress, exposure to endocrine disruptors, U.S. military service in Korea and Vietnam (National Academies 2003), and uterine environment (Smith-Morris 2006). Thus, as Lochlann Jain has demonstrated in the case of population-level breast cancer prognosis, the statistics are simultaneously “stunningly specific” and “bloodlessly vague” (2007:78). Because diabetes is associated with such an extensive list of possible triggers, it is difficult to exempt oneself from meeting one of the risk criteria. At the same time, one knows that meeting the criteria does not guarantee an eventual diagnosis. This dissertation examines how people of this region navigate being pulled into this category about which they are simultaneously doubtful and certain.

In this dissertation, I demonstrate how Mexican, Mexican-American, and Anglo residents of the Rio Grande Valley narrate the etiology of their specific case of diabetes (or someone else's) as they navigate the over-determined category of "Mexican-American diabetic in south Texas." As they do this, they also claim authentic belonging to the region. I argue that it is type-2 diabetes' murky etiology that provides the fertile soil from which people can grow their own personal narratives of authentic belonging and knowledge of diabetes, while also rejecting their own belonging to the category "Mexican-American diabetic in south Texas." As they narrate their own specific case of diabetes, these individuals re-draw boundaries between the "real," "study-worthy," or "intervention-worthy" diabetics and those who care for themselves. Precisely who is in the "us" and who is in the "them" is not fixed. Rather, the line between the two is constantly shifting, and the position of the speaker shifts as well, sometimes finding a way to occupy simultaneous positionality in "us" and "them."

All this is done through a rhetorical technique that I call "Yes, but." Recall the *maquila* owner who told me and the other civic association members that he has diabetes but that he is "well-controlled," and I should meet a woman at his factory (in Mexico) who is receiving dialysis because she did not follow his advice or her physician's advice. *Yes, I have diabetes*, he told us, but someone else's case of diabetics exemplifies the real problem. Through this "Yes, but," he produces a line of demarcation between an "us" and a "them." In his case, the line is being drawn around biomedical notions of what constitutes good diabetes care and management,

proper eating behavior, and geography. For the civic association members, the “us” are those who care for their bodies using a biomedical logic, diabetic or not. “Them” are diabetics who do not follow conventional biomedical advice, receive food stamps, or live in colonias. However, the civic association members were not the only people I met who used this “yes, but” and “us/them” logic. Be it the civic association members, people living in colonias, patients in clinics, urban gardeners, or Zumba class participants, nearly all residents of the region demonstrated simultaneous acceptance and rejection of their proximity to the category of Mexican-American diabetic. And the line of distinction between the “us” and the “them” varied, as did who comprised the “us” and who comprised the “them.”

Drawing on a broad range of cases, I highlight how the rhetorical strategy “yes, but” allows people in the region to maintain an authentic Mexican-ness. The “yes” signifies an acknowledgement of one’s own diabetes, the region’s high rates, and one’s genetic, geographic, or professional proximity to the epidemic, while the “but” signifies a turn away from the condition and a gesture toward another. This dissertation demonstrates how this category—Mexican-American diabetic in south Texas—circulates in non-clinical, non-laboratory spaces, and explores how this supposed “scientific,” clinical, or epidemiological category is woven into how people make sense of their everyday lives and make claims to multiple forms of group membership.

All of this raises the question: Why does this category have such strength? Why do people in the Rio Grande Valley feel a need to respond to it, to claim it and

also turn away from it? Why would the *maquila* owner, for example, even mention his diagnosis? There are a few reasons for this. First, there is a history of scientific research on Mexican and Mexican-American diabetics in the Rio Grande Valley (Hanis et al. 1983; Hayes et al. 2007; Fisher-Hoch et al. 2010). Indeed, Michael Montoya details how that scientific, blood-based research enrolled the national identity category “Mexican” into scientific descriptions of type-2 diabetes genetics, demonstrating how the concept of *confianza* (trust) was used by recruit study participants (Montoya 2011:112-139). Overwhelmingly, this research depicts Mexican-Americans as problematic, in need of intervention, obstinately un-modern/non-rational, and burdensome to the larger U.S. society. And, it is not just academic research that presents the “diabetic Mexican-American in south Texas” as a problem. The popular press, often drawing on academic scholarship, depicts the region as in a near-apocalyptic state, the fault of the Mexican-Americans with diabetes (Fisher-Hoch et al. 2010; Fisher-Hoch 2012; Seringer 2011).<sup>iv</sup>

In talking about diabetes, managing diabetes, and attempting to avoid diabetes, people in the Rio Grande Valley are navigating a complex terrain of multiple forms of belonging: belonging to a “social class;” belonging to a racial or ethnic group that is rooted in the region and in blood; belonging with those who draw on “rational” conceptions of the body and health, such as biomedicine; and belonging to a nation. They navigate these multiple belongings in numerous ways of which the “yes, but” and “us/them” are two closely related examples, as illustrated by Raúl’s case, which I describe below.



***Humiliation of Particularity: Publicity and the ever-present body as text***

Raúl is a Mexican-American professional in his mid-thirties who does not have diabetes. He is active in the Farmers' Market and the locavore movement, he follows a gluten-free diet, and he rejects the theory of genetic predisposition to diabetes, widely accepted in the Rio Grande Valley; he calls it a “cop-out.” Instead, he thinks of diabetes as “diabesity,” a term he attributes to alternative health guru Mark Hyman, used to describe the interconnection between obesity and diabetes, particularly the fact that excess fat deposits impede insulin production and lead to diabetes<sup>y</sup>. Thus, over the course of my interview with Raúl, the word “obesity” gradually becomes a stand-in for “diabetes.”

Our interview took place soon after the Fourth of July, and we had been talking about the ubiquitous signifiers of U.S. patriotism in the region: Tee shirts emblazoned with shiny American flags, pro-U.S.A. and pro-military bumper stickers, and other “rah-rah USA” consumer goods. Raúl described obesity as part of that patriotism, as a “hyper-nationalist” practice. Throughout our interview and subsequent conversations, Raúl described a lifetime of struggling with existing in a body that is always deemed “not quite” (Bhaba 1994) either because of its size or because his skin is not “white.” Raul’s first experience with the humiliating particularity of his body was through an indoctrination into what he describes as an “American ideal,” one in which a male body is supposed to “take up space.” Raúl has spent years following conventional nutrition and exercise advice in attempts to meet that “American ideal” and take up space. He told me about participating in the yearly

standardized fitness tests carried out in all U.S. high schools. As a boy, Raúl was expected to be able to complete a bench press at a certain weight and he could not do it. After lifting up the bar one day in the school gym, he was unable to sustain the weight, and it fell onto his chest. He said, “I was looking around, like ‘Help me!’” Raúl’s lesson in that moment was visceral; with the bench-press bar hitting his chest, he learned that his physical body met neither the standards nor the expectations of the United States.

Raúl describes obese Mexican-American bodies as hypernationalist, a corporeal way of demonstrating adherence to American ideals of consumption—both shopping and eating.

CCK: So, that goes back to the hyper-nationalism you were talking about, around here. Can you say more about that?

Raúl: I’m not talking about flying the flag. I’m talking about a tension . . . a tension that people feel. . . they are tense because they always feel that someone’s judging them because they are not American enough. You know. Like if your skin is white and you are born in America, you don’t have to prove it. . . And I know that people in Arizona are feeling it more than anyone else.<sup>vi</sup> Let me drive it home with this point. If you are a border patrol agent and you are on this street that’s pretty much abandoned except for these two people and one of them is lean, gaunt face, right? And the other one is really chubby and obese, which one do you think you’re going to . . . you only have a few seconds to ask for papers....you’re going to say, “You skinny guy, you come over here, you look like you don’t eat the American diet.” So people just assume that you are from another country or that you don’t belong here somehow....

Raúl’s tale of a hypothetical encounter between a border patrol agent and two men in a public space flips the expected script of who the border patrol agent will ask for papers from. It is not the “chubby” man who, following Raúl’s logic is attempting to

demonstrate belonging, but rather the “skinny” man—the man who looks like Raúl—who is challenged about his belonging.

Raúl’s tale brings to the fore the theoretical question at the heart of this dissertation: how do people manage their everyday lives when they cannot shed a particularity of their body that marks them as non-normative? This question is one that literary scholar Michael Warner (1992; 2002) addresses in his interpretations and extensions of Jürgen Habermas’ early theorization of the liberal public sphere as a space in which individuals could shed their identifying particularities and interact only through rational ideas (1989[1962]). Warner and numerous other scholars have demonstrated that, in his formulation of the public sphere, Habermas neglected to address the fact that only able-bodied white men could have particularities that were subtle enough that they could be shed in order to participate in rational, critical debate (Berlant 2012; Warner 1992). Everyone else—women of any skin color, men who are not white, men or women with non-normative or non-abled bodies—was excluded from the public sphere because they could not meet the requirement of shedding their particularity. Thus, it is not the ability to engage in rational, critical debate that allows one membership in the public sphere; it is having the ability to shed one’s particularity and inhabit the non-particular, mass subject of rational critical debate.

Most of the people I met are not the idealized members of Habermas’ idealized public sphere; they cannot become the abstract subject engaged in “rational, critical debate” because of the specified, particularity of their bodies. Either their bodies are overweight, obese, or skinny, or their skin color is non-white. I was no

different. When I arrived in the Rio Grande Valley, my body mass index (BMI) was 29.0, meaning it was .9 away from the diagnostic category of obese, and the high end of overweight. In the unrelenting glare of the south Texas summer heat, with temperatures consistently just under 100 degrees Fahrenheit, I moved uncomfortably in clothes that stuck to me and barely fit. For that reason, I was surprised, in my first week at the Mariana Clinic, that Dr. Flores routinely gestured to my body during clinic appointments while advising obese and/or diabetic patients to “eat like gringos [*cóma como los gringos*].” In these moments, it was the fact of my *phenotypic* difference from the other people in the room that made me noteworthy.

As I followed Dr. Flores from exam room to exam<sup>vii</sup> room in the summer of 2012, he began to use my body as a teaching tool, using my body and skin color to entextualize his ideology of phenotype and eating habits, to structure that ideology in this mundane, everyday practice (Bauman and Briggs 1990; Briggs 2007: 684). I remember flushing hot with embarrassment the first time he gestured to me—putting my body on display, making my body the object of the gaze—and said to a patient, “Eat like gringos: fruit, vegetables, salad, chicken, fish. Don’t eat Mexican food, it’s pure fat” [*Cóma como los gringos—fruta, verdura, ensalada, pollo, pescado. No cóma la comida mexicana; es pura grasa.*] In that moment, and the many others like it, I was interpellated into the complex racialized hierarchies of expertise and eating—he referred to me as a *gringo/a* through my skin color and certain eating habits, and, by saying nothing to challenge his call, I gave my tacit agreement (Althusser 2001[1971]: 174). Dr. Flores not only put my body on display and flipped

the ethnographic gaze but he was also using my skin color to index the stereotype of *gringo* eating behaviors.

In the introduction to *Women Writing Culture*, Ruth Behar describes a painting by Cuban artist Yolanda Fundara (1995). The painting is of a bare-breasted woman holding a pencil, ready to write; behind her, looking at her, are a “sea of eyes” (1996:2). Behar likens the woman in the painting to an ethnographer. “The woman who is turning others into the object of her gaze,” Behar writes, “is herself already an object of the gaze. Woman, the original Other, is always being looked at and looked over. A woman sees herself being seen” (1995:2). My body—its size, skin color, strength, speed, and its changes—was an explicit part of my research from before I ever reached the Rio Grande Valley. In talking to a friend who had lived in the region for years with her extended family, she said that I would do well in the region, citing as evidence of this the fact that I could “pass” as Latina because of my dark hair and my mixed heritage. As Behar and other feminist anthropologists who contributed to *Women Writing Culture* attest, the female body is also always racialized, assigned a class, and assessed with regard to its embodied value (Anagnost 2004).

Drawing on one postcolonial scholar, Gayatri Spivak, Ann Anagnost claims that human bodies do not inherently have value and, furthermore that their value comes not only from the ability to labor but also from the body’s capacity for training and education that lead to value extraction (2004:144). My value in one context allowed my movement into another. Take, for example, the following email I received from a coach at the gym where I had been conducting participant

observation, “Hi Celina, Do you think we could use a before and after picture of you to put on the box’s website, since you have had such a big improvement with us?”

While my body was valuable to Dr. Flores as a teaching tool due to its phenotype, for the coach it was not my phenotype but the change in my corporeality and the ability to document that change that mattered. Indeed, he explicitly draws me into the logics of “us” and “them” when he writes “you have had such a big *improvement* with *us*.”

People like Raúl and the civic association members, with extensive formal education and “middle class” or “upper middle class” status, do not fit the stereotype of borderlands residents as poor, lacking formal education, undocumented, and consuming excessive amounts of fast-food. And they are not atypical. In fact, they are part of public that I call “we-who-know” that is formed around participation in the quintessential acts of the liberal “public sphere” such as rational debate about the betterment of society. These conversations and embodied practices draw on standard biomedical expertise and public health statistics. However, as many scholars have demonstrated, engagement in the public sphere is no longer—if indeed it ever was—a primarily verbal practice. Habermas’s idealized coffeehouse debates always existed within a universe of print media and written expertise that no doubt helped to structure such discussion. Throughout this dissertation, I extend the definition of text to show that people “read” bodies according to dress, size, skin color, and presumed biomedical diagnosis. Thus, membership in “we-who-know” is also enacted through non-verbal acts by the body. In the Rio Grande Valley, charity 5k runs, Zumba classes, and CrossFit gyms, or, as Raúl demonstrated, walking down the street, are

physical spaces where the body's movements and its size are texts that circulate as embodied, textual responses to other circulating texts.

Recall the hypothetical border patrol face-off story that Raul told me, in which a border patrol agent has to choose whether to ask a skinny or a chubby man for his citizenship papers. Raúl's tale draws on tropes of the U.S. Western in its depiction of a highly gendered male face-off. However, Raúl's story is more nuanced than that; it has a shimmering complexity, moving slightly each time you think you can pin down its meaning. Most notably, the border patrol agent—a ubiquitous presence in the region—is neither demonized, nor is he/she depicted as Anglo or Mexican-American, something that would add a layer of phenotypic and racialized complexity to his story.<sup>viii</sup> In this story, the Agent is the one who has the power to ask. By fitting his own tale into the basic structure of a border-crossing tale, Raúl allows the listener to imagine the chubby and the lean men as border crossers—as the border patrol agent suspects them to be—but, in fact, all we know is that they are men walking down the street. And that is precisely Raúl's point: that simply having a lean or “gaunt” body—as he himself does—means the possibility of state surveillance and being challenged about belonging.

So, Raúl's tale, while “about” the border, is very much also about body size as a diagnostic of citizenship, as well as of belonging. In telling me this story, Raúl is rejecting the much more common diabetes and obesity stories in the region, which attribute diabetes' existence in the borderlands to “Indian” genes and to immoral and irrational eating. Raúl is responding to the many others in the region who attribute the

high diabetes rates to the persistence of genetic material passed through multiple generations since the Spanish conquest of the region, or who link diabetes to future bodily ruination in dialysis or amputation. His description of diabetes and obesity rates responds by removing them from the clutches of biomedical and clinical categorization. Instead, he says that diabetes, and the obese body he associates with it, index “American” belonging.

### ***Scalar Impossibility of Care in the U.S./Mexico Borderlands***

Diabetes is circulated in media as an “epidemic” and as a threat to the nation (Fisher-Hoch et al. 2010; Seringer 2011). The embodied actions of the caregivers (Buch 2010) as well as the bodies of the caregivers and the care-receivers are polysemic with the U.S. nation and with the nation’s future. As they attempt to care for bodies with diabetes, or attempt to avoid a diabetes diagnosis, people in the Rio Grande Valley are explicitly being asked to do the impossible through care: tend to the national body through their care of individual, family, and community bodies.

What is impossibility and what is care? How do they come together? This section addresses these two questions and ultimately suggests that care is scalar—individual, social, and national—and temporal. I argue that it is the future-oriented nature of scalar care—one must care for the future of the nation through one’s attention to bodies—that produces impossibility. To make this argument, I first address the general trends in medical anthropology for addressing the challenges of having a body in the confines of a nation-state and, from there, move into a discussion of impossibility. I then return to scholarship on care and on national securitization to advance my argument that the impossibility people in the Rio Grande Valley face is one of being asked to care for the future of the nation while being



unable to do so.

*General Trends in Medical Anthropology: Citizenship*

For the past 25 years, critical medical anthropologists and scholars of science and technology studies have argued that the contemporary era in “developed” and “developing” parts of the world is marked by the human body and its disease as a primary mode of claiming recognition from the state. Arguably, the first of these scholars was Adriana Petryna (2002), who developed the concept *biological citizenship* through her ethnography of survivors of the Chernobyl disaster in Ukraine who could claim the benefits of citizenship only by claiming biological injury from Chernobyl. Building on Petryna’s influential work, scholars have demonstrated how citizenship operates through the logics of genetics (Novas and Rose 2000; Taussig and Rapp 2001), therapeutics (Nguyen 2010), pharmaceuticals (Petryna et. al 2006), and the prison complex (Pollock 2014), to name but a few. Central to these scholars’ work has been individual and collective actions for recognition based on disease or illness (Dumit 2006).

However, in the case of diabetes in the Rio Grande Valley, despite the region being in the U.S./Mexico borderlands and the state having a sizeable presence, neither citizenship nor identification with the disease or illness was key. Rather, I found that talk and practices about diabetes indicated *disidentification* with diabetes as well as something less tangible—which I describe as impossibility—evidenced in the scales of care into which people in the region are interpellated: care of one’s own body; care of others’ bodies; and care of the nation. While it could be argued that this scalar notion of care is central to liberal democracy and thus not unique to the Rio Grande Valley and diabetes, there is a future-oriented temporality to the exhortations to care, evidenced for example in statements such as the following from a documentary, “If we don’t do anything, in the year 2050 the U.S. will be just like Cameron

County, Texas is today” (Seringer 2010).

To frame an understanding of this call to care for self, nation, and future, I draw on a particular reading of Gergory Bateson’s *double bind* as impossibility. This reading (excerpted below) describes a double bind not as a “damned if you do, damned if you don’t” conflict, but rather as something a bit different. Anthony Wilden and Tim Wilson write

A true double bind is not simply a situation in which we are “damned if we do and damned if we don’t,” for this usually amounts to no more than a choice between the lesser of two evils. . . . A true double bind—or a situation set up or perceived as one—requires a choice between two states that are equally valued and *so equally insufficient that a self-perpetuating oscillation is engendered* by any act of choice between that. . . . It is the result of the fact that one must choose, and moreover choose between incomparable alternatives. [1976:276, emphasis mine]

It is the equally insufficient nature of the categories in circulation—Mexican-American and/or Mexican-American in south Texas with diabetes—that produces the oscillation and, thus, the impossibility. Think back to the civic association members who opened this chapter: *Yes*, they are Mexican-American and *Yes*, they are diabetic, *but* they are not the “Mexican-American in south Texas with diabetes.”

#### Care: Individual and Social

The impossibility resides not only in how the problem is set up as a kind of double bind. The impossibility is also in the pragmatics of everyday care. It is in the everyday actions—checking blood sugar levels or eating a piece of high-sugar cake—through which people are engaging in care practices that instantiate the “yes, but.” *Yes*, I eat a piece of cake (that a “compliant” diabetic should avoid) *but* I am not a member of “them” when I do so because I check my blood sugar. In the Rio Grande Valley, as in many locations, individual and social care of the body generates and reproduces systemic, intersecting forms of structural inequality (Rapp and Ginsburg 1985), but not only that. Questions of the moral and embodied care of the self and others continues throughout this dissertation as people move between

what they are taught is the “right” approach to care and the actual practices they engage in, practices that often enact membership in “them.” In discussing “care,” I draw on the work of feminist scholars who attend to reproductive labor and stratified reproduction (Buch 2013, 2015; Rapp and Ginsburg 1995) and on ethnographers who demonstrate that care does not often look like a life-sustaining process (Garcia 2010, 2014).

In thinking through care, I also draw on recent scholarship about the securitization and biosecuritization of the nation (Briggs 2011; Briggs and Halin 2010; Lakoff 2008; Samimian-Darash 2009). This scholarship offers a way to historically situate how threats to the nation are produced, for example in “preparedness” exercises (Lakoff 2008) or “pre-event” configurations (Samimian-Darash 2009), making the fate of the nation’s security fall on an unlikely and almost entirely unpredictable event. The case of diabetes in the Rio Grande Valley and its mediatization is a bit different and thus offers an interesting counter-example to the work that has been done on the fear of disease outbreaks and catastrophic events. While diabetes is not contagious, it is “communicable” (Briggs 2005) and, in the Rio Grande Valley, is discussed at the apocalyptic future of the U.S. come true. Thus, as people in the Rio Grande Valley are brought into care practices that will never be quite enough to save the nation, they encounter an impossibility: the impossibility of saving the nation.

I argue that the need for this embodied care and the polysemic nature of the diabetic body makes it an impossibility for people in the Rio Grande Valley to complete the task at hand. Similar to the Tijuana residents depicted in Rihan Yeh’s work, people in the Rio Grande Valley demonstrate a kind of impossibility, though a different kind from what Yeh described. Rather than definitively claiming membership in the rational “us,” people in the Rio Grande Valley equivocate. They claim membership in the rational “us” (who somehow can tend all of the bodies) either by their talk, by their recirculation of scientific depictions of

diabetes, or through their bodily care practices, but these claims are always interrupted by moments of also claiming membership in “them.”

### ***Methodology***

When I began formulating this project, I knew that I wanted to work outside of the clinic. In making this decision, I take a cue from John Hartigan’s ethnographic approach to studying race and racialization in Detroit, Michigan (1999). Hartigan suggests that to understand race, we must attend to spaces where it spills out of its “routinized confines” (1999). Hartigan describes survey research and its pre-set categories as being inherently incapable of comprehending processes and practices that exceed those confines, thus necessitating a different approach. In studying race in Detroit, he did not study African-Americans, as one might assume. Rather, he conducted ethnographic work with white communities that self-identified as “red-necks,” “hillbillies,” and “white trash” (1999). Building on Hartigan’s insight about the pitfalls of staying within routinized confines, my research intentionally exceeded the conventional purview of medical anthropology.

Similarly, feminist medical anthropologists such as Emily Martin (1994, 2007), Rayna Rapp and Faye Ginsburg (2015), Rayna Rapp (2000) and science and technology scholars (Hacking 1999; Latour 1983,1999) also suggest methodologies that allow the researcher—and perhaps the interlocutors, as well—to study the assumptions of who and what the relevant categories of study are and how those categories take hold. Likewise, my research of the category “Mexican-American

diabetic in south Texas” does not take the category as a pre-given entity, but rather investigates how it is made and re-instantiated as it circulates in peoples’ worlds.

Most research on diabetes in the Rio Grande Valley is conducted from within the “routinized confines” of public health research, which themselves intersect with already circulating social understandings of which bodies, which neighborhoods, and which kinds of interventions should be developed. Thus, over the 22 months of this ethnographic research, I intentionally cultivated multiple research sites, many of which are quite outside of the routinized confines of public health research. However, the reality of conducting research related to a health condition meant that I had to begin in an institution and had to organize portions of my research in conventional and standardized ways.

I began my research with an interest in understanding how chronic illnesses might challenge the firm distinction between biomedical expertise and popular understandings of health and the body. To that end, I attended seven workshops and conferences, each on either diabetes or obesity, and followed participants as they returned to the non-profits or clinics where they worked so that I could observe how they distributed what they had learned. Overwhelmingly, few people challenged information or individuals who were contextualized with markers of expertise. Although I did meet some people (such as Raúl) who challenged biomedical knowledge as orthodoxy, these individuals were not challenging the line between expertise and popular knowledge. Rather, they were choosing different experts.

At the same time as I was spending days at the clinic and attending conferences, I began participating in a small, organic community garden, which led me to a circle of friends (“expats,” as I describe them in Chapter One) who were instrumental in developing the Farmers’ Markets. Many of the people I met through community gardeners or Farmers’ Market participants were doing their work in response to the region’s rates of obesity and diabetes. This fieldwork also led me to participant observation and interviews with large-scale farmers and people involved in 4H and large-scale farming.

At the outset, I decided to interview anyone who expressed interest in and opinions about the topic. It was this decision that most clearly led me out of the routinized confines of diabetes research with mostly poor, Mexican or Mexican-American colonia residents. I interviewed numerous people who did not have diabetes, and the people with diabetes whom I interviewed were from across the spectrum of socioeconomic status and professions: prominent politicians, attorneys, small business owners, “Winter Texans,” domestic workers, non-profit directors, religious leaders, labor activists, physicians, middle-school teachers, extreme athletes, fast-food managers, stay-at-home mothers, insurance agents, and social workers.

### ***Mariana Clinic***

I began my research at a site that I call *The Mariana Clinic*, a safety-net clinic on the outskirts of one of the Rio Grande Valley’s main cities. As a safety-net clinic, Mariana provides services for individuals who cannot be seen in other clinics, either because they are not U.S. citizens and cannot afford to pay the out-of-pocket cost at a

doctor's office, or because they do not have health insurance.<sup>ix</sup> Two or three days per week, Mariana had "clinic days" when a physician, physician assistant, or nurse practitioner saw patients. Some weeks, I spent two or three days at the clinic. In other weeks, I was there every day and at clinic-related fundraising events on the weekend. This was the most conventional portion of my research, as I shadowed physicians and the medical assistant, José. I sat in on patient appointments and observed as they were instructed on diet modifications and medication adherence.

On non-clinic days, I spent time with the non-medical staff who responded to telephone inquiries and to people who walked in asking for an appointment, and who engaged in the mundane but significant tasks of organizing patient files and dealing with pharmaceutical drug reps. Notably, everyone on staff at the clinic—and indeed almost all of the patients I met—had generations-long ties to the region.

### ***CrossFit and Zumba***

The clinic is not the only place for understanding diabetes. In fact, there was at least as much conversation about diabetes outside of the clinic as there was inside the clinic walls. For many people in the Rio Grande Valley, diabetes avoidance and management is about not only eating regimens and genetics but also exercise. Drawing on the ethnographic work of sociologist Loïc Wacquant, I describe this part of my research as "observant participation," a concept he developed based on his ethnographic research with men who participated in boxing on the south side of Chicago (2006). Observant participation describes an approach that foregrounds the "carnality," or the experience and the inculcation into a particular, secondary *habitus*

(Bourdieu 1984: 65-68; Wacquant 2013:6-7). Rather than participating, observing, and spectating, this approach “consists of studying the dedicated institutions and focused pedagogical programs that forge a specific habitus *by submitting to them in the first person*” (Wacquant 2014: 192, emphasis mine).

I chose CrossFit and Zumba specifically for their popularity in the region. CrossFit, an extreme form of exercise built around the idea of “functional movements,” strength, and power was becoming immensely popular in the region. When I arrived in June of 2012, there were two CrossFit locations and by the time I left the field two years later, there were six. I spent close to a year participating in CrossFit classes four to six days per week, participating in the CrossFit online community, attending competitions, and participating in “nutritional challenges” such as the Whole 30 or gluten-free diets. One of the key bodily practices—to which the coach referred in his email to me, on page 18 of this chapter—is that of measuring the body “before” a 30-day period of intense training, measuring the body “after” and then displaying one’s body measurement and pictures on the box website. Thus, I joined other athletes in measuring my neck, waist, hips, bust, and thighs, recording the numbers, and then taking three pictures of myself (front, side, and back) before the exercise challenge and after, posting these pictures on the box’s website and Facebook page.

I also engaged in observant participation in a Zumba class held at a community center, “El Centro,” in one of the region’s colonias, Las Flores. I attended the Zumba class three days per week and also participated in educational and health-



related programming developed for the women in the Zumba class. As I detail in Chapter Five, in each space I was taught distinctly different techniques for measuring my body, using my body in public space, and assessing improvement.

### ***Popular Media and Academic Scholarship***

People in the Rio Grande Valley produce, circulate, and respond to an immense amount of popular and academic scholarship about diabetes and obesity. Building on the insight that many people now receive their information about health and about the body and health through popular media (Briggs 2003) I conducted research focused on the *mediatization* of diabetes in the region. In using *mediatization*, I follow Jesús Martín-Barbero (1993) who argues that forms of popular media should not be analyzed only on their content, as if they are autonomous actors in the world. Rather, he argues for a study of *mediatization*, the practices and processes through which something becomes media.

Thus, rather than only collect newspaper articles or video footage, I also interviewed the people who produced those pieces of media and as well as those who responded. I examined when type-2 diabetes became noteworthy in the popular media, circa 1980s. Following Sarah Hill's (2003) analysis of how the Spanish word "colonia" became Anglicized in San Diego papers, eventually needing neither a translation nor geographic referent, I attend to how diabetes is spatialized, not only in popular media but also in people's everyday talk. Some people spatialize diabetes to colonias, clustered in proximity to the U.S./Mexico border; some spatialize it to the geography and "culture" of the U.S. I include an abbreviated list here (Figure 1).

One approach to *mediatization* is through theories of publicity, such as those developed by Michael Warner (2002), Jodi Dean (2003), and elaborated on by Rihan Yeh (2009). Publicity has been brought into medical anthropology primarily as a way to marry the interests of critical medical anthropologists who want to understand the role of popular media in shaping peoples' understanding of their bodies, of health, illness and disease, and the interaction of the former two with the formation of biopolitical subjectivities (Briggs 2005, 2007, 2011; Rapp and Ginsburg 2015).

Charles Briggs draws on Warner's theories of publics specifically in his work on health reporting (Briggs 2005, 2007, 2011; Briggs and Hallin 2007, 2010). His use of Warner varies but is mostly done to help Briggs wrestle with how health reporting and public health statistics have become what Bruno Latour would call "immutable mobiles" (2008), or texts and artifacts that can jump scale and communicative context with virtually no change. Briggs developed his own concept, *communicability* (2005) to describe how discourse "projects cartographies of its own production, circulation, and reception" (2007:332). He draws on parts of Warner's theorizations (and critiques them) and on Latourian concepts such as *immutable mobiles* and *facticity* to frame an understanding of public health knowledge is produced to appear transparent and then produce, as it circulates, the public it claims to be representing.

Both Warner and Briggs are useful for understanding, contextualizing, and making some sense of how certain depictions of the "diabetes epidemic" in the Rio Grande Valley, such as those in documentaries, newspaper articles, Gallup Polls, and statistics are taken as indexical of the truth by people who live there.

<b>Media</b>	<b>Description</b>	<b>Date(s)</b>
The Monitor	Regional, English-language newspaper	Archives starting in 1980-present.
<i>Diabetesville, USA</i>	Documentary film about the rates of diabetes in the Rio Grande Valley	2011
<i>Salud Importa!</i>	Health-focused call-in radio show	2010-2014
Television commercials, flyers for health-related services	Many local companies engaged in fund-raising for diabetes research.	2010-2013
<i>Supersize vs. Superskinny</i>	Reality T.V. show from the U.K., filmed in McAllen for introduction to one season	2013
Vida y Salud	Spanish-language news reporting on Latin@ health	2013
Gallup Poll on Obesity	A for-profit company that conducts telephone-based surveys that produced ranked outcomes.	2012, 2013
Gloria Evangelina Anzaldúa Archives, Benson Library, University of Texas, Austin	Folders about her experience with diabetes and her response to articles about diabetes	2015

**Figure 1. Abbreviated list of media sources.**

### *Outline of the Chapters*

Each chapter works to advance the dissertation’s central thesis that people in the Rio Grande Valley are forming *publics* around the simultaneous identification and dis-identification with the category “Mexican-American in south Texas with diabetes.” Chapter One, *Nevermore the ‘American Congo,’* is largely historical and situates the current trend of dis-identifying with diabetes within the region’s history of complex negotiations of belonging. I focus specifically on phenotype and exteriority as well as

on assumptions about what qualities or characteristics compose a body's interior. This chapter also situates the current concern with diabetic bodies within the region's geographic particularity as one in which the standard guarantees of the U.S. Constitution's Fourth Amendment (the right to no unreasonable search and seizure) have been legally loosened. Finally, because of this dissertation's focus on current popular and academic media about the region and about diabetes, Chapter One also demonstrates the region's long-standing concern with its representation in academic scholarship and in popular media.

Chapter Two, *What Is Diabetes?* explores two intersecting concerns. First, at the level of basic content, this chapter orients the reader not only to the conception of diabetes as an individualized, biological condition of a malfunctioning pancreas but also to the international and national standards of clinical care. As such, this chapter attends to the ideal, technologically based, temporal organization of diabetes in the clinic: initially, a diagnosis made possible by technologies that make the blood legible through numbers; then, management, a process that is discussed in the language of "education," a process through which individuals (and sometimes their families) are explicitly taught to re-organize their everyday lives to a "diabetic normal." Second, building on the twinned roles of doubt and certainty in the history of diabetes research and clinical practice, I describe how modernist notions of finding one certain truth about diabetes are yoked to the perpetual existence of a doubt that is *productive* in that it allows for the continual production of more certainty. I demonstrate that the pairing of doubt and certainty has such grip in the Rio Grande Valley because of the

over-determined nature of the category “Mexican-American in south Texas with diabetes.” Finally, drawing on historical descriptions of diabetes sufferers from clinical records in the 19<sup>th</sup> century as well as news reports, I raise my own question of doubt: clinicians and news reports have continually rung alarm bells about the diabetes rates rising and about the non-compliant diabetes patient—since the 19<sup>th</sup> century. Why do these two narratives have such grip? And what does the current “alarm bell” about diabetes as a serious national security indicate about how people respond to the category “Mexican-American in south Texas with diabetes.”

Chapter Three, *Temptation and Interruption in QDay Life* engages with four diabetics’ descriptions of the rhythm of their everyday lives. This chapter is in conversation with Chapter One, specifically with the clinical suggestions for the temporal management of diabetes as one that is predictable and consistent, a rhythming that I call *QDay Life*, in reference to the medical use of “Q” to mean “every” in written prescriptions.<sup>x</sup> This chapter demonstrates that *QDay life* is constantly stymied by sources of temptation—a tortilla, an extra helping of food, or the comfort of food in a time of stress. Building on that finding, I contend that while theories of everyday life such as those developed by Henri Lefebvre (1992) argue that contemporary everyday life is organized in a routinized, consistent, and predictable rhythm, my findings suggest that everyday life in the age of chronic conditions may be marked by *interruption* more than by consistency.

Chapter Four, “Yes, but:” *Living with Murky Etiology*, describes how people with and without diabetes respond to their proximity to the public health category

“Mexican-American in south Texas with diabetes,” and also to the condition’s *murky etiology*. This chapter draws together responses from a range of individuals and groups: wealthy members of a civic association; a woman living in one of the region’s colonias; a Vietnam Veteran; and a physician. I demonstrate that across these varied individuals and experiences of diabetes, they all engage in a rhetorical technique that I call “Yes, but,” a technique that allows them to simultaneously claim membership and distance from their assumed inclusion in the category “Mexican-American in south Texas with diabetes.”

Chapter Five, *Body-Based Publics: Movement, Measurement, and Preparation for the Future* is centrally concerned with the question of the humiliation of the particular in theories of *publicity*. Drawing on observant participation at CrossFit and in a Zumba class, I describe how these two sites provide different techniques for measuring the body. However, in each site, the goal of measuring the body is the same: bodily change and eventual participation in the public of “us.” However, I demonstrate that the CrossFit “athletes,” and the women in the Zumba class are neither able—nor willing—to shed their particularity simply for entrée into the public of “us.”

Chapter Six, *Mediating Belonging*, draws together the concept of more-than-textual, body-based publics with the concept of *facticity* to analyze three pieces of media about diabetes and obesity in the region: the screening of a documentary made about the region, *Diabetesville, USA*; a Gallup Poll ranking the region as “the fattest;” and a television commercial for a furniture company that was raising money for the

American Diabetes Association. I demonstrate that in the screenings of *Diabetesville, USA* and in the responses to the circulating Gallup Polls, individuals in the Rio Grande Valley are move in and out of the diabetes public of “us” and of “them,” as they attempt to inhabit the uninhabitable sphere of rational, public debate.

Chapter Seven, *Exiting Diabetesville, USA*, focuses entirely on individuals without diabetes, demonstrating that they know diabetes through *proxies*, and although they do not have a diagnosis, they live with the condition as an absent presence. Chapter Eight, *Border Fright*, circles back around to stories about the U.S./Mexico border. Specifically, it draws on two women’s descriptions of their particular case of diabetes as due to *susto*, or fright. While the attribution of diabetes to *susto* is not unusual, both of these women attribute their *susto* to a moment when—through a mediated form—the U.S. state and the border snapped into focus, restricting their movement and/or the life of a loved one.

Through attention to everyday talk, care practices, popular media and academic scholarship, and history, this dissertation describes why people in the Rio Grande Valley engage in practices and talk that allow them to simultaneously enact membership in two seemingly incommensurable publics—“us” and “them.”

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<sup>i</sup> Unless they are public figures or public events, the names of all individuals and institutions have been changed to protect their privacy. All people who completed an interview read (or had read to them) a consent form which they signed and dated.

<sup>ii</sup> In the regional lexicon this term is used to describe white people of European descent. For a history of racializing terminology used in the south Texas borderlands, see Arnoldo De León. 1983. *They*

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*Called Them Greasers: Anglo Attitudes toward Mexicans in Texas, 1821-1900*. Austin: University of Texas Press; David Montejano. 1987. *Anglos and Mexicans in the Making of Texas, 1836-1986*. Austin: The University of Texas Press.

<sup>iii</sup> Chicana literary scholar Emma Pérez has written a fictional account of a queer, Tejana cowgirl living through wars and divisions between 1830 – 1848. Her account adds a layer of complexity to the frequent description of racialized and phenotypic social and political divisions by narrating the life of a queer Tejana in love with a Native American woman. Emma Pérez. 2009. *Forgetting the Alamo, or Blood Memory*. Austin: University of Texas Press.

<sup>iv</sup> For analyses, see: Leo Chavez. 2008. *The Latino Threat: Constructing Immigrants, Citizens, and the Nation*. Stanford: Stanford University Press; Otto Santa Ana. 2002. *Brown Tide Rising: Metaphors of Latinos in Contemporary American Public Discourse*. Austin: University of Texas Press; Rodolpho Acuña. *Anything But Mexican*; Arlene Dávila. 2008. *Latino Spin: Public Image and the Whitewashing of Race*. New York: New York University Press.

<sup>v</sup> The term diabetes is used by many in the healthcare and public health worlds, including the NIH.

<sup>vi</sup> Raul is referencing a controversial law that had recently been passed in Arizona, SB 1070. SB 1070 allowed for a practice known as the “show me your papers” provision, which allowed police officers to ask about the immigration status of any person that they suspected of being in the United States without legal permission. See, the American Immigration Council, <http://www.immigrationpolicy.org/clearinghouse/litigation-issue-pages/arizona-sb-1070%E2%80%8E-legal-challenges-and-economic-realities>.

<sup>viii</sup> Joseph Nevins and Josiah Heyman have written about Mexican-American border patrol agents. See Joseph Nevins. 2010 [2002]. *Operation Gatekeeper and Beyond: The War on “Illegals” and the Remaking of the U.S.-Mexico Boundary*. New York: Routledge. Pp. 1-2. Josiah Heyman, 2002. *U.S. Immigration Officers of Mexican Ancestry as Mexican Americans, Citizens, and Immigration Police*. *Current Anthropology* 43(3):479-507.

<sup>ix</sup> While I was conducting fieldwork (2012-2014), Barak Obama ran for a second presidential term and was elected. As part of his second term, the states had to begin rolling out the Affordable Care Act (ACA). In Texas, the roll-out of ACA and extended Medicare and Medicaid, had a particular political intensity because of the state’s politically right-wing leadership, namely Governor Ted Cruz, who famously refused billions in free federal monies to help the state begin an expanded Medicaid program. In the Rio Grande Valley, where a disproportionate number of the state’s poor citizens live, the fact that Medicaid was not extended had very real consequences. (The “expansion” that “Medicaid expansion” refers to basically means that while previously only people or families who met the requirements for the federal poverty level could receive Medicaid, the expansion allowed states to include people who made up to 400% of the federal poverty level. This expansion—when enacted—was hoped to provide health insurance to a large group of U.S. citizens who could not afford plans available on the ACA marketplace (meaning their income was so small that the requirement for buying coverage was waived) but who also made too much or otherwise didn’t meet the requirements for other types of government or state assistance. For example, all children receive health insurance through CHIP, and, while the child is between the ages of 0-5, the child’s parents are also provided health insurance.

<sup>x</sup> For example, a prescription that is written as “Take Q4h” means “Take every four hours.”



## **CHAPTER ONE:**

### **NEVERMORE THE “AMERICAN CONGO”**

The Rio Grande Valley (RGV, or “the Valley” in colloquial usage) has persistently been described along an Anglo/Mexican binary based partly on the fact that much of the writing about the region’s politics of representation was written in the early-to-mid twentieth century when that binary was the lived reality (Paredes 1995 [1977]; Anzaldúa 1987; Cotera 2000; Limon 1994). As I detail throughout this chapter, over the past 40 years the Rio Grande Valley has experienced immense population growth and is no longer a region of only Anglos and Mexican-Americans. However, the notion that that binary is the primary one still exists, and it was into that imagined binary that I arrived for a summer of fieldwork in June 2010. As I searched for a place to live, I found an apartment in a small town located about 15 miles west of the main city, McAllen. The apartment rented for twice as much during the high-season winter months, when close to 100,000 “Winter Texans” (retired Anglos from midwestern states and from Canada) set up residence in mobile home communities and apartment complexes located in small towns that in earlier decades based their economies on agriculture. Now, trailer parks with names like “Tropical Acres,” “Fiesta Village,” and “Lemon Tree” sit next to agricultural packing sheds abandoned by companies that went out of business or relocated to regions with even fewer workers’ rights and labor agitation. Most Winter Texans migrate to the Valley each year for the winter months to enjoy the cheaper cost of living, access to Mexican

pharmaceuticals, warmer temperatures, and the area's excellent opportunities for bird watching (Dalstrom 2012).

The man who greeted me at the apartment did not fit the stereotype of a Valley resident. Herman was an expatriate from southern Africa who had set up shop in the region after attending high school in a nearby town in the 1960s as part of an exchange program and falling in love with his high-school sweetheart. Over the course of the next month, Herman and some of the men who hung around his property in the ramshackle town he was hoping to revitalize peppered me with stories about life in the Valley. Most of those men are Anglo, middle-aged, and had lived in the region most of their lives.

Herman surprised me one day with a story about his experiences with “racism” as an Anglo living in the Valley in the 1960s, a time when, like in many parts of the United States, there was explicit racial segregation (Nájera 2015; Richardson 1999). He said that when he and his wife, Anne, met in the 1960s, neither of their families wanted them to date because they were from different “races.” Although Herman is Anglo, Anne’s family considered him to be “black” because he is from southern Africa. Herman being assigned an identity as black was an intersubjective process produced in the specific conditions of the U.S. in the 1960s. It was also based on phenotype and geography. He was considered black because of the geography of his birth and because of Anne’s family’s imagination of the African continent.

Herman's Anglo host family, on the other hand, did not want him to date Anne; they considered her to be Mexican through the American racial theory of hypodescent, which assigns to "mixed-race" people the racial category of the more subordinate race. Like Herman, Anne is phenotypically light-skinned with blond hair and blue eyes, but, following the rules of hypodescent (Hartigan 2013), Herman's host family deemed her Mexican because one of her grandmothers was Mexican. But unlike Anne, Herman was black not because of hypodescent; he was black by geography and proximity—a kind of racial contagion.

### *Who Belongs with Whom, and Why*

Herman and Anne's story raises issues of the complex, intersubjective processes through which bodies are read. Although their story is not about diabetes, I include it here because their experience demonstrates one instance in which bodies are read and racialized based not only on exteriority, or phenotype, but on a complex recombination of interiority and exteriority. Anne's white skin, for example, did not indicate that she had the blood of a white person. Rather, the possibility of "Mexican blood" made her suspect and potentially the bearer of non-white blood.

Herman and Anne's case is one of many such stories I heard that ranged from straightforwardly racist to subtle and complex. For example, Carlos, a well-known Mexican-American politician, decided not to teach his children Spanish after his experience of being hit for speaking Spanish in school. In the late 1980s, his son, Mark, was unable to date the young women he wanted to because their parents did

not want to “mix races.” Emma, a Mexican-American woman in her 30s, found that despite the fact that she is fluently bilingual, her unaccented English and her “*güera*” [light/White] skin mean that she feels constantly challenged by others on her authentic knowledge of the region and her belonging in the Valley.

Herman and Anne, Carlos and his son Mark, and Emma are negotiating questions of belonging—of *who belongs with whom, and why*. Over the course of this chapter, I demonstrate that negotiating questions about who belongs with whom continues to be critical to life in the region and continues to occur through recourse to the interiority and exteriority of the body. Furthermore, over the course of this dissertation, I argue that those negotiations are currently occurring through how people produce and negotiate the category of “Mexican-American in south Texas with diabetes.”

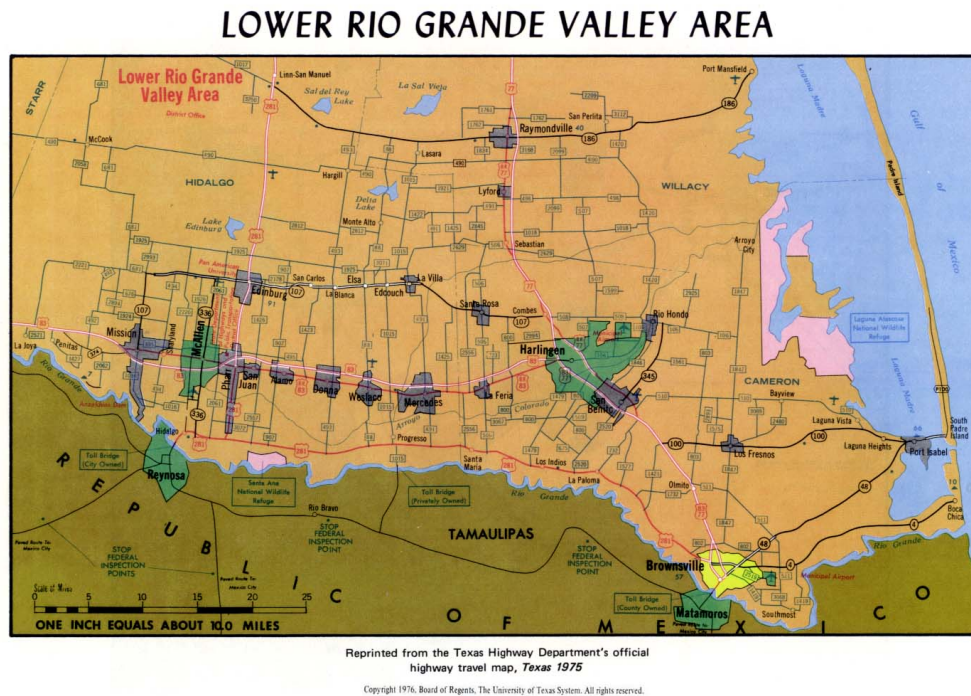
This chapter describes the region as it exists in the contemporary moment. With a persistent focus on bodies I describe how an internal U.S. border checkpoint and some legal retractions of the protections of the Fourth Amendment of the U.S. Constitution produce constant surveillance of bodies. However, I argue that that surveillance is unequally enforced and experienced and that consequently, while the movement of some bodies is restricted, other bodies are not. Through ethnographic examples of Winter Texans, cross-border consumption and healthcare provision, and the informal economy, I describe how the movement of some bodies exists in context with the surveillance and stoppage of others. Throughout this chapter, my focus is on how the parameters of belonging are policed and have been policed, particularly

through attention to skin color, ancestry, and more recently, diabetes diagnosis and corporeality.

### *Contemporary Context of the Rio Grande Valley*

The Rio Grande Valley is made up of four counties (Starr, Hidalgo, Cameron, and Webb) that cover 4,872 square miles of land and water. “The Valley” is on the northern banks of the Rio Grande River, across from numerous Mexican cities, the largest of which are Reynosa and Matamoros (Figure 1.1).

Reaching the larger Texas metropolitan areas of San Antonio and Austin from McAllen takes five hours by car through flat, arid countryside.



**Figure 2. Map of the Rio Grande Valley. The Falfurrias checkpoint, discussed below, is north of Raymondville on Route 77.**

Driving north on Route 77 out of the Rio Grande Valley, the horizon becomes long and flat. Quite quickly after leaving, the multiplexes movie theaters and apartment complexes are replaced with miles of ranch land. Every few miles, an oil well rig comes into sight, slowly bobbing its head up and down to churn out oil. This is the Texas of the U.S. national imagination, and right before entering that land of cattle ranching, big oil, and “big Texas,” there is a second border checkpoint to pass through.

### ***Constant Surveillance***

One of the most obvious ways the bodies in the region are read is through interactions with the U.S. Border Patrol. The border patrol has two locations: one on the U.S./Mexico border and another about 45 miles north in Falfurrias, Texas. Everyone who arrives in and departs from the Rio Grande Valley by car or bus must pass through the U.S. Border Checkpoint in Falfurrias. People in the Rio Grande Valley told me that the Falfurrias checkpoint is more difficult to pass through than the checkpoints at the Rio Grande because it is one where the U.S. state’s power is particularly robust. Many residents who do not have legal permission to live in the United States, or who are legal residents or citizens but fear interaction with border patrol, deal with the precariousness of their position by simply never leaving the Rio Grande Valley. This concern with the Falfurrias border checkpoint has real implications for people from the Valley who need healthcare that is available only in the northern Texas cities of Houston, Austin, or San Antonio.

Newspaper articles describe cases in which a patient is transported by medical helicopter to a Houston hospital due to an extreme emergency, only to be apprehended by border patrol at the hospital (Fernandez 2015; Hennessy-Fiske 2016). Indeed, the Director of Community Engagement at one of the regional hospitals, as well as numerous politicians who have worked to bring a medical school to the region, justify its need through the lens of this problem.

While the U.S. state's power snaps into focus at the border checkpoints, it is not only there that its presence is felt. Scholars Margaret Dorsey and Miguel Díaz-Barriga describe the region between the checkpoints at the Rio Grande River and in the small town of Falfurrias as a "state of carcelment" (2015:205-206). They draw on Michel Foucault's concept of a carceral state (1995), a state that can surveil and discipline non-imprisoned bodies in prison-like ways. Their argument is based on the fact that in the Rio Grande Valley there has been a loosening of the protections granted by the Fourth Amendment of the U.S. Constitution, which guarantees citizens the right "to be secure in their persons, houses, paper and effects" (2015:208). They describe how this state of carcelment has been legally constructed to exist within 100 miles of the borders with Canada and Mexico. Through an analysis of district court rulings that allowed for a "reasonable stretch of the Fourth Amendment," Dorsey and Díaz-Barriga write that "lawyers who work on immigration cases in south Texas refer to it as a 'Constitution free zone'" (ibid: 207).

Consider their analysis in light of Raúl's tale about a hypothetical encounter with a border patrol agent, described in the Introduction. In that tale, he is certain that his skinny body will signal a lack of belonging to the agent. In light of the region's description as a "Constitution Free Zone" by some attorneys it is clear how much latitude and discretion agents have. For Raúl, the threat of that discretion is associated with the size of his body. However, the threat is not only or always due to body size, but also other markers. For example, local police departments and divisions of motor vehicles frequently set up highway driver license checks, colloquially referred to as *retenes*. Ostensibly, these are to check for driver's licenses, but they become de facto sites of potential deportation. For example, many women who participated in the Zumba classes I attended did not have legal documentation to be in the U.S. When one of these checkpoints was set up, a network of texts and phone calls would go out, often resulting in women staying in their houses, missing work, and keeping their children home from school for days.

### ***Hub of Activity***

While it is true that bodies, goods, and movement are monitored and intervened upon in the Rio Grande Valley, for many people in the region, that reality is simply a nuisance. For the 1.3 million people who live in the McAllen-Edinburg-Mission Statistical Area (MSA<sup>xi</sup>) and for hundreds of thousands of Mexican nationals from the state of Tamaulipas, the Rio Grande Valley is a hub of family, commercial, healthcare, and educational activity (U.S. Census 2010). The region has experienced exponential population growth in recent decades. In 1960, the four counties combined



had a population of 369,223,<sup>xii</sup> and by 1980 the population had almost doubled, reaching 537,717.<sup>xiii</sup> Of the 1.3 million residents, 805,497 live in the McAllen-Edinburg-Mission MSA. Of those, 88.4% (712,205) self-identify on U.S. Census documents as “Hispanic or Latino, Mexican descent.” 3,809 identify their country of origin as Central America, 1,546 list South America, and 11,664 identify as “Other Hispanic.” Of the 73,516 who do not identify at “Hispanic or Latino,” 60,072 identify as “White alone” and 8,193 as “Asian.” Of the just over 800,000 who live in the McAllen-Edinburg-Mission MSA, almost 60% are considered “employed civilians,” and the industries that employ most of those civilians are grouped as “Education, Health Care, and Social Assistance” (28.8%). The next largest industry is retail trade, at 13.7% of the workforce.<sup>xiv</sup>

### ***Things You Can’t Know through the Census***

While U.S. Census Bureau statistics help clarify the region’s demography, there are particularities to this borderlands region that make government statistics—no matter how carefully collected—incomplete, at best. The most obvious challenge is that many people in the region do not have legal documentation to be in the U.S. and, for that reason, do not want to talk to Census workers; thus, the U.S. Census must estimate, and, by all accounts, the estimates are quite low (Hoefler 2011).

However, it is not just people without legal documentation who are excluded from the Census. The second major omission is Winter Texans, an omission that significantly skews economic data. This omission is due to Census rules about how

to determine whether an individual should be counted as a resident of any given area. Accordingly, the almost 60,000 Winter Texans are not counted by the Census because an individual must live in a given location for at least six months to be counted. Most Winter Texans migrate to the region in November and stay until early April, meaning that they reside in the region for five months.<sup>xv</sup> During that time, each Winter Texan household is estimated to spend at least \$9,555.<sup>xvi</sup>

Moreover, Winter Texans, most of whom are in their sixties and seventies, also utilize the healthcare system for care of their chronic conditions.<sup>xvii</sup> Healthcare providers cater to Winter Texans by advertising that they speak English and, according to one interlocutor, by employing blond and Anglo employees. “It makes them feel better about the place,” he explained. Herman, who earns his yearly income working with “Winter Visitors,” as he calls them, told me that Nuevo Progreso, a small town across the border, was basically built for Winter Texans who wanted to cross into Mexico to buy pharmaceuticals. Many of the local towns’ economic development corporations seek to attract new business to the region by citing U.S. Census data that indicates rapid economic growth, low average household spending, and a relatively low cost of living (Gomez 2014).

Finally, an untold amount of money circulates outside of formalized banking institutions and thus is not included in Census or other accounts of regional spending. Perhaps two of the most significant aspects of daily life are *tandas* and the cash economy. *Tandas* are informal savings associations formed by friends or small community associates either to lend money for large

purchases such as a house or a car, or to help in emergencies.<sup>xviii</sup> For example, Lucera, a community health educator with dual citizenship, has a loan for her house through a *tanda*. *Tandas*, which can include financing that comes from people on both sides of the border, is only one example of the interconnection of Texas's Rio Grande Valley and the northern region of Mexico.

### ***Interconnection***

As a speaker at a Health Summit at a local university said, "We are no longer a 'sleepy little Valley.' People from all over the world migrate to the region for work and for bodily care. Across the Rio Grande River from McAllen is the city of Reynosa, Mexico. Its population has grown drastically in the past fifteen years due to the increase of *maquiladoras*, or manufacturing operations; the 209 *maquiladoras* currently extant employ approximately 65,000 people (Richardson 2002; Thomas 2001). The population growth has contributed to growth in McAllen as well, partly because it has become the main home for *maquiladora* managers, who were dubbed the "new NAFTA Men" in a *Time Magazine* article (Thomas 2001). Local residents told me that both "NAFTA Men" and wealthy Mexican nationals routinely pay \$250,000 to \$400,000 in cash for houses in the upscale neighborhoods in McAllen and nearby Mission.



**Figure 3. North 10th Street in McAllen, TX. North 10th is the major thoroughfare that stretches from the border to the far north reaches of McAllen. In the south and central areas of town, it is a shopping and eating destination. Photo by Author.**

The area is well equipped with healthcare institutions; at present, McAllen has six hospitals, two major sub-specialty clinics, and doctors' offices on almost every road.<sup>xix</sup> Most of the hospitals are built along U.S. Route 83, the major roadway cutting east/west only a few miles north of the U.S./Mexico border crossing.

In terms of diabetes and obesity there are innumerable intergovernmental coalitions between the counties on either side of the border. The reason for this sort of

cross-border collaboration is that the people in the region are considered a coherent category, epidemiologically and culturally. Indeed, at a bi-national diabetes and obesity day-long workshop I attended, the town's mayor said, "I remember when we could wade across the river. So many of us have family members on both sides of the border." As she began her presentation, Fina said that "we" are connected by our families and that in earlier times the separation was not so apparent; now we are also connected by our health. Switching into Spanish, she said, "*Hay muchas cosas que nos unen. . . familias y salud.* [There are many things that unite us. . . family and health.] Ana, Fina's co-presenter, said that "there is so much between our two cultures..." and that diabetes and obesity is "something that both countries deal with." At this particular workshop, and at all of six that I attended, we began the day by singing the U.S. and Mexican national anthems. As we stood to sing the U.S. national anthem, Fina and a friend of hers laughed, nudging each other and saying, "Which one should I sing?!" Fina and her friend are not the only people in the region who feel interpellated by the iconography of two states in the context of conversations about health and disease. Many other people in the room made jokes, getting up and down at the beginning of the anthem for the nation to which they didn't have citizenship, exhibiting public displays of allegiance.

Part of the reason for this joking is that many people live their entire lives deeply immersed in the bureaucracy and states of each nation. For example, many Mexican nationals send their children to public and private school in the Rio Grande Valley. Sara, a dual-citizen, was born in the United States and lived in Reynosa until

she was nine years old. She described being driven to McAllen every day for elementary school. Borderlands scholar Josiah Heyman has described a “border family economy” in which domestic income and expenses are split between the U.S. and Mexico (1991).

In a reversal of this cross-border movement, Tamaulipas provides numerous medical services for a much lower cost than in the RGV to those who can cross the border. A great deal of newspaper and radio coverage of medical care in Tamaulipas describes Winter Texans crossing to buy pharmaceuticals (Dalstrom 2011), or year-round residents crossing for uncovered dental work or cosmetic surgery. However, many people I met traveled to Mexican cities for routine healthcare because they preferred the doctors’ demeanors in Mexico, or because they could not afford their U.S. co-pays.

### *Migration to the Rio Grande Valley*

While much of the discussion around migration in the region (both publicly and in academia) focuses on undocumented Mexican economic migrants<sup>xx</sup> and, more recently, the “flood” of unaccompanied minors from Central America and Mexico,<sup>xxi</sup> the region has a much more varied history and present of migration. Since the 1500s, the region has been traversed, colonized, and settled by Coahuiltecan Indians, Spain, the Republic of Texas, Mexico, and the U.S. The region was colonized by Spain in the mid-1500s, and in a fairly unrelenting fashion since the mid-1600s has drawn migrants from geographically proximate northern Mexican states as well as from the far northern reaches of the United States. During the 19<sup>th</sup> and 20<sup>th</sup> century in

particular the migration and the boundaries were produced along the binary of “Anglo” and “Mexican.” That enduring and racialized history has been written about extensively (Anzaldúa 1987; Cotera 2000; Limón 1994; Menchaca 2001; Montejano 1987; Paredes 1996[1997]). Most recently, *maquiladora* owners from Japan and physicians from Saudi Arabia, Syria, India, Mexico, Central America and South America have joined in the migration,<sup>xxii</sup> complicating the Anglo/Mexican binary that has characterized the region.

This chapter section detailed three interconnected forms of migration: those who migrate for work in medicine, those who migrate for work in homes, in construction, and to be close to family; and those who migrate for medication and for extended vacations.

### ***Migrants for Work in Medicine***

About a month into my time in the field, my husband, six-month old daughter, and I were invited to a barbeque at Manny’s house. Party guests mingled in the open living and dining rooms, occasionally stepping outside to gaze up at the palm trees and watch the birds circling overhead. The guests were a mixture of various types of what I call “Valley expats”: Teach for America (TFA) volunteers, professors, homeland security/border patrol officers, and Winter Texans who had come to the Valley but never left.

Manny himself is not from the Valley. Originally, he took a job in the Valley because it was the only job he was offered. His family relocated for what was going

to be a two-year stint, but by the time I met him, he was entering year six in the Valley. He and his wife had purchased a house and were expecting their third child. Manny was a self-styled ambassador for the Valley, a salesman who was always hatching another plan. That night he spoke impassioned, as he would at subsequent gatherings, about his conviction that he had a “calling” to be in the region. He was enthusiastic about sustainable, organic, local agriculture. His passion was infectious, and he convinced my husband and me—novice gardeners—to join a local community garden, where he promised to help us prepare the soil and choose crops. He assured us that kale and broccoli grew particularly well, and added, “Almost anything will grow on this soil! You practically just have to throw the seeds down and it’ll grow.” He had been involved in starting what was then the town’s only Farmers’ Market, and had even helped choose its location. He mentioned that some of his fellow agricultural friends had been talking about the fact they really feel that they first came to the Valley for a “cause” (in their case, to cultivate organic, sustainable agriculture) but that over time they found that they have a “calling” to use their agricultural skills to cultivate the Valley specifically, as opposed to any other region.

This move from cause to calling had to do, in part, with opportunity. Manny said that his good work in the region grew out of his knowledge and skills about gardens and plants, and food deserts.<sup>xxiii</sup> Although rather anomalous in the Valley, in his home state, people like him were “a dime a dozen.” Someone in the Valley with a “good idea,” he said, is usually given a “wide swath” and allowed to pursue their calling.



Some of the expats in the Valley work for large corporations. Ron and Mike, both African-American men, and Crystal, an Anglo woman, for example, had all been recruited to work for private healthcare or hospitals that needed people with their skills. They all said that initially they planned only to stay for a few years. Ron, an anesthesiologist, wanted to pay off his medical school loans and then move home to California, having begged his wife to move with him to the remote region. But after a few years in the Valley, Ron and his wife realized that they could live in a much bigger home than in California and still have money left over. Life in the Valley was a little boring, Ron said, but he would never make “this much” money elsewhere. Crystal, a highly specialized healthcare professional, had moved to the Valley after being approached by a private healthcare entity that wanted to be able to offer the specific services for which she had just finished training. She said that, at the time, there was “no way” she would move to the Valley, so she wrote her potential employer a list of her requirements (paid housing in one of the most elite neighborhoods, a car, a “crazy” amount of money). She was shocked when the healthcare group “didn’t bat an eye” and agreed to all of her stipulations. Unlike Ron, Crystal stayed in the Valley because she fell in love with a local, found a church and an alternative healthcare community, and simply decided she wanted to stay.

### ***Migrants for Work in Home Care, Construction, and to be With Family***

Those who migrate to the region who receive the most attention are people from Mexico who cross into the U.S. without legal permission or who overstay their

Visas. Dr. Putnam, a physician who moved to the region as part of what he described as a calling to serve after working in the National Health Service Corps (NHSC) claimed that the increased presence of undocumented Mexican people is because of the failing public schooling system in Mexico. Most people I met, however, attributed the migration to low wages and to violence in Mexico.

Of the 19 people I interviewed who said that they do not have legal permission, they had migrated to be with family, to help provide bodily care for ailing family members, for work and money, and/or because they were fleeing from the cartel. For example, Irma, a woman in her mid-40s, first migrated to the U.S. through the river to be closer to her brother, who had migrated for work in agriculture. While in the U.S. she became pregnant and gave birth to a baby. She missed her family in Mexico and so returned, only to discover that her daughter (a U.S. citizen) was deaf. Reasoning that her daughter could access better services in the U.S. than in Mexico, she returned. Like many people, Irma lives in a “multi-status” family in which members have different legal statuses vis-à-vis the U.S. state. Another woman, Eugenia, came to help care for her sister’s husband, who was undergoing a long-term hospital rehabilitation. After her brother-in-law left the hospital, he and Eugenia’s sister divorced but Eugenia stayed in the U.S. and now helps care for neighborhood children.

The vast majority of people I met migrated for work and “*para vivir mejor*” [to live better; for a better life], a saying that is usually uttered with a laugh and a roll of the eyes. Life isn’t actually better, Marianela quipped, when I asked her if life is, in

fact, better in the U.S.; it's just calmer. Living better usually meant being able to work and live off of one's wages. Most of the men (who I met through their wives) worked in the booming Texas construction industry and the women worked in homes cleaning and caring for children.

### *Colonias*

As people migrate they are assumed to occupy certain spatialized areas of the region. The southern area closer to the U.S./Mexico border has a number of colonias (peri-urban settlements) the residents of which are assumed to be living in the U.S. without documentation. While it is true that people who overstay visas or who cross illegally live in the region's colonias, there are many U.S. citizens in colonias and there are many people without legal permission living in the wealthier regions of town. For many people I met, colonias are synecdoches not only of the region, but also of diabetes: to truly know the region, one must go to the colonias, and to truly understand diabetes, one must go to the colonias. The word colonia itself is overdetermined: it conjures up images of self-made houses fashioned from cheap or discarded trailers; feral dogs, gangs and continual street violence; a dearth of potable water, street lights, police, or trash collection trucks; and inhabitants who are mostly Mexican nationals living in the United States without legal documentation.



**Figure 4. Example of one common portrayal of colonias in the region. From Leo Lopez, 2013. On the Texas-Mexico Border, a New Trade Emerges. *The Lancet* 382(9894):757.**

Both popular and academic discussions about diabetes in the Mexican-American population or in the U.S./Mexico borderlands frequently locate the condition in peri-urban settlements that in northern Mexico and U.S. borderlands states are called colonias. Of all the U.S. border states, Texas has by far the largest number of settlements deemed colonias (2,200 in Texas out of a total of 2,500 throughout the border states). Almost half of those 2,200 are located in the county where I conducted fieldwork, with close to 300,000 residents (Jepson 2012). In the Rio Grande Valley, many of the colonias were settled on cheap agricultural land sold to Mexican agricultural laborers in the 1930s by Anglo farm owners who could sell the non-irrigated land. Despite the proliferation of discourse on colonias in the region

many of the people I met who worked in clinical non-profits claimed that they had never been to a colonia.

With “colonia” standing in for so many broader assumptions about who and what constitutes both the region and diabetes, I was entirely uncertain of what the colonias would actually be like. Carolina, for example, lived in a colonia that did not fit the popular image. As I followed her to her house—a freshly built, single-story, single-family dwelling with manicured lawns, flanked by identical houses up and down either side of the street—I was no longer sure if we were in the colonia at all. The confusion I experienced about colonias, about who exactly lives in them, what the geographic boundaries are, and how they came to exist, merits discussion here because of their presumed isomorphism with the region and with diabetes.

For example, María, the director of the Mariana Clinic, has dedicated her professional life to trying to change the day-to-day life for the region’s poorest residents—many of whom live in colonias—through healthcare provision, case management, and counseling. She told me once that she had never been to a colonia, and that many of her friends and family also had never been—a statement that surprised me, in part because we had been in a colonia together a few weeks before. We had gone for the unveiling of a small subdivision of Habitat for Humanity-like housing. How could she have been in a colonia without realizing it? Anthropologist Sarah Hill traces how the term “colonias” went from first being an obscure term, to then meaning a poor neighborhood, to ultimately indicating “leaky Third Worlders in a First World space north of the border” (Hill 2003:152); as dangerous pollution, as

“matter” that is out of place (Strathern 2002[1966]:44). While initially a Spanish-language word used simply to describe “self-help” and poor neighborhoods on the northern Mexico border with the United States (Ward 1999), the term has come to be associated in the United States not with poor neighborhoods and “self-help,” but with poverty and crime, poverty and drugs, poverty and ‘illegality’ (DeGenova 2002), and poverty and usurpation of United States social services.

In the Rio Grande Valley, the term *colonia* is not simply a linguistic designation for regions of extreme poverty; it is also a bureaucratic designation with policy implications, a password that can open lines of federal and state funding. Thus, a cluster of homes may be thought of in popular discourse as a *colonia* but may not meet the policy requirements for earmarked funds, and vice versa. The three federal agencies that fund *colonia* improvements—HUD, the USDA, and the EPA—use different geographic requirements to define what constitutes a *colonia*. According to the EPA, to be designated a *colonia*, one of the criteria that a settlement must meet is that it be located within 62 miles of the U.S./Mexico border. According to HUD and the USDA, the geographic boundary maps more closely onto the Free Trade Zone boundaries, at 150 miles from the U.S./Mexico border.

*Bodies of Agriculture; Bodies of the Region*



**Figure 5. Abandoned packing shed and train tracks. Photo by Author.**

Business Route 83 stretches across the southern edge of Texas, from Harlingen in the east to Laredo in the west, before turning and heading north over 600 miles to Crystal City, Abilene, and over the state line into Oklahoma. The stretch of Business Route 83 that passes through the Rio Grande Valley is a congested city road clogged with car dealerships, wholesalers, tire repair shops, and restaurants vying for roadside real estate. The route runs parallel and due north of the Rio Grande River.

Between the route and the river are large tracts of agricultural land, some now defunct or sold to commercial development corporations. Alongside Business Route 83 run the train tracks, first built in 1904 to connect the newly flood-irrigated agricultural land with larger cities and distribution sites throughout the United States

(Foley 1997:107; Montejano 1987). The river, the railroad, and the highway have played crucial roles in the movement of commodities and people across the international border, as well as in the movement of produce and commodities from the southern reaches of the Rio Grande Valley to U.S. markets in the north (Díaz 2015). Crops include sugarcane, oranges, cotton, field corn, tortilla corn, winter vegetables, greens, avocados, wine grapes, star fruit, onions, and carrots.

There are many explanations for why agriculture revenues and volumes have shrunk in the region. One version that is particularly relevant for this dissertation is that large-scale growers left south Texas for places with fewer labor regulations, such as Mexico and the Dominican Republic, because of the incitement to organize for workers' rights fueled by the Texas Farmworkers' Association, César Chavez, and Dolores Huerta (1966–1970). Indeed, three individuals who did not agree on many political points—an Anglo farmer named Arnie, a Chicano activist named Eddie, and a 4-H food educator from a longstanding Mexicano family, named Fina—all described to me the infamous “onion strike” of 1979,<sup>xxiv</sup> and cited the impasse between the growers and the farmworkers as the reason for the town's economic downfall. During that strike, farm workers asked for increased wages and for bathrooms. The strike continued for such a long time that an entire season of onions rotted as workers and farm owners argued over pay. Agriculture has not been the mainstay of the regional economy since at least the 1980s. As evidenced in the image above, former packing sheds now sit empty (Figure 1.4). Today, many of the company-sponsored towns, such as the one where I met Herman and Anne, are



shadows of their former selves. The empty warehouses remain an insistent re-insertion of the past.

But it is not only the buildings that are ghostly reminders. It is also peoples' bodies. For example, in the 1950s Hayes-Sammons, an agricultural chemical-mixing company, operated in the Texas town of Mission, located to the west of McAllen. The Hayes-Sammons plant produced organochlorine pesticides such as DDT, BHC, dieldrin, toxaphene, and chlordane (Texas Commission on Environmental Quality 2002). According to Ester Salinas, a local activist with whom I spoke, men (including her father) lined up to work at the plant. It was an indoor job, as opposed to outdoor labor, and it paid a small bit more per day—differences that made a big difference to migrant workers. However, according to local activists and multiple newspaper reports, the chemicals that workers handled at the plant are all now banned in the U.S. and the workers were not instructed on how or why to use protective materials such as respirators, aprons, goggles, or gloves.

After an investigation led by U.S. Congressman Lloyd Dogget in 2006, the former plant was declared a Superfund site. Numerous local residents and the families of former workers claim that their decades of exposure to the chemicals caused serious medical conditions, such as non-Hodgkins lymphoma, spina bifida, skin cancers, and other diseases.<sup>xxv</sup> News reports and casual conversation, as well as a short documentary about the plant<sup>xxvi</sup> attribute multiple residents' physical abnormalities to the plant: for example, a woman with six breasts, and residents with

multiple toes, cysts, and facial deformities. Numerous articles were written in local and state-based newspapers and magazines describing the



**Figure 6. Article from the *Victoria Advocate*, given to me by one of the activists seeking compensation for bodily harm. No date on original.**

neighborhood residents' attempts to have the warehouse and their yards tested for contamination. The plant is one of the many indeterminacies that exist in the Rio Grande Valley in regard to stories that are told about the causes of ill health, but for which the causality is contested or not proven.

### ***On Representation***

The 1979 onion strike is often offered up as the end of the region's agricultural heyday that began in the early 1900s with the advent of flood irrigation. Investors bought enormous swaths of land and parceled them for sale to Anglos from

the north. However, in order to sell the land, the investors had to re-invent the myth of the region, recasting its image as a treacherous and violent borderland to a “Magic Valley” where anything can grow.

However, because many of the potential investors and settlers were Anglos from the north, boosters felt they had to work against these potential settlers’ racialized conceptions of Mexicans. They promoted visions of a “good life” not only on the basis of fertile and irrigated agricultural land, but also on the promise of the Mexican laborer. These workers were described by land sellers as “very easy to get along with and not as treacherous and barbarous as many of our northern friends think” (Stewart Land Co. 1918, cited in Branstromm and Neuman 2009:129). The Stewart Land Company reassured prospective settlers in 1918, for example, that “the Mexican has no social aspirations, and is perfectly contented to be your servant” (129). Anglo investors and settlers had been lured to the region, the “farming frontier,” with the twin promises of abundant, unending water from the Rio Grande and a ready supply of cheap Mexican labor (Montejano 1987; Brannstrom and Neuman 2009).

Previous to the early 1900s, the region was overwhelmingly perceived in the rest of the United States as dangerous and uncivilized, as evidenced in the following excerpt penned in 1894 by the American ethnologist and Army Captain John G. Bourke, in which he describes the region as “The American Congo”:

Through the centre of this unknown region, fully as large as New England, courses the Rio Grande, which can more correctly be compared to the Congo than to the Nile the moment that the degraded, turbulent, ignorant, and superstitious character of its

population comes under examination. To the Congo, therefore, I compare it, and I am confident that all who peruse these lines to a conclusion will concur in the correctness of the comparison, although stress cannot be too pointedly laid upon the existence within this Dark Belt of thriving, intelligent communities, such as Brownsville, Matamoros, Corpus Christi, Laredo, San Diego, and others, in which are to be found people of as much refinement and good breeding as anywhere else in the world, but exerting about as much influence upon the indigenes around them as did the Saxon or Danish invaders upon the Celts of Ireland.

Chicana literary scholar María Coterá analyzes Bourke's statements as illustrations of racist Anglo attitudes. Citing his ethnographic and popular writing, she highlights:

...the distinct brand of colonialist narrative linked to the ideological imperatives of American westward expansion into the southwestern borderlands. Unlike the supposedly 'pure' American Indian peoples he so eloquently wrote about in his other ethnographic texts, the Mexicans that Bourke encountered in his military actions on the southwestern border represented (for him as well as for his Anglo-Saxon contemporaries) a dangerous product of the racial admixture that characterized Spain's colonial history in the Americas. (Coterá 2000:80)

Coterá then puts Bourke's writings into an after-the-fact literary conversation with the writings of Jovita González, the region's first "native" ethnographer. González was a Mexican-American woman from an elite family who had studied folklore with the famous Anglo folklorist Frank J. Dobie at the University of Texas at Austin.

According to Coterá, González's 1921 Master's thesis in folklore, "Life Along the Border: Hidalgo, Starr, and Cameron Counties," is a subtle response to Bourke's claims about Mexican-Americans, and contributes nuance and ethnographic data to the lives of wealthy, elite Mexican-Americans.

Cultural theorists José Limón and María Coterá both analyze Bourke's and González's complex gendered, racialized, and classed positionalities (Coterá 2000:34-

42; Limon 1994). Limón, for example, takes a psychoanalytic perspective, describing Bourke's childhood experiences as the child of an Irish father and English mother, and an Irish Catholic immigrant in the northeast United States, as one in which he was treated as a racialized and unevolved Other. Cotera contextualizes Bourke's writing within the racial ideology of hypodescent by highlighting the "dangerous" nature of the racially admixed Mexicans he met.

What Bourke's, González's, Cotera's, and Limón's analyses make clear is an ongoing regional concern with how the region is depicted in racialized and class-based terms. Cotera's analysis of González's writing makes clear that the stakes were high; it was imperative not to be perceived by outsiders either as one of the "degraded, turbulent, ignorant, and superstitious" or as Cotera puts it, as a "pure" and nonthreatening Indians. Throughout this dissertation, I aim to demonstrate that this concern about the region's racialized, class-based, and citizenship-based depiction in popular media continues to be a concern. And it is a concern being navigated through practices related to diabetes care, management, and avoidance.

After Jovita González, the next ethnographies of the Rio Grande Valley were written in the late 1950s and early 1960s, and were based on research commissioned by the Hidalgo Project on Differential Culture Change and Mental Health. The Hidalgo Project's leaders were concerned about what they saw as the lack of "assimilation" of "Mexicans" into "American" culture (Madsen 1964). The research was directed by an Anglo ethnographer named William Madsen, who was subsequently skewered for his static and racist depictions of Mexican Americans by

Valley-resident-turned-folklorist Américo Paredes (1995 [1977]; 1995 [1968]; 2003), as well as by Madsen's former student Octavio Romano-V, who went on to author his own scholarship about the region and about Mexican Americans in the United States (Romano-V 1968, 1969). Romano-V became the founding editor of *El Grito*, a short-lived journal of contemporary Mexican American thought, as well as founder of a publishing company, Quinta Sol.

Madsen, Paredes, Rubel, and Romano-V were all in the business of representing the Rio Grande Valley to others outside the region, in the simmering years before the Chicano movement took full force, roughly 1968–1978 (Barrera 2004; Zavala 2014; Acuña 2011). At the time that Madsen and his doctoral students were commissioned to conduct their research, the Rio Grande Valley as a whole was in a period of reckoning: reckoning with the realities of racially segregated schools, extremely impoverished colonias, and increased migration from Mexico due to the Bracero Program. Not far from the Rio Grande Valley, in Crystal City, Texas, is where the Chicano/a movement began. While much of the Chicano/a movement in the Rio Grande Valley focused on fighting for equal educational opportunities (Barrera 2014), another key issue was that of representation: who gets to write and otherwise depict whom, and for which audiences.

At this time, Madsen was clearly impacted by Oscar Lewis's "culture of poverty" theories (1959), and as such, worked earnestly with qualitative and ethnographic methods to understand the bounded and unassimilated "culture" of Mexican-Americans. His hope was that his insights would help them "melt" into the

American melting pot. His student, Romano-V, went much farther afield, devoting his life to academic and popular critique of social science's pathologization of Mexican-Americans, and also to the promotion of Mexican-Americans' intellectual thought. That division—between Anglos and Mexican-Americans—as separate groups, separate units of analysis, and the only relevant groups for analysis has continued in the region to this day.

### ***Who Belongs with Whom, and Why***

This chapter has addressed the complex history of the region, with a focus on body- and phenotype-based belonging as central to the life in the region. Drawing on Lauren Berlant's discussion of her own approach to historical comparison, I frame this continuity of body-and phenotype-based belonging as "structural echoes" (Berlant) that continue to shape the social, legal, and medical frameworks that shape residents' experiences in the Rio Grande Valley. I have intended to demonstrate that while some of the logics and orders of life—such as the racial order in the U.S.—have changed, *the fact of* the ordering by racialized phenotype has not changed. Currently, the logics of belonging can be seen in how the interiority (genes, blood) and exteriority (obesity) of diabetes plays a role in who is a member of "us," who is a member of "them," and why.

This focus on body-based and phenotype-based belonging maps clearly on to the notion of the "humiliation of the particular"—the inability to abstract oneself from the particularity of one's body. Think of Raúl. Whether he is the "chubby" man or the "skinny, gaunt" man, he is suspect. If he is "chubby," then his humiliating

particularity is that of the “minority” group member who overeats and is diabetic. If he is “skinny, gaunt,” the border patrol officer will assume he does not eat like an American and, thus, ask him for his papers.

But it is not only Raúl and his compelling story that demonstrate the humiliation of the particular. The people who lived and worked in and near the Hayes-Sammons plant also cannot abstract themselves from their bodies of multiple breasts, skin diseases, and making claims in the public space of a courthouse in Austin, Texas for financial remuneration from corporations.

And, finally, think back to Herman and Anne, whose story began this chapter. Their experiences bring to the fore the impossible situation that people face when attempting to enact membership in both “us” and “them.” Despite identifying as Anglo and possessing “white” skin, Anne is denied membership in an Anglo “us” by Herman’s host family because of the Mexican “blood” she carries in the interior of her body.

By detailing the long and varied history of migration to the region, I have shown that although for centuries such movements were primarily Anglo/Mexican encounters, more recently migration has begun to include people from the Middle East, South America, and India. I demonstrated that the sick and/or diseased body of the Rio Grande Valley resident is, in a sense, an active actor that propels that migration, drawing people like Crystal, Ron, and Mike to live in a region that they would otherwise consider a hardship location.



The next chapter, “What is Diabetes?” provides information about the biological processes involved in type-2 diabetes as they are currently understood in allopathic medicine. Chapter Two attends to the history of diabetes research and how that history has been narrated, and provides a description of how the statistics about diabetes in the RGV are produced. In doing so the chapter demonstrates the centrality of doubt and certainty in the production of knowledge about diabetes. Chapter Two also describes the practice of diagnosis and management of diabetes in the Rio Grande Valley and how the diagnosis—“diabetic until proven otherwise”—pulls most residents into the category of “Mexican-American in south Texas with diabetes.”

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<sup>xi</sup> A metropolitan statistical area (MSA) is a designation developed by the U.S. Census to describe an urban area with more than 50,000 residents that has a significant amount of social and economic integration. Thus, an MSA can include multiple towns and parts of more than one county. More information can be found at <http://www.census.gov/population/metro/>. Accessed July 15, 2010.

<sup>xii</sup> Historical Census Browser. <http://mapswerver.lib.virginia.edu/php.state.php>. Accessed August 12, 2015.

<sup>xiii</sup> 1980 Social Explorer.

<http://www socialexplorer.com/tables/C1980/R10993266?ReportId=R10993266>.

<sup>xiv</sup> Social Explorer Tables: American Community Survey 3-yr estimates (SE) Social Explorer; U.S. Census Bureau. Accessed March 11, 2016.

<sup>xv</sup> See Residence Rule and Residence Situations for the 2010 U.S. Census, [http://www.census.gov/population/www/cen2010/resid\\_rules/resid\\_rules.html#SIX](http://www.census.gov/population/www/cen2010/resid_rules/resid_rules.html#SIX). Accessed July 24, 2015.

<sup>xvi</sup> Valley Markets and Tourism Research Center. 2008. Winter Texan Market Survey. University of Texas Pan American. Cited in Border Business Briefs 5(2), Winter 2009.

<sup>xvii</sup> Valley Markets and Tourism Research Center. 2008. Winter Texan Market Survey. University of Texas Pan American. Cited in Border Business Briefs 5(2), Winter 2009.

<sup>xviii</sup> *Tandas* have a long history in the Latino and Chicano communities in the United States. Carlos Veléz-Ibañez. *An Impossible Living in a Transborder World: Culture, Confianza, and Economy of Mexican-Origin Populations*. Tuscon: University of Arizona Press, 2010.

<sup>xix</sup> Since the time of this research, the Rio Grande Valley has built two medical schools, the first ever in the region. One is located at the newly formed UTRGV (Rio Grande Valley) and the second is a branch of Texas A&M. In 2015, the UTRGV Medical School opened the “South Texas Diabetes and Obesity Research Center” at the cost of \$30 million dollars, headed by a biological anthropologist.

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- <sup>xx</sup> Santa Ana, Otto. 2002. *Brown Tide Rising: Metaphors of Latinos in Contemporary American Public Discourse*. Austin: University of Texas Press. Richardson, Chad. 1999. *Batos, Bolillos, Pochos, and Pelados: Culture, Class, and Conflict on the South Texas Border*. Austin: University of Texas Press.
- <sup>xxi</sup> See, for example, Julia Preston (2014). Migrants Flow in South Texas, as do Rumors. *The New York Times*. June 16, 2014. Winter, Jana. Endless Wave of Immigrants Floods Rio Grande Valley. July 14, 2014. <http://www.foxnews.com/us/2014/07/14/night-time-on-border-endless-wave-illegal-immigrants-floods-rio-grande-valley/>. Accessed on August 10, 2014.
- <sup>xxii</sup> Most of the foreign physicians who practice in the Rio Grande Valley initially come to the region because it is designated as a region without a sufficient number of physicians for the population. Practicing in the Valley for a designated number of years allows these physicians to reside in the United States under a special visa (<http://www.usimmigrationlaw.net/physicians-national-interest-waivers.htm>). On October 6, 2000 the USCIS implemented regulations that permit primary care physicians working in Health Professional Shortage Areas to apply for a National Interest Waiver (NIW) and in so doing obtain a green card without the need for labor certification. This is an excellent opportunity for a primary care physician to obtain a green card without having to navigate through the lengthy and uncertain labor certification process.
- <sup>xxiii</sup> A “food desert” is a term used to describe a geographic area where there is a limited access to fresh and healthy food. There are different parameters used to assess and name food deserts by different scholars. For a review of food desert literature in the United States, see: Walker, Renee E., Keane, Christopher R., & Jessica G. Burke. 2010. Disparities in access to healthy food in the United States: A review of food deserts literature. *Health & Place* 16:876.884.
- <sup>xxiv</sup> Perry, Hart. 2003. *Valley of Tears*. 82 min. Perry Films.
- <sup>xxv</sup> See especially, Bogan, Jesse. 2007. Slow Death, Slower Justice: How pesticides poisoned South Mission, but no one is responsible. *Texas Observer*. June 29. Accessed on January 8, 2014, <http://www.texasobserver.org/2534-slow-death-slower-justice-how-pesticides-poisoned-south-mission-but-no-one-is-responsible/>. See also Roebuck, Jeremy. 2009. Mission Residents to face Hayes-Sammons plant in court. *The Monitor*. October 18. Accessed January 10, 2014, [http://www.themonitor.com/news/local/mission-residents-to-face-hayes-sammons-plant-in-court/article\\_7d4d19d7-4598-559c-ad14-f44a7f6139ea.html](http://www.themonitor.com/news/local/mission-residents-to-face-hayes-sammons-plant-in-court/article_7d4d19d7-4598-559c-ad14-f44a7f6139ea.html);
- <sup>xxvi</sup> The documentary is called “American Orange: The Undocumented Casualties of the Vietnam War.” Due to lack of funding, only certain parts of the film were produced and those can be found at [www.americanorange.com](http://www.americanorange.com).

## INTERLUDE: SEDIMENTARY LAYERS OF HISTORY



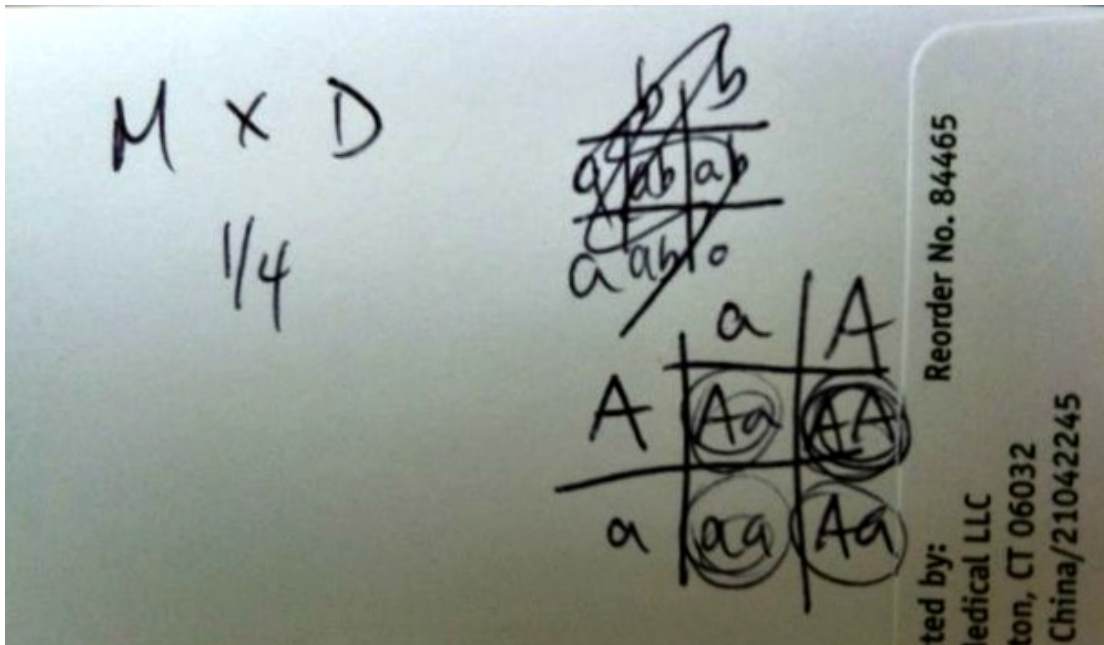
**Figure 7. Warehouse, packing shed, commuting car, cell phone company, money lender, train tracks.**

## CHAPTER TWO: WHAT IS DIABETES?

### *Certainty and Doubt*

One afternoon at the community garden, I was introduced to Angela, a Mexican-American woman and fellow gardener who is a district attorney from a well-known Rio Grande Valley family. When she learned that I was in the region to study why the diabetes rates in the Rio Grande Valley were so high, Angela looked at me quizzically, paused, and then asked, “Isn’t it just poverty?” I was taken aback by her response and by her disinterested intonation. Indeed, she is one of the only people I met, other than social scientists, who attributed the rates of diabetes to poverty.

What is not surprising about her response is her certainty. Not all of the certainty I heard was about income level, as Angela claimed. For some, diabetes could be pinpointed to more complicated interactions. For example, José, a medical assistant at the Mariana Clinic, drew me a diagram of what he called “risk factors for my diabetes” (Figure 2.1). After drawing this figure, José quickly explained that he was not confusing the heritable traits depicted in a Punnett square with genes—he wasn’t mistaking diabetes for a trait—but rather, he was using the diagram with me, as with patients, as a heuristic of the likelihood of developing diabetes.



**Figure 8. José's diagram to explain his likelihood of developing diabetes. Photo by Author.**

After he drew the Punnett square on the back of a pill dispensing envelope, I asked José to explain his sketch to me. The following is an excerpt from my fieldnotes:

He said his father has diabetes but is "well controlled" and his mother doesn't have diabetes but both of her parents do. So, his father would be "Aa" and his mother would be "AA" and he (José) would have a 1/4 (25%) probability. He said that "both mom and dad carry both" [dominant and recessive] and that "It all depends on me," that it is not definitely "up hill" or "down hill" for him, that he has some likelihood he'll get it even if he is super healthy (he gave the example of super fit/non-obese people whose cholesterol is through the roof). He said that in the "AA" squares he's "all good," which he said doesn't mean that he won't get diabetes, but that if he does, he "can get diabetes just on my own." If he's "Aa" there's a "spinning of the dice." It's 50/50 and he has to take care of himself. He said that if he continues to eat the way he does now--eating well 25% of the time and not so well 75% of the time that he will have diabetes by the time he's about 40. He said that "aa" means that he's screwed, "for sure whatever I do I'll get it."

[Fieldnotes, May 13, 2013. Emphasis mine.]

José's description of his likelihood of developing diabetes braids together Lamarckian genetics, contemporary epigenetics, and trait-based inheritance in his refashioning of the Punnett Square (Lock 2013, 2015). He believes that diabetes is heritable and that some peoples' diabetes is stronger or more virulent than others, evidenced in his description of people who look very healthy and fit but have high cholesterol levels<sup>xxvii</sup>. The idea that diabetes has "strains" is actually quite common, not only among allied health professionals and lay people, but also among researchers. Fina, a diabetes educator and a diabetic herself told me that she and her doctor have determined that she has the "good kind," evidenced by the fact that she has not developed any complications.

Unlike Angela, José does not invoke economic conditions, despite the fact that he grew up in a family with severely limited financial resources. Rather, José mixes the population aggregate idea of risk factors with heritable traits and recombines those to predict his likelihood of developing the condition—and *when*. His final prognostication is also less optimistic than Angela's: even if he's "good" in terms of genes, he claims that the fact that he does not eat well 75% of the time means he will develop diabetes.

José is not the only person I met who described diabetes not as an "if," but as a "when" and "how badly." José's certainty is that he will get the disease; his doubt is about why and when. Still others describe diabetes as a certainty through a mathematical equation that defies logic. For example, Dr. Guerra, a physician who worked with José and who is diabetic, described being Mexican-American and living

in the Rio Grande Valley as “synergistically bad” in terms of diabetes. He boiled down “synergistically bad” into a mathematical equation: “one plus one doesn’t equal two,” he told me. “One plus one equals three.”

I return to Dr. Guerra and to José in more detail in chapters three and eight, respectively. Here, however, their descriptions of diabetes are useful because they point to the interaction of certainty and doubt that motivates not only a great deal of allopathic, technoscientific medicine in general (Wolf-Meyer 2012; Proctor 2008), but clinical reasoning about diabetes, in particular. As Matthew Wolf-Meyer (2012) demonstrates through the case of American sleep science and clinical practice, doubt is a productive force and the certainty is never complete. This co-existence of incompleteness and productive doubt allows for the simultaneous explanation of disease states and also a lack of resolution (2012:5-6).

At a binational diabetes conference in the summer of 2013, the keynote speaker, who is a leading researcher on diabetes genetics, stated that knowing the genetic profile of an individual and a community helps determine the intervention; two of the three speakers after her said a version of, “it’s not that hard. We know what to do—we need to exercise and eat well.” During the Q&A I asked her whether, given the overwhelming sentiment that “we know what we need to do,” she thought that we should stop or slow genetics research on diabetes. She said “Absolutely not. There is still a lot we can learn from genetics.” The geneticist’s answer is worth lingering on because of how she coupled certainty and doubt. Her response is a classic example of an approach to “ignorance” or not-knowing that history of science

scholar Robert Proctor calls “native state” ignorance (2008:4). Native state ignorance is one in which the state of not knowing is meant not only to be slashed but also to be perpetually regenerated. For the geneticist, not knowing is “a resource, or at least a spur or challenge or prompt” (2008:5). Thus, the geneticist is certain and doubtful simultaneously. Similarly, José is certain of the etiology of diabetes, while also expressing doubt--which box of the Punnett square he is in?

Given Angela, José, and Dr. Guerra’s varied beliefs about diabetes etiology, what is surprising is that even their level of certainty in response to the unknown and to doubt is relatively recent. The history of how physicians and healers have treated diabetes, how research scientists discovered insulin, and how nations fought over the acclaim of its discovery is at turns heart-stopping drama and at others monotonous depictions of everyday life in the lab. In this chapter, I highlight a few well-accepted parts of that history, with a specific focus on how that history is told to allow diabetes to be endemic and epidemic at the same time. This micro-history also highlights key parts of diabetes’ history. First, I show that even the earliest written medical records describe diabetics as excessive and potentially resistant to self-care. Second, since at least the 1920s, the popular press in the U.S. has claimed shocking levels of diabetes. And third, the science and clinical care of diabetes has been one of policing the boundaries of bodily lack and bodily excess, albeit in quite different ways in different historical contexts. I demonstrate that diabetes has shifted from being a condition known primarily through clinical care and laboratory exams, to a condition that is known primarily through laboratory exams and population level statistics. Finally, in



Part Two of this chapter I provide a description of how diabetes is currently diagnosed and treated in the Rio Grande Valley, as well as how region-wide statistics are produced. With that groundwork laid, I detail the major trends in how anthropologists have studied diabetes.

### ***Diabetes in Allopathic Medicine and Public Health***

Type-2 diabetes, as it is currently understood in allopathic medicine, is a disease of metabolism, the biochemical processes through which the human body uses food and water to produce energy. The keys to this biochemical process are glucose and insulin. Glucose comes primarily from food and beverages broken down during digestion, whereas insulin is produced by beta cells in the Islets of Langerhans, which are located in the pancreas, an organ tucked behind the stomach.

Insulin is a hormone that is in a constant back-and-forth relationship with blood glucose to achieve homeostasis, or balance. One of insulin's most critical functions is that it allows the body's cells to process the glucose in the blood. Insulin and glucose levels are always connected and carefully calibrated. For example, when an individual eats a piece of food, that food is converted into nutrients in the blood stream, one of which is glucose. As the glucose enters the blood stream, blood glucose level increases. The pancreas is then stimulated to release insulin, which prompts the body's cells to draw on the glucose for immediate energy. Usually, it takes about two hours after eating for the body's blood glucose levels to return to their pre-eating levels. However, when glucose is present in the blood stream but

insulin is not, or not in sufficient quantity, the body cannot process the glucose and blood glucose levels rise.

In assessing insulin production or reception, one proxy measure is blood glucose levels. If a person's blood sugar levels are elevated above the "normal" range two hours after eating, that indicates that the pancreas is starting to struggle (see Figure 2,1, next page). If the pancreas cannot produce enough insulin, or if the cells cannot respond to it, the glucose stays in the blood stream, with some secreted in the urine. If blood sugar levels are slightly above normal, there are often few outward indications, except perhaps some weight gain (often termed pre-diabetes or metabolic syndrome), headaches, and thirst. Once blood glucose levels rise a bit higher than that, a person might experience the three clinical (as opposed to laboratory) diagnostic criteria: *polyuria* (frequent urination), *polyphagia* (frequent eating/hunger), *polydipsia* (frequent thirst). When blood glucose levels are higher than normal for an extended period of time, that accumulation of unusable glucose begins to impact organ function in an irreversible way. Symptoms at this stage of the disease include nerve damage to the eyes and to the peripheral nerves (causing foot pain), as well as kidney damage (which necessitates dialysis).

<b>Time of Check</b>	<b>Goal plasma blood glucose ranges for people without diabetes</b>	<b>Goal plasma blood glucose ranges for people with diabetes</b>
Before breakfast (fasting)	< 100	70 – 130
Before lunch, supper and snack	< 110	70 – 130
Two hours after meals	< 140	< 180
Bedtime	< 120	90- 150
A1C (also called glycosylated hemoglobin A1c, HbA1c or glycohemoglobin A1c)	< 6%	< 7%

**Figure 9. Standardized blood sugar ranges and their timing. From Joslin Diabetes Center.**

***Prevalence***

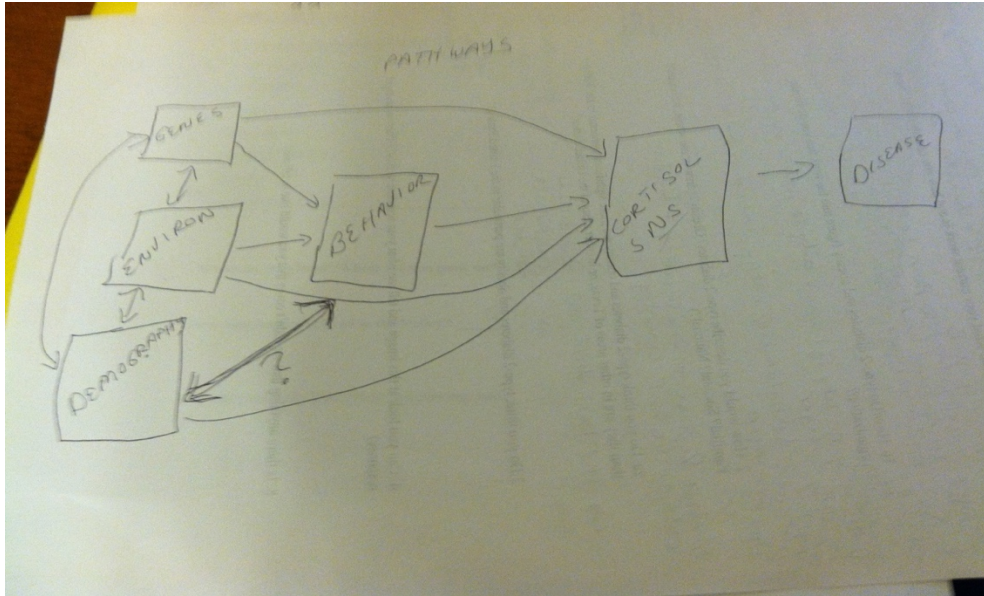
Type-2 diabetes, formerly referred to as non-insulin dependent diabetes mellitus (NIDDM) or adult-onset diabetes, is estimated to affect 29.1 million people in the United States (9.3% of the population), with 21 million of those individuals already diagnosed and 8.1 million undiagnosed (CDC 2007). Worldwide, it is estimated that 347 million people have the condition (WHO 2012). Type-2 diabetes was formerly referred to as NIDDM in order to distinguish it from Type-1 diabetes, a condition in which the body produces no insulin. Anthropologist Melanie Rock (2005), for example, agrees in the different etiology of Type-1 and Type-2 diabetes, but argues that using standardized blood sugar ranges and common diagnostic criteria commensurates, or makes equivalent, human bodies that have incommensurate political and economic lives. Researchers now generally agree that Type-1 and Type-2 diabetes are unrelated disease states, albeit with similar long-term sequelae.

However, that agreement is far from unanimous. Numerous researchers are identifying variants or “types” of diabetes that do not map onto the current understandings of type 1 and type 2 (Moran-Thomas 2016). For example, researchers of diabetes in tropical areas are describing what they call “latent autoimmune diabetes in adults” (LADA) (Hosszufalusi et al. 2003) and type 1.5 diabetes (Palmer et al. 2005). Finally, in the popular press and in clinical science, some people are describing Alzheimer’s Disease as “type 3 diabetes” (de la Monte and Wands 2008). I return to the making of these population–level statistics later in this chapter.

### ***Social Science and Diabetes***

Anthropological research on diabetes has been greatly influenced by the work of James V. Neel, a geneticist who, in 1962, described what he called a “thrifty gene” that might exist in populations where the rates of diabetes were increasing the most rapidly (1962). Neel hypothesized that, similar to the sickle cell trait, there was a “thriftiness” to food and energy storage that served populations well historically in times of feast or famine and that, although no longer useful, was still present (1962:360). Despite the fact that Neel later equivocated on the correlation to diabetes, his Thrifty Gene Hypothesis (TGH), struck a nerve and is still in widespread circulation. Indeed, an epidemiologist named Arturo whom I met in the Rio Grande Valley was seeking funding to examine the TGH, but from the angle on feast-or-famine temporality emerging specifically from histories of war, displacement, and violence. He suspected that the feast-or-famine temporality of food stamps, with a

decrease in calories at the end of a month-long cycle, takes advantage of the thrifty gene.



**Figure 10. Arturo's description of diabetes. Photo by Author.**

When anthropologists and other social scientists, nurses, and other medical and public health personal study diabetes, their attention has almost always been on *type-2* (e.g., Battle 2014; Borovay and Hine 2008; Cabassa et al. 2008; Chaufan 2006; Ferzacca 2000, 2012; Montoya 2011; Oldani 2010; Paradies et al. 2007; Poss and Jezewski 2002; Smith-Morris 2010) and has been through the lens of “culture.” Most of that research claims that diabetes rates are the highest among populations and cultures that have had to “modernize” or “Westernize” more quickly than their metabolism can keep up with. Steve Ferzacca argues that not only public health research but also anthropological research has black-boxed the concept of culture, making it a variable and leaving under-examined other possible explanations and

factors related to diabetes (2012). As diabetes has become a disease thought of in terms of population aggregates, risk factors, and laboratory findings and culture has been black-boxed, the material and fleshy reality of diabetes is often lost.

Before moving on to contemporary diagnosis and management, I want to describe a few of the challenges of diabetes care and management as they existed in the nineteenth century and the 1920s and onward. Many of the struggles of diabetes management that are often framed as linked to fast-food and a current fast-paced life have existed at least 100 years.

### *Diabetes History*

#### **Melting Flesh, ‘Pissing Evil’, and a Dog Named Marjorie**

*That adherence to treatment with diet, insulin and exercise finds ample justification in the good health, comfort and longevity of those who obey the rules as contrasted with the poor health, suffering and shortened lives of those who are careless.*  
Elliot P. Joslin, Article Number Eleven, *Diabetic Creed*. 1946<sup>xviii</sup>

The statement above was written in 1946. Except for some syntactical differences, the statement could have been penned by a contemporary clinician in the Rio Grande Valley. Elliot P. Joslin, the physician who wrote *The Diabetic Creed*, was one of the key actors in the development of treatment standards for diabetes in the U.S., both before and after the discovery of insulin. Joslin’s clinic continues to exist today with large research centers and affiliate clinics around the world, including one in the Rio Grande Valley.

By all accounts, Joslin approached clinical treatment and management of diabetes with the goal of what is called “tight control” of blood sugar levels. Before

the discovery of insulin, so the story goes, a diabetic could only be kept alive for a few years, and then only if he or she went on a “starvation diet” of 500 calories a day (Feudtner 2003; Striker 1961). Joslin worked to achieve this partly through almost daily written correspondence with his patients, an approach that became a signature of the Joslin Diabetes Center. In 1921 when insulin became widely available, care of diabetes and diabetics changed. First, technologies of care changed. The testing and monitoring of bodily fluids that had been the purview of physicians began to move to where they are now, which is squarely in a realm of practice that is—ideally—shared by the person with diabetes, his/her clinician, and/or caregivers (Clarke and Foster 2012). While initially all testing was done in the laboratory, it slowly became something that was done in the clinic, and then in the home, making the home a kind of clinical space. The technologies for use at home at first were glass syringes to be boiled once per week, urine test strips, and visual techniques of color comparison. and The second major change after the widespread introduction of insulin was that diabetes moved from being a disease of imminent death to one of the challenges of long-term disease management.

Most histories of diabetes engage in what philosopher of science Ian Hacking calls “dynamic nominalism,” in which societies classify individuals in order to help, surveil, or intervene upon their bodies (1986:228). The boundaries around those classifications are then worked over by experts and solidified, allowing people to imagine themselves and their historical predecessors as fitting into the classifications, something that Hacking calls the looping effect. I follow Hacking in noticing how

diabetes histories are written based on the idea that diabetes is a condition that has existed from time immemorial, based on a similarity of recorded symptoms.

Indeed, the nomenclature, *diabetes mellitus* comes from a Greek word meaning “to pass through” or “siphon.” (e.g., Feudnter 2007:6). Most histories of diabetes begin with the first written account of symptoms that match those that are currently associated with either type-1 or type-2 diabetes—such as the quotation above, attributed to Greek physician, Aretaeus of Cappadocia<sup>xxix</sup> (Bliss 2007[1992]:23; Feudtner 2007:4-6; Hurley 2010:3; Morgan 2016[1877]:4) which states

Diabetes is a mysterious illness . . . [where] the flesh and limbs melt into urine. . . [and make] life disgusting and painful; thirst unquenchable; . . . and one cannot stop them either from drinking or making water. If the constitution of the disease be completely established; for the melting is rapid, the death speedy.  
[Aretaeus of Cappadocia, cited in Feudtner 2007[1992]:4]

Most histories of diabetes explain that because the name of the condition and the description of the symptoms match many of our current understandings of the condition, it follows that what Aretaeus of Cappadocia describes in his writings is the same biological disease process that we know today.

However, some histories of diabetes include non-Greek descriptions of symptoms that are currently associated with diabetes such as obesity, frequent urination, and weight loss. For example, the Sanskrit medical text, the *Sushruta Samhita*, from the sixth century BC describes urine that attracts flies and has a sweet taste, copious urination and “general lassitude” that could be ameliorated with weight reduction and exercise (Striker 1961:4; Bhishagratna 1907).



According to British physician William Morgan, who wrote *Diabetes Mellitus: Its History, Chemistry, Anatomy, Pathology, Physiology, and Treatment* in 1877, although Greek physicians noted excessive urination, they did not associate excessive urine production with sugar. The prevailing belief—again, based on the writings of Aretaeus of Cappadocia, Orebasias Aetius, Alexander of Tralles, and Paulus Aegineta—and interpreted through Morgan, was that the condition developed because of what a previous acute condition had left in its wake or because of being bitten by *Dispas*, a species of viper (6). Drawing on the prevailing theories of the body and physiology at the time, physicians in Ancient Greece framed diabetes through the humors, and the condition as one that “deprives the whole body of its moisture by its immoderate heat” (7). Treatments included increasing food intake that would aid in digestion, such as rose-wine, succor, endive, pears, apples, pomegranates, dates, fishes that live among rocks, and the hooves and womb of swine. Physicians were encouraged to promote sweating, vomiting and bloodletting.

The fact of sugar in the urine was discovered in the 17<sup>th</sup> century, but it was still considered a disease of the bladder or kidneys, not a metabolic disease that involved glucose, the production of insulin, or the pancreas. Until that discovery, physicians had believed that sugar/sweetness came only from plant material, not from the internal organs of a human body (Bliss 2007[1997]; Morgan 1877).

Thus, in 1679 when English physician Thomas Willis named the condition the “Pissing Evil” and suggested that his patients eat sugar, his suggestion was perfectly reasonable<sup>xxx</sup>. He reasoned that because patients’ urine was full of “sweetness” their

bodies were losing sugar and needed to consume it to maintain the correct level of the nutrient. According to William Morgan, until the mid-1800s

the study of “Diabetes Mellitus” was more or less in darkness and obscurity; but from that period down to the present time, an entire revolution has taken place, and a flood of light has awakened the profession from a long and dreamy slumber, and has cast a bright “halo” round our present ideas, as to a more correct and scientific knowledge of the physiology and pathology of a saccharine condition of the urine (2016[1877]:B).

Morgan’s description of knowledge about diabetes etiology and treatment as having moved from darkness to light is classic Enlightenment philosophy of knowledge and the progressive march of science toward an ultimate truth.

The discovery of the role of the pancreas in modulating blood sugar levels occurred in the early 1900s. Although the discovery is attributed to a group of researchers in Canada, there were myriad scientists around the world who were steadily working to understand the “pancreatic extract” that came to be named insulin (Bliss 2007[1998:128-130). The discovery of the role of the pancreas was not based on research on humans or the use of cadavers but was through experiments conducted on hundreds of dogs. The researchers at the University of Toronto removed the pancreas from a dog and then injected the dog with dried and re-hydrated pancreatic extract that kept dogs alive for days, if not months. The key dog in this process was Marjorie who, before being “sacrificed” had been kept alive through injections of the extract for just over 70 days (ibid:12,96-97). Quickly thereafter, by the early 1920s, insulin was being mass-produced and was beginning to change not only how clinicians conceived of the disease but also how the everyday lives of patients were rhythmmed.

Much of the popular–press history of diabetes, following a “great moments in the progress of science” narrative, focuses on the discovery of the therapeutic effects of insulin in 1921-1922, such as the one I have provided (Feudtner 2003). Medical ethicist and physician Chris Feudtner (2007) describes contemporary medicine and narrative about it as involved in “mythical storytelling” and as attached to an ethos of technology and progress (9,11). He argues instead that most of the complications that we now associate with diabetes are specifically related to the fact that—with insulin—people with diabetes live much longer than they did before but with complications such as blindness, limb numbness, amputation, and dialysis.

### ***Diabetic Economy***

For all the data on financial costs of diabetes, it also brings a great deal of money into the region; there is also a veritable diabetes industry that has been built up, mostly comprised of genetics researchers, public health personnel, medical professionals, interventionists, and medical supply companies. For researchers, this means getting federal and state monies to study exactly how many people have the condition. For example, the nearby “Latino Health Consortium<sup>xxxii</sup>” received over 50 million dollars in U.S. federal government support. For clinicians, this means staying abreast of the newest medications, seeing patients regularly, writing prescriptions, and ordering lab work. Often the laboratories and pharmacies that patients are referred to are owned by the physician, making each patient visit more profitable. As one physician’s assistant (hereafter, PA) said to me, “If it weren’t for diabetes, I

wouldn't have a job!" And for nonprofits and community groups, funding for their overhead costs often comes in interventions to reduce diabetes complications or enhance patient "compliance" and education. In practice this means that there are diabetes fairs and diabetes education classes occurring almost every day.



**Figure 11. *Glucometer Glut.* This small office at the Mariana Clinic was one of two rooms half-full of unused and free glucometers. Photo by Author.**

For pharmaceutical drug representatives, this means busy days spent visiting all the physicians and PAs in the region, particularly those with high patient load, and checking in at the local pharmacies to see how many prescriptions those providers have written. Finally, for home healthcare workers this often means caring for people

with diabetes-related amputation, accompanying them to medical appointments or dialysis treatments, preparing food, and giving medication. In many cases the care workers and the diabetic are family members meaning that (most frequently) a daughter receives payment from the U.S. government (in the form of Medicare payments for home healthcare) for bodily care she would have had to perform with or without the government's financial payment.

So ubiquitous are diabetes research and intervention programs that one long-time resident described situation as “Diabetes, Inc” and another told me that diabetes is “the tail that wags the dog.” Their descriptions are barely coded critiques of the immense profitability of diabetes research, treatment, and intervention. Those critiques—shared in private moments and in whispers—would certainly offend those who describe their work to reduce the rates of diabetes in the region as work that they do “in the trenches” and “on the frontlines.” Yet as such enterprises persist, so too does diabetes itself, with its various circulating statistics, explanations, and modes of diagnosis and management. The particular borderland context in which diabetes circulates so consequentially is the subject of the next chapter.

### ***Diagnosis and Management in the Rio Grande Valley***

#### **Diabetic Until Proven Otherwise**

Most of the physicians I met in the Rio Grande Valley care for diabetics because they have to, not because they are particularly enamored with the physiological processes or with the challenges of clinical care. There are, of course

exceptions, such as Dr. Cavazos. Cavazos, an intensely dynamic physician and radio personality refers to himself as a “diabetologist” and gives free talks and speaks on radio programs about the condition (detailed in Chapter Three). Most healthcare providers I met approach diabetes more as something that comes with the territory and that helps pay the bills. Even the diabetologist, who is now passionate about diabetes prevention, care, and treatment, describes beginning his medical career in the Rio Grande Valley and having to learn more about the condition because of the people he was seeing.

Indeed, an article in *RGVision*, a glossy regional magazine, entitled “We are What We Eat: Solving Diabetes in South Texas,” quoted a local physician advocating that physicians assume that all patients are “Diabetic until proven otherwise” (Gomez 2013). To be “proven otherwise” is a complicated matter and one that I detail throughout this dissertation. Laboratory results can confirm clinically that an individual does not have diabetes, but outside of clinic walls, many people attempt to distance themselves from misrecognition as diabetic in numerous embodied ways. I address the complex bodily and rhetorical techniques throughout this dissertation, particularly that people do who this distancing are policing the boundaries of who will be assigned to the category of “Mexican-American in south Texas with diabetes.” Think back to the civic association members discussed in the introduction who, despite being diabetic, claim that they are not the *right kind* of diabetic and therefore not useful to helping one understand diabetes in everyday life.

In clinical care, diabetes is temporally cleaved into two phases: first diagnosis, then management. The management phase becomes temporally about repetition and constancy: repetitive measurement of blood glucose levels both at home and in the laboratory; about teaching/learning practices of filling out food logs and blood sugar monitoring charts; and about cultivating trust in numerical representations of bodily states. However, while that temporal cleaving of diagnosis and management represents best practices, it does not fully encapsulate how—for many people in the Rio Grande Valley—diabetes diagnosis and management are not necessarily sequential.

This part of the chapter describes the standard and best practices of diabetes diagnosis and management and how those two occur. Let me be clear: my goal in this section is not to vilify how diagnosis and treatment occur in the Rio Grande Valley. Standards and policies are rarely implemented as they were imagined. Rather, my goal here is two-fold: first, to provide basic knowledge and vocabulary about diabetes diagnosis and treatment and to demonstrate how doubt and certainty motivate diagnosis and everyday management.

### **Diagnosis**

In 2010, based on the recommendations of the International Diabetes Federation (IDF) and the European Association for the Study of Diabetes (EASD), the American Diabetes Association (ADA) altered its recommendations for best practices in diagnosing diabetes. Prior to 2010, diabetes was diagnosed based on two

elevated Fasting Plasma Glucose tests (FPG). In 2010, the ADA's recommendations introduced the Hemoglobin A1C (hereafter, A1C), a laboratory exam that measures average blood glucose levels over the previous twelve weeks. Because of the length of time that the A1C assesses, it is considered a much more accurate measure than the FPG. Additionally, it is widely believed that use of the A1C as a diagnostic criterion increases rates of diagnosis because it diagnoses individuals who do not meet the diagnostic criteria based on FPG. At present, the best-practices criteria for diagnosing diabetes are any one of the following results on two consecutive tests: (a) A1C of 6.5% or more (average daily blood sugar of 140 or more); (b) FPG of 126 mg/dL or more; or (c) two-hour plasma glucose of 200 mg/dL.<sup>xxxii xxxiii</sup>

Diagnosis follows a slightly different trajectory in the Rio Grande Valley. There, the people with whom I spoke during my fieldwork described more of a back-and-forth diagnostic process. The diagnosis occurred slowly, such that when they received the official diabetes diagnosis, it was more a moment of confirmation than of revelation. One woman in her mid-50s, Marianéla, had been diagnosed with gestational diabetes in her last two pregnancies, so when she recognized that she probably had developed diabetes, she did not consider it urgent. Because of her experience of gestational diabetes, she knew what the diet recommendations would be if she did have diabetes. One day, when she was with a friend who had a glucometer in her car, Marianéla decided to check her blood glucose level. Marianéla's reading showed a blood glucose of 145 mg/dL, which she recognized as "a bit high," so she



went back to her clinic—where she had been treated for gestational diabetes—for confirmation. Only then did she receive a diagnosis from a healthcare provider.

The second most common method of diagnosis is at a *feria de salud* (health fair). Health fairs are frequently held at churches, in elementary school gyms, and at hospitals, and almost always draw large crowds. The health fairs usually included screenings for blood glucose, cholesterol, and blood pressure (See Figure 2.3).



**Figure 12. A highly publicized "Diabetes Health Fair" sponsored by one of the local hospitals. Photo by Author.**

Health fair blood glucose screenings usually included what is called a random glucose screening, meaning the blood draw was not predicated on fasting or on adequate time passing since last meal. Individuals who test high in blood glucose at a health fair were told to follow up with a healthcare provider. Those whose blood sugar level is

alarmingly high (275mg/dL or higher) are often informed by health fair personnel, as one woman told me, “La diabetes ya tiene” (You’ve already got diabetes).

As Marianela’s case demonstrates, so many people have experience with diabetes and/or have friends or family with glucometers that they have a basic knowledge of how to assess the number on a glucometer screen. Hector, a well-known politician, discovered that he has diabetes in a similar way. He and his wife suspected that he might have diabetes and so she brought a glucometer home from work (she is an allied healthcare professional). When his reading was high, they went to the doctor.

### Management

As individuals, their families, and their communities are instructed about diabetes management practices, they are asked to care for their bodies in particular ways, not only (or even primarily) for their own health, but for the sake of the social, the economic, and the political. As currently understood in biomedicine, type-2 diabetes is a condition in which the body struggles to maintain *homeostasis* (balance) either because of insufficient insulin production or the inability of body cells to use the insulin that is produced (termed *insulin resistance*). Thus, diabetes management is often understood as a quest for balance: balance in food intake, activity, and blood sugar levels. This balance is a historically specific clinical goal. Even in the decade after insulin was discovered, the goal of treatment was simply to keep a patient alive; the ability to even partly engage in everyday life was a lesser concern. While survival was managed through diet and urine testing, balance is managed through daily and

weekly practices of logging and through the use of multiple at-home technological devices, such as logging sheets, glucometers, test strips, and glucose pills.

### Technologies of Care

Tools for the daily management of diabetes include (but are not limited to) glucometers, test strips, food logs, and charts. Here, I focus on the chart and in Chapter Four, I address glucometers, test strips, and food logs. This chart gives different ranges for people who have diabetes from people who do not have the disease. However, there is debate within the healthcare community about whether there should be different expectations for people with diabetes, and there are differing opinions among diabetics about how closely one should strive to attain “normal” blood sugar ranges. Mario, a diabetic man in his early 60s, told me about the different approaches to blood sugar levels that he and his wife have. While Mario checks his blood sugar three-four times per week, his wife, who was more recently diagnosed, checks more frequently and “freaks out” if her blood sugar reading is above these ranges. He gave me the following example:

She would check herself in the morning, in the afternoon, in the evening. ‘I’m 160, 170, 300!’ she would say. I said to her, ‘Hey, You’re not going to get perfect readings. The doctor says between 90 and 120; you’re not going to get to between 90-120. You’re not going to get there: accept that.’

While Mario sees the various readings throughout the week as indicative of the normal state of his life with diabetes, his wife exemplifies a position of heightened concern focused on a desire to reign in her excess blood sugar and, thus, be “normal.”

## The Good Life

As the cases throughout this dissertation make clear, in clinical treatment logic, type-2 diabetes is not primarily about bodily-based, subjective sensing (Mol and Law 2014). Rather, it is about learning to not attend to signals and subjective sensing and, then, recalibrating one's response to bodily sensations based on clinical guidelines. A clear example of this is the common description of receiving a diabetes diagnosis. The following excerpt is from an interview with a local activist who, although he does not have diabetes used this common diabetes-diagnosis story to describe the region's economy:

If you ask somebody, it's kind of the diabetic response, you ask somebody  
"How are you doing?,"  
"Well, I'm fine,"  
"Well, your blood sugar's off the charts; you seem tired."  
"Well, I am tired. But, I'm used to it."

This exchange in which someone tells a healthcare provider that he/she is tired and is used to high blood sugar levels is a ritual communicative event that begins the formal process of learning the practices of diabetes care, according to clinical logic. People with diabetes are usually instructed to limit or avoid foods that convert quickly to glucose in the bloodstream (sweet candy, cake, cookies, bread, potatoes, rice, fruit). All of the 75 people I interviewed with diabetes discussed this in terms of self-control, self-care, and excruciating temptation on a daily basis to "give in" and just have a little. Mario, for example, spent a great deal of our interview talking about the fact that he had always imagined that in his retirement he would be able to enjoy "the good things in life." For him this meant indulging in extra tortillas, beer, and

barbecue. Instead, he said that his life revolves around his mail-order insulin delivery, doctor's appointments, and lab visits. Mario here comes up against what Lauren Berlant called the "cruel optimism" of late liberalism in which promises of a good life are sites of attachment, but are also unattainable (2011).

Although it is a condition that is biologically housed in one individual's body, diabetes is also social. For some, this means transporting a family member to dialysis a few times a week or attending doctor's appointments or appointments at a lab for a blood draw. However, for many the caregiving is more intensive. Take for example, Ana Lucia, a Mexican woman in her mid-20s who has Lupus and a pacemaker. Ana Lucia lives in the colonia *Las Flores* and I met her at *El Centro*. Despite her own chronic conditions, she is responsible for the day-to-day care of her family members, all of whom have diabetes. Ana Lucia said that she refers to her house as *la casa azucarada* [the sugar house]. As such, she spends most of her days caring for her mother, whose diabetes gives her *corajes* [anger] and who demands attention every five minutes. Ana Lucia described that if she helps her mother get settled in on the couch, for example before Ana Lucia can even start another task, her mother is demanding another kind of assistance; a glass of water, help to the bathroom, someone to talk to. For most, the daily caregiving is less acute, focused instead on eating— and exercised—based management. For example, Hector described how his wife and children "are always on me," reminding him—at times when he would prefer to forget—that as a diabetic he should eat a smaller portion of food, drink a few less beers, or lose weight. While Carlos described his family's attempts as good-

natured, for other diabetics their eating behavior is a source of immense frustration and irritation. Aimée, for example, whose father has been living with diabetes for over 20 years, describes his “I’m-good-for-a-while-then-I’m-not” temporality of eating as sinful and immoral.



**Figure 13. Insulin. Food. Sociality of Care. Photo by Author.**

The case for individual and social management is often made through recourse to the negative regional or national economic impacts or the potential future ruin of the individual’s body or of their family. Professional conferences often frame the urgency of reducing the rates of diabetes in terms of its negative impact on the regional economy: diabetes affects working and wages to the tune of \$227,506,898

per year in lost wages and productivity (Brown et al. 2008). In this way, individual cases of diabetes may be construed as part of a larger social and economic issue that encompasses the diagnosed and undiagnosed alike.

### ***Making Up “We”: Who Is In The Measured Group?***

This section deals specifically with the question, “How many people in the Rio Grande Valley have diabetes?” The question is important because two authorizing institutions—the CDC and a local, prestigious university—produced quite different answers. The CDC place the prevalence at around 10%. In contrast, the local researchers estimate the rate at about 30%. The percentage that has gained the most circulation and widespread acceptance as fact, however, is the 30% figure. This section describes the different methodologies used to produce such population-level statistics and draws on ethnographic data to detail how people use anecdotal evidence to decide which statistic is fact.

This section also builds on the insights of Ian Hacking (1985), who argued that identity labels such as “split” and “*garçon de café*” could not have been placed onto people who existed before the labels themselves came into existence. That is, labels and categories *make* populations, and not the other way around. What I take from Hacking’s work is his central interest in the dynamic between classification and identity, as well as the constantly shifting relationship between the two, which he calls a “looping effect.”

While Hacking focuses on individuals, however, I am more interested in the broader scale of population and the idea of a *public* that is formed around population-

level categories. I also diverge from Hacking in that, as I detail in the introduction of this dissertation, I am interested in the people who *do not* meet the requirements of the category, and also those who try to *claim* that they do not meet the category requirements but are nonetheless drawn to respond to it. To that end, I begin this final section with an extended quotation from Hacking’s “Making up People:”

The idea of making up people. . . applies not to the unfortunate elect but to all of us. It is not just the making up of people of a kind that did not exist before: not only are the split and the waiter made up, but every one of us is made up. We are not only what we are but what we might have been and the possibilities for what we might have been are transformed.

[Hacking 1985:233]

Hacking’s quotation raises questions that motivate not only this section of “What is Diabetes?” but also questions that motivate much of this dissertation. Those are questions about what possibilities—or, indeed *impossibilities*—are produced by the categories that both make us and keep us in an endless “loop.” This section details the various ways that the category “Mexican-American diabetic in south Texas” is made up which lays the groundwork for the rest of the dissertation in which I examine how the category circulates as fact and how people respond to it.

### Measuring Diabetes

Rates of disease in any given population in the U.S. are measured using multiple methodologies, pulling together data from U.S. Census documents, in-person or paper-based surveys, and sometimes anthropometric data. In research on chronic conditions in the United States, data are collected by multiple governmental entities and organized by the Centers for Disease Control & Prevention (CDC). According to the CDC, the prevalence of type-2 diabetes in the four counties that comprise the Rio



Grande Valley have the following prevalence: 9.3%, 9.0%, 8.8%, and 8.4%<sup>xxxiv</sup>. The CDC calculates this percentage by pulling from data gathered by the U.S. Census Bureau, the Behavioral Risk Factor Survey (BRFSS), and the National Health and Nutrition Education Survey (NHANES). The survey question used to determine type-2 diabetes is, “Has your healthcare provider ever told you that you have diabetes?”<sup>xxxv</sup> The phone-based survey technique relies on two key assumptions. First, it is assumed that the individual can and does see a healthcare provider. Second, the question assumes that it is through a healthcare provider that people find out about diabetes. As I demonstrate later in this chapter, that is not necessarily the case in the Rio Grande Valley.

Although CDC-produced statistics have the twin benefits of institutional authority and the truth associated with numbers, it is not the most widely cited statistic on diabetes among people in the Rio Grande Valley. Rather, the statistic that circulates is one that places the prevalence of diagnosed *and* undiagnosed diabetics at 30% of the region (Fischer-Hoch et al. 2010). The researchers who conducted the study that places the prevalence at 30% claim that the CDC statistics under report the prevalence because so many people in the región are uninsured and, they assume, do not go to the doctor. Along those lines, the researchers also claim that their research finding is more accurate because their research is based on blood-based data as opposed to the CDC findings’ reliance on random-sample telephone surveys.

The lead epidemiologists of the study that produced the finding of 30% claim that an additional 30% of the population is overweight or obese, leading diabetes

researcher to state that “almost nobody is normal anymore” (Fisher-Hoch, quoted in Seringer 2010). While the 30% prevalence is used by public health personnel and also circulates in the popular press (addressed in more detail in Chapter Three), its credibility comes not only from its widespread circulation in the popular press but also from the institutional authority and expertise of its producers. While the heft of university affiliation lends authority, the numbers themselves translate a finding that is—in one of the study’s author’s words—“a best guess,” and turn it into a credible fact.

### Collecting the Data

Statistics are not objective representations of human bodies and geographic space. Rather, they are organized and collected in specific ways that divide space, bodies, and time (Davis 1995; Jain 2007; Foucault 1988 [1986]). For example, some data are collected at the county level, others<sup>xxxvi</sup> at the city level. Some data are collected using “random” sampling, a methodology that many scientists believe is the gold standard for producing unbiased statistical representation. Some data are derived from “self-report” questionnaires, meaning that the individuals answer questions about diagnosis, treatment, and medication, and the researchers do not verify this with blood-based confirmation nor do they compare it with other data from blood samples and questionnaires.

Although estimates of how many individuals in the region have diabetes vary between 9.7% and 70%, there is no doubt that many people have the illness and most have friends and family members with the condition. Much of this variance in

estimated percentages is based on the structure of public health research and the availability of already-existing research, and on scalar boundaries that have previously been drawn around a grouping of demographic characteristics. Many scholars, for example, depend upon already-existing U.S. Census or CDC data to complement or contextualize their research. The Census and CDC data organize society into individuals, households, tracts, neighborhoods, and counties. Drawing on such data means, to a certain extent, accepting its categories and scales. As a demonstration of how scale can affect diabetes rates estimates, some researchers include individuals with *prediabetes*<sup>xxxvii</sup> in their calculations of diabetes prevalence, while others do not; some include individuals who are overweight or obese, others do not. Doing so can drastically change the percentage that is reported.

Although the methodologies differ, most public health researchers are attempting to achieve two main goals. First, by using their discipline's conventions of rigor, they hope to convey an accurate and representative sample of the disease prevalence in the region they are studying. Second, those researchers who have a large enough sample often use their findings from that one sample to either generalize to a larger population deemed to be demographically similar, and/or the researchers make predictions about the future.

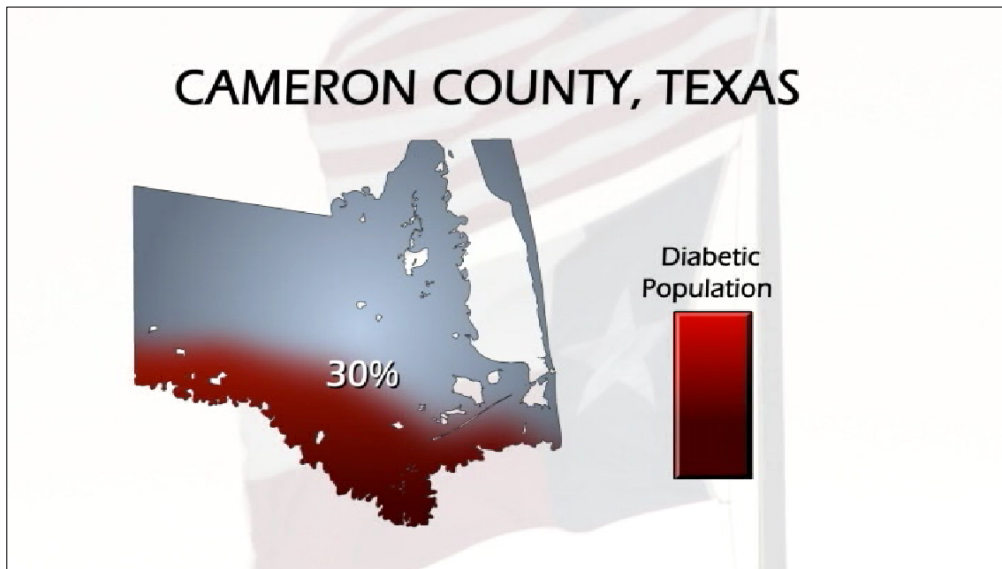
For example, one study conducted by faculty at a nearby university in south Texas found that at least 29% of the 829 Mexican-Americans they interviewed in one county had been diagnosed with type-2 diabetes (Bastida et al. 2010). These authors did not claim to be using a "representative sample," but they did add to their

conclusion the following sentence: “The data indicate that diabetes in Mexican-Americans may be undertreated in south Texas” (75). This sentence indicates that the authors were engaging in a discipline-specific kind of representational thinking; this is not necessarily wrong, but what I want to point out is that it happens almost reflexively: some Mexican-Americans (most frequently those who are poor) stand in for all Mexican-Americans across a region.

A more widely circulated study that anchors the storyline of *Diabetesville, USA* was conducted by epidemiologists at a university in a nearby county and one that I address over the course of this dissertation. These researchers also made claims about their sample being representative, but did so using a different methodology to assess diabetes prevalence; they also studied a larger number of individuals, giving their data more “statistical power” and reliability. These researchers did not rely on the “self-report” of diabetes diagnoses (as the researchers in the first example did). Rather, these researchers collected blood samples and took body measurements. They found that 30.7% of a 2,000-person cohort have diabetes and that close to 50% of those with diabetes had not been diagnosed (Fisher-Hoch et al. 2012). Unlike the first set of researchers, the epidemiologists wanted to find the most reliable method for estimating the prevalence of diabetes in the region of over 1.3 millions individuals (U.S. Census 2012).

### Demonstrating Production and Circulating the Data

The two slides and text below from *Diabetesville, USA* demonstrate how obesity and diabetes are often lumped together and how doing so drastically affects the scale.

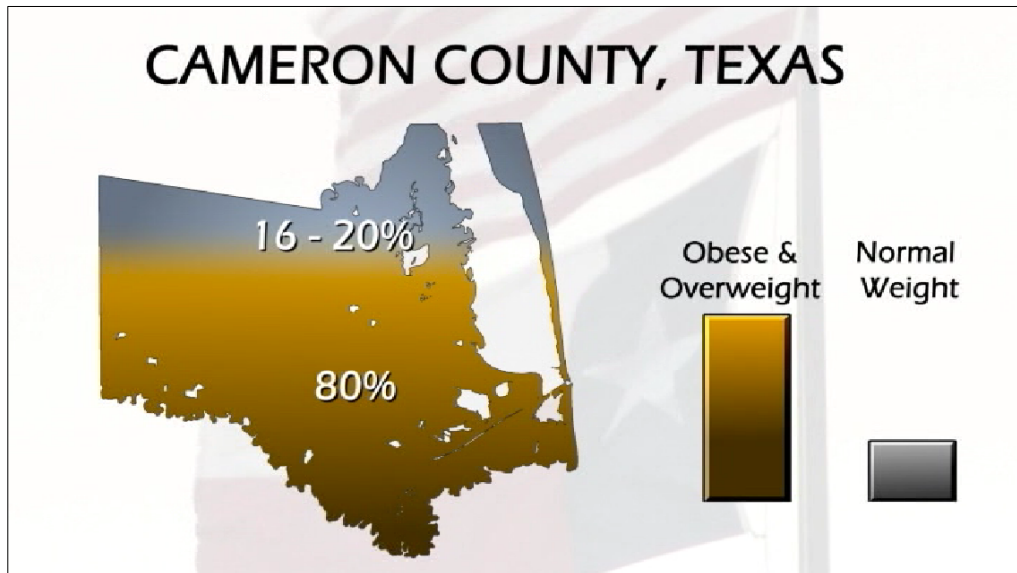


**Figure 14. Graph of overweight in Cameron County, Texas.**

The image above is the first of two screenshots from the documentary. Over a background of the flags of the United States and Texas, we see a blackish red swath depicting the 30% of the population with diabetes. As the image is shown, a voice-over begins:

Last year, the ADA (American Diabetes Association) decided to expand the definition of diabetes to include what's known as “glycosylated hemoglobin<sup>xxxviii</sup>”. This is a very good measure of the fact that you are not handling glucose properly. And when we look at that it pushes our diabetes rates up to about 29.7%, over the age of 18. So, 1/3 of this population has diabetes.

Then, after a few clips of morbidly obese individuals walking around *pulgas* (flea-markets) or sitting on sidewalks, the following information is given before showing the final graph, below.



**Figure 15. Graph of overweight and obesity in Cameron County, Texas.**

**Figure 15. Graph of overweight and obesity in Cameron County, Texas.**

As the documentary zooms into this graph the same speaker continues:

Obesity was about 50% of the population and another 24% were overweight. So, you know if you go around the turn you'll be able to see our data and realize there aren't many normal-sized people around anymore.

So, overall, over 80% of the population here is abnormally, [*sic*] is overweight or obese which means only 15-16% of population is normal weight.

In these two graphs along with the voiceover, it becomes clear that there is an often-unexplained connection between overweight/obesity and diabetes, subtly melding

them and placing the idealized “normal” on top. The point here is not to say that these studies either over- or underestimate the “true” number of diabetics—or people with ill health and complications like obesity—in the region. The point is to demonstrate that there are multiple boundaries that can be put in place for data collection about diabetes.

The most commonly used boundaries, at least for the public health researchers I spent time with, was to locate their research in low-income neighborhoods with predominantly Mexican-American-identified individuals. In one of the most-cited academic articles (and the one that anchors the documentary) the authors write the following in their description of study participants:

We omitted 1 in the higher SES stratum because it contained predominantly ‘winter Texans,’ mostly retired winter visitors from the northern United States and Canada, most of whom are not Hispanic.

[Fisher-Hoch et al. 2010:3]

The researchers’ explicit explanation of why they chose to omit “Winter Texans” makes it clear that the scientists were mapping out for themselves the world of diabetes that they wanted to find. Indeed, in an interview at the beginning of *Diabetesville, USA* the lead researcher states that in designing the study they were using the model of a well-known longitudinal public health study called the Framingham Study. “They were Caucasian and middle-class. We wanted Hispanic, specifically Mexican-American,” the lead researcher explains, “and poor.” In using such an approach, they allow low-income, Mexican-American individuals over-represented in these studies, which continues the depiction of this region as one where people are both poor and diabetic.

Both types of methods I just described differ a bit from those used by the most commonly cited estimates of prevalence, which are compiled by the CDC. The CDC data are reported at different scales than are the data of the first two sets of researchers. This is due mostly to the sources of data that the CDC relies on: Indian Health Service (IHS), BRFSS, and NHANES. While many of these data sources rely on phone, random-digit dialing interviews in which the individual is asked to respond to the question, “Have you ever been told by a healthcare professional that you have diabetes?”, the NHANES does draw people’s blood and test for fasting blood sugar and A1C.

Unlike some of the other CDC data, that is used to represent a county, the NHANES data uses each individual to represent approximately 50,000 other people in the United States. For example, the NHANES pamphlet for participants includes the following answer to the question, “How was I selected?”

Participants are selected through a complex statistical process using the most current Census information. In simple terms, NHANES divides the United States into communities. The communities are divided into neighborhoods. The neighborhoods are selected at random. From each neighborhood, housing units are selected at random. Selected households are approached by our interviewers who ask residents a few short questions to determine if their household is eligible for study.

You have a unique health profile; if you are selected to be a participant, no other person can be substituted for you. You were selected based on your age, gender, and racial/ethnic background. No one can take your place in this survey.

The survey examines a nationally representative sample of about 5,000 persons each year. These persons are located in counties across the country, 15 of which are visited each year. Each participant represents approximately 50,000 other U.S. residents.<sup>xxxix</sup>



Thus the CDC's "Fact Sheets" on diabetes (or any other condition) do not report the actual number of people living with a condition, but rather draw conclusions from carefully controlled random samples. Because of that, they are often taken to be the most accurate description of the national prevalence. However, in an interesting turn of events, the researchers described above who conducted the 2,000-person study and collected blood samples did so partly because they wanted to see if the CDC data were underestimating the prevalence of diabetes in the region. During his interview in *Diabetesville, USA*, one of the authors states that in the case of the Valley the CDC was likely to be incorrect because the CDC uses *does not use* blood-based data and instead only asks individuals if a doctor has ever diagnosed them with diabetes. Considering the fact that many of the Valley's poorer residents do not have healthcare, he reasoned, and therefore wouldn't have gone to a doctor and received a diagnosis, the CDC's methodology was not well suited for the region. Indeed, the data he collected showed the 20% of the individuals found to have diabetes did not know that they had diabetes until told by research study staff.

His comments about what methodology works—or doesn't—in the Valley are relevant to this discussion. While the CDC does indeed use blood-based data from NHANES, the issue here is not necessarily about the relative value of specific actors' methodologies, but rather about these actors' performances of *facticity*. The common practice of positioning one's research vis-à-vis another study has the effect of underscoring the *facticity*—the value and the accuracy—of one's own data and

functions as an attempt to convince others of a more valid and accurate “truth” (Latour and Woolgar 1986).

The facticity created by researchers in the academic articles I discussed and by the makers of *Diabetesville, USA* occurred in English, although much of the data collection took place in Spanish. Over the course of this dissertation, I argue that this language-based circulation and reception created a diabetes-based public predicated on language and literacy. I demonstrate that membership in the English-language diabetes-based public is a method of enacting an elite status, distancing oneself—even if only rhetorically—from the people with diabetes represented in the statistics, while also maintaining a connection to those same people, through another language and practices that required specific forms of expertise.

#### Responding: Anecdote

The final methodology I cover in this section is anecdotal evidence and personal experience, two methods of assessing the rates of diabetes in the Valley that are quite common. Not everyone agrees with the public health estimates. For example, Dr. Rodriguez, a general practitioner in his 70s, told me about the time he went to a talk at the recently-opened satellite office of the Joslin Diabetes Center. The well-regarded physician who had been hired to run the center gave a presentation citing the “newest data” that states that 30% of the population in the Rio Grande Valley has diabetes. “That’s *very* low,” Dr. Rodriguez told me, “It’s more like 60 or 70%.” I asked him where he got that number and he pointed to his eyes, opening them wide and leaning toward me. “I see it, everyday,” he told me. “Almost all of my

patients have diabetes.” He said that 50 years earlier, as he was beginning his career in medicine, he spent the summer training with a man who was then one of the few doctors in the Valley. He said that “back then” everyone had diabetes, too. Although Dr. Rodriguez wasn’t someone who would use a concept like “temporality of statistics,” his comment implied a critique not only of the accuracy of current statistics but also of their inattention to the past.

### ***Conclusion***

This chapter has attempted to answer the following three questions: what is diabetes?, how do we know what diabetes is? And, how many people in the Rio Grande Valley have diabetes? As it turns out, these are difficult questions for a few reasons. The first is because of people’s need to interact—to “loop,” as Ian Hacking would say—with the category “Mexican-American in south Texas with diabetes.” It is a category that is produced by local, authorizing experts (Fisher-Hoch et. al 2010) and presented in the form of statistics which are widely taken as fact.

It is a category that people in the Rio Grande Valley must live with—they are “diabetic until proven otherwise” (Gomez 2013:31). And as they interact with the category, they reproduce the divisions—the “us” and the “them”—that make it such a vexing category. It is in that looping between people and their categorizations that productive doubt and certainty arise. As people respond to the category they find ways to identify and to dis-identify with it.

The next chapter, “*Yes, but: Living with Murky Etiology*” continues with this chapters concern with identification and dis-identification and details the micro-

practices of how various people simultaneously identify and dis-identify with the category.

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<sup>xxviii</sup> The full Diabetic Creed is in Appendix 2.

<sup>xxix</sup> Aretaeus of Cappadocia was a contemporary of Galen of Pergemum, the influential Greek physician and philosopher.

<sup>xxxi</sup> All individuals and organization are referred to with pseudonyms with the exception of public figures.

<sup>xxxii</sup> American Diabetes Association, “Position Statement: Standards of Medical Care in Diabetes—2013. *Diabetes Care* 36, Supplement 1, January 2013. Accessed March 1, 2016. [http://care.diabetesjournals.org/content/36/Supplement\\_1/S11.full.pdf+html](http://care.diabetesjournals.org/content/36/Supplement_1/S11.full.pdf+html)

<sup>xxxiii</sup> The third diagnostic listed, the two-hour plasma glucose is also referred to as the Oral Glucose Tolerance Test (OGTT) and is most commonly used to diagnose gestational diabetes. The test involves having the patient drink a glucose load of 75g (usually in the form of sticky, sweet drink) within two minutes and drawing blood for glucose levels after two hours.

<sup>xxxiv</sup> CDC estimates are at the county level. The counties percentages listed above are, in order, Hidalgo County, Cameron County, Starr County, and Willacy County. Retrieved from CDC website on March 30, 2016: <http://www.cdc.gov/diabetes/atlas/countydata/atlas.html>.

<sup>xxxv</sup> Methods and References for County-Level Estimates and Ranks, CDC. Retrieved on March 15, 2016, <http://www.cdc.gov/diabetes/pdfs/data/calculating-methods-references-county-level-estimates-ranks.pdf>.

<sup>xxxvii</sup> Prediabetes is now a diagnostic category based on an individual’s A1C. I witnessed a wide range in how healthcare providers approach the category of *prediabetes* and what A1C range was used to determine the category. Some healthcare providers simply told patients whose A1C was in a particular “pre” range to be careful and that they would probably develop diabetes. Others routinely offered the standard diabetes medication, Metformin, explaining that the medication would help stall the development of diabetes. Others referred patients to classes like the one described earlier in this chapter, telling patients that they could prevent the onset of diabetes with modifications to diet and exercise. Finally, other healthcare providers said that most people in the region were prediabetic because of their Mexican genetic ancestry.

<sup>xxxviii</sup> “Glycosylated Hemoglobin” is more frequently referred to as “A1C.” This is the blood test now considered standard for diagnosing and monitoring diabetes. The test measures an individual’s average blood sugar for the previous three months in milligrams/deciliter and that number is converted into a number between 4.5 and 12. People without diabetes usually have an A1C between 4.5 – 5.5 of 5.6, which indicates an average daily blood sugar level of between 97-110. Some healthcare providers consider an A1C between 5.6 and 5.9 to be prediabetes.

<sup>xxxix</sup> Retrieved from <http://www.cdc.gov/nchs/nhanes/participant.htm>, July 13, 2013.

**INTERLUDE: DIABETIC UNTIL PROVEN OTHERWISE**



**Figure 16. Blood sugar lancet on the road.**

## CHAPTER THREE:

### “YES, BUT:” LIVING WITH MURKY ETIOLOGY

Mario was 68 when I interviewed him, and for over 40 years, he has been living with numerous chronic conditions—diabetes, cardiovascular disease, tinnitus, and neuropathy. At 301 pounds and just over six feet tall, he dominates the soft chair he sits in, tucked in the corner of a little-used massage therapy room in his chiropractor’s office. I was a patient of the same chiropractor, who had suggested I meet Mario when I mentioned that I was researching diabetes in the region and wanted to interview people whose experience with the condition might complicate the normative portrayal of the region’s diabetics as lacking financial resources, as not having U.S. citizenship, as living in colonias, and as uninterested in their health.

Although Mario does not fit that normative portrayal, he is not an outlier. Like many people in the region, Mario describes himself as “raised in the fields,” doing agricultural labor farming fruits and vegetables. He talks with ease about watching crop-dusters fly overhead spraying agro-chemicals, and he was the first person to mention to me the presence of the Hayes-Sammons plant and the role of pesticide exposure in diabetes onset.<sup>x1</sup> Despite being exposed to these endocrine-disrupting pesticides as a child, Mario does not attribute his diabetes to exposure to those chemicals. Nor does he attribute his case of diabetes to his “Mexican genes.” Instead, he traces his diabetes to his time in the U.S. military.

Raised by an uncle who had his own field crew, Mario was offered a pickup truck and his own crew of men when he graduated from high school, but he had

declined the offer and instead joined the U.S. military, serving in Korea and then in Vietnam. Mario later learned from a Veterans Affairs (VA) mailing that in both wars he had been exposed to the herbicide (defoliant) Agent Orange, a chemical that scientists for the National Academies, the scientific body that advises the U.S. government, determined might have caused the onset of type-2 diabetes in veterans who were exposed.

On the one hand, Mario adheres to a common narrative about the condition's etiology: people of Mexican descent are genetically predisposed to develop diabetes and that genetic predisposition, along with the consumption of Mexican food, results in the high prevalence of diabetes. And yet on the other hand, Mario attributes his diabetes to Agent Orange-exposure.

When I asked Mario why he believes that in his case diabetes was caused by exposure to Agent Orange rather than by genetics or pesticide exposure in the Rio Grande Valley, he said:

In the 70s I was warned that I was "borderline diabetic" and I had no insurance and so I dropped it. So, fast-forward to 2004 and 2005 when I applied for disability under the Agent Orange claim. I'm very fortunate that they determined that because of exposure to Agent Orange that the diabetes was now progressed to the point where I needed medication and treatment. And the VA took responsibility for providing medication and treatment, and compensation.

Later in the interview, he compared the causation of his diabetes to that of his wife and her family, who he suggested have the genetically-caused diabetes:

My father-in-law, he died at 54 from complications of diabetes . . . . And then, on my side of the family my oldest aunt died when she was 94, 92. My father passed at 88. So, I kind of build myself up, "I've got good genes, I'll be alright." This was not hereditary, this was induced by your exposure to Agent Orange . . . .

Although Mario believes that Mexican people are genetically predisposed to develop diabetes, he is also able to except himself from that norm. His narrative thus shifts between the normative narrative of “Mexican” genetic causation for his wife and her family and his exposure to Agent Orange. Ultimately, he accepts the category of causation now used by the U.S. government and the Department of Veterans Affairs. Because he fits that category, he is provided with medical treatment and disability compensation.

As I describe in the Introduction to this dissertation through the example of the civic association members, the category “Mexican-American diabetic in south Texas” is over-determined. In peoples’ minds and in the popular media that circulate about the region’s rates of diabetes, the condition is *entextualized* (Bauman and Briggs 1990) by poverty, illegality, unhealthy behavior, and disinterest in improvement. When the civic association members told me to spend time with people with diabetes who fit the normative image, they were effectively distancing themselves from this supposed type. Mario did something similar: in deciding that his case of diabetes is due to Agent Orange exposure rather than to genetic predisposition or “unhealthy” eating, Mario, like the civic association members, is saying, “Yes, but.” Yes, I’m diabetic, Yes, I’m Mexican-American, *but* I’m not the kind of Mexican-American in south Texas with diabetes who should constitute the object of study.



In this chapter, I draw on four cases to demonstrate how people narrate the etiology of their own diabetes and that of other people, as they navigate the over-determined category into which they are pulled. As they do this, they also claim authentic belonging to the region. I argue that it is the productive doubt produced by type-2 diabetes' murky etiology that provides the fertile soil from which people develop their logic of authentic belonging and knowledge of diabetes, but also reject their own belonging to the category "Mexican-American diabetic in south Texas." As they describe their own case of diabetes, they re-draw boundaries between the "real," "study-worthy," or "intervention-worthy" diabetes and those who care for themselves. Precisely who is in the "us" and who is in the "them" is not fixed. Rather, the line between the two is constantly shifting, and the position of the speaker shifts as well, sometimes—as shown in the last case in the chapter—finding a way to occupy simultaneous positionality in "us" and "them."

All this is done through a rhetorical technique that I call "Yes, but." Recall the *maquila* owner who told me and the other civic association members that he has diabetes but that he is "well-controlled," and I should meet a woman at his factory (in Mexico) who is receiving dialysis because she didn't follow his advice or her physician's advice. Yes, but; us/them. *Yes*, I have diabetes, he told us, but someone else's case of diabetics exemplifies the real problem. All of this raises the question: Why does this category have such strength? Why do people in the Rio Grande Valley feel a need to respond to it, to claim it and turn away from it? I return to these questions in the conclusion where I suggest that the constant shifting between "us"

and “them” is an attempt to remove oneself from experiencing what Michael Warner called the “humiliating positivity of the particular” (1992).

Drawing on a broad range of cases—from civic association members, to a colonia resident, to a Vietnam Veteran, to a physician—I highlight how their use of the rhetorical strategy “yes, but” allows them to maintain an authentic Mexican-ness. The “yes” signifies an acknowledgement of one’s own diabetes, the region’s high rates and one’s genetic, geographic, or professional proximity to the epidemic, the crucial “but” signifies a turn away from the condition and a gesture toward a different kind of self-fashioning. This chapter demonstrates how this category—Mexican-American diabetic in the Rio Grande Valley—circulates in non-clinical, non-laboratory spaces, and explores how this supposed “scientific,” clinical, or epidemiological category is woven into how people make sense of their everyday lives and make claims to multiple forms of group membership.

Why would the *maquila* owner, for example, even mention his diagnosis? There are a few reasons for this. First, there is a history of scientific research on Mexican and Mexican-American diabetics in the Rio Grande Valley (Hanis et al. 1983; Hayes et al. 2007; Fisher-Hoch et al. 2010). Indeed, Michael Montoya details how that scientific, blood-based research enrolled the national identity category “Mexican” into scientific descriptions of type-2 diabetes genetics (Montoya 2011). Overwhelmingly, this research depicts Mexican-Americans as problematic, in need of intervention, obstinately un-modern/non-rational, and burdensome to the larger U.S. society (Fisher-Hoch et al. 2010; Fisher-Hoch 2012; Seringer 2011). And, it is not just

academic research that presents the “diabetic Mexican-American in south Texas” as a problem. The popular press, often drawing on academic scholarship, depicts the region as in a near-apocalyptic state, the fault of the Mexican-Americans with diabetes.

In talking about diabetes, managing diabetes, and attempting to avoid diabetes, people in the Rio Grande Valley are navigating a complex terrain of multiple forms of belonging: belonging to a “social class”; belonging to a racial or ethnic group that is rooted in the region and in blood; belonging with those who draw on “rational” conceptions of the body and health, such as biomedicine; and belonging to a nation. They navigate these multiple belongings in numerous ways of which the “yes, but” and “us/them” are two closely related examples, as illustrated in the three cases below.

*Esme: Una Vida Agringada*

From the outside, Esme’s house looks like a mansion, sitting next to a mobile home that is raised up above the flood-prone land on cinder blocks. She lives in a colonia, the type of neighborhood that the civic association members suggested I spend time in and the type of neighborhood that is geographically associated with “them” as out-of-control diabetics. However, driving to her house, spending time with her and her family, and looking around the neighboring streets made it clear that a great deal was missing from the civic association members’ description of the colonias, including the inextricable interconnection between the uneven development of the colonias juxtaposed with the wealth, prosperity, and ease of life in the region.

As I found, Esme’s description of diabetes rates in the region to “una vida agringada” serves as a kind of response to the civic association members who point to people like her and neighborhoods like hers as the seat of the epidemic.

Geographically, Esme’s house is neither remote nor disconnected from the region’s wealth. Her dusty and exposed street is surrounded by verdant clusters of Winter Texans’ mobile home communities with names that evoke a relaxed and fun-filled life, such as “Fun-in-the-Sun,” “Paradise Park,” and “*Casas Bonitas*.” Directly across the street is a large citrus orchard, and heading north toward the business highway are automobile repair shops and one of the region’s largest *pulgás*.



**Figure 17. A Winter Texas mobile home community near Esme's house. Photo by Author.**

Although inside her house Esme had running water and flushable toilets, other aspects of her house's construction fit the image of piecemeal housing construction that characterizes colonias. She explained that she and her husband had decided to suspend the construction so that they could afford the monthly payments for her daughter's *Quinceañera*, a year away. They were making do with cement floors, few interior doors, and mostly-unfinished lighting. We sat in the living room on a large wrap-around leather couch while her 14-year-old daughter and three other teenagers sat at the kitchen table, half listening to our conversation, adding in one-line jokes now and then. I had explained to Esme that I wasn't allowed to interview her daughter directly because of her age but that I could interview Esme about her experience of her daughter's condition.

Esme did not lack knowledge about diabetes. Indeed, she knew a great deal about it and deftly explained that the dark lines—*acanthosis nigricans*—around her daughter's neck and joints indicated an accumulation of insulin. At a doctor's appointment about a year earlier, her daughter had been told that she was at risk<sup>xli</sup> for developing diabetes due to being overweight, and because her biological father and others in his family had diabetes. Esme took this to mean that her daughter had to work even harder than most to avoid the condition. Yes, but. Yes, she's at risk, but if she works diligently, she will not develop diabetes. Esme purchased Zumba DVDs and coaxed her daughter into doing the Zumba classes with her. Although her daughter didn't like Zumba, she was losing weight. However, the whole endeavor

was foiled when her daughter contracted a fierce bacterial infection at one of the local spray parks, developed an abscess, and was hospitalized for over a week.

Esme is an active member of a local Seventh Day Adventist church. Drawing on the teachings of her religion and the bodily transformations she has seen in fellow congregation members, she believes that herbs and food are effective medicine and that diabetes does not necessarily require medication. Indeed, she described a husband and wife who were both overweight, diabetic, and on multiple oral medications and insulin but who—by following the pastor’s recommendations that they consume herbs and herb-based teas—they were healed. Thus, while she did believe that certain people, like her daughter, are at risk, she was certain that exercise and following a prescribed food regimen is what truly helps people.

Like the civic association members, Esme adhered to a model of rational, individual behavior change; she made this clear when she told me that if her daughter worked diligently enough, she would avoid a diabetes diagnosis. When I asked her why she thought the rates of diabetes in the region are so high, she paused. “*Bueno, Celina,*” she said, “I don’t want to offend you.” With that, she said that my “culture” was one of French fries, hamburgers, a fast-paced life, and family disintegration. Attributing diabetes rates to *una vida agringada* achieves at least two ends: first, it subtly reframes the ghettoization of colonias and their residents by demonstrating their integration into the everyday life of the United States via the rhythm of eating and food choice. While the fast-food franchise owner at the civic association meeting disavowed the role of his company in the obesity and diabetes epidemic, pointing

instead at people like Esme for buying their children the food on offer, Esme pointed back at the likes of him (and me) by linking diabetes only partially to individual rational choice, and more so to rhythms and practices of Americanized life.

Esme was not the only woman I met with concerns about health and child-raising in the United States. For most of the women I met who live in the colonias, living in the United States was a trade-off. Several women I met at the Zumba class—Dalia, Flor, Mayra, and Marienela—told me that they had decided to come to the United States “*cómo dicen, ‘para vivir mejor, para seguir adelante’*” [as they say, “for a better life, improve yourself”).<sup>xliii</sup> The saying “para vivir mejor” was always stated as a truth and a joke simultaneously. Marienela expressed it well when she said, “*No sé si es mejor, pero tal vez es mas tranquila*” (“Maybe it’s not better, but maybe it’s a bit more calm.”) For example, Esme’s daughter was being educated in the U.S. public school system and could speak broken English. Most importantly, Esme could feed her family, which she had not always been able to do as a day laborer in Mexico. She said that in Mexico, nobody helps anyone else (meaning charity and social services), but that in the United States, everyone will help. She said that when she had first arrived, the church helped and gave her family canned goods and clothes.

Many other women I spoke to echoed Esme’s sentiments: living in the U.S. was better than living in Mexico and going hungry, and their day-to-day struggles in the U.S. were, on the whole, less onerous than the day-to-day fear of cartel violence in Mexico. Maybe you can say here: “The “cruel optimism” of a “calmer” life which came at a potential cost of one’s children’s health was something Marienela and her

friends contended with. Still, despite the fact that outside of the colonias, and in the northern reaches of Texas, the Rio Grande Valley is described as “MexAmerica,” Esme and her friends described life in the Valley as being not their “culture.”

***Dr. Guerra: 1+1=3***

Dr. Guerra, a third diabetic who employed the “yes, but” and us/them technique, grew up in a small, dusty town about an hour north of McAllen. His parents ran a local Presbyterian mission school for boys where Dr. Guerra received his early education. Dr. Guerra’s father had had a childhood farming accident that left him with only one arm. He joined the Presbyterian Church after a local Presbyterian took him in and offered to educate him at the mission school. Dr. Guerra’s father, in turn, took responsibility for educating his brothers and then his children. “And now,” Dr. Guerra told me proudly during an interview, “we have five doctors and pharmacists in the family!” Like many men his age in the region who had received extensive formal education, Dr. Guerra had been a pharmacist before he attended medical school in the Midwestern United States.

Dr. Guerra described himself as a very religious man who had always wanted to do mission work in another country after his retirement. But his retirement age kept rising as he became responsible for two families, through a divorce and second marriage. Despite being in his early 70s, he did not foresee being able to retire anytime soon. Because he could not leave the country for extended periods of mission work, he considered his work at the *Mariana Clinic* (where I first met him) to be his mission work.



Dr. Guerra had his first “elevated” glucose test in 1972, when he was in his first year of medical school. He and his fellow medical students had to do glucose tests on each other, and his test returned a result of “early diabetes.” He went straight to a local doctor to have the diagnosis confirmed. Once it was, Dr. Guerra was “devastated.” When I asked him why he was devastated he said that it was primarily because of his time working as a pharmacist in the Valley. During those years, he handed out a lot of insulin to diabetics with end-stage or “uncontrolled” diabetes, meaning they had foot or leg amputations, were blind, or were receiving dialysis. Therefore, when the physician confirmed that he had “early diabetes,” Dr. Guerra immediately changed his diet and began running four miles per day. Between September and the winter holidays of that first year of medical school, he lost 30 pounds and reduced his blood sugar levels.

Thus, Dr. Guerra experienced diabetes not only as a healthcare practitioner but also as a diabetic himself; he engaged in care of others and also his own daily bodily care. In a private medical practice that he operated with his brother, Dr. Guerra saw most of the diabetics, and he said that he loved the work. He believed that patients responded well (meaning they were more likely to make the recommended behavior change) when he told them about all of the complications they would experience if they did not keep their diabetes “under control.” In order to achieve these ends himself, Dr. Guerra tried to keep his A1C at 6, a number that is associated with very low risk of nerve-related damage (blindness and amputation) or dialysis. Although he saw a local physician to get his prescription medication for diabetes, he set his own

routine for taking the medications, “usually about once a week.” When talking about his day-to-day management of diabetes, Dr. Guerra’s comments about genetics moved into the background, and his philosophy of food consumption and “Mexican culture” moved to the foreground.

Over the years that I knew him, Dr. Guerra renewed his commitment to weight loss and diabetes management multiple times. At one point, he joined a “Biggest Loser” competition at a facility where he served as the director; he won by losing seven pounds in one month. Then came the winter holidays, and his weight went back up. He joked that “my backside” could be a solar panel. This time, he pointed to the sky and said, “I’m making a promise to God, not to my kids, not to my wife!” Despite winning the Biggest Loser competition and making a promise to God, Dr. Guerra’s weight stayed more or less the same the entire time I knew him.

Although he wasn’t able to achieve the weight loss that he desired, he was able to maintain his desired A1C (just around 6), mostly through attention to food choices. He felt that the Rio Grande Valley was a particularly hard place to manage diabetes because the “Mexican culture” includes frequent baptisms, birthday parties, barbeques, and get-togethers, all events that revolve around food that is fatty and high in carbohydrates. It was much easier to manage his diabetes on a day-to-day basis when in medical school, living in the Midwestern United States, eating yogurt and granola for most meals. At the time I knew him, he had good days and not-so-good days in managing his food choices, but he said that he tried to stay consistent about poaching two eggs in his office microwave and drinking them for breakfast. He

jokingly blamed his wife for cooking food that was hard to turn away from and for buying foods with high sugar content but said that his teenaged daughter helped keep him making “good” food choices with her off-the-cuff comments such as, “You want to live to meet your grandkids, right, dad?” when she saw him eating ice cream. His daughter’s comments, like his recurring weight loss attempts, motivated him to change his behavior for a few days or a week, but like most diabetics I met, he eventually returned to eating foods that he knew would raise his blood sugar. Dr. Guerra intimated that life in another geographic region, without “Mexican culture,” might be an easier locale for managing diabetes on a day-to-day basis.

After about a year of participant observation while Dr. Guerra attended to patients, he and I sat down for an interview. We shared a bowl of trail mix during the interview, one that I had brought for the clinic staff, and as he chewed on a handful of nuts and berries, he smiled and told me that it reminded him of how he ate during medical school. “Yogurt and nuts,” he said, chuckling, “Now I eat so much worse!” He told me that between work and what he referred to as “our culture,” it is nearly impossible to eat well in the borderlands: work meetings are held at restaurants where he is plied with baskets of tortillas and his favorite Mexican dishes, and every weekend there are family functions—birthday parties, *Quinceañeras*, bar-b-ques, weddings—where it simply isn’t acceptable to say “no” to a piece of cake or a large plate of food. He described the region as a landscape of temptation, as one rife with opportunities for food choices that are unhealthy either for their quantity or for the fat and carbohydrate level. Thus, when I asked him why he thought there are such high

rates of diabetes in the region, I expected him to attribute them to diet and eating, as many people do. He did not. Although he does think the “food culture” makes it harder to manage diabetes, he told me the following:

I think we (Hispanic/Mexican Americans) got it more from the Indians because I think the only people that have a higher diabetic rate than Hispanics are the Indians. . . . I think American Indians might have a higher. . . and that's probably how we got it from mixing the local Indians with Spanish, we got this. So, it's not so much Hispanic. It's whoever has lots of Indian blood in them probably has lots of diabetes.

Diabetes is a disease that is multifactorial but it has a very, very high component of genetics. . . and of course it's cultural, the cultural aspect with the diet does not help the genetic. It's almost synergistically bad to be Hispanic because of the bad synergy between the genetics and the bad diet. It's almost like 1 plus 1 is not 2, 1 plus 1 is 3 in terms of badness for diabetes.

Below I include an excerpt of the interview I conducted with him in which we both refer to Vermont, a state that was, at the time, a potential comparative research site. I include this excerpt because Dr. Guerra frames a genetic risk for diabetes as something that can be lessened through inter-marriage with people from the geographically distant state of Vermont:

CCK: When I first met you, you said, ‘So, if I go to Vermont, are my genetics going to change, is my diabetes going to go away?’

Dr. Guerra: Well, in a sense that’s true because if you move to Vermont and marry someone from Vermont then that changes the genetics of the family and then you are removing the genes. Or you think of it in a bad way also . . . depends. . . if you are a pessimistic person you could think of it as taking the bad genes to Vermont.

CCK: Which way would you think of it?

Dr. Guerra: Well, since I’m part of the bad genes here, to me it’s good that my family would marry someone from Vermont because that would remove the bad genes. I have, you know, my oldest son who has three maternal uncles that died either in their late 50s or early 60s from diabetes.

Later in the interview, he elaborated on how marrying people not from the Valley could help the future generations of his family.

So genetics is there, and we doctors think about it more than others, so I was glad when my son married someone from Dallas who isn't Hispanic and didn't have a family history of diabetes. I thought that was wonderful because they were diluting that gene and there's a possibility that my grandchildren out of that marriage is going to result in kids that are not diabetic or have heart disease.

For Dr. Guerra, there is an unstated distinction between having diabetes and managing diabetes. Having diabetes is faultless, an unlucky genetic legacy that Dr. Guerra is squarely a part of. By stating, “I’m part of the bad genes here,” he makes a claim of genetic belonging to the region and its history of “mixing the local Indian with the Spanish.” While all he and other people who currently have diabetes can do is manage the condition, he believed that moving to geographically distant places with lower rates of diabetes, and marrying people without histories of diabetes could help reduce the rate of diabetes in his descendants.

Dr. Guerra’s diabetes origin story is not only temporal but also spatial. He located diabetes in anachronistic drops of blood, ones that drip from pricked fingertips, his included, onto the strips of a Glucometer. And those drops of blood do not simply index an historical past; they are that past—“the Indian” of the time of Spanish colonization—in the blood of present-day Mexican-American diabetics. That Indian blood, moreover, brings the past and the present into co-existence, brings close the bodies of warring Spaniards and Indians who lived in this same landscape only a few centuries before. However, his diabetes origin story does not stay anchored in an historical past. It then moves through time and geography. The movement to the

north—in the hypothetical marriage of one of his children to an Anglo—is also temporal: it is the future generations that in their “diluted” blood will be geographically removed from the Mexican-American eating customs of the borderlands and temporally distanced from the colonial era by generation and by their diluted blood. In a surprising display of both certainty and impossibility, he said, “It’s like, in terms of diabetes, it’s synergistically bad to be Mexican: 1+1 doesn’t equal 2; 1+1 equals 3.” One being Indian blood, one being borderlands food culture. And these “ones” together exceed mathematical possibility: excess and the resultant impossibility of being healthy.

Dr. Guerra’s story demonstrates the politically explosive nature of diabetes. He openly discussed many of the thorny issues related to diabetes, such as whether there is a “Mexican” genetic predisposition to diabetes borne in the blood, a topic analyzed in Michael Montoya’s *Making the Mexican Diabetic* (2011). At first glance, his description of diabetes and Indian blood could be tagged as *mestizaje*, the Latin American ideology of mixed—as opposed to pure—national blood lines (Johnson 2011; Stern 2003; Wade). But, his description of the “diluted”—and thus healthier—blood of his future grandchildren indicates that he weaves *mestisaje* together with European and “American” theories of hypodescent in which the inferior blood-lines are, over generations, diluted (Hartigan 2013).

It would be easy to dismiss Dr. Guerra’s idea of diabetes etiology as an example of how a challenging laboratory science concept—genetics and heredity—is misunderstood in clinical practice. Or, I could use Dr. Guerra’s description as an

example of the popularity of epigenetic thinking. Instead I offer a different interpretation. Dr. Guerra makes it clear that biology is not influenced by ideology; biology *is* ideology (Lewontin 1993). Dr. Guerra's comments about "Indian" blood and inter-marriage as a process of "diluting" blood demonstrate that science is not a citadel; science and scientific knowledge are always cultural and always attached to other notions of life (belonging, ethnicity, custom). Thus, while Michael Montoya demonstrates how laboratory scientists and field researchers convert ethnic and national identities into racial categories, in *Making the Mexican Diabetic* (2011), here I demonstrate how scientific notions such as "blood" and genetic predisposition are made into vibrant and meaningful parts of people's everyday lives in the Rio Grande Valley.

### ***Conclusion***

In conclusion, I return to the questions posed at the outset of this chapter. "Why do people feel the need to respond to and turn away from the category of "Mexican-American diabetic in south Texas"? And, what does ethnographic attention to this category help us understand about the circulation and reception of scientific categories and about the complexities of belonging to the Rio Grande Valley and to the U.S. as a nation? All of my interlocutors engage in the rhetorical technique that I call "yes, but." This technique allows them to navigate the complex landscape of who counts as "us" and who counts as "them" by acknowledging their proximity to the condition ("yes") while distinguishing themselves from "those" diabetics who are really the problem, and worthy of study.

First, the civic association members' "yeses" were based in embodied knowledge of the condition ("yes, I have diabetes"), and their use of "but" pointed toward others who were distanced from them geographically as well as by patterns of living and eating. Second, Esme's "yes," like that of the civic association members, located diabetes in the genetics housed in her body and her daughter's body. Her use of "but," however, gestured not so much to a geographic other as to an other who organized the rhythm of everyday life and food in a particular way: *una vida agringada*. In a way, the civic association members and Esme are claiming to be "of, but not in." They are "of" Mexican-ness, through blood and through "culture," but not "in" the practices that make one a Mexican-American diabetic in south Texas. Dr. Guerra, the third case, does something different. As a physician who himself has diabetes, he is less binaristic in his description of the us and them of diabetes. He describes it as "synergistically bad" to be Mexican (in terms of diabetes, exemplifying his words in a mathematical formula:  $1+1=3$ ). In a sense, Dr. Guerra is saying that he cannot be *either* "us" or "them," because he is necessarily both.

Issues of misrecognition, representation, and depiction have long been a real concern for people of Mexican descent living the region now called the Rio Grande Valley. I have approached understanding the category of "Mexican-American diabetic in south Texas" as a project of attending to how a category that is seemingly biological or public health-oriented is indeed a critical site of engagement for diabetic and non-diabetic Mexican-Americans in their everyday lives, far from the confines of anything that is remotely clinical. For the people I met, Mexican-ness is not only a



response to swirling social, economic, class-based, political, and public notions of group identity. It is also a response to the constantly re-circulating, biological and public health category of the “Mexican-American diabetic in south Texas”—a category that, with its murky etiology, has long since left the laboratory, left the secure grip of public health personnel, and has come to be woven tightly into the everyday life and processes of group identification.

The next chapter, “Temptation and Interruption in QDay Life” begins again with Mario, the Vietnam Veteran whose story started this chapter. Rather than continue with a focus on etiology, however, Chapter Four draws on theories of everyday life (deCerteau 1998; Lefebvre 1992) to demonstrate that diabetes care and management are organizing what count as a normative everyday life. The chapter demonstrates the temporal nature of the “us” and “them” publics by focusing on how certain temporalities of eating are productive of an “us” while others produce a “them.”

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<sup>xi</sup> See, for example, Montgomery et al. 2008. Incident diabetes and pesticide exposure among licensed pesticide applicators: Agricultural Health Study, 1993-2003. *American Journal of Epidemiology* 167(10):1235-1246.

<sup>xli</sup> The word used in Spanish is *propensa*.

<sup>xlii</sup> From Maria Elena: *Pues, es un dicho: una vida mejor*. She said that she's not really even sure if it's a "vida mejor" but that it's probably "mas tranquila."

**INTERLUDE: EVERYDAY LIFE**



**Figure 18. QDay life: Clock in, clock out.**



Figure 19. QDay life, idealized.





## CHAPTER FOUR: TEMPTATION AND THE IMPOSSIBILITY OF CARE IN QDAY LIFE

Running down the centre of the new Wellcome Trust Gallery at the British Museum is a 13 m installation entitled *Cradle to Grave*. It centres around a notional lifetime supply of drugs knitted into two lengths of textile.

Each length contains over 14,000 drug doses, the estimated average prescribed to every person in Britain in their lifetime. Both the man and the woman start at birth with an injection of vitamin K. In childhood they receive immunizations, and both take antibiotics and painkillers at various times during their lives. The woman takes contraceptive pills as a young adult and, in middle age, hormone replacement therapy.<sup>xliii</sup>

The excerpt from *QJM* above demonstrates that chronic medication of the self is a technology that normalizes on multiple levels. The routine hormonal therapy of the woman depicted in the British Museum installation, for example, can be understood as the regulation of an “unruly” female body over her lifespan (Hester 2009:61; Martin 1991,1997). The man and woman whose 14,000 doses are displayed are also framed normatively as a heterosexual, married couple<sup>xliv</sup>. The couple’s health is situated within the health of the national body politic, as evidenced by the inclusion of state-sponsored medial interventions such as post-birth Vitamin K and immunizations. Finally, the description of their medicalization is in the temporality of life-stages: birth, reproduction, middle-age. While the museum exhibit addresses a life-course temporality of medication, most people I met talked more about how medication and its requirements was organizing a particular time in their life; and interrupting their idea of how that time should be.

Take, for example Mario. Mario was 68 when I interviewed him, and for over 40 years he had been living with numerous chronic conditions: diabetes,

cardiovascular disease, tinnitus, and neuropathy. At 301 pounds and just over six feet tall, he dominated the soft chair he sat in, tucked in the corner of a little-used massage therapy room in his chiropractor's office. I was a patient of the same chiropractor, who had suggested I meet Mario.

Mario had a lot to teach me about the rhythming of everyday life. After finishing high school, Mario took the bold step of refusing his uncle's offer of a pick-up truck and his own crew to manage in the local fields. Instead, Mario joined the U.S. military. First, he served in Korea and then in the Republic of Vietnam. After leaving the service and returning to the Rio Grande Valley, Mario started a life of work in agriculture. Because of the region's centrality to certain markets, Mario was kept busy organizing logistics for transport companies and acting as a liaison for company services in Mexico. For a short time, he drummed up business as an insurance salesman.

His life had been the quintessential everyday life of American-style capitalism: wake up, eat, work, home, eat, drink, sleep. Mario's life had been the kind that another man, Jesús, described as "una vida monótona" [a monotonous life]. Mario had anticipated an end to that monotony with retirement; he had envisioned living a life in which he was not beholden to a clock or tasks that felt like work. He had wanted to be with his friends, eating barbecue and drinking beer without worrying about the effects.

However, that is not what happened. The care and management of his and his wife's diabetes rhythmmed his everyday life just as work had rhythmmed his life before

retirement. During our interview, he explained it to me in the following way, linking the rhythms of paid labor to the rhythms of care related to diabetes, both his and his wife's:

I had a very interesting conversation this morning, *very* interesting. My wife had bloodwork—she's a diabetic also—so I'm sitting there and this older couple that's ahead us, the guy turns around and says, "Did you ever work in the fields?" I said, "yes, sir, sure did, *raised* in the fields," and he says, "I remember we used to wake up at 4:30/5 o'clock in the morning, pack our lunch, get ready, and get on the truck, go to the fields." He says, "Here it is 60 years later, I'm still getting up at 5 o'clock in the morning because I can't sleep because this pain, that pain, I gotta take my medication, gotta take my insulin, and pack my medication, come here and get bloodwork. So, nothing's changed!" I started laughing so hard! . . . He's right. Nothing's changed.

Although Mario describes his life as regimented by caring for his and his wife's diabetes, he also describes the regimentation as incomplete. That regimentation is incomplete in moments of temptation that interrupt the monotony. For example, the morning of our interview, he, his wife, and their friends had gone out for breakfast at Lupe's, a family-owned restaurant near his house where he could have coffee, beans, eggs, ham, and tortillas for \$1.99. He said that as he looked down at his hand grabbing the tortilla he thought to himself, "I *could* just use the fork. I don't *need* this tortilla. . . . ach, to hell with it." And he used the tortilla.

Thus, the way that diabetes care and management organizes Mario's everyday life, thus, is not the continuous and predictable rhythm that clinical medicine advocates, one that I call "QDay life" (in reference to the clinical use of "Q" to mean "every"): (1) wake up, take blood sugar, inject insulin, eat; (2) exercise, snack; (3) lunch, blood sugar check; (4) dinner, blood sugar check, insulin. Rather, Mario's days are marked by the temptation to eat food that is not approved as healthy for diabetics



and, when he succumbs to the temptation, it becomes clear that QDay life is governed by temptation and interruption as much as by a predictable and consistent rhythm.

Likewise, his days are marked by the care of bodies, the care for his own body and for his wife's, for example by accompanying her to blood draw appointments.

The concerns raised in the *Cradle to Grave* exhibit and in Mario's lament about his everyday life draw to the fore why scholars have been interested in studying how allopathic, clinical medicine organizes the temporality of everyday living. The excerpts above also demonstrate the various incitements to care for the self, for family members, and metonymically, for the nation.

It can be argued that everyday life is the bread and butter of the ethnographic method (Ries 2002). As a phrase, "everyday life" is generally taken to indicate the routine activities and behaviors that organize social life, including many of the staples of anthropological analyses: eating and cooking (Ries 2009; Farquhar 2003), gift-giving (Mauss 2000 [1923]; Munn 1992), and worshipping (Douglas 1966), to name only a few. However, the unique intervention that the study of chronic illness makes into the study of everyday life is most striking if we start with the theories of everyday life from Michel de Certeau (1984; 1998) and Henri Lefebvre (1992; 2004).

Theorizing in post-World War II France, they understood that daily activities such as walking, cooking, drinking wine, or watching television have been routinized and imbued with monotony through France's colonization by an "American-style" capitalism. That capitalism, they argued, organized space and time so thoroughly that it left few opportunities for creativity or freedom (Lefebvre 2004; de Certeau, Giard,

and Mayol 1998). While for Lefebvre, everyday life was a hegemonic force that alienated man from himself even in the privacy of his home, for de Certeau everyday life was more celebratory, evident in the multiple and sometimes imperceptible ways that people use the goods of capitalism.

In this chapter, I demonstrate that the constant interruptions of temptation, such as those described by Mario, contribute to these theorizations of everyday life in two ways. First, diabetes management expands the practices that are relevant for theorizing everyday life to include activities such as bodily care of the self and of others, injecting insulin, eating in restaurants with friends, checking blood sugar, and taking medication.<sup>xlv</sup> While a Lefebvrian analysis allows us to see the ways that these practices may thoroughly ensconce their practitioners in a routinized space-time of capitalism, an analysis building on de Certeau demonstrates how these practices conjure spatiotemporal horizons—the pasts and the futures—within which individuals experience themselves.

Bringing Lefebvrian and deCerteauian analyses together allows us to see that while everyday life is an organizing and routinizing spatiotemporal structure, it is incomplete. But the spontaneous attempts at celebration are incomplete, as well. This rhythm of consistent temporal interruption that can be foreseen but not predicted is at the heart of this chapter. The organization and interruption care of the diabetic or pre-diabetic body, then, are not in opposition to each other or to QDay life; rather, each is dependent upon the other for its existence. Thus, diabetes care and management offer a way to further examine organization, temptation, and interruption as co-constitutive.

This movement in QDay life from instances of temptation marks moments of enacting membership in both an “us” and a “them.” When Mario says, “Ach, to hell with it,” and uses the tortilla, he is enacting membership in “them.” But, when describing that behavior as wrong, he is declaring a momentary allegiance to the “rightness” of QDay life as prescribed by clinical medicine—the public of “us.”

This chapter has two parts. The first part focuses on two ethnographic examples of how QDay life is taught. One is a community hospital-based program called “Yo Puedo Controlar mi Diabetes” [I can control my diabetes]. The second is a talk I attended by a well-known diabetologist. This part of the chapter describes how these two classes teach the students that they do not know enough about the properties of food and must learn how to manage temptation. But each program teaches these skills in different ways. The second section is organized about three ethnographic cases: Mario, Marianéla, and Edgar. Each describe what they do to manage temptation.

Woven through both parts of this chapter is the concept of care. I attend in the cases to how care is framed in teaching and living QDay life, with a particular focus on the scalar, metonymic nature of the body and the practices through which that occurs. The conclusion takes up care in more detail, focusing on how care of one’s own body and the bodies of others is framed as a dire national security concern.

### *Learning QDay Life*

Most classes for diabetics are based out of hospitals or clinics or offered through one-on-one meetings with an office or clinic-based nutritionist. Some are free drop-ins listed in newspapers and held at public hospitals. Almost all programs are organized around weekly or bi-weekly 1-2 hour meetings, with each week covering a particular topic or “competence.” This could be “Measuring blood sugar and calibrating your glucometer” or “eating out” or “portion size.” Usually there are worksheets and quizzes. They are almost always taught by some form of credentialed “expert.” The first one I attended was taught by an RD (registered dietician), others by CDE (Certified Diabetes Educator), others by nurses. These programs seem to me to follow the logic of learning how to drive a car: you begin with a student with little to no knowledge, teach basics, give a test, and then they know how. Maybe they’ll have an accident or two but more or less they now know.

The nutrition class I attended was called *Yo Puedo Controlar Mi Diabetes* (I Can Control My Diabetes). It was held at a small regional hospital about 30 minutes west of where I had met Mario. After class, the teacher, a registered dietician, took me to her office and gave me the standard information about diet that she gives to diabetics. Unfolding a poster-sized glossy sheet of paper on the desk, she marked an X over each of the foods that were off limits. The off-limits foods included sausage, ribs, chicken with skin, peanut butter, all fruit juices, flour tortillas, chocolate pudding, oatmeal, spaghetti sauce, French fries, chips, cornbread, cookies, crackers, and ice cream. The standard diabetes diet was written in at the top of the poster,

organized by time of day, set quantities of food (by the ounce), a calorie limit for the day, and set times for eating [poster in Appendix A].

While Mario had described to me the “dos” and “don’ts” of a diabetic diet, the class I attended materialized them. During the class period, we sat around a seminar-style table with worksheets showing pictures of various foods, and our task was to fill in, next to each picture, how much of that food was considered one serving. We all over-estimated. As we reviewed our answers, the teacher held up plastic food models, covering up half or a third of the food so we could see just how small a real portion is and how much excess we had been eating. As in all the diabetes education classes I attended, when the teacher demonstrated how little we should eat, a chorus of groans, moans, and laughter echoed throughout the room, indicating that there was just no way we could ever eat such a small volume of food. The groans are about not wanting to turn away from the foods that call out to us. But, the format of the class, with the final answers revealed at the end, teaches us that our answers are incorrect and that we need more schooling. Even though we are in a classroom and learning from credentialed experts, we learn the material and also learn that we still need to learn more. Specifically, we learn how to rein in our temptations, as evidenced in our misperception of portion size. Despite his struggles to manage QDay life, Mario and all of the other people with diabetes who I interviewed agreed that that predictable, consistent rhythm of QDay life eating was the right way to eat.

### *Hopes and Dreams*

The *Centro Comunitario* (hereafter, *Centro*) sits at the end of an infamous road, about two miles south from the exit off of highway. The road dead ends at the *Centro*, after which point the horizon is taken over by tall and tangled grasses, stacks of wood and recycling, and agricultural land. A few miles out of sight is the Rio Grande. The *Centro* was built in 2007 through a coordinated effort between grassroots community groups from the two colonias it serves (West Side and *Las Flores*), public health officials, academics, and municipal officials.

The purpose of the *Centro* is to bring state and social services to the neighborhoods' residents. Community groups lobbied for particular services, namely a Sheriff's sub-station, license-plate office, and WIC services. According to the *Centro*'s outreach director, in 2012 the *Centro* served over 4,000 families with monthly incomes between \$600 and \$1,000/month, and served a total of more than 15,000 children. Many clients—although not all—of the neighborhood's residents do not have legal permission to live in the United States, and thus live their day-to-day lives with one eye on the border patrol. Despite a daily fear of deportation that often meant women stayed in their houses for a week at a time if they knew the police to be doing side-of-the-road license checks, they also were also fed up with the violence in their neighborhoods and wanted to ensure that their calls for police assistance would be tended to promptly, thus the request for the sub-station.

Neighborhood women were vocal about what they wanted the *Centro* to include, and another key component was a walking trail and a fence around it that

would keep out feral dogs. My time in the *Centro* was spent with a group of about 20 or 30 women who participated in the *Centro*'s outreach activities. Most of the classes, workshops, or activities were in some way related to body measurement, health, and body change: Zumba, nutrition, and beauty classes; workshops on protecting your rights as a domestic worker,<sup>xlvi</sup> or meetings with university researchers, most of whom conducted structured survey interviews to assess colonia-wide health. These meetings sometimes involved body measurements and blood draws. Thus, learning about one's body—and having a body through which others learned—played a central role in day-to-day programming at the *Centro*.

Initially, my plan was to conduct participant observation in a 12-week diabetes education course run by Vero, the director of the community center. At the last minute, the course was canceled indefinitely because she had to take on more caregiving responsibilities at home. Instead, I began attending the morning Zumba classes and the special talks and classes, most of which were organized by Lucera, the *Centro*'s community outreach educator.

The “Zumba class” was a temporal and spatial demarcation and didn't mean that we always did an hour of Zumba. Sometimes, we gathered at the same time and place but instead did a walking video, or listened to a guest speaker on nutrition. In this way, the Zumba classroom was similar to the CrossFit box I describe in Chapter Five in that both were spaces clearly demarcated to participants for explicit conversations about bodies, health, and nutrition.

One of the first talks I attended was by Dr. Cavazos, a well-known physician who specializes in diabetes care and weight loss. Not only does he own multiple medical practices staffed by a small army of PAs (Physician Assistants), but he also hosts a weekly call-in radio show, “*¡Salud importa!*” [Health Matters!] on a popular Christian radio station, as well as a health-based television show distributed in Mexico and several South American countries.

When the doctor arrived, he began his talk as a bit of an iconoclast. Gesturing toward the Coca-Cola laid out on the table, he said, "You know, there isn't really much difference between the multi-millionaires who own Coca-Cola and the *capos* (drug lords) who run drugs—they are both killing humanity." He paused for dramatic effect and then changed his tone. He said that we are the real multi-millionaires, not the Coca-Cola owners or the *capos*. We are the ones with riches, he explained, because we can dream, have hopes, and we can plan and change our lives. With this introduction, he framed the rest of his talk with three key points: first, he said that medicine can control your symptoms but it does not cure you: the moment you stop taking the medication, he pointed out, you are unwell again. In that talk, too, he described the centrality of hopes and dreams, using his own personal story as evidence that if one has dreams and a plan, one can accomplish whatever one wants (Berlant 2007). Conversely, he warned that, “*Y si no, no sabe por donde va*” [And if you don't (have a plan), you don't know where you are going].





**Figure 22. Dr. Cavazos giving his talk about diabetes and obesity. Photo by Author.**

While describing his working philosophy to the women at *El Centro*, Dr. Cavazos underscored the ways in which his story was similar to theirs. As he told the story of his life as one of struggle, of hopes, and of ultimate success, he foreshadowed the commitment and healthy behaviors that he advocates in diabetics' relationship to food and eating. He said that like many of the women there, neither of his parents could read or write, and the small village in Colombia where he grew up had virtually no healthcare available. He described a formative experience of watching as a family member suffocated and died during an asthma attack, with a circle of community members watching, unable to help. After that, he said that he was lying in a field at

night and looking up at the stars and the moon, telling himself that he would one day leave that village and become a doctor. So ludicrous was this dream that his aunt asked him if he was smoking marijuana. It was his grandmother who believed in him and he said that it was the memory of her voice telling him that he could do it that helped him make it through the difficult times. Through grit and determination, he was accepted into medical school in Mexico, where he worked full-time to support himself and also send money home to his mother. He only saw her once a year, at most. Both times I heard him give this talk, the audience was riveted. At *El Centro*, women nodded their heads in disbelief that he wasn't able to see his mother more frequently. Many in the audience understood this situation, as they themselves were unable to return to Mexico to see their own mothers.

***Managing Consumer and Metabolic Temptation:***

***Talking to Your Body, Caring for Your Family and the Nation***

It was at this point in his personal narrative that Dr. Cavazos deftly brought together dreaming, goals, planning an everyday life, and diabetes. He told the women that the medical community is at fault for the high rates of diabetes and obesity because that they should prescribe a different diet, rather than prescribe medication. Furthermore, he asserted that blood sugar is not the bodily fluid of most concern, but rather insulin, meaning that laboratory exams do not tell us what we need to know. He explained doctors' behavior in terms of ignorance and fear. He suggested that such fear is both broad and deep by telling the women, "*Hasta los países tiemblan en frente de esta enfermedad*" [Even countries tremble in the face of this disease]. He

said that it is a (false) belief that diabetes equals a horrific life and death as a dream-killer. He repeatedly asserted that it is a lie when people say that diabetes is a killer. “Uno puede vivir *con* diabetes y morir *con* diabetes, no *por* diabetes.” [“You can live *with* diabetes and die *with* diabetes, not *from* diabetes.”] He then positioned women as the key source of health for a family, repeatedly emphasizing to the women in attendance that they are the ones who can positively or negatively impact the health of their entire families.

With the basic premises of his talk laid out, he prepared the women for what was to come. He told them that while much of the information he was giving them would be new and difficult, that he would make it as easy as possible and that, by the end of the talk, they would have the information they needed and could thereby act on it.<sup>xlvii</sup> His talk disentangled diabetes from the realm of genes and heredity and put it into the world of international politics (Coca-Cola and *capos*) while at the same time placing it squarely in the realm of individual choice, family life, and having dreams. His talk was scalar in nature. It began with faceless, immoral druglords and the *cruel optimism* (Berlant 1997) or dreams and hopes before scaling to the planning of everyday life. Without explicitly stating it, he positions the diet and behavior he prescribes as a response to the *capos*, to Coca-Cola, and to cheap food manufacturers. Caring for one’s own body and the bodies of family members was an everyday way to fight back against broad political failures and violence.

His assistant had already queued a slide show, and slide by slide, the doctor described concepts such as “glycemic load,” high glycemic index foods, and low

glycemic index foods. The women moaned, laughed, and threw their hands up in discouragement at a slide full of pictures of their favorite fruits—grapes, bananas, pineapples, watermelon, and mango for example—each obscured with a large X. The following slide followed the same format, but this time the items with a big X over them were flour tortillas, rice, potatoes, and bread. Lourdes, who was sitting across from me and diligently taking notes, flopped back in her chair and threw down her pencil when she saw the list of the fruits that were not acceptable. “Noooo!” she said, laughing.

Everyone in the room joined in her laughter, including the doctor who took her exclamatory remark as a chance to demonstrate how to avoid temptation. Looking at Lourdes, he said, “Yo la entiendo” [I understand]. Grabbing the extra flesh at his sides, he said that until recently he had “hasta tres llantitas” [up to three spare tires]; then he chuckled. He continued, now looking at Lourdes and the rest of the women in the room, and proceeded to give them some actual strategies. He started with grocery shopping, a key activity of everyday social reproduction (Miller 1998), and explained that when they are at the grocery store and are tempted by the fruits, tortillas, or other high-glycemic index foods, “Ni los mire!” [Don’t even look at those items.]. His suggestion to not even look at the sugary fruit or high carbohydrate foods flies in the face of most diabetes, obesity, or weight loss behavior modification suggestions that focus on teaching people how to eat “like everyone else,” just in smaller quantities. Lucera, for example (whose suggestions I detail below) gave the women detailed instructions on how to have a small taste of whatever they want, to appease the urge,

and then move on. Thus, he was asking the women to embrace an entirely new food and eating sociality, one that Dr. Guerra (in previous chapter) claimed was impossible to do in the region because of “our” [Mexican] food culture. The diabetologist cut this kind of response off before anyone could state it. “It’s not just the U.S., it’s not just Mexico,” he said, “It’s all over.”

Like Lucera, the doctor was an excellent performer, and to demonstrate how to avoid sweet food, he stood tall and told the women to pretend that he was looking in the mirror. He said that the women should do the same thing when they are at home and that they should talk to their bodies as if their body was a child; as mothers, they would know how to do that, he said. He returned to his performance. Standing tall, his white coat on and a small smile on his face, he said, “Body, I’m tired of you just as you are tired of me. I know you want this cookie, but I can’t let you have it. It’s my job to keep you healthy and safe. You can get mad at me, but that’s okay.”

I linger on his demonstration here for two key reasons. First is how the doctor addressed the issue of wanting to purchase and eat food that one has been told is unhealthy. This issue of wanting arose in multiple ways. As I describe throughout this chapter, many people with diabetes discussed “tentación” (temptation) and described food that increases the blood sugar (tortillas, black beans, fruit) as agentic, as actors that “me llama la atención” [they grab my attention.] Thus, how people were instructed to deal with that temptation illuminates the practices through which people are taught to enact membership in “us.”

The doctor universalized temptation, telling us that “todos” (everyone) want to eat the sugary foods and carbohydrates, himself included. However, he didn’t end his intervention in a universalization of temptation and frustration. He went further, locating the origin of temptation in out-of-whack insulin production—as opposed to interpersonal stress, for example—that creates a “yo-yo” effect. Temptation is because of out-of-whack metabolism. He explained that the more sugar one eats, the more insulin the body produces and when a lot of insulin is produced we are hungry more quickly and thus more likely to crave any food, especially something sweet. He said that most people say that blood sugar is the problem for people with diabetes but that that is wrong; it is insulin. He described the process: (1) Eat lots of carbs; (2) Carbs make insulin production increase; (3) Insulin decreases the amount of sugar; (4) Low sugar makes us hungry. Here, he explained that when a body achieves metabolic balance—a process he believed could be achieved by a Zone diet (40% carbohydrates; 30% protein; 30% fat)—there was less craving.

To demonstrate how the women’s choices while food shopping ripple into the seemingly non-food related parts of life, he used the example of sleep apnea. He said the relationship between a husband and wife, which is the basis for any family, can be negatively impacted by diabetes (for which obesity was a stand-in). He gave a hypothetical example: a man who is obese may well end up with sleep apnea and a sleep machine—and this doesn’t only happen to old men but also to younger men. He said that the sleep apnea itself can cause a loss of erection, plus the machine can get in the way of sexual relations, and thus diabetes can negatively impact the marital

relationship. And the marriage might not last. He added, “And what if there are kids? In that case, the whole family is impacted by something that can be changed by what we eat.” In his cascade of negative impacts, he prompts the women to link their small, everyday choices with the fate of their families. As such, the care of the women’s bodies becomes a vector for the care of others’ bodies and—drawing his example of the nations trembling before the epidemic—the body of the nation, as well.

### ***Managing Temptation: Social Propriety***

A community health worker at the *Centro*, Lucera had decided to invite Dr. Cavazos to speak after her 24-year old son became his patient. She told us all that her son had been diagnosed with fatty liver and had been instructed to lose 30 pounds. She explained fatty liver as a condition in which the liver becomes inflamed and scarred and thus its function is compromised. Fatty liver can develop for multiple reasons but is highly associated with diabetes and obesity.

Lucera shared the story of her son’s diagnosis and his attempts at weight loss. As she did this, she drew not only on clinical terminology such as *higado grasoso* [fatty liver] and “non-alcoholic steatohepatitis” (NASH) that—in the context of the *Centro* carried expertise and authority—but also on the family-based sociality of care. Although she did make it clear that the end goal had been dictated by the doctor, she framed how her son would get there as a social endeavor and one that entailed helping him learn to exercise and learn to turn away from temptation. She said that every day she and her son’s girlfriend work with him, encouraging him to ride his bike around the neighborhood, for example; in the past week, he had lost eight

pounds. She also described the important role of media messaging, describing how the reality TV show “The Biggest Loser” motivated him. It was not the weight loss in the show that motivated him, however; it was seeing the humiliating particularity of the hanging folds of extra skin on the bodies of the formerly obese that caught his attention. Lucera said that at that point, her son turned to her and said, “Ay no, Mami! I don’t want to be like that!” She then described how his day-to-day life has been rhythmized by eating hamburgers and fatty, American foods. In particular, she told us about how he loves *Pappadeaux*, a Cajun food chain restaurant. Since he lives with her, Lucera has started cooking him home-cooked meals every night, reminding him—and by telling us the story, reminding the women—of the perils of eating in restaurants. In so doing she deftly brought the care of her son’s body into the family home.

Lucera is fairly certain that many people—such as her sons—are *propensa* for diabetes because of heredity. According to Lucera, this *propensidad* came from their biological father’s family in which many people developed diabetes. However, she was hesitant to make declarative statements about why the rates of diabetes in the region are so high. Unlike Dr. Guerra, who described diabetes as an almost certainty through his equation  $1+1=3$ , Lucera didn’t see *propensidad* as the most important factor in developing diabetes. With delicate and politely-phrased wording during a one-on-one interview, she placed a great deal of the responsibility for diabetes onset on parents and caregivers, and specifically on how they train their children to deal not only with food, but also with the temptation that is woven into *una vida agringada*.



After the workshop, Lucera suggested to the women a very particular technique for avoiding over-eating that was distinctly different from the message that Dr. Cavazos gave them. While he instructed that they should not even look at tempting food, Lucera suggested not only looking, but eating that food. Lucera believes that turning away from food is socially unacceptable. Therefore, rather than the abstinence that the doctor recommends, she recommends to the women that they break pieces of food into halves or quarters. During an interview with Lucera, she explained her method of teaching to me by describing that the women who come to the community center Zumba class often bring her a breakfast burrito or a treat from home. She raised her hands and shrugged her shoulders to emphasize how inappropriate it would be to say, “Ay, no thank you. I’m not eating flour these days.”

Lucera’s example illustrates the delicate social balance expected of people—diabetic or not—to partake in social life while also partly-abstaining for certain foods that are deeply embedded within sociality in the Rio Grande Valley. While Dr. Cavazos might exhort shoppers to “not even look” at certain foods, it maybe be the case that the greater temptation for the *Centro* women is the social obligation they feel to remain with the “us” of their community even if it places them in a broader public of “them.” But the “us” is also gendered and implied in care. Both Dr. Cavazos and Lucera approach the womens’ bodies as vector for the care of the bodies of their family members. Thus, for the women, caring for themselves becomes a practice through which others are cared for. In Lucera’s instruction, others are cared for by accepting—even nominally—gifts of food, while also finding a way to satiate one’s

own temptation by eating only a small portion of their desired foods. Dr. Cavazos also brought to the fore not the women's bodies, but rather the bodies of their family members: the sleep apnic husband, the emotionally unregulated children of divorce, the obese family members. The women's bodies come in and out of focus in these stories as they manage the care of other bodies.

### *Responding to the Teaching of QDay Life*

#### Gloria: Maintaining QDay Life by Imagining Necretizing Limbs

Gloria's husband, Mateo, was a loud shadow presence during our interview, as he is in her life. We drove from the community center in my car the few blocks to her house, and as she opened the chain-link gate and I drove my car in, I saw him sitting on the small porch wearing reflective sunglasses, looking out at the street. The porch was impossibly small, about two feet by 3.5 feet, and Irma and I stood awkwardly on the porch before kneeling down and greeting their daughter's chihuahua, Dulce, who was hurling her six-pound body over the side of her small cardboard box, so great was her excitement at seeing Gloria. Mateo mumbled something at me when she introduced me, and I only saw him once more, when he walked into the kitchen where we were meeting to get his lunch off the counter, where Gloria had placed it for him.

Gloria is worried about Mateo's health, and as we discussed her diabetes and stress, we circled back to his drinking and his refusal to go to the doctor. As we did so, her body's care and its needs came in and out of focus. When she tried to talk to

him about his health and his possible illnesses—she suspected that he might have diabetes—he told her, “Well, what does it matter? I’m going to die from something!)<sup>xlviii</sup> Gloria found this response intensely frustrating, as did many of the women I met whose husbands said similar things. Indeed, Vero, the director of the community center where I met Gloria, spoke to me at length one afternoon about this precise saying. She described a former colleague who was diabetic and a smoker, saying that when she told him that smoking inhibited his body’s uptake of his diabetes medication, and thus its efficacy, he said, “Well, I’m going to die anyway, so what.<sup>xlix</sup> Does it matter?” She said that it is completely confounding to her that people who “know,” people who have the information, do not begin behavior change or do not continue it.

Gloria, too, raised the issue of quality of life by telling her husband that while it is true that he will die from something, why would he want to assure himself a long, slow, painful decline? When she is at her wits’ end she retorts, as Vero did, “Yeah, and I’m going to have to take care of you!” Like so many of the women I met, Gloria had her own diabetes to care for, but it was the bodies of her friends and family members that seemed to cause her the most concern on a day-to-day basis—the most stress.

For example, a few months earlier, Gloria received a phone call from Mexico that her mother was, completely unexpectedly, having something placed in her heart. No one knew she had a heart condition; she had merely gone to the doctor for a routine cholesterol check. Gloria says that the extreme stress she felt at the time,

unable to return to Mexico to help care for her mother, is an example of problems that make her want to eat. She said that sometimes if she is having a difficult day, she consults with Lucera, who reminds her that she is managing a great deal of stress. Although those talks did help her remember that stress makes her want to eat even if she isn't hungry, that recognition is not sufficient to help her consistently change her eating behaviors and thus reduce her blood sugar levels.

Gloria was diagnosed with gestational diabetes when she was pregnant with her youngest child, Yadira, who is now 11 years old. Her daughter is now “gordita” [a little bit fat], and Gloria is worried that Yadira is going to develop diabetes herself, not only because of the pregnancy but also because of her weight and her eating habits. Gloria described to me how Yadira is always hungry, even after a sufficient dinner. In the evening before bed, Gloria gives her cornflakes and milk with a banana, but even that doesn't satiate her daughter's hunger. What Yadira really wants is “comida” (literally “food,” but in this context it means a real meal). Gloria is no stranger to this feeling of continually wanting food, says that she wants to eat a lot, especially when she is at home, worrying about her daughter. Worrying about the illnesses in family members' bodies—her husband, her daughter, and her mother—make Gloria feel stress and temptation. The only way she has recently been able to curb her eating was by imagining her own body's illness emerging from her blood to necrotize her limbs.

Like Mario, whose story began this chapter, Gloria is not a novice in diabetes medication management and food-based diabetes- and weight-control. When I asked

her if she had attended many diabetes education classes or nutrition workshops, she laughed, and told me that she probably could not even count the number she has attended. She listed off instead the locations where she has attended classes: el *Centro*, the clinic where she receives healthcare, and the grassroots community center a block down the street from her house. Although she has not been able to consistently follow the eating regimen that is suggested for diabetes, she has been able to maintain her medical regimen. She purchases insulin from her clinic at low cost, and her in-laws purchased her pills (metformin<sup>l</sup>) in Reynosa and bring them to her once a month during visits. Between metformin and insulin, her medication costs about \$100/month. It is “*las tiritas*” [the test strips] for her glucometer that she cannot afford, either in the U.S. or Mexico. Test strips are, in a sense, the technology that connects and calibrates eating behavior and blood sugar levels, but for diabetics without health insurance, they are unattainable.

Like Mario, Gloria said that she knows what to do but that she struggles with *tentación* (temptation). She said that certain foods “*me llama la atención*” (they “call out” to her, or she notices them),<sup>li</sup> and in those moments, she feels temptation, particularly to eat tortillas. Until about five weeks before I met Gloria, she had been eating about six flour tortillas with every meal (the recommendation is one or two). At a clinic appointment five weeks earlier, her PA had told her that even with her insulin and oral medications, her blood sugar levels were quite high; she was going to start having more serious complications if she did not change her eating. That day the nutritionist and Gloria went over the same kinds of information they usually

reviewed, such as the recommended quantities of food, healthier cooking oils, and low glycemic foods. However, her nutritionist also suggested a new behavior modification technique for use in the moment she felt *tentación*:

“When you feel that temptation,” she said, “say to yourself, ‘If I eat this tortilla they’ll cut my toe off.’ If I eat this next tortilla, I’ll lose my leg.”

Gloria was not entirely certain why her nutritionist’s suggestion helps, but she said that when she thought of losing her leg, she remembered a former neighbor who had gone blind and had both of his legs amputated due to diabetes. She recalled how he used to roll up and down the street in his wheelchair, glaring out at the neighborhood. Imagining that neighbor’s bleak day-to-day life scared Gloria and helped her turn away from the foods that caught her attention.

While practicing this new skill of managing temptation, Gloria had also renewed her commitment to logging her daily blood sugar levels. For the first three weeks after that appointment with her nutritionist, she wrote out the date and her morning blood sugar level on the pages of a spiral notebook. She pulled the notebook out of a cardboard box full of Avon supplies and pointed to the numbers, proof that she was managing that *tentación*: 128 mg/dL, 136 mg/dL. The list abruptly ended mid-page with a date two weeks before our interview. Gloria had run out of the costly test strips for her glucometer, so she hadn’t been able to continue testing her blood sugar levels. At her next clinic appointment in one month, her blood would be drawn, the A1C test would be run, and the results would confirm or deny her success at avoiding temptation. But, Gloria was not concerned. Although it was difficult in the

first weeks of her behavior change to consistently guard against the temptation, she simply did not feel the temptation any longer.

### Marianéla: Managing Temptation with Technology

Marianéla is in her 50s, and like Gloria, first learned about managing diabetes during her a pregnancy. During her third pregnancy, she was meticulous about following the prescribed diet and hours for eating. She told that she would watch sit in the chair in the kitchen and watch the clock until it was time to eat. Now that she is no longer pregnant, her daily management of diabetes is less by-the-book. Her personal style for wrangling temptation is quite different from the technique used by Gloria.



**Figure 23. Marianéla's microwave with her glucometer, test strips, and syringes on top. Photo by Author.**

Specifically, she uses her glucometer in an unorthodox way. Her temptation and the numbers on the glucometer are in a constant dialogue. Here are some examples. When Marianéla sense that her blood sugar might be high she does not check her blood sugar; she does not want to see the number. If she had eaten cake, let's say and thought the number would be high—for example, 225—she doesn't want to look at the numeric display because the minute she sees the number, the number turns into a value. And it is not a positive value; it is a value of “them” who do not control their blood sugar levels. Furthermore, if she thinks she's “doing well” she will check her blood sugar and it is “good,” she will let herself have a piece of cake. She said, “Some days, I go crazy/mess up. I go between ‘yes’ and ‘no.’”<sup>lii</sup> Marianela's approach is one that I call the *I'm-good-for-awhile-then-I'm-not* temporality of diabetes management that, in fact, is a temporality of everyday eating that resonates with many non-diabetics in south Texas who strive to follow certain health-eating regimes.

#### Edgar: Social and Seasonal Temptation

While Marianela describes a day-by-day temporality, Edgar describes a seasonal, holiday-based, and lifecourse pattern to managing temptation and to following an *I'm-good-for-awhile-and-them-I'm-not* temporality. Edgar was in his mid-30s when I met him at the CrossFit box where I was conducting fieldwork. He had a quick wit and sarcasm that he usually turned on himself, particularly when discussing his body. For example, one afternoon after the day's workout, the head coach Fredy was describing his philosophy to those of us who were circled around



him, stretching and drinking water. Fredy said that he is cautious with new athletes and treats everyone at their first class as if they were his own mother. Edgar responded, “So, on my first day your mother was a 278 pound Mexican guy with diabetes?” Fredy laughed and said, “Yeah, I guess she was!”

Edgar was quick to place himself in “them.” He said that it is his fault that he developed diabetes because he did not eat well. Despite claiming membership in “them,” however, he also claims membership in “us.” For example, Edgar participated in a photography project with me in which he took pictures of moments or objects that remind him, positively or negatively of his diabetes, and pull him toward “us” or toward “them.” While particular food, like a cake left in his refrigerator, is tempting (see image below), it was meeting his fiancé, Anabel that made him think he could actually be a member of “us.” He started jogging in 5k races and hiking with Anabel and her family.



**Figure 24. Cake in the refrigerator.**



**Figure 25. Hike.** “I’ve been lucky to have people in my life who have influenced me to be healthier and more active in the past few years. I have friends who encouraged me to run 5Ks and later on 10ks when I weighed 340 pounds. I had friends and family who encouraged me and convinced me that I should try CrossFit when there was nothing I wanted to do less. And now that I’m considerably healthier and lighter, I have people who would rather go out and hike, then sit around and watch television—and drag me along with them.” Photograph and text by Edgar.

One of the times he feels the strongest pull of temptation is when he and his Anabel order the same dish and her plate looks like it has more than his does. That difference in quantity jostles him and makes it hard for him to continue eating his plate of food without being constantly interrupted by thoughts of whether or not Anabel’s plate of food is bigger than his. In the public and social space of a restaurant, Edgar is able to restrain himself from grabbing some of the food off of Anabel’s plate, but when he is

alone, and during seasonal holidays when he is surrounded by trays of food at parties, he finds it close to impossible to turn away from the foods that catch his attention.

Two particular events are useful here and link his descriptions of temptation and temporality to both Gloria and to Marianela. The first one is a story that Edgar told me many times, about stress-eating at a grant-writing position he had years ago. He described grabbing an individually wrapped chocolate out of a bowl to eat it. He said, “Then, I looked down and there were all these wrappers in my hand and I barely remembered eating them all. It was crazy.” Like Gloria, when alone and feeling stress, Edgar struggles to turn away from foods that catch his attention. Unlike Gloria, Edgar describes social and public eating (such as at a restaurant) as a space in which he can resist the temptation to eat more. It is social eating during the holidays when he consciously permits himself to follow his temptation and it is in this planning and knowledge of times when he’s going to intentionally not follow the recommended diabetes diet that his technique resembles Marianela’s:

I don’t think I ever forget that I have diabetes. I think about it with every meal. I make a conscious effort to avoid sugars and carbs (carbs, sometimes, but sugar as much as I can). Sometimes, I’ll indulge myself a little bit if I’ve been good by letting myself have some cookies or some other sweets. And then there are times around the holidays when I’ll ignore that I have diabetes.

Gloria, Marianela, and Edgar all manage temptation differently. One key commonality is that they go back and forth. The frequency of their back and forth and what calls their attention and causes temptation are different; this is a temporality of us and them.

The final section of this chapter scales up to address temptation as it emerged in conversations about non-profits, the region's ubiquitous raffles and give-aways, and in conversations about migration in which the U.S. itself became the source of too much temptation.

***Temptation Nation: Non-profits, Raffles, Give-Aways, and Migration***

Lucera had thought a great deal about messaging, particularly about how to encourage people to attend the community center's free classes. As a college student in Mexico, she had studied communication and media and frequently shared with me her concerns about how much was given away for free in the United States—she was concerned about what kind of message it sends. Because we had already spoken about how much is given for free, I decided to ask her a delicate question based on what some of the women had told me: were the social services in Mexico that much worse than what was offered in the U.S.? Did families really have to buy all the supplies for their children to attend public school and, if so was it so costly that it was a burden to many families? Lucera took her time in forming her answer. I had asked a question that hit on a politically explosive and divisive issue in the U.S. overall but particularly in the Valley: do Mexican nationals come to the United States for social services that are available through their children? Does that, for better or worse, provide enough of a monthly income that they do not have to work for an hourly wage?

The divisiveness of this issue in the region cannot be overstated. For example, during lunch at a popular hamburger restaurant, the owner came over to the table to chat with me and my friends, Crystal and Jesus, with whom I was conducting an

interview about Jesus' diabetes. Indeed, Crystal had suggested doing the interview at this particular restaurant because it is one of Jesus' favorites, and a place where he had won a hamburger-eating challenge. Crystal explained to the owner that I was studying diabetes, and when he heard that, what was to be a quick hello with the restaurant owner turned into a 30-minute conversation about immigration, hospitals, and politics. The following is an excerpt from my field-notes:

He said "the whole problem is the welfare system," that it is a "breeding problem." That people "do it" [have kids] for the money. He thinks that prisoners should work in the *maquiladoras* like in Arizona where they live in tents; prisons shouldn't be "Disney World." They should also make "all hospitals" in the Valley "like embassies" so that if you are "illegal" and come across and have a baby in the hospital here, that the baby does not get citizenship. He said that he mentioned this to a congressman who readily agreed that it was a good idea, but said that it would never fly. He said that he remembers when he was a kid and a young adult that wealthy Mexican nationals would come over to the U.S. to have their babies and then just go back and live in Mexico; they came "here" to have their kids, he said because the hospitals were so much better, not because they wanted any sort of government "handout."

[Fieldnotes 6.18.2013]

Crystal and Jesus nodded their heads in agreement. The store owner's blend of nostalgia for a past during which time fewer bodies of Mexican citizens entered the United States and fewer desired U.S. assistance, along with his assessment of contemporary abuse and criminality, resonated with Crystal and Jesus.

To make sure I understood the extent of the systemic abuse, Jesus pointed out that it is not only poor Mexicans who do this, but wealthier Mexican nationals, as well. He explained that "they" (wealthier Mexican nationals) have a legal residence in the United States—often just a small trailer—so they can have a mailing address; that legal residence allows them to receive government benefits. He that that technique is

how many people enter into the healthcare system in the region. They all agreed that I should watch the “Border Wars”<sup>liii</sup> episode that follows local border agents as they intercept a group of fourteen Mexican women, all in labor, who had just crossed the border into the United States. “All of them were taken to the regional hospital,” Jesus said, raising his eyebrows, “and the hospitals love it because they see those kids and they say, ‘Cha-ching! Medicaid money!’”

I read what Crystal, Jesus, and the restaurant owner were talking about as, at least partly, about temptation. Specifically, about the U.S. as too tempting for the Mexican nationals who live in northern Mexico. That temptation is similar to Lauren Berlant’s “cruel optimism,” (2011) in that the U.S. stands for “*vivir mejor*” [live better], as discussed in Chapter Four. And Crystal, Jesus, and the restaurant owner want the U.S. state to enact the cruelty embedded in the optimism—let them give birth in the U.S., suggests the restaurant owner, but the hospital will legally be Mexico.

Thus, when I asked Lucera about what the women had told me, the air was thick with this minefield. She lined up the papers on her desk, keeping her eyes fixed on a spot on her desk and then looked up at me and said, “*Pues, Celina, no sé.*” She confirmed that there are fewer social services in Mexico than in the U.S. but that Mexico does offer social services; she herself had worked in the Mexican social service office before coming to the United States. And to the question of public schooling, she confirmed that Mexico is costly.

Without framing it as such, Lucera described a kind of social and political apparatus based around U.S. social services and charities, one that she has felt pulled into but has resisted. For example, when she first arrived in the United States she said that other mothers told her to go to the schools' parent events because there would be free food. The logic of that sentiment, the temptation of the free food, bothered Lucera because she feels that attending those types of events should be mandatory. She suggested that I attend some of the back-to-school fairs or health fairs and watch peoples' behavior. She described a kind of free-for-all in which the children and the parents grab the backpack given at the door and walk through the event grabbing free items off of organizations' tables without talking to the representatives. Once I had attended a fair, she suggested then driving around the *colonias* the next day to see all the free items being in yard sales.

As much as Lucera criticized this charity and social service sociality and economy, she herself was a part of it. She said that is was virtually impossible to convince women to attend events, especially ongoing classes without some sort of reward, be it a gift card, a raffle, free clothes, or a meal. While she wasn't thrilled about the temptation that the dynamic created, she was also under no pretenses about the overwhelming day-to-day challenges of most of the women's lives that made it a challenge for them to get the energy to leave the house on any given day.

As an example of this challenge to participation, Lucera asked me to remember a conversation she and I had with three women from the Zumba class, all of whom have chronic conditions and are also the primary caregiver for family

members with diabetes.<sup>liv</sup> One woman, Ana Lucia, is in her mid-20s and has been diagnosed with Lupus and a serious heart condition. She is responsible for the daily care of all seven of her family members, all of whom have diabetes. She joked that they call their house *la casa azucarada* [the sugared house; house of sugar]. She spends most of her days caring for her mother, whose diabetes makes her irritable and demanding. Ana Lucia described that if she helps her mother get settled in on the couch, for example before Ana Lucia can even start another task, her mother is demanding another kind of assistance; a glass of water, help to the bathroom, someone to talk to.

At that point in the conversation, Lucera suggested that Ana Lucia's mother would be the perfect person for me to interview. Ana Lucia said that it could not work: her mother is too angry, would not want to answer the questions, and—she made abundantly clear—it would not be worth it for Ana Lucia. Lucera pushed harder, engaging in the same kind of temptation that she critiqued, jokingly reminding Ana Lucia that the interview came with a gift card to the supermarket. “*Hable con tú familia sobre la entrevista, Ana Lucia, sí?*” “*¡Avísale del gift card para que se anime!*” [Talk to your family about the interview, ok Ana Lucia? And tell them about the gift card so they get the energy to participate.”] Lucera turned to her friend Rocío, whose mother also has diabetes, trying to pass the interview on to her. Rocío responded, “Ay, no. Ni modo” [Oh no, no way!]. Rocío explained that her mother becomes incredibly irritable due to her diabetes. And, like Ana Lucia, she had other bodies to care for, as well: her 12-year old son is autistic and has been deemed as



developmentally equivalent to a four-year old. Although he is out of diapers, she said that arranging his care consumes a great deal of her time.

As a way to wrap up the conversation, Lucera reminded Ana Lucia, Rocío, and I how important it is to be together, to leave the house and share our struggles. “You might think you have it bad,” Lucera explained, “and then you hear about someone else and think to yourself, ‘Okay, I’ll stick with what I have.’” As an example, Lucera told us that she had returned to Mexico over the weekend to a uterine cyst removed. As a single mother, she had to organize her transport herself and return quickly to her home in the United States to care for her teenaged son and get back to work on Monday. “*¿Asi es la vida, no?*” Rocío said, and we all agreed.

Although Lucera felt uncomfortable with the practice of raffles, gift cards, and freebies to draw people out of their homes and into social service agencies, she also understood that most of the women she worked with had multiple demands on their time, caregiving responsibilities to numerous family members, and were struggling with the overwhelming and crushing weight of the brutal monotony of their everyday lives. In a way, the freebies, the gift cards. And the raffles were compensation for their reproductive labor which would not otherwise be remunerated.

Lucera’s comments about eating and about give-aways in the United States is relevant here. First, like many social service providers I met, Lucera believed in individual behavior change, and she was confused when people didn’t make what seemed like rational choices about their health. However, she was unusual in how she dealt with that frustration. The first thing she did was identify with it. For example,

when describing a woman who—because of high blood pressure—needed a kidney transplant, but didn't show up at the *Centro* for free help, Lucera explained it in the following way (excerpt from field notes):

She said that the woman didn't show up [to meet with the healthcare provider who was willing to help for free or low-cost] and she said further that if she were in that kind of situation she would be looking and looking and looking all over for information. I asked why she thinks that the woman didn't come and she said that she thinks that she [Lucera] is not so different. For example, she wants to get rid of her *llantita* ["spare tire"] on her hips and that although she does sometimes exercise with the women in the morning, it is hard for her because she is at work and so she can't do much. She's totally tired when she gets home and she just doesn't do exercise then, even though she knows she should and so she said she's not that different. (*different and similar at the same time, it seems*).

As we circled back to talking about the ubiquitous free items in the region,

I proposed that maybe there is something about the culture in the United States that cultivates the desire for more and more and more. Because we had just been talking about all of the freebies and raffles and "grab-and-go" behavior at back-to-school fairs and health fairs I thought that she would agree. She did and she didn't. While she agreed that those kinds of practices do cultivate desire, she also resisted linking it to the United States, per se. "*Así es en todas partes, en todos países,*" she said.

[Fieldnotes, 12.07.2013]

Lucera's perspective on diabetes hinges on her awareness of the day-to-day demands of the disease, specifically the demands it places on the diagnosed individual to manage it through a constant effort and vigilance that can be wearisome, if not impossible to maintain.

This chapter suggests the term "QDay Life" to denote the centrality of prescribed medication regimens to the patterning and rhythming of everyday life in the Rio Grande Valley, particularly for people who are managing the bodily care of diabetes. I have suggested that the idealized QDay life temporality is one of consistency and predictability. Despite that ideal, people's actual QDay lives are

organized around the interruptions caused by temptation. I suggest that the interruptions are not a new temporal order nor do they indicate that QDay life as a ideology does not have grip. Quite the opposite. As Mario, Marianéla, Edgar, Dr. Cavazos, and Lucera describe how to manage temptation, their descriptions uphold consistent QDay life as the goal. Thus, what I add to theorizations of the biomedicalization and pharmaceuticalization of normative rhythms of everyday is the role of temptation as a source of interruption.

However, interruption also functions in another way and that is in the formation of the public of “us” and of “thus.” As people move in and out of the idealized QDay life rhythm they are moving back and forth between “us” and “them.” For example, when Edgar looks down after binging on chocolates and sees a desk full of empty wrappers, he sees material and momentary evidence of his participation in “them.” But, as he lags behind and takes a picture of Anabel and her family hiking in the south Texas landscape, he can imagine himself as a member of “us.”

Finally, as I indicated in the introduction to this chapter, all of the cases in this chapter deal with the concept of care—caring about (something or someone) and/or engaging in practices of care (Buch 2015). While in the hospital-based class, the focus was on the individual with diabetes and improving that person’s food intake, Dr. Cavazos and Lucera instructions suggested that grocery shopping and certain modes of eating are key sites of reproductive labor (Ginsburg and Rapp 1995). The reproductive labor of the women’s grocery shopping and self-care techniques is the most evident in how Dr. Cavazos’ narrative scales out from individual eating to the

obesity-related, sleep apnic spouses, to negatively impacted children, and ultimately, to family disintegration. Indeed, while the doctor did address the importance of the women's own bodily health, the focus was decidedly on the women as vectors of care for the bodies of family members. Similar to the embodied inequality of the African-American home healthcare workers studied by Elana Buch (2012), the women who attended the classes at *El Centro* were being instructed to provide deeply embodied care that reproduced the structural inequality in many of their families' lives. But, the women are not only being asked to care for family members.

In framing his dynamic talk, Dr. Cavazos began by laying out all the authorial, powerful, and expert entities who “tremble” in the face of the twin epidemics of obesity and diabetes. It is neither doctors, nor nations that stop the diseases; it is the women who, starting with talking to their bodies as if they were children can care for their families and for the national body.

Two weeks after his talk, Lucera joked with the women at *El Centro* asking how many had cleaned out their cabinets and stopped drinking Coca-Cola. While most had some small changes for a short period of time, most of the women agreed that they had not followed through. The temptation engage in the logics of food as gift, food as sociality, and food as a tempting force was too great.

The next chapter, *Trust in Which Numbers*, continues with the women at *El Centro* and also draws on my participant observation at a CrossFit gym. Throughout the chapter, I continue with the interest of care of the nation through the care of the

body but do so through ethnographic attention to how the women at Zumba and the CrossFitters are taught to measure their bodies.

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<sup>xliii</sup> This text is from a description of the cover photo of *QJM: An International Journal of Medicine*, March 2006. 99(3). Further descriptions of the exhibition referenced can be found on website dedicated to that particular exhibit, <http://cradletograve.org/> and on a website with a broader body of work by all of the artists involved, <http://www.pharmacopoeia-art.net/>. Emily Martin writes about this exhibition and her notion of a pharmaceutical person in Emily Martin. 2006. The Pharmaceutical Person. *BioSocieties* 1:273-287.

<sup>xliv</sup> Other sections of the exhibit include family photographs and biographical information.

<sup>xlv</sup> For more on the proliferation of self-tracking, see Nikolas Rose and Carlos Novas, "Biological Citizenship," in *Global Assemblages: Technology, Politics, and Ethics as Anthropological Problems*, ed. Aihwa Ong and Steven J. Collier. [Malden, MA: Blackwell Publishing], 439-463. See also Gary Wolf, "The Data-Driven Life," *The New York Times Magazine* (April 28, 2010).

<sup>xlvi</sup> During my time in the Rio Grande Valley two well-known non-profit groups, Texas Rio Grande Legal Aid and the newly-formed *Fuerza del Valle* Workers' Center, joined forces to engage in a two-pronged legal campaign. One part of the campaign focused on public education that attempted to persuade Valley residents to care about the excessively low wages of domestic workers in the region. This was achieved through Op-Eds in local papers and community meetings with Sheriffs and members of the police force committed to prosecuting individuals and organizations that mistreat domestic workers.

<sup>xlvii</sup> His operational premise was similar to the underpinnings of cognitive behavioral therapy: set a goal for changing a behavior; institute a plan; and using rationality to enact the change.

<sup>xlviii</sup> Spanish original: *Ay, que importa? de algo me voy a morir.*

<sup>xlix</sup> Spanglish in original: *Me voy a morir comoquiera so [sic] que importa?*

<sup>l</sup> Metformin is a standard front-line treatment for diabetes and now for pre-diabetes. It is in a class of medications called oral hypoglycemic agents, meaning that it is taken by mouth and lowers blood sugar.

<sup>li</sup> The phrase in Spanish is "me llama la atención." Many people used this phrase to describe the particular experience of people with diabetes in relation to certain foods. Chapter Four, "Trust in Which Numbers?" describes *tentación* and "me llama la atención" in the context of a physician and a community center staff member who have differing approaches to teaching women how to deal with eating-related temptation.

<sup>lii</sup> "Si, dias me chiflo. Voy entre si y no."

<sup>liii</sup> *Border Wars* is a National Geographic television series that uses documentary-style film-making to demonstrate the everyday work lives of border patrol agents. Episodes often focus on the large amounts of methamphetamine, cocaine, or marijuana that is recovered. Despite extensive searching, I could not locate the episode in question. When I contacted Crystal to ask about it she said that she had not actually seen the episode but had heard about it from a friend who works in border patrol.

<sup>liv</sup> Indeed, research is emerging about the role caregiving stress for Mexican immigrant women and how that stress impacts metabolism and basic everyday choices, such as decisions about whether a child or spouse will eat or whether the woman will eat.

## CHAPTER FIVE

### **BODY-BASED PUBLICS: MEASUREMENTS, MOVEMENTS, AND PREPARING FOR THE FUTURE**

This chapter begins with a number and two questions. The number is 5.7, and the questions are: what does that number mean, and what does it do? To address these queries I begin with an auto-ethnographic vignette that elucidates the concerns of this chapter, namely (1) the power of numbers in the valuation of individual bodies; (2) the aggregation of bodies into a “public” in need of intervention; and (3) the processes through which responding to a body-based number becomes a public-making act.

In March 2011 at my ten-week prenatal appointment, my midwife explained that my blood tests had returned to “within normal limits” (WNL) except for my Hemoglobin A1C, a test measuring the average blood sugar level for the previous three months. My A1C level was 5.7, just .1 above the normalcy range used by the laboratory to signify pre-diabetes and/or gestational diabetes. Although gestational diabetes is not usually diagnosed until the end of the second trimester, the number 5.7 edged me out of normal and into pathological, and thus the midwife referred me to a California state-sponsored public health program, “Sweet Success.” As part of the program, I received a glucometer and participated in one-on-one meetings with a Certified Diabetes Educator, who told me that changing my daily life in the present—what food I ate and how I ate it—would alter the future of my “unborn child” and greatly decrease the risks associated with “uncontrolled” gestational diabetes:

macrosomia (large body), large shoulders at delivery (necessitating a Caesarian section), and difficulty breathing (at birth). In addition, if my blood sugar levels were uncontrolled during pregnancy, there was a chance that my “unborn child’s” pancreas would get “worn out” and that he/she would be consigned to a life of obesity and/or type-2 diabetes. Thus, 5.7 was not only predictive but also prognosticative—it read into the future and diagnosed a future body, all in the name of public health.

Three months later at my 20-week appointment in May 2011 it was still unclear whether I had gestational diabetes; the experts were in disagreement. My midwife said, “Well, let’s wait until 24 weeks when we will do the Oral Glucose Tolerance Test (OGTT).” The Certified Diabetes Educator (CDE) told me that I had gestational *and* pre-diabetes based on my A1C test result alone and that I should *not* take the OGTT because she already knew that I would “go high.” In response to the CDE’s comments the midwife said, “She’s not a clinician and it isn’t her job to diagnose. Let’s just follow the ‘standard of care.’”

A few weeks later I moved to the Rio Grande Valley for fieldwork, and I mentioned to a diabetes educator there that I was being “monitored” for potential gestational diabetes. Upon hearing this, she offered to go through her educational materials with me. I explained that I had been testing my blood sugar four times a day for months and told her the ranges that I had been given for my fasting and post-meal blood sugars. She looked shocked. “Oh, those aren’t the ranges we use,” she said. I told her about my A1C test and she said, “Oh, but that’s normal. And they are having you do all of *this*?”

Clearly, standards of care are not standard everywhere. In fact, the standards themselves are not clear, even to healthcare professionals. In northern California I had some form of diabetes while in south Texas I did not. In south Texas, I was not a body requiring surveillance and my numbers made me “normal”; in Northern California I was most likely gestationally diabetic and had been labeled “non-compliant” and perhaps too high-risk for midwifery care. Four weeks after returning from south Texas, when I was back in northern California, I had my 24-week prenatal appointment; my OGTT results returned as “completely normal,” and I was told I was not diabetic. Despite these results, my healthcare provider considered my future and identity as a *pre*-diabetic—and that of my child—as already sealed. She told me that if I did not monitor my pre-diabetes I was just like a heroin-addicted pregnant woman who would not abstain during pregnancy.

My experience of being clinically classifiable as diabetic in one region and simultaneously *not* clinically diagnosable in another, while also receiving moralized messages from healthcare providers about my potential harm to future bodies, is not far from the experiences of people with diabetes in the Rio Grande Valley. As I have described through this dissertation, people in the Rio Grande Valley are described as immoral because they do not fit the “image of a responsible, rational actor who, upon hearing a new fact, incorporates it first by becoming concerned and then by taking action” (Dumit 2012:71). My experience provides just one example of the ways in which numbers – A1C results, in this case – circulate. And, as they circulate, they bind together, and thus also separate other entities such as geographic regions.



One could interpret my experience through Margaret Lock's and Nancy Scheper-Hughes' analytic of the three bodies (1987): I simultaneously possessed an individual body, a social body, and was part of the body politic (1987), and all three were isomorphic with each other. My phenomenologically-sensed body was indistinct from my symbolic "social body" either as a "bad mother" or a "good" one, depending upon where I was. Neither my individual nor my social body was distinct from the body politic, evidenced in me being sent to a state-sponsored public health intervention through which my body was surveilled in the name of improved health for the social and political aggregate (1987: 7-8).

However, how individual bodies are surveilled as the "public" of public health has changed over time. In the United States, individual bodies—particularly those who are considered problematic for the nation, such as prostitutes or the insane—have long been counted, surveilled, and intervened upon in the name of public health and national vigor (Porter 1995; Lakoff 2008; Martin 1994; Porter 1999; Starr 1982). Andrew Lakoff (2008) describes multiple models that have existed and now co-exist on how to protect and manage the health of the national populace. In the 18<sup>th</sup> and 19<sup>th</sup> centuries, the approach to safeguarding the national population was through military protection of geographic boundaries; this ideology was likewise demonstrated in depictions of the human body as a fortress (Martin 1994:25). In the 19<sup>th</sup> and 20<sup>th</sup> centuries, however, the focus was *less* regional and more attentive to individual hygiene and the health of individual bodies; this was the era during which the notion that individual bodies harbored unseen and potentially harmful agents (e.g., miasma

or bacteria) emerged (Martin 1994: 26-30; Rosenberg 1961:21). At the same time, public health as we currently experience it began to develop (Porter 1999:147-162). Lakoff (2008) argues that in the current century neither the regional nor the individual model is gone, but that the newest model in ascendance is one of preparation for biological threats that cannot be predicted. Thus, although—according to Lakoff—the United States currently operates under a system of preparation for unimaginable biological threats, that does not mean that there is no longer a concern with the protection of national and regional borders, nor with the health of individuals as isomorphic with the health of the nation. Thus, discussions of public health are temporal-scalar, scaling individual biology, regional public health concerns, and national public health while also projecting into the future about how the nation will fare.

Key for this chapter is not the brute fact of Lock and Scheper-Hughes's "multiple bodies" (1987), but rather that I was brought into inhabiting these bodies through the response to circulating public health numbers—the A1C, for example—that produced a diagnosis in one geographic location and not in another. My experience highlights that the numeric ranges used in biomedical diagnosis are region-making, identity-forming projects as much as they are about standards of clinical care: in Texas I was "normal," and in Northern California I was a non-compliant gestationally-diabetic mother, willfully placing my child in harm's way.

This chapter builds on what is evidenced in the opening vignette, specifically that trust in and interpretations of certain numbers bring bodies into alignment with

particular standardized ideas of health, the region, the nation, and the future. Specifically, this chapter attends to clinical and public health numbers that are standardized classifications. As standardized classifications, public health numbers are designed to commensurate, or compare “different entities according to a common metric” (Espeland and Stevens 1998: 313). Anthropologist Melanie Rock makes this argument (about commensurating incomparables) in reference to the fact that the same blood sugar ranges are used for diagnosing and managing type 1 and type 2 diabetes, diseases that are overwhelmingly believed to be of distinct etiology (Rock 2005). Rock argues that commensuration through diagnostic and management numbers makes invisible the great disparity in structural conditions and life trajectories of people with type 1 and type 2 diabetes (468).

My argument builds on Rock’s argument, and also differs from it and broadens the scope. First, my focus is on type 2 diabetics and non-diabetics, *not* on type 1 and type 2, as Rock’s article focused on. Second, the commensurating numbers that I examine are not only blood sugar-related. Rather, I focus on numbers that are used for measuring bodily health and body size, specifically those used in CrossFit and in a Zumba class held in a community center. I demonstrate that individuals sometimes decide to become incommensurate with the standardized world of numbers like BMI (body mass index), and they do so by attempting to commensurate themselves with different numbers. Third, my argument draws on the scalar nature of numbers as they link the individual bodies they represent to broader body politics and political bodies (Timmermans and Epstein 2010). My focus on numbers also

demonstrates the *future*-facing nature of the numbers, their use as predictors, as opposed to their use as indicators of what one has done in the past. Finally, I incorporate the concepts of commensuration and incommensuration as they occur through body-based numbers into my broader dissertation-level argument by demonstrating that the numbers are circulating texts, the responses to which are momentary acts of public-making.

However, unlike the “Yes, but” described in the previous chapter, in this chapter, people’s equivocation in the face of the implication of the category “Mexican-American in south Texas with diabetes” is evidenced in moments of acceptance or denial of certain numbers. As I demonstrated in the previous chapter, the boundary marking the publics of “us” and “them” is neither standardized nor is it impervious to change. Different people and institutions have different boundaries that mark “us” and “them,” and how people enact those boundaries changes over time. In this chapter, I argue that as they engage in certain practices of movement and response to numbers, people at CrossFit and in the Zumba class are being taught to commensurate themselves with scalar notions of the body. Thus, I demonstrate that as people respond to numbers about health and the body they enact moments of belonging to either the public of “us” or of “them,” which also makes them commensurate—or not—with ideas about regional, social, and political bodies.

I describe three seemingly incommensurable sites of body-based measurement: a costly CrossFit “box” (gym) in the wealthier, northern section of town and a free Zumba class held at a community center in a local colonia. In each of

these sites, people are confronted with numbers that circulate about *their* bodies in particular and bodies and health more generally. Additionally, in each site numbers are not the only circulating texts. Along with numbers about health and bodies, other texts such as pamphlets, other peoples' bodies, articles and poll rankings—along with the values associated with each of these texts—also flow through these spaces. As participants respond to these numbers they enact momentary membership in diabetic publics of “us” and of “them.”

### *CrossFit Basics*

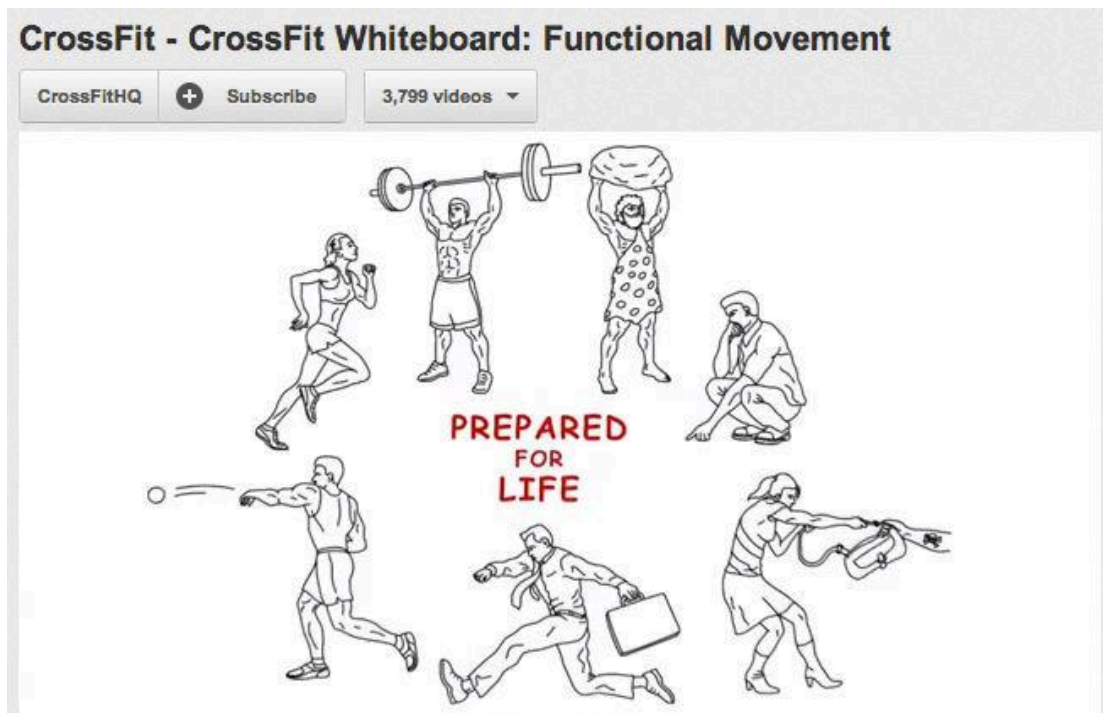
CrossFit was founded by a former gymnast and personal trainer named Gregg Glassman in the hope of diversifying training regimens not only for gymnasts and athletes, but also for people who train at conventional gyms. CrossFit lore depicts Glassman as an iconoclast. When Efrén, the head coach and founder at the CrossFit where I participated told me the story, he smiled with pride when describing the origin story to me:

It started off as. . . the founder Greg Glassman, he was—in Santa Cruz!—just training people at local gyms and slowly, but surely he got kicked out one at a time and his friend told him, “Well it’s because you are *awesome*, that’s why they are kicking you out!” People were flocking to him to workout with him! He says he worked with a friend of his who said you can use this space—you gotta watch the video!, I’ll send it to you. . .

CrossFit’s origin story as told to me by Efrén could seem to set the stage for a Warnerian *counterpublic*, formed by people who intentionally attempt to create a public space that subverts a normative, Habermasian public sphere (Warner 2012). However, as I demonstrate throughout this chapter, the CrossFit members do not

constitute a *counterpublic* because although the circulating texts to which they respond with identification are particular, they are still normative.

Glassman, current CrossFit coaches, and many athletes think about the training as based around three concepts: constantly varied, functional movements, performed at a high intensity (see Figure 5.1). Of the three concepts, functional movements and constant variation are the most important for this discussion. Functional movements are considered basic, foundational human movements such as squatting, throwing, carrying, jumping, catching, and pulling.



**Figure 26.** How functional movement (like lifting weight over one's head) mimic movements used in everyday life. From [www.crossfit.com](http://www.crossfit.com), accessed June 10, 2016.

Each workout (called a WOD, or Workout of the Day) is organized to include a combination of these types of movements. For example, a WOD might consist of throwing balls against the wall while squatting (Wall Ball Shots), running sprints, carrying heavy weights (Farmer's Carry), and jumping on and off of boxes of varied height (box jumps). These movements are then combined in myriad ways into WODs and performed with different goals in mind. For example, a WOD may be an AMRAP (as many rounds as possible) meaning that the athletes repeat the circuit as many times as possible for the time cut-off. A WOD with a high number of repetitions and perhaps a long run included is called a Chipper, meaning that the athlete "chips away" at it.

Each of these movements—no matter how it is combined in a WOD—is supposed to make activities in one's day-to-day life more manageable. And a CrossFit video shows drawings of highly gendered day-to-day activities that might be improved by CrossFit (see above) such as a woman carrying groceries, a male firefighter pulling someone up to safety, a woman pushing a wheelbarrow, and a man jumping over a puddle while carrying a briefcase. When showing the video to CrossFit athletes Edgar and Anabel they said that the video descriptions were "spot on" and that the images described their own experience of how much more easily and efficiently they could carry groceries from the car to the house since starting at the box.

CrossFit also advocates attention to diet and nutrition, specifically the Zone Diet and "Paleo" eating. The Zone Diet is the diet recommended by Dr. Cavazos in

the previous chapter. It is a diet that recommends eating 30% carbohydrates, 30% fat, and 40% protein. “Paleo” eating is designed on the idea that many of the illnesses that people experience, such as diabetes, are due to the style of eating after the industrial revolution. The word Paleo is used to reference the idea of how people ate during the Paleolithic Era. As with the origin story and the movements used in CrossFit, diet and nutrition suggested are explicitly in opposition to the “standard American diet” (SAD) and are considered functional or that they have a great deal of utility in combating diabetes. During my interview with Efrén, he mentioned that many of his family members have diabetes and so I asked him if he is concerned about developing the disease himself. The following is an excerpt from our interview:

CECK: Does anyone in your family have diabetes?

E: My father. My sister but she won't admit it. "I have a headache." (mocking a high woman's voice), "I got a sugar rush!" And she won't admit it! . . . Oh, my father, my father's cousins, my grandma, my uncle had a toe chopped off or something. . . My dad's side of the family they are all big people.

CECK: Do you worry about getting diabetes?

E: No.

CECK: Why not?

E: Because I work out and I try to be relatively active and I will be forever and ever.

CECK: The reason I'm asking is because people I've interviewed in the health profession who say that it is 100% genetic.

E: That's bullshit. It's an easy. . . it's a cop-out. It's easier to say that it's genetic than to get up and do something about it. There are certain things that are. . . I have no doubt that genetics *plays a role*. If you make the effort, the human body's going to respond. I don't know if you've read on the Paleo thing, right, what does it say, the human body hasn't changed in so many years. *We're still the same people we were 10,000 years ago.*



### *CrossFit in the Rio Grande Valley*

When I began training at CrossFit, there were three boxes in the surrounding towns, one of which was two blocks from my house and thus I began my observant participation there. Unlike the two other, longer-operating CrossFits in the region that held classes in hangar-sized warehouses, Valley CrossFit's space was small and barebones, about 30' by 12'. Efrén, the head coach, had chosen this location after training people in his garage and in the city park for a few months and this small unit was what he could afford. Although it was the smallest box, it was still costly and its schedule and price catered to working professionals with a disposable income. The base rate for a monthly membership was \$125 and the rate for a drop-in class was \$15. Almost all of the participants were Mexican-American, having grown up in the region.

The box's longest wall was covered in U.S. military, United States, Texas, and firefighter iconography: the spots on the wall we had to aim for when throwing heavy balls against the wall (Wall Balls) were drawn to look like shooting targets; the head coach had painted a 4' by 6' Texas Flag on the wall, and a similarly large U.S. flag hung the opposing wall; felt badges from local police and fire departments covered the wall around the U.S. flag. Directly under the U.S. flag was the large white board where the Workouts of the Day (WODs) were written out (see Figure 6.2).

Because the room was small and not air-conditioned, we often spilled out into the parking lot to do the day's WOD, placing our equipment—e.g., a specific height box jump, a kettlebell of a particular weight, barbells and weights, and metal sleds—just

outside the box's garage-style door. We all set our equipment up close enough to the door that we could keep an eye on the large timer that hung on the box's back wall. Indeed, knowing and then logging the *exact* time, in minutes and seconds, that it takes to complete a WOD is so crucial to measuring an athlete's improvement that if someone finished a WOD and could not see the timer, we would all hear him/her scream out, "Time! Time! Someone get my time!" At the end of the WOD, we wrote our scores on the whiteboard and also on the box's website.



Figure 27. Whiteboard and WODs.

Public and Private Bodies

Because CrossFit is an international phenomenon, the box often had visiting athletes. For example, for a month a border patrol agent from Plattsburgh, NY attended every day; for a week an engineer from Sweden who stayed in McAllen but crossed the border into Reynosa every day to visit his company's factory attended, showing us stretches and movements they used at his CrossFit in rural Sweden; a young military recruit from the southern United States spent a month attending seven days/week, and regaling us with pictures of the CrossFit set up at her military outpost in Afghanistan; and a musician from northern Mexico who was touring the Rio Grande Valley attended three times.

Although the CrossFit box had all the trappings of a somewhat elite venue, there was one way in which it did not meet the conventions of elite spaces: the athlete's bodies. Fully half of the 10–16 athletes at the box while I was conducting observant participation were, clinically speaking, obese or overweight. A visiting CrossFitter from upstate New York, for example, described himself as a “fat ass.” The issue of whose bodies could represent the box in public spaces became a heated and divisive issue when Anabel and her fiancé, Edgar, both of whom were obese, signed up to compete at a local competition between boxes. They were quietly reprimanded for joining what was supposed to be an elite competition; soon after they left the box and began working out in their garage.

This use of space commonly thought of as public (parking lots, streets, city parks) is a hallmark of CrossFit in the Rio Grande Valley. Léti, one of the star athletes at the box, told me that she first became aware of CrossFit as a form of exercise when

she was standing on a friend's balcony, looking out at the cars driving by on the busy suburban thoroughfare. She puzzled over a group of people doing what she now could identify as the "bear crawl" (walking on hands and feet without putting your knees on the ground). What she remembers is not only the non-normative use of their bodies in public space—"they were all crawling, butts up in the air! I was like, "*wha... ?*" — but even more that they were doing so on a well-traveled public street and in front of a church.

*Learning the Numbers: Commensuration and Incommensuration*

After about six weeks of almost daily "observant participation" (Wacquant 2004) in CrossFit, I was a fluent enough member of the CrossFit speech community to participate in the section of the website where we posted our scores, shared our struggles, and cheered each other on. The terminology I was learning taught me to demonstrate membership in this group linguistically. At the same time, I was learning how to enact my membership through how I moved my body and how I measured it. Just as the speech community involved demonstrating my use of a certain vocabulary ("box" instead of "gym;" "WOD" instead of "workout"), demonstrating my body-based membership involved practices of movement and of measurement. The following is from a posting I made in November 2013:

Celina: I wish I could be there today to do this WOD [Workout of the Day]I'm totally flattened by a cold. Hope to be there tomorrow. I need some encouragement!!! I finally weighed myself after doing Crossfit for 6 weeks and I haven't lost any weight. I eat gluten-free (almost), no processed food, yada yada. Suggestions? Encouragement?"

Coach Jaime : It's not about the weight on the scale Celina! It's about how you feel and how's your body is changing. Many times in CrossFit you will actually weight more because of the muscle your gaining, but these workouts or designed to shed fat without losing muscle! So what I'm trying to say is **THROW THE SCALE IN THE TRASH!!!** Your doing better and better every workout, don't give up!!! And don't worry about the number on the scale!!!!

Anabel posted: Everything A said is spot on. When I start to feel discouraged, I try to focus on other numbers, like PR's & weight used & times on the whiteboard. It may not be apparent to you how far you've come, but it's happening. Little by little, every day.



**Figure 28. The Author performing her first WOD. Photo by coach and posted on the box's Facebook page.**

In this interaction, Coach Ari and my fellow athlete Anabel instructed me on which kinds of numbers to use in an assessment of my body's health and improvement and which numbers to reject. Thus, the acceptance and the rejection went hand in glove. Anabel suggested assessing my body's improvement through attention to the kinds of numbers collected during a WOD: repetitions of a given movement performed in a

specified amount of time; achieving a PR (personal record) for a particular weight-lifting move, such as the deadlift; or the “times on the whiteboard.” Coach Ari encouraged me to measure my body’s improvement in non-numeric, qualitative ways, such as “how you feel.”

Box	Gym
WOD	Workout of the day
AMRAP	As Many Rounds as Possible
Athlete	Anyone who joins a CrossFit box
Paleo	A way of eating that is believed to mimic how humans’ Paleolithic ancestors ate.
Functional Movement	Movements that are key to CrossFit WODs and that are considered basic human movements. Some functional movements are: squat, overhead throw, and walking lunges.

**Figure 29. CrossFit Terminology**

By suggesting that I “throw the scale in the trash” and “focus on other numbers,” Coach Jaime and Anabel were also inviting me in to a movement- and body-measurement based public (Warner 2002) that references normative body- and nutrition-specific expertise such as the BMI as “bullshit,” and “archaic.” Take Gallo, a coach at the CrossFit location where I conducted “participant observation” for just over a year. Based on his height and weight, Gallo’s BMI placed him in the biomedical category “obese.” However, upon calculating and reading that number, Gallo deemed it “archaic” and inaccurate. Instead, he focused on different numeric and non-numeric measurements of the body and of health (detailed throughout the

chapter), such as those advocated by CrossFit and “Paleo” or pre-industrial eating habits.

My posting on the box’s website can also be analyzed by thinking about how I eventually came to identify with CrossFit and its stance on numbers and diet. My experience as I panicked about not being able to attend CrossFit because I was “flattened” by a cold can be thought of in similar terms as Susan Harding’s experience of conducting fieldwork with Evangelical Christians (2000). Harding describes her experience of almost getting into a car accident and responding (much to her surprise) with the question, “What is the holy spirit trying to tell me?” (57). Her analysis of this response hinges on the challenges of conducting ethnographic fieldwork in which the ethnographer listens carefully and takes the speech and practices of her interlocutors seriously. My website post demonstrates something similar to Harding’s almost car-crash. It was in *not* being able to attend that the “seams split” (57) and I was able to see the two worlds I was inhabiting: in one, non-CrossFit world I still relied on the numbers on the scale; as a CrossFit “athlete,” I tried earnestly to learn the measurement practices and the eating behavior (gluten-free, for example) that CrossFit advocates.

Finally, one key method for assessing bodies and health for the CrossFitters I met was getting an “in body,” a machine-based full-body assessment that provides an extensive print out of body measurements. An InBody is a machine that provides a detailed print out with the person’s weight, body mass index (BMI), total body water, basal metabolic rate, skeletal muscle mass, percent body fat, and many other

measurements. This machine was a technoscientific body measurement device that many people I knew used to measure and compare themselves in the temporality of “before and after.” For example, Crystal (the alternative healthcare practitioner I mentioned in the introduction) and her husband Jesus always went to “Lupe’s Nutrition” for their InBody readings, something they did a few times a year. The “before” and the “after” readings were always free as long as they purchased the suggested supplements or diet.

*Imagining the Future; Remembering Past Bodies*

Furthermore, teaching our bodies to do “functional movements” and, as the head coach said, “lift heavy shit,” meant that we were physically ready for anything. While we were stretching after a WOD one afternoon, Coach Gallo said, “That’s the thing about CrossFit. It’s preparation for a potential attack.” This co-existence of the past and any potential future in the present-day movements of athletes characterized CrossFit, as did frequent verbal and visual reminders of the U.S. as a military entity that we pay homage to through our dedication to our bodies. For example, some days (Veterans Day but also on non-specified days) we were assigned a “Hero WOD,” a workout meant to be extremely demanding and named after a fallen U.S. serviceman, firefighter, or teacher. During a conversation with Efrén, I asked him if CrossFit had developed from the U.S. military, considering how frequently WODs reference soldiers and the U.S. military. He said “no” and when I asked him why, then, there were “Hero” WODs, he said the following:



They wanted to honor dead soldiers who sacrificed their lives; that's pretty much it. . . . There are too many people dying out there on the battlefield and they don't get any recognition. It's just another number, add another number to the fatality list. It's just a way to honor them, so they can be remembered, you see?

The remembrance of soldiers who had been killed was clear during Hero WODs such as the following one that we completed on January 3, 2013. This WOD was named "Loredo," in remembrance of Army Staff Sergeant Edwardo Loredo. The description on Valley CrossFit's website was as follows:

U.S. Army Staff Sergeant Edwardo Loredo, 34, of Houston, Texas, assigned to the 2nd Battalion, 508th Parachute Infantry Regiment, 4th Brigade Combat Team, 82nd Airborne Division, based in Fort Bragg, North Carolina, was killed on June 24, 2010 in Jelewar, Afghanistan, when insurgents attacked his unit with an improvised explosive device. He is survived by his wife, First Sergeant Jennifer Loredo; his daughter, Laura Isabelle; his stepdaughter, Alexis; and his son, Eduardo Enrique.<sup>55</sup>

Although the "heros" were usually former military personnel, this was not always the case. For example, on December 14, 2012 there was a mass shooting in the United States at Sandy Hook elementary school in Connecticut in which 20 children and 6 adults were killed. Shortly after the shooting, CrossFit headquarters put out a Hero WOD for one of the teachers who had been killed by shielding the children in her class with her own body. On days when we were completing a Hero WOD, we chatted informally about the people who had died: When the WOD was named after servicemen who engaged in CrossFit while overseas, our conversation was usually about how "crazy" their favorite WOD was and how incredible it was that they could, for example, complete their WODs in the heat of Afghanistan. Indeed, to mimic the

strenuousness of the service-members' experience of CrossFit on their army base, some of the men at Valley CrossFit would do the Hero WOD while wearing a 20- or 40-lb weighted vest.

I end this section with a question: How are these enactments and practices of remembering the dead related to imagining futures and also to commensuration with an idea of the nation? I contend that remembering the Paleolithic ancestors for eating regimens and also remembering those who died in the past helps motivate imaginations of particular futures that can be pre-emptively prepared for in CrossFit functional movements and hero WODs.

### Zumba Basics

As with my observant participation at the CrossFit box, I participated in a Zumba class at El Centro because it is a popular form of exercise and also because there was constant discussion in the class of obesity and of diabetes. However, there are sociological details that might make the Zumba class seem too different from CrossFit to include it in the same chapter. However, this seeming incommensurability of sites is precisely the point of the chapter and in this section I focus on *moments* in which the Zumba participants commensurate themselves to the imagined world of people in the northern section of town (such as the CrossFitters) and also on *moments* when they incommensurate themselves. As with the CrossFit athletes, the women who participate in the Zumba class are doing so in the shadow of the nation. While in CrossFit the nation-state, as the military, is explicitly part of the workout, in the

Zumba class the nation—and attempts to commensurate the women with it—are a bit more subtle. For example, the Zumba room was full of markers of the U.S., but these were images of all of the U.S. presidents, lined up neatly along the wall, posters with detailed information about major events in U.S. history such as World War II and the Great Depression. In the CrossFit box the icons of the nation were intentional; in the Zumba class they were intentional, as well, but only for the times when the room was used for middle- or high-school level teaching.

“Zumba class” is a broad designation. The class was held at a community center at the same time every morning, Monday through Friday, but we did not always do a full class of Zumba. Some days, the instructor couldn’t be there and we would have an impromptu small-group chat, some days we had a guest speaker, some days we only had use of half of the room, and some days we took body measurements to assess our progress. The “Zumba class,” then, denoted a space, a time, a social gathering, and the possibility of exercise. In this way, it was quite distinct from CrossFit. Held at *El Centro*, the Zumba class was in one of the region’s most notorious colonias, on the south side of the main highway. The classes and all of the side conversation were in Spanish, we were all women, and everything we did at the “Zumba class” was free. In fact, it was against the rules of *El Centro* to charge for any of the services.

### Public and Private Space

One morning as we prepared the Zumba room for a presentation, Lucera called the women to attention and reminded them that the colonia is viewed negatively by people in the Rio Grande Valley;<sup>56</sup> the women's bodily comportment, style of speaking, and loudness of their voices would either reinforce or challenge those stereotypes. We had to remember to be *bien calladitos* (totally quiet), which she emphasized by running her fingers across her lips as if she were closing them tightly.

This was not the only time I heard her give this type of suggestion. Once, when a group of the women were planning to attend a Zumbathon in a nearby town's shopping plaza, Lucera reminded the women (many of whom would be attending with their children) that people in the town have preconceptions about the colonia and the people in it. For that outing, she reminded the women to be nicely dressed and not to dote on the children. "*No siempre, 'mi vida! Mi cielo!*" ("Not always, 'My life! My sky!'"). To enhance the credibility of her assessment of other people's preconceptions about the colonia, Lucera went on to tell us about her experience at a dinner party a few nights before. At that party, when she told the other guests that she goes to work every day in *Las Flores*, they opened their eyes wide with fear, and made the sign of the cross one hundred times. We all laughed as Lucera, a gifted performer, imitated the guests wiping the worried sweat from their brows and making the sign of the cross. As she did this, Lucera was subtly chiding the dinner guests, while also making it clear to the women that their behavior was being watched and that the community-wide perception of their colonia rested on their self-presentation.

Learning Numbers; Commensuration with the Nation

Lucera also used numbers in the form of poll rankings to teach the women why they needed to measure and respond to numbers in a certain way in order to not be the worst in the nation. Although most of the women in the room were Mexican citizens, the nation in question was the United States. Lucera held up a sheet of paper full of notes from a bi-national conference she attended the day before on diabetes, obesity, and cholera.<sup>57</sup> “We are number three in the United States,” she told us, “but it’s not a third place we should be proud of. We are number three for obesity.” A woman in the front of the room chimed in, “We should be ashamed.” Lucera leveled her eyes at us in a direct, firm, but kind way and said,

They are talking about *our* bodies. And it is not just Zumba that is going to help us. Our goal cannot simply be to look like Maritza (the Zumba instructor). It is about our bodies and our health. We need to show up and follow through.<sup>58</sup>

In mixing a rhetoric of self-discipline and responsibility, while also noting the region’s and its residents’ bodies exposure to national scrutiny, Lucera encouraged the women to strive to accommodate that scrutiny, not challenge it. Before every event she reminded the women about proper comportment. But the docile body she was instructing them on was one that she asked them to cultivate temporarily, for use when interacting with people from outside the geographic boundaries of the colonia. In this way, the line between public and private space—and the use of one’s body in each—was drawn differently for the women in the Zumba class than it was for the CrossFit participants. The women in the Zumba class are being told that, in a sense, anywhere outside of the geographic bounds of the colonia is “public.” Unlike for the

CrossFitters, there was no valorization of an unusual or spectacle-like way of using one's body—no bear crawls for the women in the Zumba class.

To bolster the truth and effect of her pronouncements, Lucera draws on her personal, anecdotal experience at the dinner party, as well as her own professional expertise in the form of the paper she could hold up as proof of her attendance at the health conference and the ranking. When I asked Lucera where the number three ranking came from, she said that she did not remember.

In holding up a piece of paper and then mentioning a conference, Lucera invokes authority and expertise. And, as the woman at the front of the room responds with, 'we should be ashamed' she demonstrates her interpellation into the ranking. The fact of polls and ranking as meaningful devices of self-fashioning is an historically specific. Indeed, in the 1930s and 1940s, while attempting to convince scientists and laypeople that "random sampling" was more accurate than "man on the street" interviews, George Gallup (the founder of Gallup Poll) faced strong resistance. What Gallup argued, however, and what I argue is at work in an interaction such as the one between Lucera and the women in the Zumba class is the ideology of interview at the root of Gallup ranking is accurate at soliciting "true" data that can be generalized and that is naturally bound by the nation (Briggs 2007:688). Thus, in accepting the ranking as true, Lucera and the woman who responded allow their interpellation into a particular idea of the nation and the bodies that (in rank order) inhabit its geographic space.

*InBody: Moments of Commensuration and Incommensuration with CrossFit bodies*

Back in the Zumba room, the doctor's assistant arrived before the doctor himself did, bringing with her an "InBody," a body composition machine that purportedly converts the body into metrics.

Thus, the InBody was a technoscientific node of connection between the people I knew in the wealthier section of town and the women I met at the *Centro*. Ordinarily, InBody measurements are not free. The machine is used to cater to wealthier areas and stores where consumers pay for each session. In contrast, it was unlikely that the free Zumba participants would shop at InBody locations, let alone pay for a body measurement reading. In the northern section of town people had access to an "after" InBody reading and could track their body composition changes. But for the women at the *Centro* who were unlikely to see an InBody in their own neighborhoods, there was only the option of the now. Lucera explained this to the women—that normally they would have to purchase \$60 to \$70 of supplements to

receive this information—



**Figure 30. The InBody machine that the doctor brought to the Zumba class. Photo by Author.**

but that by being there today, they were getting it for free and would thus have the information they needed to help them change their behavior.

Attending to their body size and engaging in routine body measurement was not new to the women at the *Centro*; the InBody and its readings are not a clear case of Mexican women being co-opted into “American” ideals of body size and measurements. Indeed, many women wore special exercise corsets during class in the belief that the corset would cause them to sweat more and lose fat in that specific area. The Zumba instructor told me that when she started doing Zumba she used a



special cream on her abdomen during class to help her get rid of her stomach fat.

What was different with the InBody was the precision, the sociality, and what was done with the information.

### *The Sociality of Commensuration*

Every week on Monday morning at the beginning of the Zumba class, Lucera called each of us up individually to weigh us and to measure our waist and hips; the waist and hip measurements were then used to calculate the waist-to-hip ratio, something that is generally agreed to be an index of pre-diabetes. These measurement moments with Lucera were both private and shared: the blaring music offered a sound barrier and the lights were dimmed in the area where she took the measurements. Even though everyone was watching each woman get measured, the actual process—and the exact numbers—were not shared. After being measured, some women simply walked back to their spot on the Zumba floor and some performed happiness or sadness with their results, either raising their fists in a demonstration of success, running their hands along their waist and hips in a mock, flirty fashion, or bowing their heads and dragging their feet in frustration. These measurement sessions also had an added benefit: each woman got a few private moments with Lucera.

The experience with the body composition machine was different. It offered detailed and precise readings but there was no sense of privacy: no loud music to provide a buffer, the fluorescent lighting was in full force. The set was similar in the nutritional supplement stores, such as the one Andrea went to. The InBody machine was usually centrally located in the store and the process of stepping on the InBody

and reviewing the results with a staff member had a similar private but shared feel. Ostensibly, the InBody printout provided each woman with not only more information about her body, but also more precise information. While Lucera used an old tape measure and a bathroom scale, the InBody was calibrated to assess internal body composition. However, unlike at the nutritional supplement stores there was little discussion between the doctor's assistant and the women, and there was no presumption of a follow-up InBody reading.

It would be easy to argue that as the women were given a demonstration of the InBody's functions, that they were being taught practices of precise bodily attention that are increasingly associated, in the RGV and across the U.S., with healthy outcomes; that is, they were being taught a middle-class *habitus*. Additionally, it would be easy to argue that in the process of making the practice of precise bodily attention visible and then making follow-up essentially untenable, the women were also being schooled in their location on the social and bodily hierarchy in the region. While those interpretations are not necessarily incorrect, I shy away from them here because I believe that there is a subtle issue of temporalities of bodily attention and care that are also going on, namely the moments of commensuration and incommensuration with ideas of the nation and health.

### Conclusion

This chapter has described three ethnographic sites in which numbers were circulated and used—in moments of response to them—to commensurate or incommensurate an

individual with others. I intentionally bring together these quite different sites together as, when thought through together, they demonstrate the scalar nature of public health and body-based numbers. The auto-ethnographic vignette that begins this chapter, details how healthcare providers responded to an A1C of 5.7 differently in northern California than they did in the Rio Grande Valley. In the Rio Grande Valley, the number was a point of commensuration with a biomedical category of “normal” while in northern California, having an A1C of 5.7 commensurated me with a biomedical categorization of “pathological biology.” However, that auto-ethnographic vignette does not end with an individual body being commensurated differently in two geographic regions. Rather, the auto-ethnographic vignette demonstrates a few more key points about commensuration and incommensuration: first, that, as Wendy Espeland and Mitchell Stevens argued, they are social processes (1998); second, that being commensurate in one region can mean being incommensurate in another; and third, that as commensuration often occurs through standardized numbers, those numbers are sometimes standardized across the nation, but not always.

From the auto-ethnographic vignette, this chapter moved to the examples of CrossFit and Zumba to examine more pragmatics of commensuration through body-measurement numbers. As might be expected, I was taught to attend to and measure my body differently in both sites. But, those moments of commensurability and incommensurability are at the heart of this chapter. While this chapter details the differences in measurements and desired outcomes in each of these settings, it also

demonstrates that there are nodes of commensuration—technical artifacts such as the *InBody* and the belief that tending to one’s body is a project to be done in part for the health of the nation. However, “the nation” in each instance was quite different. At Valley CrossFit, the U.S. nation was present on the walls and in our workouts through references to the military and to service members’ bodies. Thus, as we engaged in the workouts and learned about the service members, the nation was also in us. The Zumba room was also full of markers of the U.S., but these were images of all of the U.S. presidents, lined up neatly along the wall, posters with detailed information about major events in U.S. history such as World War II and the Great Depression. In the CrossFit box the icons of the nation were intentional; in the Zumba class they were intentional, as well, but only for the times when the room was used for middle- or high-school level teaching.

Thus, as I engaged in these two practices of observant participation, I was taught techniques for caring for and measuring my body that brought me into two connected but distinct U.S. national body-based publics. These body-based publics produce and reproduce the social, economic, and body-based inequality of the context in which they exist. As the Crossfitters are—for the most part—encouraged to use their bodies in unusual ways in space colloquially considered public, such as parks, parking lots, and streets, the women in the Zumba class are reminded about proper and quiet bodily comportment in public. The women in the Zumba class are offered one opportunity to measure their bodies in the manner that people in CrossFit do on one occasion, making the commensuration between the Zumba woman and the

CrossFit athletes a momentary event. In the moment standing on the InBody machine, holding the handles, a woman is allowed to imagine, “What *is* muscle mass? How much do I even want? Why am I measuring it?” and most important for the idea of imagined *publics*, “What are the measurements of other people?” But, that measurement is a moment, an interruption in an everyday life of other kinds of measurement, such as the tape measure and bathroom scale.

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<sup>55</sup> Loreda: Six Rounds for Time: Six rounds for time of: 24 Squats ,24 Push-ups ,24 Walking lunge steps . Run 400 meters. We also completed a Hero WOD in remembrance of one of the teachers killed at Sandy Hook Elementary School and for soldiers and a civilian who were killed in an attack at Fort Hood, in Texas.

<sup>56</sup> Las Flores appears almost daily in the local news for drunk driving, homicide, violence, and drug-related offences.

<sup>57</sup> Cholera and tuberculosis are public health concerns on both sides of the border and thus binational health conferences (of which there are many) often address these two. Because cholera is water-borne it is of particular concern for colonias because most are built in floodplains and many are still engaged in legal fights for proper water drainage and sewage. A diabetes diagnosis itself is considered a risk factor for tuberculosis and thus public health personnel are working to develop interventions that address both conditions.

<sup>58</sup> This is word-for-word fieldnotes. Lucera was speaking in Spanish but I wrote in English.

In these sites, I demonstrated how, in moments of response to these numbers—be they InBody readings, A1C results, or BMI measurements—people enacting momentary membership in publics and, in doing so, commensurate themselves with particular ideas of the nation.

## CHAPTER SIX: MEDIATING BELONGING

This chapter begins by returning to my interview with Raúl, a Mexican-American man whose border crossing tale begins this dissertation. Like many people in their 20s and 30s, Raúl avidly uses social media and he does so in his quest to have what he considers to be a healthy body. He subscribes to multiple Youtube channels where he can learn weight lifting moves more efficiently than from still images in magazines, he watches TED talks, and follows people on Facebook who do CrossFit and are “athletic minded.” He feels that social media-based information is something that he can tailor for himself, seeing only the kinds of articles and videos that he determines are correct. This is in opposition to the nightly news or a newspaper, for example, which he describes as “someone else telling me what they think I want to know.” He finds the Youtube videos he watches to be more informative than the NASM (National Association of Sports Medicine) course he took to be a trainer.

When discussing the depiction of the region in national media, Raúl said the following:

Because of the Internet we're not the same people. . . Now, you have these small streams of knowledge going into towns and people and they're not the same. . . I feel [that] the truth is. . . we're not the same anymore. . . people are going to break off from the people we're with. What if the people in McAllen aren't talking to people in McAllen, but are talking to people who aren't here, people on TED talks, to people on Facebook, people from other countries, people who do CrossFit. Like, if you watch the news, you are going to get the vision that the person who wrote the news wants you to hear but if you get your news from Facebook, from people who do CrossFit, are into athleticism, that changes what your world is like. We're not the same group. You can't say, 'the people in McAllen are just like 'each other.' Well, the media. . . you've gotta keep in mind the media is five steps behind. They're still making newscasts as if there's anyone watching them! We don't have time to hear their message because we're too busy.

[Interview, 7.27.2013]

Even though Raúl does not follow mainstream media such, he is keenly aware of how the Rio Grande Valley is depicted. Thus, while he associates with, and feels a belonging to a non-placed-based, non-physically co-present group of people (Warner 1992), he feels compelled to respond to the circulating texts about the region. He is challenging the “supposition that bodies in the same space are sharing the same world, made up of the same object of concern,” as Harris Solomon writes regarding metabolic living in Mumbai, India (2016: 9).

One way of understanding Raul’s assessment of “media” is through Joe Dumit’s discussion of counter-interpellation, in his work on direct-to-consumer advertising and mass health (2012). In his description of people’s response to DTC advertisements that suggest their risk of disease and/or need for pharmaceuticals, Dumit describes the slight twist on Althusser’s theory of interpellation. Althusser’s theory is one in which a proxy of the state calls out “Hey, you!” and the individual turns to say, “yes, it is me!” In Dumit’s counter-interpellation:

your self-evidence is directly assaulted. Your self-identity is called into question via the algorithm. You are not who you think you are. Your body is not what you think it is. . . . The algorithm offers, in turn, to identify your objective self for you, so instead of the interpellated response, “Yes, it’s me,” we say “Oh! So, that’s who I am.”

[2012:62]

Dumit’s analysis suggests an acceptance of one’s interpellation in the statement “So, that’s who I am.” Raul’s response to media is slightly different; he adds a question and frustration and through him the response becomes, “Oh! So, *that’s* who I am?!”



This chapter builds on what is evidenced in Raul's strong response, his counter-interpellation by popular media about the Rio Grande Valley. Specifically, the chapter demonstrates the pragmatics of the production, circulation, and reception of media about either diabetes or obesity in the Rio Grande Valley. First, I address production of media through an interview with a journalist who wrote the first story about about the region's obesity rates based on a (then) recently-released Gallup Poll that ranked the region as the “fattest” in the United States. By focusing on the journalist's description of how she wrote the article and why, I highlight the pragmatics of how the Gallup Poll results moved from the Associated Press and her editors desk, to the front page of the local English-language newspaper. The second case I describe is of John, a local chef and Farmers Market enthusiast who asserts that the Gallup Poll results propel and motivate the work he does. Throughout our interview, John sites numerous rankings, circulating them through their mention in conversation with me. Before moving to the final case in the chapter, I then spend some time describing why polls—and Gallup Polls in particular—have developed the authority that they currently have in the United States. Furthermore, I argue that response to the Gallup rankings is a public-making act, one in which people enact membership in an “us” that is concerned with not only the opinion of the common man but also with the democratic process.

The third case in this chapter describes a furniture-store commercial that uses ADA statistics and promises of financial donations as a marketing technique. Drawing again on Dumit, I describe how the commercial is like an advertorial; “it

appears non-coercive, even empowering. You are offered a gift to freely evaluate” but it is a gift to which there is a correct response. As Dumit has shown, “the moral grammar of health information is that facts will be acted upon. The grammar precludes resistance.” The final ethnographic case in this chapter describes a documentary film screening of “Diabetesville, USA” and the Q&A that followed. This chapter demonstrates ethnographically *how* the impossibility of inhabiting two publics at once occurs.

Finally, in conclusion I argue that production, circulation are not sequential, nor are producers, receivers or circulators necessarily different people. Furthermore, I demonstrate how the rankings (framed as national) and the documentary (also framed as about the nation) indicate that circulating and responding to popular media and statistics about diabetes and obesity in the Rio Grande Valley is to a certain extent about securing the nation and its borders.

This chapter begins with Raúl's description of how he uses social media and what he thinks of more conventional media, in order to demonstrate the importance of focusing on peoples' responses to media, not solely on the media's content; mediated descriptions of diabetes and obesity are received and responded to by people in the Rio Grande Valley. I draw on a body of scholarship that is interested in the pragmatics of media circulation (Klinenberg 1995) and the ideology of communication evidenced in the circulation of health-related media (Briggs 2010; Briggs and Mantini-Briggs 2003; Klinenberg 1995). In this chapter, I argue that as people respond to the media, although they do so in myriad and unpredictable ways,

thaty as they do so they demonstrate that they are willing and able participants in the rational public sphere (Dean 2003; Warner 2012; Yeh 2009).

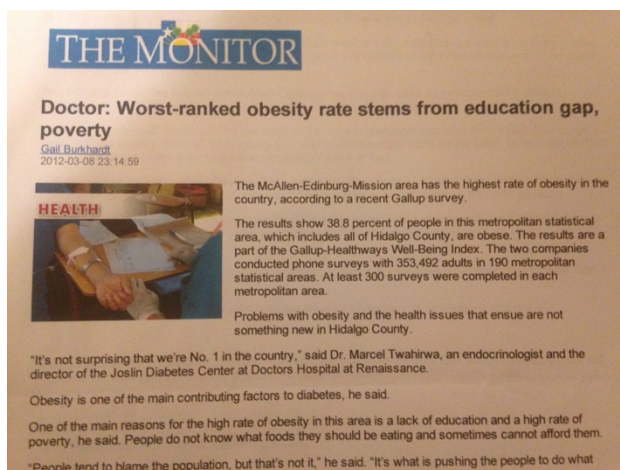
Enacting membership in the rational, public sphere, however becomes quite complicated, for at least two reasons. First, because of the particularity of their bodies (obesity, skin color, disability) most of the people described in this chapter are unable to abstract themselves and join the public sphere; their particularity consistently marks them as “them.” However, it is not just that. As the people in the *Diabetesville, USA* screening and the Chef who responds to the Gallup poll demonstrate, the strong regional ties of most people living in the region make them unwilling to fully decry their membership in “them,” as fully joining “us” would have them do. As Raúl demonstrates in the opening of this chapter, the conventional popular media image of the region does not depict the reality of many peoples’ day-to-day lives.

### ***Gallup Polls: Questioning the Production***

Diabetes exists as a regional problem oftentimes in the mundane, background noise of everyday life. One of the most frequently circulated numerical facts about the region’s diabetes rates was a Gallup Poll that ranked the McAllen-Edinburg-Mission statistical area (MSA) as the “fattest” in the United States, with 38.5% of the residents having a BMI between 30.0 and 39.9, the BMI criterion for obesity.<sup>lix</sup> Although the ranking was for obesity, not diabetes, the two conditions are perceived to be virtually interchangeable among those in south Texas. Whereas the furniture store commercial (detailed

in the end of this chapter) attempts to compel action by using quantity (30%) and comparison (three times higher than the rest of the United States), the Gallup Poll made its point using this ranking. Thus, the fact of the region's rates of diabetes exists not only as a statistical number, "30%," but also in other circulating texts, most of which are mutually reinforcing.

One of those texts circulated to me before I began my extended fieldwork. Between my second summer of fieldwork and the beginning of extended fieldwork in 2012, I received an email from Claire, a Winter-Texan-turned-year-round-resident, alerting me to an article that appeared that morning in *The Monitor*, the local newspaper. The article, "Doctor: Worst-ranked obesity rate stems from education gap, poverty" (Burkhardt 2012) was written precisely because of the Gallup Poll that had come to the editor's attention through the Associated Press.



**Figure 31. An internet printout of Gail Burkhardt's article. She printed this out for me because the newspaper archives did not have a copy. Photo by author.**

When I interviewed Gail, the journalist who had written the story, she said that she did not usually cover health for the paper; she had been filling in for someone else and her editor wanted the article by the end of the day. The journalist who usually wrote about health issues gave Gail two potential contacts, Dr. Marcel Twahira, the director of the newly formed Joslin Diabetes Center Affiliate, and Estrella, a well-known health coach. In the article, as in our interview, Gail began by explaining that Gallup conducted telephone surveys with approximately 300 residents in every metropolitan statistical area (MSA) included in the study. In our conversation, Gail did express doubt about the ability of phone surveys to be accurate, and she also reminded me that Gallup is a for-profit company. But these facts did not necessarily cause her to question the poll's: a large percentage of the population is obese. Still, it frustrated her that the Gallup Poll was considered by the "general public" to be just as accurate as a scientific study. When I asked her whether she had received any feedback from readers, she replied that she had received about four phone calls, which were evenly split: half told her, "We knew we were fat, just not *the* fattest," and the other half, she said, "blamed food stamps recipients and 'illegals.'"

Gail's article was not the only circuit through which the Gallup Poll results reached the region's residents. In January of 2013, it was circulated (as shown in Figure 2) on news consolidation sites and was written up again in another regional newspaper later that year (Taylor 2013). Often during my

fieldwork, I found myself in conversations or at events at which someone mentioned the Gallup Poll rankings with a comment such as, “We are finally number one in something, but it’s not a number 1 to be proud of.” Statements such as this never stood alone. They were followed by incitements to action such as the one I heard at the community center Zumba class described in Chapter Seven: “We should be ashamed! It is our bodies they are talking about. It’s not enough to do Zumba, we need to change how we eat.” The women in the Zumba class may never have read directly about the Gallup Poll numbers, yet through secondhand contact with those numbers, they are exhorted to change the way they perceive and treat their own bodies.

### ***Responding to the Gallup Poll***

Frank, a chef at an upscale restaurant in the Valley, told me that his decision to start a Farmers’ Market that encouraged the participation of small-scale organic farmers was an explicit response to a Gallup Poll:

CECK: Would you say that chronic illnesses—diabetes and obesity, in particular—figure into this work, implicitly or explicitly?

Frank: Oh, yeah, absolutely. Explicitly. For sure. There was a recent Gallup Poll that said that we are 234 out of 234, we are dead last place for regions of the country that eat produce. Now on the other end of the spectrum we were the highest for diabetes rates and obesity rates, so that’s got to be linked. It just makes sense. But, I think the fact that there wasn’t a lot of Farmers’ Markets or education about plant-based nutrition in the Valley, I think it really had an effect on the health. The problem with the Valley is that it’s kind of a melting pot of both of the culture, of Mexico and the United States and you have this area down here that you’re getting the whole, you know the consumer buying from Mexico and the capitalist marketing to the consumers from the United States and it’s all melding right here in this area, it’s kind of like "ground zero."

It is not clear what rankings Frank was referring to or whether they were actually produced by Gallup. Nevertheless, Frank's response to my question and to the Gallup or other polls—is useful in thinking through circulation and reception of truths about the Rio Grande Valley. First, after sharing with me his recollection of the two rankings, he said, “so that's got to be linked. It just makes sense.” Here he cues us in to the fact that circulating numbers and rankings about the region are calibrated for their truthiness through individual experience and perception. Later in the interview, Frank told me about his battles with diners at his restaurant who sent back artfully created plates he had created with six ounces of steak, asking instead for 10, 12, or 30 ounces.

Frank further explained how the truth of the poll numbers was validated by his own experience. At one point, Frank described the changes to his own body after he moved to the region from the northeast United States, and how his own understanding of diabetes and obesity had taken shape. The changes to his own body helped him validate the Gallup Poll rankings and the 30% statistic. When he referred to the region as “ground zero” for capitalist marketing and consumption, I asked him whether he had noticed that dynamic right away after arriving in the region. In answer to my question, he described his own bodily changes.

Frank: You know, it was very subtle. There were things that I saw that were different right away and things that I'm still trying to figure out. Um, the diet for one. I gained, in two years' time, 40 pounds. Just eating the food around here. And I tried all the restaurants, most of the restaurants. I'm a chef, that's

what I like to do, eat around. And see whose got what. I didn't change anything about my lifestyle except the food. I did quit smoking, so that probably had a little hand in that, too. That shouldn't have been that drastic. I ate more animal protein, a lot of dairy, a lot more really fatty foods. Like, you know fajitas, tacos, there's *manteca* or pork lard in the tortillas, the grease from the skirt steak. I mean you name it. Eating carbohydrates late at night, them turning into sugars and thus, heavily caloric. I'm a product of my environment!

CECK: How would you describe diabetes and obesity?

Frank: Gosh, diabetes . . . I think that if you feel uncomfortable in your own skin, that's obese. I know that's probably incorrect because everyone's view is different but, like, if it's hard to tie your shoes, that's obese, you know? Or you're breathing more heavily if you are doing activity, that's obese. And diabetes, I'm not sure what happens precisely. What's it? Your blood sugar, you have trouble with your blood sugar. Is that correct?

CECK: And do you associate diabetes with obesity?

Frank: Yes, I do. I should know more about it! I'm trying to fight against it and I don't know much about it, so! It's a killer.

Although Frank is not entirely certain that he knows what diabetes is or how it is linked to obesity, he is sure that there is a connection between the two conditions, and is dedicated to “fighting” both conditions in his work as a chef. Thus, the Gallup Poll, the unmoored 30%, and the myriad other circulating truths about the region as diabetic and obese, “just seemed linked” and, for most people, confirm their day-to-day experience in the region.



NewsCastic Locations Assignments



**Top 10 Fattest Cities in America**

By [WakeUPNewMexico](#) 04/16/2013  
US News [embed this story](#)

**13K** shares

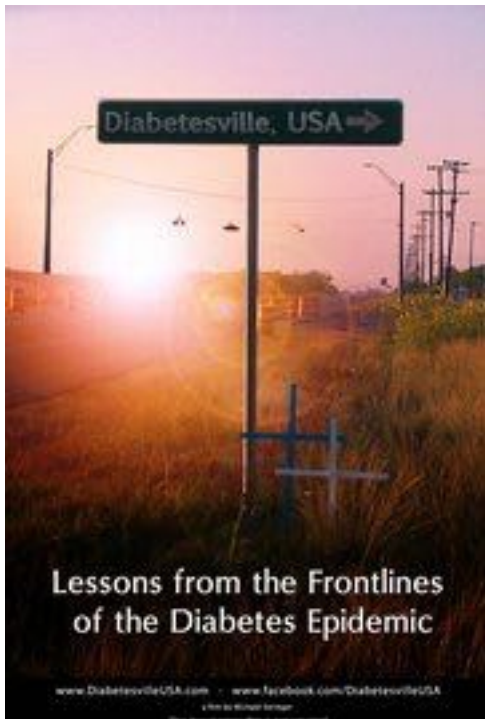
[Share](#) [Tweet](#) [g+](#) [t](#) [in](#) [m](#)

1. McAllen, Texas  
Obesity rate: 38.5%
2. Huntington, West Virginia  
Obesity rate: 37.7%
3. Little Rock, Ark.  
Obesity rate: 34.7%

**Figure 32. The Gallup Poll ranking as it was sent to me by the Mariana Clinic director after she posted it on her Facebook page.**

*Circulating the Unmoored Truth: Diabetesville, USA*

Thirty of us were gathered in a lecture hall at a local college in south Texas, on a brisk winter evening. The promotional poster for the documentary we were gathered to watch was projected on the screen in front of us: *Diabetesville, USA: Lessons from the Frontlines of the Diabetes Epidemic*. The poster focused squarely on death and the nation. In the overgrown grass by a south Texas highway, white crosses and flowers of remembrance act as signifiers of the brutal, accidental highway deaths that had preceded them.



**Figure 33. *Diabetesville* poster.**

The film's title explicitly stated that the danger posed by diabetes was not just to the region, but also to the rest of the United States, a claim that was repeated throughout the documentary. Despite that fact that we were seated in an auditorium only ten minutes by car from the political boundary marking Mexico on one side and the U.S. on the other, the threat of the condition and its future were situated squarely in the United States, eliding the fact that many residents seek healthcare on both sides of the border and that a great deal of research focuses on a bi-national zone. In the first ten minutes of the film, a well-known local epidemiologist states, "This is the pandemic of the 21<sup>st</sup> century; we've already got it. Never mind AIDS. AIDS NEVER touched as many people as this is touching."<sup>ix</sup> In the region, the film tells us, 30% are diabetic.

And in the future, specifically in 2050, the rest of the United States will have the same disease profile as south Texas.

### Diabetesville, USA

*Diabetesville USA* opens with an image of a black screen. The word “WARNING” is in red letters at the top, and the rest of the slide is filled with white text in all-caps:

Failure to heed the warnings presented in this film will result in a very uncertain future. You are expressly prohibited from denying or from allowing friends, family and/or co-workers to deny the impacts of chronic disease on our healthcare system (like they did for global warming). You are prohibited from eating calorie-dense, nutrient-deficient snacks while viewing this film.

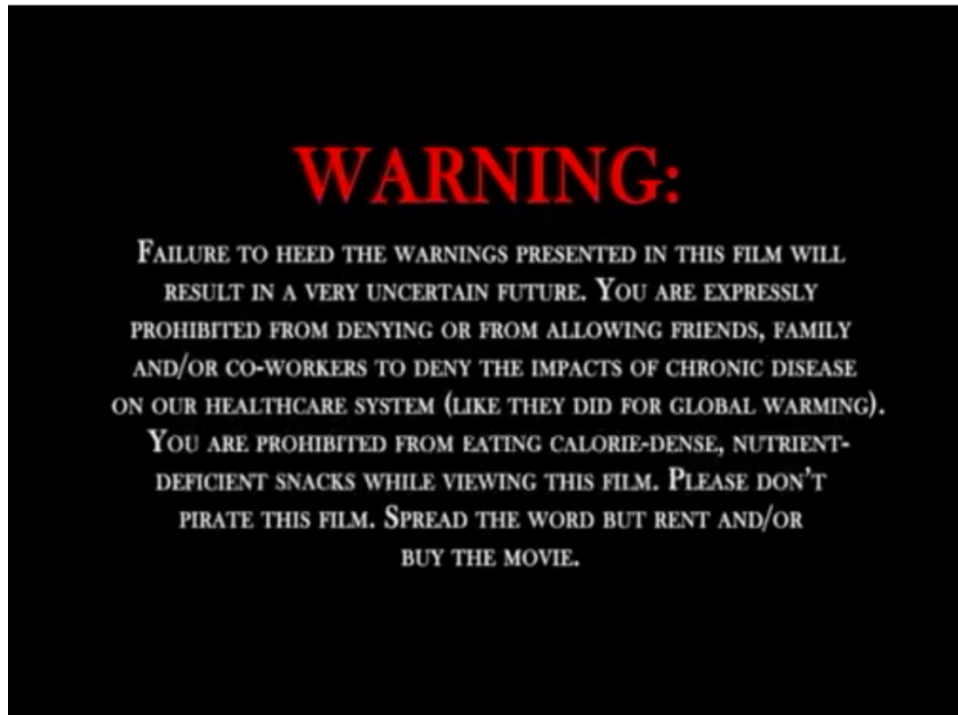


Figure 34. *Diabetesville* screen shot.

As Mariachi music begins to play, the camera focuses on Day of the Dead memorabilia, connoting Mexico/Mexican-ness and death. We are told in an ominous voice over, "The diabetes rates here give us a window into our nation's future when, in 2050, one-third of the population will have diabetes, just like they do in Cameron County, Texas today." *Diabetesville, USA* proceeds to a detailed description of the individual biological pathology of diabetes, using graphics, animation, interviews with prominent researchers and physicians, and documentary footage from the Valley. The footage used in the documentary—some of it filmed in public places like local *pulgas* (flea markets), supermarkets, but also in clinical spaces like dialysis centers, a childhood obesity research center in San Antonio, and doctor's offices—was replete with images of the morbidly obese, their faces (but of course not their bodies) blurred out for confidentiality.

The film is anchored in numbers: rates of diabetes, rates of obesity, rates of overweight, healthcare costs, A1C ranges, blood glucose levels, and life expectancy. The lead epidemiologist of the research team that produced the finding of 30% comes on the screen in minute four of the hour-long documentary. Following the generic conventions of documentaries, he is denoted as authorial and expert through his onscreen presentation—he is in a suit with the camera trained on his face only (not his body) and his name and title appear underneath. He tells us that unlike the CDC, he and his team collected "real data." By "real data," he means blood samples and physical measurements (e.g., BMI) of people who are not likely to be counted in CDC estimates, which are based on telephone interviews and physician diagnosis. His

research study found that 30.7% of a 2000-person cohort have diabetes and that close to 50% of those with diabetes had not been diagnosed (Fisher-Hoch et al. 2012). He and his research team wanted to find the most reliable method for estimating the prevalence of diabetes in the region of over 1.3 million individuals (U.S. Census 2012).

Like all the public health researchers I met, this epidemiologist and his team located their research in low-income neighborhoods with predominantly Mexican-American-identified individuals. Indeed, in an interview at the beginning of *Diabetesville*, one of the studies' authors states that in designing the study they were using the model of a well-known longitudinal public health study called the "Framingham Study." "They were Caucasian and middle-class. We wanted Hispanic, specifically Mexican-American," she explains, "and poor." In the article (that anchors the documentary), the authors write the following in their description of study participants, "We omitted 1 in the higher SES stratum because it contained predominantly 'winter Texans,' mostly retired winter visitors from the northern United States and Canada, most of whom are not Hispanic "(Fisher-Hoch et al. 2010:3).

This omission makes it clear that the scientists were mapping out for themselves the world of diabetes that they wanted to find. To use such an approach, however, is to make low-income, Mexican-American individuals over-represented in these studies, which perpetuates the depiction of this region as one where people are both poor and diabetic. Thus, the reach of diabetes into the region's sizable population

of wealthy Mexican-Americans is obscured, as are the rates of diabetes in the “Winter Texan” community, most of whom live in the region for at least 6 months per year.

The end result is that poor, plus Mexican/Mexican-American equals diabetes.

Not only did these researchers make claims about the region as a whole, they also claimed that

National data may underestimate the prevalence of obesity and diabetes in border communities. Rates of diabetes in these communities were 1.4 times higher than those reported nationally for Mexican Americans aged 20 years or older and nearly twice as high as in all Americans. Undiagnosed diabetes was also twice as high in our border population as nationally. . . . These excess rates offer a glimpse of the potential future health of people of Mexican origin residing in other parts of the United States.

[Fisher-Hoch et al. 2007:5, emphasis mine]

The film then features statements from local healthcare providers that pin the high numbers of diabetic bodies on the Mexican cultural attribute of fatalism. Healthcare providers and diabetics all describe diabetes as a problem that needs to be fixed—and can be fixed—by individual behavior change. Individual behavior change is so important, they argue, because the “Mexican culture” is “fatalistic.”<sup>lxix</sup> Indeed, the film’s director told me that his intention was for the film to serve as a rallying site for educators in the region to try to change the diabetes rates. And a rallying point it was. But, as I describe here and toward the end of this talk, the use of English only in the film, the choice of elite venues (e.g. libraries, colleges), and the message of Mexican-ness as fatal placed the audience members in a position from which they claimed identity with parts of the documentary and not others, meanwhile continuing its circulation.

The third section of the film describes individual and community-wide efforts to prevent diabetes and manage the condition for those with a diagnosis, focusing on a woman named Alma who through grit and hard work lost 100 pounds and discontinued all her diabetes, cholesterol, and other medications. The film explains, repeatedly that doctors do not know how to do prevention, they do not understand nutrition, and they are economically motivated to treat emergencies. The burden of change then is on “us.” The documentary uses a woman named Alma to embody “us.” She describes being from a family of 12 in which everyone was obese. Narrating her conversion from unknowing to knowing, she explains that she now understands that her family is obese and was unhealthy but at the time, she just thought they were normal. She continues, explaining that she was considered “small” and so her family always tried to feed her. Everyone she knows has diabetes, she tell us: her parents, her aunts and uncles, her siblings and her children; her son in his mid-20s and her daughter, who is pre-diabetic. She said that she never really knew that her body could or should be another way. In using her story and her words, through Alma the film voices the dominant public health paradigm of chronic illness interventions, which is: (1) Provide information, (2) Once the information is received, if the person is not fatalistic, that person will implement changes, (3) The diabetes epidemic will be halted. The message is clear: we—each of us—can change ourselves. Doctors are drug pushers and they are not going to fix the problem for us.

The documentary states, in no uncertain terms, that the rates of diagnosed and undiagnosed diabetes and obesity in the region are a harbinger of the nation’s future.

Building on the authority of the epidemiologist's statistical findings, the documentary makes clear that there is an "us" and a "them." If "we" don't do anything, the film tells us, "we" will all become like the obese diabetics in the Rio Grande Valley of south Texas; the United States as a whole will become *Diabetesville, USA*. The voice-over informs viewers that diabetes is a condition that "infiltrates the body's entire system: brain, eyes, kidney, heart, and liver" concluding, "Diabetes is going to conquer if you let it." The referent of "you" in his statement is unclear: you the individual viewer or you the nation? A health-coach interviewed toward the end of the documentary answers that question, making it clear that the "you" can jump scales of individual and nation when she says, "It used to be that if you didn't care of yourself it only affected you. But, now if you don't take care of yourself, you are impacting ME."

#### Description of Q&A

Thus, it is no surprise that in the question and answer sessions after the documentary, it was unfailingly praised. The narrative tension within the documentary—a dichotomy of "us" versus "them"—seemed to pervade the very space where the screening took place. Everything about the organization of our bodies in this space, and the organization of the space itself positioned us—to varying degrees—as members of an "us," a diabetic public of those who can reduce the rates of diabetes. First, although rates of college attendance and graduation are increasing rapidly, many of the region's residents are the first person in their family to attend college. Thus, placing the screening on a college campus made it an exclusive, even



elite event. Second, although Spanish is the preferred or only language of many residents—and certainly of the communities indexically depicted in the film—the film itself, and the ensuing discussion were in English. Third, was the food: while many diabetes and obesity-related events that I attended served rich food such as chicken, mashed potatoes, bread, and *tamales*, this event was different: on long, folding tables outside the auditorium were plates with raw cauliflower, broccoli, carrots, red peppers, alongside coolers with bottles of water. Small sandwiches filled with hummus and vegetables filled another table. At events such as this screening, the food that is provided acts to contextualize the screening and address certain publics. After the documentary viewing, the Q&A session began. In this conversation, the speakers were not simply in dialogic relationship with, or speaking in response to, the documentary. Nor as they responded were they speaking only to the other people co-present in the room. Rather, the people who spoke up during the Q&A to ask, answer, reflect, and share their “testimonies” (in the spiritualized idiom of one woman in attendance) were responding also to all the other people who might view the film and who might misrecognize them, individual viewers of the film, as being among the diabetic/obese/irrational/undisciplined people depicted in the documentary. In this way, as the attendees responded to the documentary as a text/image that addressed them, they also responded to their own bodies as texts that were potentially being responded to by others.

The body’s textuality is evident in its potential for multiple readings: recall that in the Introduction, Raúl’s skinny body could alternately signify potential status

as undocumented to border patrol agents (geographical non-belonging) and physical fitness to the fellow members of his YouTube functional movement community (digital belonging). Ironically, his body size gave him more surety of belonging within a digital community than a geographic/physical community, illustrating one salient feature of the concept of publics: its lack of reliance on physical co-presence. So too, as the people at the screening responded to the documentary and each other, they were responding to a concatenation of texts and more-than-texts, some tangibly represented in the room (film, bodies, speech), some within individuals' imaginations, but all of them circulating.

An interaction between two women at the screening serves to illustrate the interlinked texts associated with the publics being enacted there. During the Q&A, a frustrated woman stood up to share her opinion, not so much of the documentary but of the issue of diabetes and obesity in the region. She said in a raised voice, "It comes down to two things: we die in this country because of what we put in our mouths and what we do after work." In this response, the woman is responding to the documentary's implicit address to her as a member of Diabetesville. Beyond that, she responded to the others in the room and *to others who might view the documentary*—strangers whom she could imagine—insisting that the solution to diabetes is "simple." Diabetes management and prevention, in her view, could be reduced to addressing just two behaviors, albeit morally charged ones. This woman's speech called into imagination for all of us in the room the obese person as "lazy" and thus morally suspect. But the very next person who stood up to speak was a woman in her early

20s, leaning against a table in the back of the room. Her body was morbidly obese: a material embodiment of the "them" that the documentary claims "we" must teach and educate. She announced that she herself was "not sick yet," implying that she would eventually become sick. Addressing those of us present in the room, through a plea for help she explained why she was obese, asking us, "Could I have an allergy or a sensitivity? I don't eat that badly and I don't eat gluten! I don't know why I can't lose weight. I understand the consequences; I work in a dialysis center!" This woman's speech, her body, the woman who had responded to the film by calling diabetes "simple," the documentary itself, the forum of a college lecture hall where English was the lingua Franca, the statistics being cited, the images of morbidly obese bodies in the documentary and in imaginations—all of these are texts. On their own they do not create publics. They do so because they can assume a "previously existing discourse and a responding discourse [can] be postulated" (63).

Like the audience, the panelists onstage were also negotiating multiple publics in that screening room. The college president, a middle-aged Anglo man, contextualized diabetes in terms of the work of the university's students and the future of the region's economy. He opened his remarks with a claim to sincere knowledge about diabetes, saying that his parent had died from diabetes, and "That death is horrific." He also described how "moved" he is when nursing students from the university go to the colonias; "it touches me to see that, when I see the students give clothes to them." Finally, he said that because of the region's healthcare needs—

diabetes and its complications being top among them—the region could be the “epicenter of major healthcare innovation.”

It is impossible to understand the president’s comments without attending to his racialized (Hartigan 1999:4,11) position as an Anglo. The documentary situates diabetes firmly within the Mexican-American community through its imagery and commentary. The documentary’s message about diabetes was circulating in the space of the screening with other “texts” about diabetes in the region, namely the widespread belief that there is a “Mexican” gene, or a “Mexican” predisposition to the disease. Anglos might get diabetes, the logic goes, but it’s not the same and it is certainly not as bad. Thus, the president could not claim an authentic knowledge of the condition through shared biologic or genetic material; he had to work to cultivate sincerity. By talking about his diabetic parent and most importantly the “horrific” end-stage complications, the president—like other Anglos—was claiming membership in a broader “us” of the Valley, something that felt necessary when his skin color creates the assumption that he was from elsewhere.

The President mentioned the smart and caring students in the school’s nursing program, and the work that they do in colonias. In doing so, he geographically situated diabetes in very poor communities that are overwhelmingly equated with lack: lack of U.S. citizenship, lack of formalized education, lack of services, and lack of rational knowledge about their bodies and healthcare. He situated diabetes in colonias and the residents of colonias as the quintessential “unsanitary citizens” (Briggs and Mantini Briggs 2003). At the same time, this linguistic move positioned

him as a member of “us.” But, the “us” is a kind of regional, local “we” partly predicated on personal, proximate knowledge of “them.” His speech positioned him as part of “us” because of his love of the region and having lived there for a long time, and because of his mother’s uncontrolled diabetes. He was also claiming part of a more rarified “we” by situating himself as one of the people who wants to help “them.”

The President was not the only panelist who spoke. A local sheriff was on a panel slated to discuss the film. During the documentary and after he wiped tears from his eyes, saying, “It’s truly very emotional. It reminded me of my *tías* and my *tíos*. I can’t say more or I’ll start crying.” In that statement he demonstrated through the use of Spanish to describe aunts and uncles and through his emotion that he was one of “them,” the people depicted in the documentary; he could respond to the *more-than-textual* that addressed him in the documentary. He demonstrated to himself and to the audience that he “gets” it and knows diabetes. However, in uttering those words at an English-language film screening on a university campus, seated with professors, film-makers, and diabetes program developers, he simultaneously situated himself as part of “us” or “we”: different and distanced from the *tías* and *tíos* because he was *at* the screening as opposed to at home. Eddie was simultaneously part of “us” and “them.” His use of the Spanish language and his description of biological family members marked him as Mexican-American but also as “rational” and desirous of change as opposed to “fatalistic.”

In the five screenings of *Diabetesville, USA* that I attended, I only met one person who did not like the documentary: a research scientist named Carlos. In fact, he could not bear to sit through an entire showing. While Carlos did not dispute that the region has high rates of diabetes, that was where his agreement ended. I mention him here because his trepidation about voicing concern over the veracity of public health statistics or about how the region's diabetics are depicted creates a perforation in the otherwise unproblematic and neatly formed "black box" (Latour 2004) of knowledge about the region's diabetes and obesity rates. Not only his specific concerns but also the brute fact of his reticence to voice them indicate that actants had been enrolled in the network to produce the truth of diabetes and obesity in the region and that Carlos' assessment of the region and its rates was made invisible. However—and this is crucial—he would only share his critiques and concerns with me after I had made multiple assurances of my process for confidentializing his identity. Carlos and I spent a full hour over lunch discussing the ways that he could be anonymized, something that Carlos felt was as important for my reputation in the region as it was for his.

### ***Unmoored Statistics on TV***

On the heels of my conversation with Raúl, I encountered the kind of information about the region that frustrates him, encapsulated in the form of a television commercial for a furniture store. It was a commercial break during the season finale of *So You Think You Can Dance*, a show watched by people at the CrossFit gym where I was conducting "observant participation" (Wacquant 2006). I

heard a woman talking about diabetes and turned around to see what the advertisement was about. The commercial was for a furniture store started in 1935 as a small family business, which had now come to dominate the region's market in new furniture sales. The commercial began with information about the region's diabetes rate. A slender, professionally dressed woman stood against a white background and told us that the store was holding a promotion to support the American Diabetes Association (ADA). She stated that the rates of diabetes were close to 30% "here in the Valley" and were much worse than in the rest of the United States. That weekend only, she continued, the store was holding a special: if you donated \$10 to the ADA, the store would match your donation and give you 10% off your purchase; the same for a \$15 donation. In a 30-second advertisement, I was thus told that the problem of diabetes in the region was worse than anywhere else in the United States, and that through consumption (furniture shopping), I could help fund diabetes researchers at the ADA. This would in turn bring the region into alignment with the rest of the United States, at least in terms of one particular health metric. An emergency invoked, a fix proffered, and then back to the teenaged dancers on "*So You Think You Can Dance.*"

As I detailed in Chapter Two, the 30% statistic is variously attributed to obesity and to diabetes, and there is so much slippage between the two terms that one has essentially come to equal the other. Chapter Two also describes how the statistic is a 'best guess' (according to a local statistician) based on blood samples collected from an extremely poor Mexican-American neighborhood in the eastern section of

the region. With the towns, cities, and neighborhoods varying greatly in predictors of health—namely wealth, education level, and access to fresh foods—I argue that the neighborhood-specific statistics homogenize a complex region.

I was intrigued to see that the 30% statistic was deployed in the commercial as a fact that did not require citation. Through a process of entextualization (Bauman & Briggs 1990), its tethering to the bodies and blood samples of individuals living in a poor census tract in a neighboring country that produced it, had been cut.

Recontextualized in the commercial by a bolded “30%” and the authorizing figure of an English-speaking woman in a suit, the un-cited percentage had been rendered movable text. Additionally, although the percentage was unmoored from the research that produced it, it was what Theodore Porter would call a “strategy of quantification,” in which the lack of citation or explanation not only demonstrates confidence but also “disciplines” those outside the discipline (1996:200). Finally, the un-cited statistic benefitted from the almost two decades of local popular media coverage of the region’s obesity and diabetes. Thus, the 30% statistic could circulate without the citational practices that often anchor statistics. For example, there was no lead-in anchoring the statistic in scientific objectivity, such as, “According to researchers . . .” or “A study released. . .,” phrases that are often used to substantiate the robustness of the statement that proceeds it.

Nor did this ad include any images to bolster its claims. Most newspaper or magazine articles, or social media “info-tainment” pieces, include at least one of the following images: a headless, obese individual with the photograph taken from



behind; a description and image of (unhealthy) local and/or Mexican foods and food habits such as hot Cheetos with cheese or oversized hamburgers; or entextualized images that demonstrate diabetes *as* poverty, *as* “illegal immigrants,” and as spatially located in colonias, which are assumed to be populated by such individuals. The furniture store owners correctly assumed that none of these entextualizations were needed; the statistic is so frequently accompanied by such images that it could exist alone in this one evocation and still conjure the requisite associations.

The design of advertisement centers on the use of comparison to compel action. The advertisement’s comparison is not to the past, nor to Mexico. Instead, the comparison is to the rest of the United States. And the region compares unfavorably—a fact that is particularly embarrassing for many of the region’s residents who are extremely patriotic, who fought hard for their U.S. citizenship, and who thus “care deeply about their U.S. citizenship and its signifiers” (Dorsey 2006:56). The comparison is explicitly framed as a call to action; the furniture store attempts to compel people to come in and buy some furniture, betting that the statistic and the store’s financial generosity to the American Diabetes Association will be enough to open customers’ wallets.

Over the course of this chapter, and dissertation, I have been suggesting that the circulation and reception of stories about diabetes have an ease of circulation and “communicability” (Briggs 2005) precisely because they are interwoven with narratives about who belongs with whom and why—discourses that have a long and

present history in the Rio Grande Valley. They are also sites of enacting dual membership in both an “us”—we-who-know-[how-to-eat-and-manage-our-bodies-according-to-biomedical-models]”—and a “them”—they-who-still-believe-in-old-‘Mexican’-ways-or-continue-to-resist-doctors-suggestions-in-the-face-of-worsening-health.”

Before the campus film screening that I have already described, I had previously attended the documentary’s premier at the Scarlet Waters Horror Film Festival held at national hotel chain, in Austin, Texas. During that first viewing, I had become increasingly uncomfortable with how *Diabetesville, USA* depicted the region. In fact, I assumed that once the documentary was shown in the region, it would be received negatively. While interviewing the director after the screening, I asked whether I could show the documentary to a group of local health-focused activists. Eager for their feedback, he gave me a copy of the documentary, asking me to send back their comments. I screened the documentary in the meeting room of a non-profit where the activists—who met monthly to address issues of health inequality—met. Much to my surprise, they liked it.

In conversation after my small screening, all five people to whom I showed the documentary praised the film, stating that it provided a fairly accurate portrayal of what people in the region are like in terms of eating patterns and interaction with biomedicine. Each person found one part of the documentary that aptly reflected or described something in his or her life and, based on that, claimed that the documentary “gets it.” For example, Lucas, a Mexican-American health activist in his

mid-20s who himself was obese and diabetic was drawn to an interview with a healthcare provider who asserted that “they” (people with diabetes or obesity) do not take the condition seriously. A physician interviewed in the documentary had provided a linguistic illustration of Mexican-Americans’ diminishment of diabetes as a disease, stating that “they” refer to diabetes as “*la diabetes*” as opposed to “diabetes.” The “*la*,” she argues, indicates that “they” personify the illness. While I interpreted her statement as pathologization of “Mexican” diabetics through an analysis of linguistic conventions, Lucas found her analysis insightful. “Yeah, we do totally do that!” he said.

In another expression of resonance with the documentary, one woman whom I had invited, the director of a local non-profit, recognized the accounts of parents being concerned about skinny children, but not about overweight or obese children. She understood this phenomenon as partly rooted in families’ histories of poverty and food scarcity, which the film did not include in its depiction. Nonetheless, even though the film excluded the context of parents’ concern for skinny children, the inclusion of the description itself in an account of diabetes in the Rio Grande Valley made her feel that the documentarian did in some sense “get it.” Indeed, multiple viewers at the small screening said that they could recognize their own family members in the film. But the group’s one critique of the documentary was also voiced by multiple members: they believed the documentary ought to be made in Spanish, the preferred language of most people in the region.

In this chapter, I argued that it is impossible for people to inhabit both *publics*, the “us” and the “them” at the same time. I did this by first showing how significant popular media depictions of the region in situations in the case of diabetes and obesity: the stories are produced quickly, gain traction, and are re-circulated. Think back to the case of Frank, the Chef who states that the Gallup Poll and diabetes motivate a great deal of his work at the Farmers Market. Despite the fact that he isn’t entirely certain what diabetes is, his saturation with media about it keys him in to the basic shape of the mediated message: diabetes, bad.

Moving on to the documentary *Diabetesville, USA* and the Q and A after one of its screenings, I argued that the viewers attempted to claim membership in “us” through demonstrations of allegiance to the principles of the rational, public sphere and the protection of the nation’s future. But, there is always a hesitation, a moment of incomplete allegiance in which audience members also claim membership in “them” such as through linguistic code-switching to Spanish.

In the next chapter, I continue exploring the theme of how people in the Rio Grande Valley respond to being drawn into the category of the Mexican-American in south Texas with diabetes. I ask: How do people who do *not* have diabetes experience the category? How do they know diabetes? And what practices do they engage in in the present to produce a future without diabetes?

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<sup>lix</sup> The Gallup Poll ranking, which is discussed in more detail in chapter 2, was as follows: 1) McAllen-Edinburg-Mission, 38.5%, 2) Huntington-Ashland W.V. and Ky, Ohio, 37.7%, 3) Little Rock, Ark., 34.7%, 4) Mobile, Ala. 33.7%, 5) Hagerstown-Martinsburg, Md. 33.4%. The Gallup Poll can be found at <http://www.gallup.com/poll/153143/obese-nearly-metro-areas.aspx>. It was sent to me on January 9, 2014 from the following news consolidation site: <https://www.newscastic.com/news/top-10-fattest-cities-in-america-377706/>.

<sup>lx</sup> Dr. Susan Fish-Hoch, Lead Epidemiologist, UT Health Science Center, Brownsville Campus.

<sup>lxi</sup> The body of literature on fatalism as a cultural attribute (in “Mexicans,” “Hispanics,” and “African-Americans” is immense) and is frequently written about as something to be intervened upon. See, for example: Sixta, Constance S. and Sharon Ostwald. 2008. Texas-Mexico Border Intervention by Promotores for Patients with Type 2 Diabetes. *The Diabetes Educator* March/April. 34(2):299-309; Hunt, L, Valenzuela, and Pugh. 1998. ‘*Porque me tocó a mi?*’ Mexican American diabetes patients’ causal stories and their relationship to treatment behaviors. *Social Science & Medicine* 46(8):959-969.



**CHAPTER SEVEN:**  
**LEAVING DIABETESVILLE, USA**

*A Visit to “Diabetesville, USA”*

In the late summer of 2012, María, the director of Helping Hands Clinic, told me about the *chisme* (gossip) at a recent Chamber of Commerce meeting. “Some researchers from England are coming to find out why we are so fat,” María told me as she shook her head back and forth, resting it in the palms of her hands. “We are not a zoo.” María’s suspicions were well warranted. The researchers, it turns out, were not researchers at all, but a celebrity doctor, Dr. Christian. Along with his crew for the British reality TV show *Supersize vs. Superskinny*,<sup>lxii</sup> the doctor wanted to present nothing less than a zoo, or more precisely, a kind of “freak show” (Dreger 2005).<sup>lxiii</sup> The show’s producers chose McAllen, Texas, because the town had recently been listed as the “most obese city in the United States,” according to a Gallup Poll.<sup>lxiv</sup> At the beginning of episode one, released months later, Dr. Christian is shown walking down the main street of McAllen’s historic district, saying

Where America leads, Britain so often follows. So, I’m here to investigate how obesity impacts on all aspects of life from birth all the way through to death. Because it’s a possible future for us in the UK if we don’t change our ways.<sup>lxv</sup>

That “possible future for us in the UK” was depicted by honing the show’s narrow lens upon obese and morbidly obese diabetic individuals with gnarled feet and recently amputated toes, complete with surgery thread still visibly poking out. His depiction of those individuals’ future was similarly designed to

shock the viewer. On a visit to the local morgue, he is shown gasping, raising his eyebrows, and shaking his head as the coroner describes how she now orders double-wide autopsy tables. Dr. Christian directs the viewer's imagination to the grotesque image of falling viscera by asking, "I suppose if you don't [use the larger tables for these obese subjects] . . . bits start to fall off, yeah?" Dr. Christian attempted to "balance" the story of grotesquerie and diabetic death by also interviewing people who were working to reduce obesity rates – and this led him to Estrella, a well-known health coach and leader in the "locavore" movement. She has an upbeat, almost religious zeal when talking about food as a way to heal from illness, particularly gluten sensitivity, obesity, and diabetes.

At the time of Dr. Christian's visit, Estrella enjoyed a good state of health and well-being, but this had been hard won. A few years earlier, at her most ill, Estrella was in the hospital multiple times per month, and, even with health insurance, her medical costs had soared well over \$100,000. She could barely walk and had been diagnosed with irritable bowel syndrome (IBS), multiple mental health conditions, and various "gastro" issues. "Basically," she told me one day, "all those diagnoses just mean they don't know. They don't know!" At the same time, the doctors told her that she was destined for a diabetes diagnosis due to her Mexican heritage, the fact that she was then 55-pounds overweight, and her eating habits (she was a manager at a national fast-food franchise and ate there for free). Although the physicians could not give her a diagnosis for the



“gastro” symptoms that ailed her, they did feel comfortable predicting her future as a diabetic.

Estrella agreed to accompany Dr. Christian on a visit to a local *panadería* (bakery) to discuss her work as a health coach and to talk to him about the “cultural” issues around food that seem particular to people in the Rio Grande Valley. As they walked slowly around the small shop, she explained that breads that had historically been “fiesta” foods, eaten only during holidays, had become everyday staples. She narrated her conversion story from someone who, in the past, had eaten bread and cakes everyday to someone who now doesn’t eat any bread products at all. Instead, she told him, she eats only “whole, organic, and local” food. As the interview continued, Estrella’s comments indicated that she was not interested in glossing obesity, bread-eating, or the transition from fiesta to everyday food as a particularly Mexican-American or an American phenomenon. Neither the scale of the nation nor the question of culture were her concerns. She was trying to use the time to discuss her relationships with local farmers, her work with residents (such as her own cameraman) who had lost immense amounts of weight, or her work at public events, such as the film series she hosted. As discussed in the following pages, unlike Dr. Christian and his film crew, Estrella views biology as highly individual, and she recommends alternate perspectives promoting “gut health” and local foods. She hoped Dr. Christian would be excited by her work and that his interest could be piqued by the healthier bodies and local produce she advanced as potential alternate futures for

Britain. In sum, she was not painting the picture of the region that the doctor sought.

As she discussed how much bread most people eat, the doctor edged in a comment, responding to her rhetorically with, “Moderation isn’t very American, now is it?” Estrella didn’t take the bait, and it became abundantly clear that they were at cross-purposes. Dr. Christian’s narrative of obesity and diabetes located these ailments in terms of individual choice, the arc of individual life stories, and in biomedical pathology based on standardized norms of health and healthcare. For him, those pathological bodies were naturally organized within the geographic limits of nation-states glossed as “American,” and “British,” and within cultures of eating glossed as “Mexican.” Yet as she refused his depiction, he refused hers.<sup>lxvi</sup>

### ***Proxies and Publics***

This chapter builds on what is evidenced in the interaction between Estrella and Dr. Christian: that people who do not have diabetes and are not obese, who I call the “un-diagnosed,” know diabetes through proxies, material and semiotic objects that bring them into contact with a disease that is not housed in their own body. For example, the Gallup Poll, described above, is a proxy. It is a text that is circulated widely and was cited in conversations with nearly every young professional I met. Although the Gallup Poll merely ranked McAllen as “the most obese,” and not as the “most diabetic,” obesity in the region had become isomorphic with diabetes. The Gallup Poll, thus, had become

a proxy for diabetes and one to which the un-diagnosed felt compelled to respond. Proxies are tangible, physical, visceral material objects such as a diabetic family member's body, the ever-present glucometer (tool for measuring blood-sugar levels), or the portion sizes at local restaurants. These proxies for diabetes motivate the day-to-day activities for the un-diagnosed as they imagine and attempt to enact a future in which they strive to remain "un-diagnosed." In recent decades, medical anthropologists have turned their attention to how the human body, disease and diagnosis, and genetics are increasingly critical modes of receiving state recognition, particularly in resource-poor settings (Petryna 2002), but also in resource-rich settings (Rose and Novas 2005).

This chapter demonstrates a slightly different phenomenon: the efforts of people who live in resource-poor settings, but who are not resource poor themselves, to remain *undiagnosed*. Their talk and their practices of eating and bodily care respond to circulating proxies for diabetes. As they work to remain undiagnosed, they create what I call a diabetic public of "we-who-know-how-to-care-for-our-bodies" (hereafter, "we-who-know"). As they form this diabetic public of "we-who-know," such people without a diabetes diagnosis navigate interlocking networks of truths about diabetes, which vie for status as fact (Callon 1986). One network is the prevailing biomedical ideology (Lewontin 1991) that diabetes is originarily genetic and linked to Mexican-ness (Montoya 2011; Paradies et al. 2007); another network is the hypermediated images that equate Mexican-ness with poverty, undocumented legal status, illegal activity

(Chavez 2006; Santa Ana 2002),<sup>lxvii</sup> and obesity and diabetes. This chapter provides accounts of Estrella and Aimée, two professional women in their 40s who identify as Mexican (they are also US citizens), who do not have a diabetes diagnosis, and who engage in the talk and practices of diabetic public “we-who-know.” They do so, however, in distinctly different ways: Estrella has completely turned away from biomedicine, while Aimée has fully accepted its precepts. This chapter describes how Estrella and Aimée find themselves constantly fighting their interpellation by the circulating proxies exemplified by, but not limited to, Dr. Christian’s *Supersize vs. Superskinny* and the documentary *Diabetesville, USA* (described in Chapter One). In their speech and their everyday practices, Estrella and Aimée demonstrate to themselves and to those who might overhear (Warner 2002:77-78) their membership in the diabetic public of “we-who-know.”

***Aimée: Right Sin, Excess, and the Temporality of Eating***

My conversations with Aimée continuously jumped scales. In one moment, we would discuss diabetes at the scale of the nation as she shared her frustration over the association of Mexican food with tortillas and high-fat fast-food; in another moment, our talk would turn to the inner-workings of human bodies, the genetic material in her blood, and theories of metabolism. In yet other moments, Aimée railed against the immorality of “excessive” eating, and still in other moments she questioned whether there really is a genetic predisposition to the condition and whether her own association between obesity

and diabetes was based not in science but in her gendered fear of being “big.” In these ways, Aimée constantly navigated interlocking networks of truth about diabetes. As she did so, she found some anchoring in her knowledge about how to avoid developing the condition.

Aimée has come to know diabetes after nearly 20 years of work in healthcare and through tending to her 70-year-old father who is an insulin-dependent diabetic. She's scared she'll develop diabetes and tells her husband (who also has older family members with diabetes), "I'm *not* going to get diabetes. I'm *not*." Diabetes is the reason she moved from northern Texas to the Valley. Her brother, a dietician, had been recruited to fill one of the hundreds of dietician positions at the hospitals, clinics, dialysis centers, and doctors' offices. After they had both relocated, Aimée and her brother convinced their younger sister to relocate, and then, with all three children in the region, Aimée's aging parents, her aunt, and her grandmother relocated as well. Her brother frequently reminds her that “diabetes is in our genes” and that, along with witnessing her father's degenerating condition, convinces her that she is “at risk” of developing diabetes.

While Aimée is certain that excessive eating and genetic predisposition contribute to diabetes, she is also keenly aware of how certain foods have become equated with Mexico, “the Mexican,” and diabetes, a process that culminates in Mexico and “Mexican food” being pathologized and blamed for diabetes rates. For almost ten years she worked for a company that provided and

serviced individual machines for hospitalized patients with Parkinson's disease. In that work she was like a high-level pharmaceutical drug representative, on call across the region 24-hours a day. It was in that job that she learned that many doctors in the region are "not from here." She had been surprised at the number of physicians from Costa Rica, Puerto Rico, Colombia, Syria, and India, and she felt that most brought with them stereotypes of Mexican food that they mapped onto Mexican culture. She said that many of those doctors made assumptions about what "Mexican food" is or what "the" Mexican diet is based on the Mexican fast-food available in the region.

I asked Aimee if she could tell me more about physicians' assumptions about Mexican food. She responded:

I don't want to say that they put down the Mexican...but not all of Mexican culture is like that, not all Mexican food is like that. They assume people here are so out of shape and overweight because of their food choices...the tortilla, the taco...That's how they view the Mexican culture, but, to me, that's skewed. That's not how I grew up, I mean yea, you have the tortilla, but Mexican food is not all about that. My mom is *from* Mexico...We didn't have *enchiladas* every day, we didn't have tacos every day. And when you see all these--down here--the little *taquitos*, it's to me the same kind of thing, it's fast food, it's their form of fast-food. I mean, I knew, even as a kid, you eat a lot of tortillas you're going to gain weight! You don't eat a lot of flour, you don't eat a lot of that stuff. You use it as a part but it's not, *tortillatortillatortilla*.

Aimée makes many moves in the statements above. The first move makes it clear that, for the foreign physicians she worked with, the Valley's "Mexican" fast food is a proxy for diabetes and for Mexican-ness. The doctors' speech, then, is the circulating truth about diabetes, one that Aimée feels she must respond to in order to demonstrate that she is not "them," the people she refers

to when she states, “It’s *their* form of fast-food.” As she says this, she linguistically distances herself from the people who consume local fast food. As a Mexican national by birth, and as a professional with post-college education, the stakes are high for Aimée. She not only wants to resist her potential interpellation into the diabetic “they-who-don’t-know-how-to-care-for-their-bodies,” but she also wants her own understanding of Mexico and Mexican-ness to be recognized and validated. She tells me that “not all Mexican culture is like that,” that the physicians—many from other nations in Latin America—have a “skewed” idea of Mexican-ness. In this conversation, Aimée tells me things she could not tell the physicians for whom she worked. She brings me into this diabetic public of “we-who-know” by allowing me to “overhear” what the physicians say.

In addition to her thoughts on the foreign physicians, one of Aimée’s enduring proxies was the idea of a morally-right temporality of eating. Most of our conversations eventually circled around to her father’s diabetes and Aimée’s frustration with how he manages it. Like most diabetics who have interacted with a biomedical institution, Aimée’s father has been taught to follow a standardized American Diabetes Association (ADA) diet, although he only follows it sometimes, usually after a medical “scare.”

Teaching styles vary widely but the basic components of the ADA diet are the same: (1) Learn appropriate portion size; (2) Follow that portion sizing for foods that are safe for diabetics and that are described as nutritional and low-

sugar; and (3) Fill in a log of eating and a log of blood-sugar levels and insulin injections.<sup>lxviii</sup> The message of ADA type diets was always the same: follow a template, a way of eating that has been researched and developed by people who know and that is proven to help all diabetic bodies reduce blood sugar levels. While the American Diabetes Association diet was the frame I saw most frequently, all the hospitals had diabetes management programs built upon the ADA model or attempted to make it “culturally competent” for Mexican-American identified individuals.

Despite the supposed cultural competence of the programs he attended, Aimée’s father would not change his eating behavior. He organizes his eating in an inconsistent temporality that unnerves and infuriates her. She describes that after a “scare,” such as his recent hospitalization, he eats “well,” following the diets as prescribed. After a while though he slowly begins to increase his portion size and add in foods that he finds pleasurable. For example, he

. . . eats lots of carbs. He will prepare a big breakfast. Eggs, *chorizo*. Lots of carbs. Pastries, refried beans. I just think he eats in excess. . . I don’t think we need to eat that much.

When Aimée’s father eats in a way that deviates in quantity and temporality from the prescribed, standardized ADA or American Heart Association (AHA) diet, she describes his eating habits as excessive. In the excerpt below, she elaborates on eating that is not based in caloric or nutritional need as excessive and indulgent, and thus immoral:

Again, it’s like do you really *need* to? It’s like, your everyday, what do you really need to live? And then, if I could spend all this money on all



this food and drink, do you need it? Do you really, really need it? I mean, you could be using that money to help somebody else or for something else. But, to be so self indulgent, to take it all in and consume...I mean, gluttony is one of the seven deadly sins. I mean, I understand wanting to eat for pleasure because that's my husband and his family and my dad, it's pleasurable. And I understand that but I'm not going to pleasure-eat every day of my life! You know, I'm going to enjoy something that I like when I have my meals. But, I'm not going to be, I guess, indulgent. I think you can still have pleasurable meals, but not... I guess...overdoing it. Because my dad would always say, "it's a holiday, it's a holiday." And, it's like, "It's not a holiday, dad, you don't have to pig out." And then, to me the other thing is. . .at what point do you say it's a sin... I'm Catholic... so, you know...at what point are you gluttonous?

Aimée's first comment, "what do you really need to live?" highlights her conception of food as fuel, a "classic metabolism" approach to eating and energy in which the focus is on calories in and calories out, just enough to make the human body-as-machine work (Landeker 2001:170-172). Landeker links this conception of energy and food to the Fordist economic system in which it developed and theorizes that a new model of metabolism is emerging, one anchored in the belief that food is "exposure" that can cause epigenetic expression of chronic conditions, namely diabetes and obesity. Aimée believes in the classic metabolism approach to food and energy.

Aimée raises the issue of a morally right temporality of eating and everyday life, one that is repeated, consistent, and need-based, as opposed to her father's rhythm of "I'm-good-for-a-while-and-then-I'm-not." Aimée's adherence to a predictable and consistent rhythm of eating is a practice through which she attempts to resolve the spectre of herself as diabetic.

However, her description also adds texture to that need-based conception of calories-in and calories-out. She demonstrates the importance of precise attention to multiple, simultaneous, and overlapping concerns. First is understanding her genetic material as holding diabetes in a latent, embryonic form. In this way her knowledge of diabetes scales back and forth from the printed word in diabetes care manuals and course materials to the invisible components of her blood. Second, she organizes her own eating routine to fit with the standardized rhythms of eating advocated by established institutional experts. Third, as she orients her life and work toward God and away from sin, she regulates pleasure-based eating and excessive consumption. As a devout Catholic, the sinful nature of gluttony and excess orient her own approach to food and eating, as well as her response to her family's eating behavior. But her description of need raises the idea of eating as relational, as a kind of *stranger sociability* (Warner 2002:74-76) where "others" are not physically co-present, yet are adversely impacted by excess, non-need-based food consumption. Her concern is with an indistinct "other," someone whose need for food could be impacted by her own gluttonous behavior. Unlike the people described in Chapter One at the *Diabetesville, USA* screenings, she did not personify the "other" in the stereotyped image of a *colonia* resident.

Later in the interview, Aimée and I discussed our common struggles with maintaining a healthy body. At this point, she described fighting not to get diabetes or obesity through practices of logging and "discipline." In order to

keep up with her younger colleagues in a highly physical job, Aimée works hard to stay in shape. She counts her calories and endeavors to eat as few processed products as she can, something she learned in part from her grandmother in Mexico City and in part from her U.S. public high school. Growing up in a border town, she regularly visited her grandmother in Mexico City who prepared fresh vegetables and fish. She said that she returns to the lessons from her grandmother frequently, particularly her grandmother's habit of being a "very disciplined" and "God-fearing" woman. While her grandmother taught her techniques of cooking, her U.S. school taught her precise food logging and self-surveillance techniques as a teenager:

CCK: So, where did you, when did you start thinking about eating and about food as fuel?

A: I've been aware of it. I don't know if it is just exposure, my family, but I've been aware of it since I was a teen. My dad was not diabetic at that time. I think I've always had a fear of being big or fear of just...I just didn't want to be unhealthy.

CCK: And you associate that [being unhealthy] with being fat/large?

A: Unfortunately, I mean and I know that's not...Yes, I mean honestly, YES but I've grown and learned. Because, I mean, in college I gained weight. I mean I was, like extremely thin. When I was in high school I was like this ((holds up pinkie finger)), I was a toothpick because I would exercise too much. I didn't eat a lot of protein; I ate a lot of carbs...It was the 80s and I still remember I had a high school project in biology when I was a sophomore, and they wanted us to keep a food diary and keep track of everything we ate, and from then on, I think that that also...I took it to an extreme ((laughing))...Have I always looked at calories? Yes. Have I always looked at fat content? Yes. And then I would read all the teen magazines, the *Glamours*. For me it really started in high school.

Aimée's comments demonstrate the multiply scalar nature of eating. As food enters her body, or as she decides not to purchase or consume particular

foods, she brings herself into relation with diabetes and obesity through proxies that help her avoid a diagnosis. For example, at our restaurant meeting, she chose the *caldo de marisco* (seafood soup), as opposed to the popular *Botana* Platter (a shared meal of fajitas, quesadillas, flautas, fried zucchini, rice, beans, tortillas, guacamole, corn chips with beans, cheese, jalapeños, onion, and tomato). She makes choices like this partly through her precise knowledge of nutritional and caloric content of foods and the needs of her body. She also makes these food choices in response to the regional depiction of Mexican food, choosing instead food that approximates what her slim and disciplined grandmother made.

For Aimée, that fighting is about staving off the future that is embodied in her diabetic father. Fighting off that future involves living by, and advocating a particular moral temporality of eating and pleasure. That temporality, an organization of movement through space, is learned; it is a *habitus* that organizes food purchasing, eating, holiday food, and “good” food around the rhythm of an 8am-5pm workday, non-working two-day weekends, and periodic holidays involving excess food consumption (LeFebvre 2004:9, 74-76). That temporality is maintained not only by doing it but also through practices of food logging, calorie-counting, social education of family members, and eating at home. She has so embodied this knowledge that she said she can now “eyeball” food portions and know how much should be consumed. This way of knowing diabetes is in constant interaction with Aimée’s interior body—her blood, her

genetic material—made visible only through the proxy of annual blood tests that indicate whether her average daily blood sugar is high enough for a *pre*-diabetes or diabetes diagnosis, and through her weekly interactions with her 70-year-old father who is diagnosed with diabetes, heart disease, and other chronic conditions.

Early in my formal interview with her I asked Aimée if she worries about developing diabetes. She responded with the following comment in which she indicates that she is at higher risk for for diabetes because of her genes:

I think I'm at risk and I guess my brother being a dietician has always made comments like, 'We have to be careful because it's in our genes, it's in our family so we have a higher *risk*.' So, and I always tell my husband, 'I do *not* want to be a diabetic. I do *not*...To me that's a big thing. I do not want to be diabetic.

However, later in the conversation she began raising questions. She told me about a recent trip to a conference in Hawai'i, during which she was struck by the amount of Spam she saw people eating and saw for sale in stores, and by the high rates of obesity. As we discussed Spam and other "potted" meats, a conversation that included a discussion of her father's love of "Beanie Weenies," I told her that it seemed like although she believes in a genetic predisposition that she sees diabetes as social.<sup>lxix</sup> So, I asked her whether she believes that some people are genetically pre-disposed to diabetes. She said

See, that's . . . I don't know. Over time, is that? . . . I mean, yes, because it's in my family, and you see it in all these other families, so it makes you think that. It makes you want to come up with theories and ideas but is it true? I don't know, I haven't studied it. But, do you see it more in some population? Yes, That's why . . . I'm glad you do this kind of work, asking, "Why?" Why Mexicans? Why Indians?<sup>lxx</sup> Why do some populations develop it more?

With this statement, Aimée demonstrates her uncertainty. For Aimée diabetes' etiology is murky. But, she must live in that murk. And when she needs to, she can refocus on her proxies, conventional biomedical knowledge about etiology and eating behaviors and she feels less adrift.

***Illnesses You Have to Fight Not to Get***

Estrella and Aimée's positioning as undiagnosed Mexican-American women who are "abnormally healthy" in relation to the myths of diabetic hyper-normality lends itself to a fruitful engagement with analyses of contested illnesses. Of particular interest is their relation to groups with "illnesses you have to fight to get," as described by Dumit (2006). This relation is mostly one of contrasts, that is, Estrella and Aimée are not fighting to receive a diagnosis, rather they are fighting to remain undiagnosed, while aware of the diabetes latent in their blood. Thus their circumstances differ from people suffering with Chronic Fatigue Syndrome (CFS) and Multiple Chemical Sensitivity (MCS) described by Dumit, whose sufferers and their families, facing frustrating circumstances in addition to their health issues, must use numerous strategies to receive medical care, insurance reimbursement, and social validation. But certain aspects of diabetes prevent a simple opposition between the two groups, despite the enormous biomedical recognition of diabetes, and thereby demonstrate the formation of a public around talk, practices, and materials associated with not receiving a diabetes diagnosis.

While a large body of literature and an established set of practices exist for the diagnosis and treatment of diabetes, no consensus exists regarding its cause, debates about which often center on discovering root genetic or environmental causes, or some combination of these. To many it may seem that type-2 diabetes' etiology, diagnosis, and treatment are fairly straightforward. However, currently understood as a multifactorial condition, it is unclear where its one true cause—if there is any—lies: in genetics, environmental factors, or some combination. Multiple suspects and conditions have been advanced formally and informally, including: exposure to chemicals (like the defoliant Agent Orange or agricultural pesticides),<sup>lxxi</sup> the uterine environment during gestation, work-related stress, intergenerational historical stress, “inbreeding,” and visceral fat in the abdominal area related to overweight and obesity. Over my 22 months of research, I heard all of these theories of causation.<sup>lxxii</sup> Even the “gold standard” of measuring blood glucose levels as the key to diabetes diagnosis and treatment evaluation is being reconsidered. For example, well-known functional medicine guru Stephen Hotze and local physicians I met argue that the important measurement should be insulin production, not blood sugar levels. They reason that increased blood sugar levels are simply an indication—a proxy, if you will—of the real pathology, a pancreas that can no longer produce insulin.

*Estrella: Recalibration and the Feeling Body*

In an interview with a local newspaper, Estrella describes what I call a moment of “recalibration” in which she consciously decided to calibrate her body to a new set of norms and standards. The proxies through which she had known her body no longer served her. “A pill for every ill,” is how Estrella describes her former self. She had been a compliant patient, willing to follow standardized advice and protocols until they stopped working for, and, most importantly for this chapter, until she was told she was going to develop diabetes. When she was on the precipice of entering the diabetic and obese future she feared, she oriented her approach around information and knowledge systems that were explicitly in disagreement with conventional biomedicine. She said

I knew I had to die sometime, but I wasn’t ready with my daughter still so young. At that moment I felt a peace come over me—it was God’s way of telling me my daughter would be okay. But I begged to at least know what had caused my illness. I also knew then and there if I lived, I would spend the rest of my life giving back to the world.

[Mitchell-Bennett 2013]

As a woman seeking medical care for bodily aches, stomach pain, and digestive problems, Estrella was given diagnoses that she says just mean “they don’t know,” such as irritable bowel syndrome (IBS) and gastritis. She was also told that it was all in her head and had been deemed a contemporary hysterical woman. Estrella insisted that she had “gastro” issues, and, after consulting well-known functional medicine physicians, using a slew of amino acid supplements,



and engaging in yeast- and gluten-free detox diet protocols for the past two years, she was feeling much better.

Over two three-hour interviews and many shared events and informal chats, Estrella taught me about the information that now organized her approach to health and the body. Once she had achieved her current state of health, she stopped worrying so much about diabetes as she had in the past. After becoming part of the local movement for “whole foods” and “local, organic produce,” she came to see diabetes not as developing from individual pathology but as synecdochic of a food system and lifestyle gone awry. Thus, she now approaches her body not as interchangeable with other bodies, but as entirely unique. Thus, normalcy ranges and standardized diets, such as the ones that guide Aimée, are no longer of use to her.

Estrella relies instead on “feeling,” which she describes as a gut response or intuition. Once she has a feeling, about her overall health or about her response to a particular food, she attends to that intuition until she finds an answer. What satisfies her intuition about health is partly based on how her body responds. She strongly adheres to the “everyone is different” idea of bioindividuality.<sup>lxxiii</sup> She reiterated numerous times that what works for her may not—and probably will not—work for someone else. In order to navigate how numerous individual bodies respond and “feel” requires knowing and having multiple resources on hand, each one something that assesses the body on a fine-

grained level and/or tests its responsiveness, and which is expected to change all the time.

As someone with multiple food sensitivities, Estrella found that cooking in her own kitchen made it easier to ensure she wouldn't accidentally eat gluten, and so she suggested we do our formal interviews at her house. Like many people in the region, her house had suffered extreme damage from a hailstorm in the spring of 2011, and she and her family had only recently moved back into their house after extensive repairs and renovations. Some of the renovations, like the large kitchen and air-conditioned garage, had been included so that she could eventually expand her health coaching business. As we started our first interview, she gave me a tour of her house, pointing out the three Christmas trees that she had already put up, with one more to go. She took me through the master bedroom to show me the master bath with an intimidatingly large bronzed tiger statue and a hair-washing station for when she had "Pamper Yourself" parties for her friends. We circled back around to the kitchen and Estrella began preparing us lunch.

She took about 30 minutes to make the salad, puttering around her immense kitchen, chatting with me about how she had had her kitchen designed in a particular way so that she could have cooking classes there. We talked as she prepared the meal, and she periodically checked to see whether I had an allergy to an ingredient she was going to put in the salad. When she held up the plastic container of spinach, I said that I sometimes did wonder if I was allergic to

spinach. She looked up at me and said, "Well, let's see!" She told me to stand tall and face her. She grabbed the plastic container with the spinach in it and told me to hold it around my navel, against my body, with both hands and close my eyes, and think of nothing. I tried my best. She stood to the side of me and watched. After a few moments she said, "No, I don't think you are allergic to spinach, you tilted forward." I told her that I had had spinach pizza the night before and felt like I was allergic afterwards. To that she said, "Let me get some cheese." She grabbed a package of Kraft shredded cheese from the fridge. She had me do the same thing and said that I wavered a bit so she asked me to hold the cheese up in my left hand and hold my right arm out to the side. She then pushed down on my right arm and told me to exert pressure up against her. This is a practice called muscle testing. She decided to try with another block of cheese from the fridge that was not processed "cheese food," but real cheese. This time she noticed me lean back and said that I was less strong when pushing up against her. She said, "Yea, you probably have a dairy allergy," and told me that dairy allergies are common. I said, "Yea, I wonder if I do" and then reflected that I had stopped at the coffee shop on the way over and gotten a Mocha, with cow's milk in it, and that I was in fact itching. Estrella was teaching me, showing me two of the tools she uses as she recalibrates what a healthy body is.

Once she had assessed and diagnosed my allergy, Estrella finished preparing the salad. As we walked into her formal dining room we each had a plate with a base of spinach and half of a sliced avocado, pumpkin seeds, slices

of mandarin orange, pickled beets, dried cranberries, and one package of Star-Kist tuna. As we sat down to eat, Estrella narrated her process of recalibration. She described her training to become a health coach and her immersion in the world of alternative medicine and healing, a world in which there were proxies for diabetes, obesity and unhealthy eating being key. But, even more, she described the logic of this alternative health community in which, while there were proxies for diabetes, the key proxy was diabetes itself. As described further in Chapter Five, the Farmers Market community, “locavores,” alternative healthcare practitioners, and CrossFit enthusiasts describe diabetes as a proxy for an everyday life that has drifted too far from what the human body was “designed” to do.

### **Conclusion**

This chapter began with *chisme*—gossip—about “researchers” who turned out to be a doctor and his TV crew who did not want to do research *per se* but rather sought sensational images of the Valley as overrun by morbidly obese diabetics. Neither María, nor Estrella, nor Aimée accept that depiction of their region, and yet it is a misrecognition to which they feel compelled to respond. Remember, for instance, the exacting nature of Aimée’s daily practices as she attempts to avoid a diagnosis; her adherence to the rules, codes, normalcy and pathology ranges of diabetes. Indeed, despite her healthcare provider’s insistence that her “numbers are perfect,” she remains vigilant. Estrella, on the other hand, interprets the codes and normalcy ranges about diabetes as “totally wrong.”

Rather than the standardization and normalcy ranges of conventional biomedicine, she has oriented herself toward bioindividuality, a concept that asserts the non-standard, ever-changing, unique, and unpredictable, biology of each individual person, and has recalibrated her body to these sources of information. Unlike the sufferers in Dumit's article, Estrella does not want to fight to get her facts about bodies, size, and health taken up by conventional biomedicine; she does not want a diagnostic code or bureaucratic recognition. Instead, she calibrates her nutrition and bodily health to an entirely different spatiotemporal logic. Estrella is convinced that her newfound knowledge of the body, the gut, and food is the truth that makes sense to her—and the fact that biomedicine doesn't agree with her does not bother her at all.

What Aimée and Estrella have in common is an emergent and uncertain relationship to a chronic condition, which they understand as latent in their blood, and available to them in their everyday lives in the form of proxies. Their tactics of self-care and treatment are distinctly different but are decisively in response to proxies for diabetes that circulate through their everyday lives. To be misread as a member of the diabetic public comprised of “they-who-don’t-know-how-to-care-for-their-bodies” is simply not an option. They must find a way to leave “Diabetesville, USA.”

The next chapter, *Border Fright*, circles back around to themes that emerged in the first border story of this dissertation—Raúl’s story of the encounter with the border patrol agent.

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<sup>lxii</sup> The show is about “feeding” disorders, and each season the doctor creates eight pairs, each with one “superskinny” person and one “supersize” person who have to work together to learn healthier eating habits.

<sup>lxiii</sup> See Alice Domurot Dreger’s *One of Us: A history of conjoined twins* (2005) for an analysis of how freak shows have historically provided a way to re-instate scientific and medical conceptions of normal bodies.

<sup>lxiv</sup> The Gallup Poll list of the most obese metropolitan areas circulated in numerous magazines and newspapers. (The previous year *Supersize vs. Superskinny* anchored Britain’s future in Evansville, Indiana, the city that Gallup rated as the most obese that year. The 2011 Gallup Poll of Most Obese Metro Areas is part of the Gallup-Healthways Well-Being Index and can be accessed at <http://www.gallup.com/poll/153143/obese-nearly-metro-areas.aspx>. The Poll was circulated widely in the Valley. See, for example, Taylor, Jared. 2013. Poll ranks McAllen as fattest metro in U.S. *The Monitor*. April 12<sup>th</sup>;

<sup>lxv</sup> The successful participants in his reality show are perfect Foucauldian subjects who engage in ethical self-evaluation and are rewarded when they bring their bodies into alignment with biomedical norms (Foucault 1985:25-30,105; Foucault 1986:42,99-104).

<sup>lxvi</sup> This clash resembles a chronotopic misalignment, *par excellence* (Bahktin 1983). Neither the farmers market nor the *panaderia* were included in the show.

<sup>lxvii</sup> See also Otto Santa Ana’s forthcoming publication, “The Cowboy and the Goddess: Television News Mythmaking about Immigrants,” *Discourse & Society* 27(1), scheduled for Jan 2016.

<sup>lxviii</sup> This is the most common method of teaching about diabetes that I observed. Alternate methods all use a log (usually only for the early months after diagnosis) but will often have fewer blood-sugar checks. And a few that I participated in did not restrict food into lists of “good for diabetics” and “not good for diabetics,” focusing the message instead on the idea that someone with diabetes can live long and well eating whatever he/she wants, just in moderation. A small number (2) of the programs I attended fully rejected these conventional methods, implementing a completely different system such as the protein-heavy Zone Diet and human chorionic gonadotropin (HCG) injections (for weight loss).

<sup>lxix</sup> “The reason I ask is because I’m interested in if people describe diabetes as something individual and biological or familial, social, societal, or something like that...Because some of the other ways you have described it seem sort of, more social. You know, like, people go out and eat all this food. It kind of seems like this ((gesturing to where I had written down her definition of diabetes)) is more the consequence of all that.”

<sup>lxx</sup> Here she is referring to people from the Indian subcontinent as we had just been talking about a physician from India who she dated before marrying her current husband.

<sup>lxxi</sup> The herbicide Agent Orange as well as agricultural pesticides are currently understood by many scientists and lay people as “endocrine disruptors,” meaning that their chemical structures interfere with human endocrine system functioning. According to activists and politicians I met, a nearby factory (now closed) produced Agent Orange and most people over 45 in the region spent time working in the agricultural fields where they were exposed to (then under-regulated) pesticides. These issues are addressed in Chapters 2 and 4.

<sup>lxxii</sup> These are discussed in more detail in other chapters.

<sup>lxxiii</sup> Estrella follows Joshua Rosenthal and other integrative nutrition and food-based healers, such as Weston Price, in her use of this word. Her use of this term is different from the “local biologies” suggested by Margaret Lock (2001).

## INTERCHAPTER

### Border Fright

**IDENTIFICACION OPORTUNA**

EXAMEN CLINICO DE MAMA	ENFERMEDAD QUE IDENTIFICA	FRECUENCIA Y EDAD RECOMENDADA
MASTOGRAFIA	CANCER DE MAMA	CADA AÑO A MUJERES DE 40 A 69 AÑOS DE EDAD
PAPANICOLAOU	CANCER DE MAMA	CADA 2 AÑOS A MUJERES DE 30 A 69 AÑOS DE EDAD
MEDICION DE GLUCOSA EN SANGRE	CANCER CERVICO UTERINO	CADA 3 AÑOS A MUJERES DE 60 A 69 AÑOS DE EDAD O MUJERES MAYORES DE 65 AÑOS SIN DETECCION PREVIA, HACER SOLO POR ESTUDIOS, CON DIFERENCIA DE UN AÑO
MEDICION DE LA PRESION ARTERIAL	DIABETES MELLITUS	CADA TRES AÑOS A PARTIR DE LOS 60 AÑOS DE EDAD
BACILOSCOPIA	HIPERTENSION ARTERIAL	CADA AÑO A PARTIR DE LOS 60 AÑOS DE EDAD
	TUBERCULOSIS PULMONAR	A PACIENTES QUE PRESENTAN TOS CON FLEMA DE DOS O MAS SEMANAS DE EVOLUCION

**DE ENFERMEDADES**

FECHA	FECHA	FECHA	FECHA
09 ABR 2008			
18 FEB 2008			
09 ABR 2008			
29 VII 2004			
09 ABR 2008			
16 X 2007			
09 ABR 2008			
13 X 2006			
16 FEB 2008			
09 ABR 2008			

**Figure 35.** Hortensia's *Cartilla de salud* [Health card] for use in Mexico. Photo by Author.

Twenty-two years ago, when Carolina's youngest son was a one-year-old, she was given such a fright—*un susto*—that she developed diabetes. She described the event to me this way:

I had my son in the car, I was going to go out to do some shopping and then I realized that I had left the front window of the house open. I jumped out of the car really quick to go shut the window and when I turned around, my son had climbed into the front seat of the car, locked the door, and gotten the car into neutral. It slid down the

driveway into my mother-in-law's house and then he had the car into drive and it hit her house!!!!<sup>lxxiv</sup>

Not three months later, she was in Reynosa with her sister and they stopped at a *féria de salud* (health fair) where she had her blood sugar tested; it was confirmed that she has diabetes.

Carolina was one of the first people José suggested I interview. She had been a patient at the clinic for almost a decade and had had so many appointments that the pages of her file filled two manila folders. Over the past year, with the help of a pharmaceutical drug plan that provides free insulin to U.S. citizens who have an annual income below a certain threshold, her blood sugar levels had stabilized and her health was improving.

“We had to work with her really hard,” José told me one afternoon as we were killing some down time toward the end of the clinic day. Then, raising his eyebrows, he asked me if Carolina had told me her *susto* story yet. Indeed, she had. I asked if he thought it might be possible that—at least in some cases—an extreme fright could cause such a shock to the human body that the metabolic system would go haywire and result in diabetes. “No,” he said, rolling his eyes, “I’m *rational* and scientific.” He balled his hands into fists, gritted his teeth, and cried in frustration, “Arg!!! It drives me *crazy!*” Ángela, the young woman who worked at the front desk, walked through the staff room at just this moment; she smiled and laughed. They began sharing stories of *tías* and *abuelas* who did “ridiculous” things to divine the course of an illness, such as crack an egg into a glass and prognosticate based on the strings of the yolk. Ángela then did a kind of full-body comedy routine, turning to José and,



pretending she was an older Mexican grandmother, acted like she was rubbing an egg all over his body. “Quit it!” José said, shooing her away and laughing.

Turning to me, José asked if my family in India had any odd beliefs, and I described my father’s frustration at my grandmother’s description of her epilepsy, which she attributed to a spell cast on her by a business associate of her husband’s who was displeased with the family’s behavior. This was not the first, nor the last, time that José and I talked about what he called “superstitious” beliefs. And although José adopted a hard line and claimed to be “rational and scientific,” most of the other clinic staff were more on the fence.

There is a substantial amount of academic scholarship about the concept of *susto*, generally described as an intense fright that can lead to withdrawn, anxious, depressed, or unusual behavior (Rubel 1960). In early social science and medical research on the topic, *susto* was explained as a culture-bound syndrome, meaning that it did not indicate a particular biological disease process as understood by biomedical practitioners; rather, *susto* was described in the literature as a philosophical frame through which individuals in a bounded culture made sense of their biological disease (Rebhun 2014). Cultural psychiatrist Pow-Meng Yap (1962; 1969) is credited with developing the concept of a culture-bound syndrome, and when used in conjunction with Arthur Kleinman’s explanatory models of disease (1978), it was used to try to bring the insights of anthropology (at the time) to biomedical practitioners.

Since that time, all three of the terms listed above—culture, culture-bound syndrome, and *susto*—have been critiqued. However, in the medical anthropology

scholarship on diabetes, research on *susto* continues, mostly drawing on interviews and focus groups with poor Mexicans and Mexican-Americans living in the border regions who describe *susto* not as its own condition but as a frightful event that produces the conditions of possibility for diabetes onset (Poss and Jezewski 2002; Cabassa et al. 2008). The research about *susto* has primarily investigated it in the context of clinical care relationships, demonstrating how *susto* as an explanatory model for diabetes does not indicate a lack of belief, lack of trust, or lack of understanding of biomedical understandings of the disease (Poss and Jezewski 2002).

I began this dissertation with Raúl's tale of a hypothetical encounter between a border patrol agent and two Mexican-American men, one "chubby/obese," and one "skinny/gaunt." In Raúl's telling, the geopolitical boundary marking the United States and Mexico is evident in the body of the border patrol agent. It is the fact of the U.S./Mexico boundary that propels the tension in his story and the different kinds of belonging indexed by his body size in different contexts. In the hypothetical encounter with the border patrol agent, the perils of his body having the wrong size is yoked to the power of the United States government and its ability to govern the border.

In this final chapter of the dissertation, I circle back to the U.S./Mexico border and the way it inflects the diabetes etiology stories that two women, Hortensia and Eugenia, told me. In both of their stories of their diabetes etiology, they cite the U.S./Mexico border itself as the cause of their condition. Hortensia and Eugenia's *susto* stories could be slotted into standard diabetes etiology narratives, but they are

slightly different. Although Raúl brings the actual border close through the body of the border patrol agent, Raúl's tale is not about border crossing as much as it is about perpetual surveillance. Eugenia and Hortensia bring the U.S./Mexico border into full view and describe how bodies are read in relationship to its ever-presence. In these cases, the circulating texts are not only of diabetes, but of the U.S./Mexico border: a purse and "papers," and a radio broadcaster's description of a dead man's clothes. These observations build into a larger interest in this dissertation, that of interruption, in everyday life and in life-course plans. In Chapter Four, I described how the interruption of temptation is part of QDay life. Here I focus on a somewhat different interruption. Here, the interruption is the border itself. And when the various materials that index the border appear or disappear, it is a surprise—a fright—that causes diabetes.

### ***Hortensia: Paper-Mediated Border***

Hortensia was in her mid-60s when I met her at her daughter's home in a small neighborhood off of Route 83. Hortensia's days are quiet but filled with reproductive labor: she helps her daughter Magdalena care for her children while Magdalena's husband works in the oil industry. When she is not with Magdalena, Hortensia and her husband stay with another daughter who is also living in the U.S. At least once per month, she and her husband take a 12-hour bus ride to their eldest daughter's house in the city of Guadalajara, Mexico, partly so that Hortensia can receive care for her diabetes. She is a Mexican citizen and a pensioner and so receives

free healthcare in Mexico. Although she splits her time between all of her adult children, she feels the most cared-for and understood by her daughter in Guadalajara.

Like many families that live in the greater borderlands region, Hortensia's family is what would be called "mixed-status." Hortensia and her husband have U.S. tourist visas (10 years per visa) and thus can move back and forth across the U.S./Mexico border as they wish. In Chapter One, I describe how the region's history was narrated by Américo Paredes as one that survived a partition, similar to the 1947 Partition that resulted in the countries of India and Pakistan. Paredes' use of *partition* reframes the standard telling of the history of the U.S./Mexico border, which focuses on the 1848 Treaty of Guadalupe Hidalgo as creating two countries. Between these two descriptions is the subtlest of distinctions. In Paredes' description an entity was halved and in the second, more common, description a legal document created two nations; the subject of each description is different.

And that slight difference helps tease apart Hortensia's situation. While her family is not originally from the Rio Grande Valley, her family is like many in Mexico in that once one family member moved to the U.S. for work, others decided to try to join that person. Indeed, Hortensia did not initially care to spend so much time in the U.S., but her daughters wanted to spend more time with their favorite uncle, who had moved to the Rio Grande Valley and since they were then living in northern Mexico it seemed possible. However, as described below, Hortensia and her husband are the only ones who can cross the U.S./Mexico border legally and thus movement is a key part of her everyday life.

I met Hortensia through her daughter Magdalena who participated in the daily Zumba classes at the *Centro* and attended all of the talks. Magdalena and her sister also entered the United States with tourist visas, but Magdalena was the only one who could no longer return to Mexico. Once, after a visit to her sister in Guadalajara, Magdalena attempted to re-enter the U.S. only to find that her visa had expired. She was turned away at the border and had to cross *por el río* [by/in the river].

Magdalena and her sister who still lives in Guadalajara help their mother manage her diabetes. Indeed, Magdalena participated in the talk described in Chapter Six in which the diabetes specialist discussed how to set goals and achieve those goals. Based on his suggestions, Magdalena made changes to her mother's diet, eliminating *pan dulce* and greatly reducing the frequency of bananas and oranges.

Hortensia's response to her diagnosis was similar to Dr. Guerra's, the physician who described being devastated at learning of his diagnosis. She said at first she cried a lot and became really depressed because she kept thinking of her brothers who both died "badly" from diabetes: one had his leg amputated, and she thinks that it was losing his leg—not the diabetes itself—that pushed him over the edge and made him stop wanting to care for himself. She also was saddened at her diagnosis because she realized that she would not be able to have fun with her family in the way that she wanted to, whether this was having some wine or beer or indulging in extra cake or fruit. The diagnosis posed an irreversible disruption, one that she assumed would alter the course of her life, as it had so many of her family

members. In these ways, Hortensia is no different than many of the people described in this dissertation.

When I first asked Hortensia why she thought she had developed diabetes, she said she believed that diabetes is “*hereditario*” (hereditary). However, as we continued talking, she raised the issue of the border and the way its presence and power might be the cause of her diabetes. While Hortensia’s ability to go back and forth (from *hereditario* to the specter of the border) is another example of the power of murky etiology, her particular choice of the border is useful to think through.

When I interviewed Hortensia, her daughter Magdalena was with us, sharing her opinions and adding details that she thought her mother might not know to include. As Hortensia, Magdalena and I talked, our conversation ranged, as did many of my interviews and conversations, from the topic of diabetes to questions of the U.S./Mexico border. As Hortensia was reminded of her daughter having to cross illegally through the river, she started to remember the change, how things “used to be,” when there was less violence and a more porous border. It was then that she thought to herself—and expressed to Magdalena, and thus to me as well—that maybe the time when the border became impenetrable for her—when she misplaced her wallet that held her visa— maybe it was *that fear* that gave her diabetes.

Hortensia: And me, when I feel bad, I go. I come and I go.

Magdalena: But me and my sister, we can’t. (laughing and whisking eggs in the background). We all have Visa. But they didn’t take them away from the others. One time I went to Reynosa and when I was coming back they stopped me at the bridge (checkpoint). And there they took it away from me. And so I had to cross through the river.

Hortensia: But it wasn't like that before. There wasn't so much . . . And now you just can't. . . And then, so. . . I would put the blame—you know what,

Hortensia: [now addressing her daughter]—when I lost my Visa I was so worried and I bet that it's because of that that I developed sugar. I don't know.

CCK: Hmm.

Hortensia: No really! I lost it, I left it at the bank in Walmart. My wallet, everything. I had to call the police, file a report, and stay here for almost a month<sup>lxxv</sup>.

Hortensia wants to be able to return to Mexico whenever she wants to or whenever she “feel[s] bad.” It is where she is the most comfortable. But without papers, she could not go. Here, her paperwork is the text that circulates for her and with her. With that paperwork in hand, she is safe. Without it she is vulnerable and her body becomes the text through she will be read. Her body—and how it will be read as a text—is not as reliable as her paperwork. Just as in Raúl's tale of the border patrol agent, it is the papers that allow the final decision about belonging to be made. Without papers, she was stuck in place; she was “them.” I argue that it was precisely being pulled in “them” that gave Hortensia the fright.

### ***Eugenia: Radio-mediated Border***

Eugenia fits the stereotype of who is expected to live in a colonia as well as the stereotype of who believes in *susto*: she is living in the U.S. without legal permission and she is functionally illiterate. Now in her mid-50s, she migrated to the U.S. to be closer to family and help care for her brother and her brother's sister while her brother was undergoing major surgery. After that time, she decided not to return

to Mexico. Now, she occupies her time helping care for neighbors' children, caring for her plants, and attending events at the woman-centered community self-help group where I met her.

The day I met Eugenia, we were both at *Adelante!*, the colonia center where I was attending weekly diabetes group blood-sugar checks [Figure 8.2]. The younger women who ran *Adelante!* picked her up in their van so that she could be at events, and they made sure to drive her to her quarterly doctors' appointments at the *Mariana Clinic* to have her diabetes checked.

That morning, Eugenia had arrived early with Noelia so she could begin the sweeping before all the other members arrived. She anticipated a high blood-sugar reading because she had not been able to inject her insulin for almost two months: she had the insulin, but not the syringes. Her blood sugar was indeed 381. In a clinical setting, a blood sugar level of 381 would be cause for alarm, direct monitoring and injections of insulin every 20 or 30 minutes until her blood glucose level lowered to between 120 and 180. Eugenia and Noelia knew that her blood sugar was too high, but she had no syringes to inject the insulin, so she had gone outside and was walking all around, sweeping up the backyard and the side of the building, shaking out carpets.

After class, I stood on the front porch and talked to Eugenia as she leaned against her broom. She told me she thought that she had diabetes because of a *susto* she had received 20 years ago. At that time, she was living in Mexico and her son—in his mid-20s at the time—lived nearby. One evening, he came to the house, and she



gave him dinner. He asked her if she could clean his clothes. She washed his clothes—his jeans, his shirt, and his underwear—and left them folded for him to put on in the morning. When she awoke in the morning, he was gone, as were the clean clothes. None of this was alarming.

The *susto* occurred when she turned on the radio later that day and listened to the news report. The newscaster was sharing yet another story of a failed border crossing, a narrative of failure and death that those living in the borderlands know well. Several young men's bodies had been found in the Rio Grande, washed ashore after drowning in the passage to the U.S. She said that the news report included a detailed description of what the young men were wearing. The description matched the clothes that she had left out for son the night before, all the way down to the color of his underwear. Trembling and desperate, she called friends and family in the area, trying to determine if her son was in fact one of those who had died crossing the river. She left the house, set off running though her legs and feet felt as if they were buckling under her. At her sister-in-law's house she reached another family member in a neighboring town who told her that her son was safe. In fact, he was still in Mexico and hadn't attempted the crossing.

She concluded her story, saying that up until that time, no doctor had ever told her that she had diabetes. It was only after that event, that *susto*, that she was told she had diabetes. For Eugenia, *susto* was the fright induced through the voice of the newscaster, the panic at the thought of her son's death, and the violence of the river. Her fright comes from having been unsuspecting, from doing the mundane, totally

unremarkable practices of reproductive labor and from the force of the river in the voice of the newscaster.

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<sup>lxxiv</sup> Original in Spanish. Translation by Author.  
<sup>lxxv</sup> Original in Spanish. Translation by Author.

## CONCLUSION:

### IMPOSSIBLE BELONGING

It's almost synergistically bad to be Hispanic because of the bad synergy between the genetics and the bad diet. It's almost like 1 plus 1 is not 2, 1 plus 1 is 3 in terms of badness for diabetes.

[Dr. Guerra, Rio Grande Valley]

As with almost every way in which it is possible to be a person, it is possible to be a waiter only at a certain time, in a certain place, and a certain social setting. The feudal serf putting food on my lady's table can no more choose to be a *garçon de cafe* than he can choose to be Lord of the Manor. The impossibility is evidently different in kind. It is not a technical impossibility. Serfs may once have dreamed of travel to the moon; certainly their lettered betters wrote or read adventures of moon travel. But, moon travel was impossible for them, whereas it is not quite impossible for today's young waiter.

[Hacking 1999:232]

This dissertation is centrally concerned with the category “Mexican-American diabetic in south Texas” and the practices through which people draw close to the category and move away from it: how they identify and dis-identify with the category's over-determined and over-determining nature. It is a category that demands attention because it is made at the constantly-shifting intersection of other categories, namely Mexican-American and diabetic. Mexican-American is a category of individual identity, of political clout, and one that demonstrates the limits of the nation as an idea that sufficiently holds the complexities of peoples' identities—one is both Mexican and American, and neither. Always shifting, too, are the regional particularities of south Texas: at various times in the past the very land belonged to the Spanish Crown, the Republic of Texas, Mexico or the United States, and more recently the area has become a highly politicized potential site for a literal wall

preventing Mexicans from crossing into the United States. To be Mexican-American with diabetes in south Texas, then, is to always exist in multiple places in multiple valences.

But that is not all. Just as Hacking suggested that socio-historical and economic constraints consign individuals to particular categories, I suggest that Mexican-Americans in south Texas *cannot* simply be “Mexican-Americans.” Diabetes – both as a fact and a future prospect – is so tied to ethnicity and region that *all* Mexican-Americans, regardless of health status, always have diabetes as a possibility. The impossibility is pulling away from that tie.

The two quotations above, each in its own way, address impossibility: Dr. Guerra describes how being “Hispanic” and living in the Rio Grande Valley creates an excess of possibility for diabetes or, conversely, the unavoidable impossibility of living *without* a diabetes diagnosis. But, how to make sense of his statement? Philosopher of science Ian Hacking, author of the second quotation, would likely interpret Dr. Guerra’s description as an historically specific “looping effect” in which the category of “Mexican-American in south Texas with diabetes” is so all-encompassing that Dr. Guerra can inhabit it and solidify the category as he does so.

However, that interpretation does not address a more fundamental question, and that is, *what is impossible?* For Hacking the impossibility is about what people might be, and not what they are (222). In that regard, my work departs from his: I am interested in both what people are *and* what they imagine they might be and how those co-exist, making either one seem untenable. Recall any number of the cases

presented throughout the dissertation: Raúl, who is concerned not only with his body's size with respect to masculinity, but also with regard to who a border patrol agent *might think he is*. Or recall the civic association members, many of whom are Mexican-American and diabetic but do not want to imagine that they might inhabit the category of "Mexican-American in south Texas with diabetes." Or recall Aimée and Estrella who do not have diabetes, but who nonetheless fashion their day-to-day living on their imaginations of who they might become vis-à-vis diabetes. In each case, their present day and imaginations of who they might be are fashioned in response to the category "Mexican-American in south Texas with diabetes." The cases I have described throughout this dissertation speak to this impossible belonging—the impossibility of inhabiting two positionalities at once.

That impossibility is also scalar. They demonstrate that they cannot be the "Mexican American in South Texas with diabetes" and also be the "healthy? Mexican American in South Texas" at the same time, rather they must choose in moments their belonging to either one. I argue that this impossibility for people in South Texas is not specific to Mexican-American people, but rather demonstrates the limits of categories to hold the complexity of any individual or group at one moment or across time.

### *Scalar Impossibility of Care*

However, the embodied actions of the caregivers (Buch 2010) as well as the bodies of the caregivers and the care-receivers are polysemic with the U.S. nation and with the nation's future. As they attempt to care for bodies with diabetes, or attempt to avoid a diabetes diagnosis, people in the Rio Grande Valley are explicitly being asked to do the impossible

through care: tend to the national body through their care of individual, family, and community bodies. What is impossibility and what is care? How do they come together?

To frame an understanding of this call to care for self, nation, and future, I draw on a particular reading of Gergory Bateson's *double bind* as impossibility. This reading (excerpted below) describes a double bind not as a "damned if you do, damned if you don't" conflict, but rather as something a bit different. Anthony Wilden and Tim Wilson write

A true double bind is not simply a situation in which we are "damned if we do and damned if we don't," for this usually amounts to no more than a choice between the lesser of two evils. . . . A true double bind—or a situation set up or perceived as one—requires a choice between two states that are equally valued and *so equally insufficient that a self-perpetuating oscillation is engendered* by any act of choice between that. . . .It is the result of the fact that one must choose, and moreover choose between incomparable alternatives. [1976:276, emphasis mine]

It is the equally insufficient nature of the categories in circulation—Mexican-American and/or Mexican-American in south Texas with diabetes—that produces the oscillation and, thus, the impossibility. Think back to the civic association members who opened this chapter: *Yes*, they are Mexican-American and *Yes*, they are diabetic, *but* they are not the "Mexican-American in south Texas with diabetes."

### Care: Individual and Social

The impossibility resides not only in how the problem is set up as a kind of double bind. The impossibility is also in the pragmatics of everyday care. It is in the everyday actions—checking blood sugar levels or eating a piece of high-sugar cake—through which people are engaging in care practices that instantiate the "yes, but." *Yes*, I eat a piece of cake (that a "compliant" diabetic should avoid) *but* I am not a member of "them" when I do so because I check my blood sugar. In the Rio Grande Valley, as in many locations, individual and social care of the body generates and reproduces systemic, intersecting forms of structural

inequality (Rapp and Ginsburg 1985), but not only that. Questions of the moral and embodied care of the self and others continues throughout this dissertation as people move between what they are taught is the “right” approach to care and the actual practices they engage in, practices that often enact membership in “them.” In discussing “care,” I draw on the work of feminist scholars who attend to reproductive labor and stratified reproduction (Buch 2013, 2015; Rapp and Ginsburg 1995) and on ethnographers who demonstrate that care does not often look like a life-sustaining process (Garcia 2010, 2014).

In thinking through care, I also draw on recent scholarship about the securitization and biosecuritization of the nation (Briggs 2011; Briggs and Halin 2010; Lakoff 2008; Samimian-Darash 2009). This scholarship offers a way to historically situate how threats to the nation are produced, for example in “preparedness” exercises (Lakoff 2008) or “pre-event” configurations (Samimian-Darash 2009), making the fate of the nation’s security fall on an unlikely and almost entirely unpredictable event. The case of diabetes in the Rio Grande Valley and its mediatization is a bit different and thus offers an interesting counter-example to the work that has been done on the fear of disease outbreaks and catastrophic events. While diabetes is not contagious, it is “communicable” (Briggs 2005) and, in the Rio Grande Valley, is discussed at the apocalyptic future of the U.S. come true. Thus, as people in the Rio Grande Valley are brought into care practices that will never be quite enough to save the nation, they encounter an impossibility: the impossibility of saving the nation.

I argue that the need for this embodied care and the polysemic nature of the diabetic body makes it an impossibility for people in the Rio Grande Valley to complete the task at hand. Similar to the Tijuana residents depicted in Rihan Yeh’s work, people in the Rio Grande Valley demonstrate a kind of impossibility, though a different kind from what Yeh described. Rather than definitively claiming membership in the rational “us,” people in the

Rio Grande Valley equivocate. They claim membership in the rational “us” (who somehow can tend all of the bodies) either by their talk, by their recirculation of scientific depictions of diabetes, or through their bodily care practices, but these claims are always interrupted by moments of also claiming membership in “them.”

### Outline of the Chapters

Each chapter of this dissertation works to advance the dissertation’s central thesis that people in the Rio Grande Valley are forming body-based *publics* around moments of identification and dis-identification with the category “Mexican-American in south Texas with diabetes” as it circulates in popular media and academic scholarship. Each chapter includes at least one instance of dis-identification and analyzes the complexity of that process. Whether in the United States/Mexico borderlands (Montoya 2011), in India (Solomon 2016), in Belize (Moran-Thomas 2016), or in any number of regions with “endemic” diabetes, this dissertation demonstrates that diabetes is not only a biological disease processes. Rather, diabetes transforms in multiple ways as it is produced and circulated in popular media, and as people respond to it in its multiply mediated forms. In focusing on popular media and its producers, I follow Charles Briggs, who argues that “health reporting” (2003) is the primary means through which people receive information about their bodies and health. Through attention to the pragmatics of everyday talk, care practices, and the production, circulation, and reception of popular media and academic scholarship, and history, this dissertation has described how people in the Rio Grande Valley



engage in practices and talk that allow them to enact membership in two seemingly incommensurable publics—“us” and “them.”

The first chapter, *Nevermore the ‘American Congo,’* engages in this argument historically, arguing that the current trend of dis-identifying with diabetes needs to be understood within the region’s particular history of having been a national frontier for the Spanish Crown, The Republic of Texas, Mexico, and the United States.

Particularly when the region and its residents came under the control of the United States, skin color and skin tone became critical for people of Mexican descent who strove to prove their rightful belonging in the region (Montejano 1987). Having come into the United States’ particular racialized citizenship structure of white and black (Molina 2006, 2010), people of Mexican heritage—whether light-skinned or dark-skinned—found they were “not quite” (Bhaba 1984).

Despite the fact that I draw on historical data in this chapter, I do not aim at an argument of historical continuity. Rather, drawing on Laurent Berlant, I suggest “structural echoes” (1997:234), a resemblance enough akin to indicate that phenotype and belonging have long been concerns in the region and, most importantly that those concerns are tied to racialized logics of the United States. Similar to Angela Garica’s work on heroin addiction along the Rio Grande in New Mexico (2010), this chapter argued that “the past was forever in their present and always already embedded in their future” (52). As only one example of this, I described the waxing and waning of the agricultural and pesticide industries. As those industries’ presence diminished, “our people,” as one Mexican-American woman said, had few job opportunities.

Fina, the woman who shared that story with me felt that “our people” were more likely to develop diabetes in an environment in which they were not engaged in intense manual labor. And thus, for Fina, who is diabetic herself, the bodies of diabetic Mexican-Americans are corporeal evidence of the flight of industry. Also for Arnie, an Anglo large-scale farmer. However, the bodies of under-employed Mexican-Americans evidence something quite different for him—they index what he believes were “overzealous” labor strikes in the region in the 1970s that “made” industry leave. Had Mexican-Americans not “agitated” for labor rights, he explained to me, they would not likely have such high rates of diabetes.

Chapter Two, *What Is Diabetes?* explored two intersecting concerns. First, at the level of basic content, this chapter oriented the reader not only to the conception of diabetes as an individualized, biological condition of a malfunctioning pancreas, but also to the international standards of clinical care. As such, this chapter attended to the ideal, technologically based, temporal organization of diabetes in the clinic: first, diagnosis; then, management. It then demonstrated how this temporal ideal does not operate in this way in the Rio Grande Valley where the moment of diagnosis is often confirmation and often occurs after one has already begun managing the condition. Second, building on the twinned roles of doubt and certainty in the history of diabetes research and clinical practice, I described how the modernist concern with finding one certain truth about diabetes are yoked to the perpetual existence of a doubt about what diabetes is. That doubt is *productive* in that it allows for the continual pursuit of more certainty. I demonstrated that the pairing of doubt and

certainty has such grip in the Rio Grande Valley because of the over-determined, negative nature of the category “Mexican-American in south Texas with diabetes.” Finally, drawing on historical descriptions of diabetes sufferers from Elliot Joslin’s clinical records in the 19<sup>th</sup> and 20<sup>th</sup> century, as well as clinical records from the 18<sup>th</sup> century, I raised my own question of doubt: considering the fact that clinicians and news reports continually ring alarm bells about the diabetes rates rising and about “non-compliant” diabetes patient—since the 19<sup>th</sup> century, why do these two narratives have such grip? And what does the current “alarm bell” about diabetes as a serious national security indicate about how people respond to the category “Mexican-American in south Texas with diabetes.” Throughout my dissertation, particularly in discussions of the scalar nature of diabetes care, I suggest that through the practices of diabetes care, management, and avoidance that people are being asked to care for themselves and also for the nation. This finding is reminiscent of Emily Martin’s (1996) work on the co-emergence of notions of flexibility in the immune system and in labor. As such, it raises questions about where else we might see these logics of care of self/community/nation through pre-emption and triage at play.

Chapter Three, *Temptation and Interruption in QDay Life* engaged with the stories of four people with diabetes who describe the rhythm of their everyday lives. This chapter is in conversation with Chapter One, specifically with the standardized, clinical suggestion that the ideal temporal management of diabetes is one that is predictable and consistent, a rhythming that I call *QDay Life*, in reference to the medical use of “Q” to mean “every” in written prescriptions.<sup>lxxvi</sup> This chapter

demonstrated that the temporality of consistency exhorted by *QDay life* is constantly stymied by sources of temptation—a tortilla, an extra helping of food, or the comfort of food in a time of stress—that many people describe as calling to them, an attribution that gives the food status as an active actor in process of QDay life.

Building on the finding that temptation stymies attempts at consistent eating, I contended that everyday life in the age of chronic conditions may be marked by *interruption*. This chapter's finding speaks to broader debates in applied medical anthropology about where and when to best place public health interventions. This chapter, then, suggests the the knowledge-deficit model of most public health and clinical interventions does not account for the fact that many people with diabetes state that they know how they “should” be eating; oftentimes, they do not do so because of temptation. As my research expanded to include people without diabetes, I found that the struggle with temptation was almost omnipresent. For some people, temptation (or *tentación*) was based on stressful life circumstances while for others temptation was social—a birthday party or a work event. Building on Lauren Berlant's argument about obesity in *Cruel Optimism* (2011), I demonstrate that the interruption caused by temptation occurs in “spaces of ordinariness,” such a breakfast with friends or a phone conversation with a family member and that people's responses to that temptation do not “always or even usually follow the logic of visible effectuality, bourgeois dramatics, and lifelong accumulation of self-fashioning” (99).

Chapter Four, “*Yes, but:*” *Living with Murky Etiology*, returns to the rhetorical strategy, “Yes, but” introduced in the dissertation's introduction. This chapter

provides more detailed ethnographic descriptions of how people with and without diabetes respond to their proximity to the public health category “Mexican-American in south Texas with diabetes,” and also to the condition’s *murky etiology*. This chapter drew together responses from a range of individuals and groups: wealthy members of a civic association; a woman living in one of the region’s colonias; a Vietnam Veteran; and a physician. In this way, this chapter shows that even people who fit the demography of the category, “Mexican-American in south Texas with diabetes” claim distance from it. I demonstrated that across these varied individuals and experiences of diabetes, they all engaged in a rhetorical technique that I call “Yes, but,” that allowed them to claim both membership and distance from their assumed inclusion in the category “Mexican-American in south Texas with diabetes.”

Like Chapter Three, Chapter Five, *Body-Based Publics: Movement, Measurement, and Preparation for the Future* deals with the temporality of enacting membership in public of “us” and of “them.” It makes this argument through use of the concepts of commensuration and incommensuration with ideas of the nation as produced in a CrossFit box and a Zumba class. Drawing on observant participation at CrossFit and in a Zumba class, I described how these two sites provide different techniques for measuring the body. However, in each site, the goal of measuring the body is the same: bodily change and eventual participation in the public of “us.” However, I demonstrate that the CrossFit “athletes,” and the women in the Zumba class are neither able—nor willing—to shed their particularity simply for entrée into the public of “us.”

Chapter Six, *Mediating Belonging*, drew together the concept of more-than-textual, body-based publics with the concept of *facticity* to analyze three pieces of media about diabetes and obesity in the region: the screening of a documentary made about the region, *Diabetesville, USA*; a Gallup Poll ranking the region as “the fattest;” and a television commercial for a furniture company that was raising money for the American Diabetes Association. I demonstrated that in the screenings of *Diabetesville, USA* and in the responses to the circulating Gallup Polls, individuals in the Rio Grande Valley are move in and out of the diabetes public of “us” and of “them,” as they attempt to inhabit the uninhabitable sphere of rational, public debate.

Chapter Seven, *Exiting Diabetesville, USA*, focused entirely on individuals without diabetes, demonstrating that they know diabetes through *proxies*, and although they do not have a diagnosis, they live with the condition as an absent presence. As such, this chapter demonstrates that not only people with diabetes enact membership in public based around diabetes. The interlude before this conclusion is called, *Border Fright*, circled back around to stories about the U.S./Mexico border. Specifically, it draws on two women’s descriptions of their particular case of diabetes as due to *susto*, or fright. While the attribution of diabetes to *susto* is not unusual, both of these women attribute their *susto* to a moment when—through a mediated form—the U.S. state and the border snapped into focus, restricting their movement and/or the life of a loved one.

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The experiences that produced *susto* in these women are foreseeable. The fact of border crossers dying is a daily occurrence. Likewise, losing documents, as Hortensia did, is not unheard of. It is a sufficiently common event that there are procedures and processes in place to address it. Consequently, the prospect of losing one's papers is a constant worry among Mexican-Americans who depend on their ability to move across the border. While Eugenia did not actually lose her son and Hortensia was able to get her papers restored, the shock – the *susto* – for these women lay in the fact that in those moments they came to the sudden realization that they themselves could be the subjects of such cautionary tales. They understood that such terrible events are not just foreseeable in the abstract, but also foreseeable *for themselves*.

This question of an unfortunate event being foreseeable yet unpredictable is at the center of the relationship between people in the Rio Grande Valley, on the one hand, and the disease of diabetes on the other. The concepts that anchor this dissertation—doubt, uncertainty, impossibility, interruption, care, routine, and everyday life—help frame that relationship. What is “impossible” in the borderlands is to be a member of the quintessential rational public sphere and to be a Mexican-American because "Mexican-American" is isomorphic with the category “Mexican-

American diabetic in south Texas.” And to be a Mexican-American diabetic in south Texas, as I have demonstrated throughout this dissertation, produces the conditions of impossibility for joining the rational, public sphere, a tale that suggests that the sphere is a phantom, an idealized and aspirational space that accepts no one—Mexican-American or not—as its true member.



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<sup>lxxvi</sup> For example, a prescription that is written as "Take Q4h" means "Take every four hours."

## APPENDICES

## Appendix A. Diabetic Creed

1. **Diabetic Creed.**—For my own practical guidance in 1923 I adopted a diabetic creed, but, like the best of the creeds, it has undergone alterations and I am sure will soon require more.

I believe at the beginning of this year, 1928:

1. That *diabetes mellitus* should be considered so probable in any person who has 0.1 per cent or more of sugar in the urine that he should be watched for life.

2. That *normal weight* or less should be insisted upon in each diabetic, suspected diabetic, or relative of a diabetic, but that therapeutic loss of weight should be extremely gradual.

3. That *mildness* of the diabetes should be assumed, a long life be expected, and the patient be treated accordingly. Hence, the nearer the proportions of carbohydrate, protein, and fat in the diabetic diet conform to those of the normal diet, always seeking to avoid glycosuria and hyperglycemia, the better it will be for the patient, even at the sacrifice of weight, though not of strength. A carbohydrate tolerance, unutilized, retrogrades.

4. That *reversal of the diet*, namely high-fat and low-carbohydrate, assumes the contrary, severity of the diabetes, and is dangerous both in principle and in practice and unless accompanied by a minimum protein intake frequently ends in coma.

5. That *undernutrition* (*a*) prevents diabetes and (*b*) is the foundation-stone of diabetic treatment, but if hunger can be avoided a smaller number of patients will yield to temptation, break treatment, and in consequence die of coma.

6. That *extreme inanition* with loss of body protein is not worth while *simply to render the blood sugar normal*.

7. That diabetes of itself is not fatal, but that death ensues from other diseases or complications; that *coma* is an accident usually inexcusable and is more easily prevented in 99 cases than treated in 1, and, therefore, diabetics when ill from any cause should (1) go to bed, (2) keep warm, (3) take a glass of hot water, tea, broth, orange juice, or oatmeal water gruel every hour, (4) empty the bowels with an enema, (5) call a doctor, who, if he finds acidosis the dominant factor, will give insulin and caffeine, may wash out the stomach and inject subcutaneously a solution of salt. A diabetic

under treatment with insulin should not omit it unless sugar-free and under medical supervision.

8. That the diabetic should be regarded as unusually susceptible to arteriosclerosis and should be treated with this in view. The carbohydrate in the diet should not long remain under 100 grams and foods high in cholesterol should be restricted. *Gangrene* and the complications therefrom can usually be avoided by treatment with posture and by washing the feet daily and by reporting the discovery of any lesion to the physician.

9. That any patient with a tolerance of less than 100 grams of carbohydrate should (*a*) test his own urine for sugar, (*b*) keep sugar-free, and (*c*) take home food scales and use them until he can keep sugar-free without them.

10. That the *immediate aim* of practice should be to simplify treatment and to encourage physicians to develop in their *own* communities homes and clinics to which they may refer their patients for a diabetic education in case their own time and facilities are inadequate.

11. That *firm persistence* in a strict diabetic diet (*a*) finds ample justification in the patients kept alive by it to profit by insulin; and (*b*) is essential to safety and success in the use of insulin. Insulin utilizes rather than replaces the advances in diabetic treatment hitherto achieved.

## Appendix B. Supplemental Images



Figure 36. Poster-size food guide and suggested diet, from first class I attended.



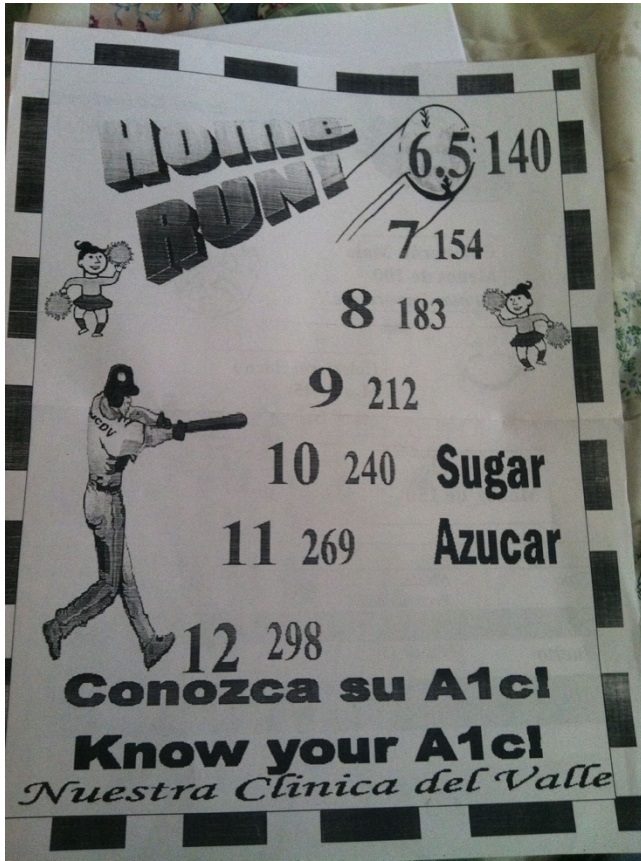


Figure 38. A1C and blood sugar equivalency chart.