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Poor Quality of Life Predicts Adherence to a Weight-Loss Intervention in Overweight and Obese Patients With Heart Failure

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### Authors

Motie, Marjan  
Lennie, Terry A  
Evangelista, Lorraine S

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CORE 2. EPIDEMIOLOGY AND PREVENTION OF CV DISEASE: PHYSIOLOGY, PHARMACOLOGY AND LIFESTYLE

SESSION TITLE: CARDIOMETABOLIC EFFECTS OF POPULAR DIETS

## Abstract 18759: Poor Quality of Life Predicts Adherence to a Weight-Loss Intervention in Overweight and Obese Patients With Heart Failure

Marjan Motie, Terry A Lennie and Lorraine S Evangelista

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### Abstract

**Background:** Poor quality of life (QOL) has a known association with cardiometabolic risk that is also correlated with weight, diet, physical activity, and smoking. However, the effect of QOL on adherence (i.e. completing the study protocol) to a dietary intervention in heart failure (HF) patients has not been studied. We investigated the relationship between QOL and adherence with completing a 3 month intensive weight loss intervention in a cohort of obese HF patients with metabolic complications and tested a model that included age, gender, race, baseline weight, functional status, and QOL on adherence.

**Methods:** Data on QOL of overweight and obese patients with HF who participated in a larger clinical trial comparing a high protein and standard protein diet were collected at baseline and 3 months using the Minnesota Living with Heart Failure (MLHF) Questionnaire. Comparisons were made between participants who completed the 3 month dietary intervention (i.e. completers) and participants who did not (i.e. non-completers).

**Results:** Forty-nine patients - mean age  $59.1 \pm 9.8$ ; weight  $248.8 \pm 29.7$  pounds; EF  $37.3 \pm 12.5\%$ ; peak VO<sub>2</sub>  $12.5 \pm 3.7$  mg/kg/ml; 55% White; 20% Hispanics; 16% Blacks; 8% Asians - participated in the study; 34 (70%) completed the intensive phase of the dietary intervention. There were statistically significant differences in QOL

scores between completers and non-completers (Table 1). There were no age or gender differences between completers and non-completers; Whites were less likely to complete the intervention compared to their counterparts ( $p = 0.046$ ). In a model controlling for age, gender, race, baseline weight, and functional status, QOL explained an additional 19% of the variance in adherence.

**Conclusion:** Our findings elucidate the need to integrate QOL assessments and strategies in clinical trials involving dietary interventions as potential key to enhancing adherence.

**Table 1: Quality of Life Scores of Completers and Non-Completers at Baseline and Three Months**

	Completers (n= 34) Mean $\pm$ SD	Non-Completers (n=15)	P
Overall QOL, Mean $\pm$ SD	40.80 $\pm$ 20.33	58.74 $\pm$ 24.20	0.010
Physical QOL, Mean $\pm$ SD	16.42 $\pm$ 9.28	24.69 $\pm$ 10.39	0.008
Emotional QOL, Mean $\pm$ SD	9.13 $\pm$ 7.04	14.50 $\pm$ 7.50	0.020

**Heart failure   Behavior change   Adherence   Quality of life   Nutrition**