

April 23, 2014 | By Yadira Galindo

Community-Based Weight Loss Program Aids Diabetes Management

Majority of participants in randomized trial lost weight and reduced medication use

Weight loss and control of blood sugar can reduce the risk of complications in patients with diabetes but this is difficult for many to achieve. A University of California, San Diego School of Medicine randomized controlled trial of obese adults with type 2 diabetes suggests that participants enrolled in a community-based structured weight loss program are able to shed more pounds, improve blood sugar control and reduce or eliminate insulin use and other medications compared to a control group.

“Support and a tailored lifestyle intervention have been shown to reduce cardiovascular disease risk factors and adverse outcomes in people with diabetes,” said Cheryl L. Rock, PhD, RD, professor of Family and Preventive Medicine and principal investigator of the study.

“However, most overweight individuals with type 2 diabetes do not receive this degree of support for changes in diet and physical activity to promote weight loss in their clinical care, due in part to constraints of time and training for most health care providers and clinicians.”

The results of the study, published in the April 23, 2014 online issue of *Diabetes Care*, found that 72 percent of participants on the weight loss program that included portion-controlled foods and personalized counseling were able to change their insulin use compared to eight percent of the control group. Similarly, other diabetes, cholesterol and blood pressure drugs were decreased or discontinued more often among the weight loss program enrollees.

According to the Centers for Disease Control and Prevention, 35 percent of adults in the United States are obese and eight percent of adults are affected by diabetes.

“Weight loss is a primary strategy for successful management of type 2 diabetes due to its impact on glycemic control and improvements in cardiovascular disease risk factors,” said Rock. “These study results suggest that patients not only lose weight on structured commercial

weight loss programs that include behavioral modification and individual support, but that this weight loss translates to significant improvements in diabetes control and cardio-metabolic parameters.”

Between March and August 2012, the trial enrolled 227 overweight men and women with type 2 diabetes at UC San Diego and University of Minnesota, Minneapolis. Participants in the structured program received diabetes self-management education, weight counseling, portion-controlled food, a planned menu during the first six months, and continued one-on-one counseling for the one-year study period, all provided by Jenny Craig. These participants showed 8.2 percent weight loss compared to 2.5 percent in the control group.

The control group received standard care that included general diabetes management education, a one-hour individual weight loss counseling session with a dietitian at the start of the program and again at six months, as well as monthly follow-up consultations via email or telephone.

Participants in the weight loss program were assigned to one of two Jenny Craig plans, a higher carbohydrate, lower fat diet or a lower carbohydrate, higher fat plan. Both groups showed improved weight loss, an increase in physical activity, lower depression scores and a reduction in medications compared to the control group.

The group using the lower carbohydrate menu lost nine percent of initial weight as compared to 7.4 percent in the higher carbohydrate group. The participants following the lower carbohydrate menu also reduced their hemoglobin A1c levels (a marker of blood sugar control) from 7.3 percent to 6.6 percent, while those in the control group showed no significant changes.

This study was supported by Jenny Craig, Inc. which supplied program activities and educational materials, including consultations and portion-controlled foods.

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