

Using Behavioral Economics to Improve the Promotion of Healthy Dietary Patterns

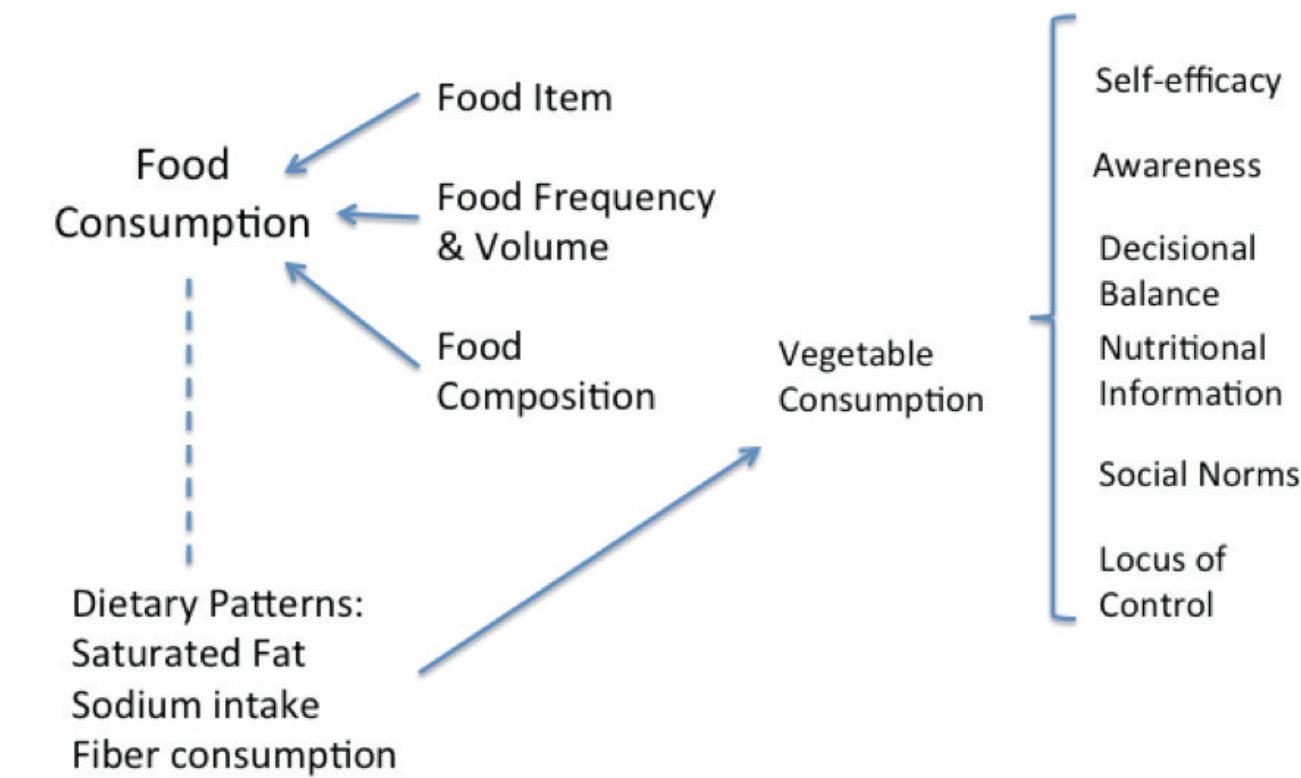
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INTRODUCTION

Worldwide and for more than 20 years, improving the dietary patterns of the population has been an important target of Health Promotion (WHO 1990; WHO 2012). There are population dietary goals for saturated fat, trans-fat, fiber, calories from added sugars, fruit and vegetable consumption, etc. that, if achieved, could reduce the prevalence of many non-communicable chronic diseases (WHO 2002; WHO 2003). In spite of several health promotion efforts, several of these goals have not yet been achieved in many countries (Mozaffarian & Capewell 2011; WHO 2012). More research is needed in order to devise the most effective strategies to achieve these dietary goals.

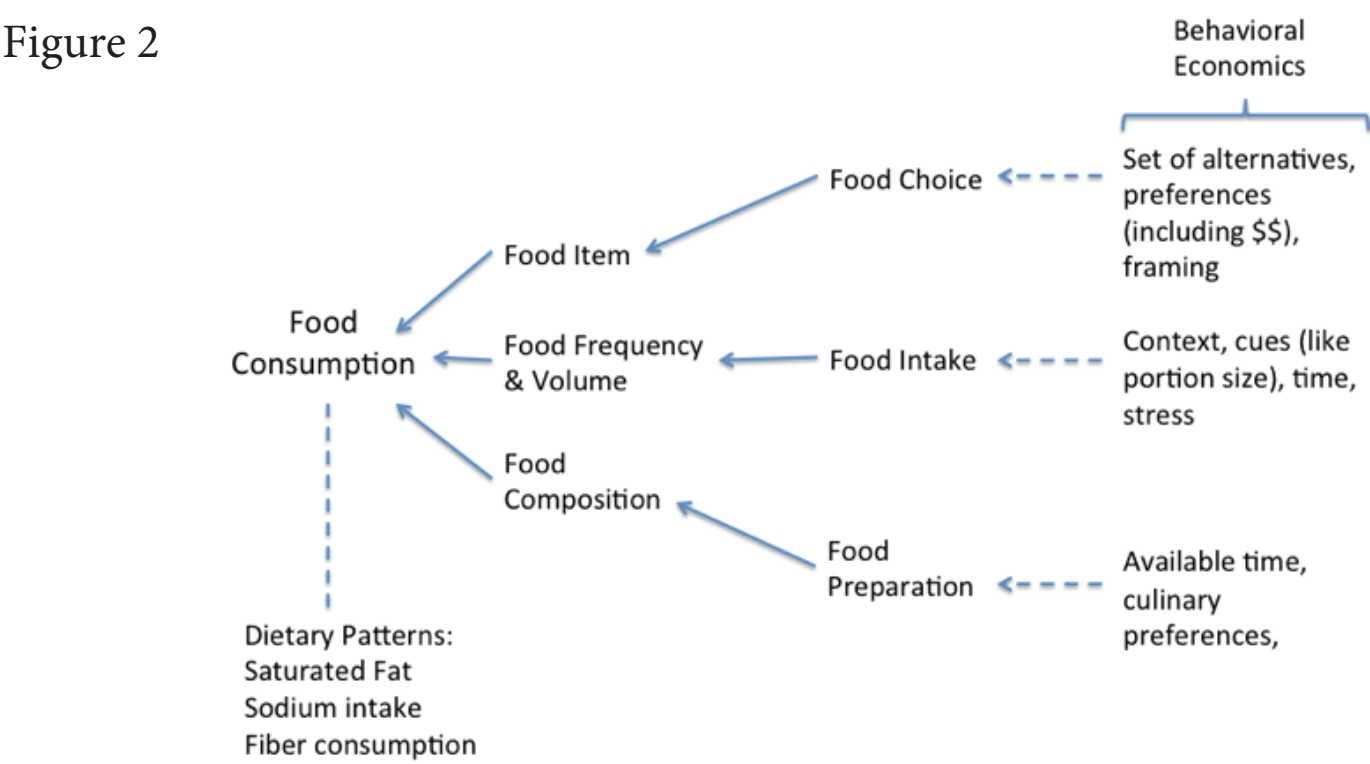
From a nutritional epidemiological point of view, dietary patterns emerge from the interaction of three determinants: the type of food chosen to eat, the volume consumed and the nutritional composition of food chosen (Margetts & Nelson 1998). Behavioral Nutritional Interventions have traditionally targeted several psychological variables, such as self-efficacy, knowledge, motivation or awareness with respect to a specific dietary pattern, like sodium or vegetable intake. (Glanz et al. 2008) (Figure 1)

Figure 1



However, from a Behavioral Sciences perspective, these dietary patterns are not behavioural targets. The targets are the eating behaviors behind the epidemiological determinants of dietary patterns. The type of behaviors that resemble closest these determinants could be food choice, food preparation, and food intake.

Figure 2



The association of the three types of dietary patterns determinants with specific types of behaviors offers a simplified framework to design and evaluate nutritional interventions. (Figure 2) For example, instead of trying to modify self-efficacy to 'eat' vegetables, one should try to modify self-efficacy to prepare vegetables.

It also helps to incorporate findings from other disciplines. For example, Behavioral Economics extends our understanding of the factors that influence food choice. Three of the most important determinants of food choice are shown in Figure 2.

Unlike mainstream microeconomics, Behavioral Economics postulates that, in addition to preferences and the set of food alternatives people have, there are other factors, such as beliefs, context, framing and information availability, that determine the choices people make.

The difference between mainstream economics and Behavioral Economics has been summarized as:

mainstream economics	$C(A) = \text{alternative chosen}$
behavioral economics	$C(A, f) = \text{alternative chosen}$

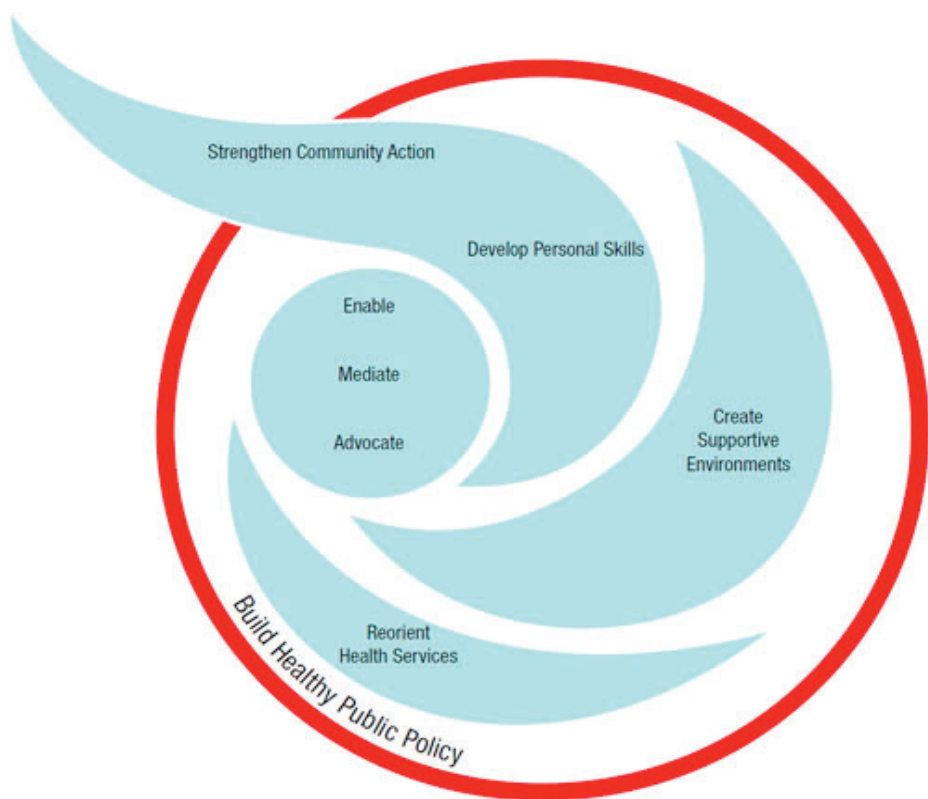
Where A is the set of alternatives, C is the set of preferences that will determine the alternative chosen and f are these other factors we just mentioned.

For Health Promotion, the advantage of using Behavioral Economics is that it provides a set of potential strategies to target non-individual factors with nutritional interventions. As well, it provides some mathematical models to explain their impact on people's food choice.

CONCLUSION

In order to promote healthy patterns on the population, we need to create supportive environments. To do so, new frameworks are required. From a Behavioral Economics Perspective, the array of potential contextual interventions goes from the physical environment to the tax environment, passing by the informational environment. Although Health Behavior Theories acknowledge the relevance of non-individual factors in order to modify food behaviors, the granular analysis that is obtained by using Behavioral Economics might help to achieve greater impact on dietary change

As well, a Behavioral Economics Perspective integrates parsimoniously with the Health Promotion Framework, by providing a guidance regarding the creation of supportive environments, where the healthier choices are also the easier to take.



References:

Glanz, K., Rimer, B.K. & Viswanath, K., 2008. Health behavior and health education: theory, research, and practice, John Wiley & Sons.

Kahnemann, D. 2011. Thinking Fast and Slow. New York, Farrar, Strauss and Giroux.

Margetts, B. & Nelson, M., 1998. Design Concepts in Nutritional Epidemiology, Oxford: Oxford University Press.

Mozaffarian, D. & Capewell, S., 2011. United Nations' dietary policies to prevent cardiovascular disease. BMJ (Clinical Research Ed.), 343, p.d 5747.

WHO, 1990. Diet, Nutrition and the Prevention of Chronic Diseases:report of a WHO Study Group, Geneva: World Health Organization.

WHO, 2003. Diet, nutrition and the prevention of chronic diseases. World Health Organization Technical Report Series, 916, pp.i-viii, 1-149.