

***Multidisciplinary approach as best practice for the treatment of obesity patients.***

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**Introduction:** Obesity is a gateway disease that contributes to many medical problems including: coronary heart disease, stroke, type 2 diabetes, cancers as well as mental disorders. In 2008, the overall medical care costs related to obesity in the US were \$147 billion. Despite the availability of guidelines to treat obesity in the US, the prevalence of obesity is still rising, estimated to affect 165 million Americans by 2030. Traditional medical management of obesity patients is not enough and innovative strategies to treat obesity are critically needed. A multidisciplinary weight loss clinic, the Energy BALANCE (Behavior And Lifestyle Assessment with Nutrition Centered Education) was established at the University of Nevada, Reno in 2010. This clinic utilizes a team-approach to evaluate, motivate and effectively treat patients with obesity. This study is to assess whether a multidisciplinary team is an effective way to treat obesity.

**Methods:** The Energy BALANCE clinic is led by a team of physicians, dieticians and an exercise specialist who evaluated and treated obesity patients in a 12 week pilot program. 119 overweight or obese patients who were referred to the clinic by PCPs were studied. The study's primary outcome was the change in patients' body weight and BMI before and after the 12 weeks treatment period. Fasting glucose, HgbA1C, and lipid panel were also evaluated. Data was collected and analyzed to assess the effect of the multidisciplinary weight loss program and compared to other studies.

**Results:** All patients (N=119) with 12 weeks follow-up data were included in the study analysis. On average, body weight decreased by 13.1±8.3 lbs and BMI decreased by 5.27±2.83% ( $p < 0.00001$ ) during the 12 week period with an average cost of \$900/patient. Patients who visited the clinic more often lost more weight. Patients with baseline BMI<35 lost 7.8±5.2 lbs and patients with baseline BMI>35 lost 15.0±8.3 lbs. Fasting glucose significantly decreased from 103.2±39.1 to 95.2±22.8 ( $p=0.004$ ). Patients with diabetes have significant decrease in HgbA1C from 7.89±1.46 to 7.05±1.04 ( $p=0.006$ ,  $n=15$ ). Significant decreases in TG, TC and LDL were seen at 9%, 15% and 8%, respectively.

**Conclusion:** The study suggests that a multidisciplinary team is an effective approach to treat obesity. Significant decreases in body weight, BMI, HgbA1c, lipid parameters were seen in a relatively short period of time. We anticipate this approach to be a best practice for obesity management.