

## **Weight Loss: A Changing Paradigm in Insulin Resistant and Diabetic Patients**

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**Background:** GLP-1 agents increasingly impact obesity therapy of insulin-resistant and diabetic patients.

**Objective:** Report multimodality obesity treatments.

**Methods:** Multiple treatments included: up to weekly-titrated GLP-1's, phentermine-topiramate, bupropion-naloxone, lisdexamfetamine, 4 days per 2 weeks of an omnivorous diet, 800 calories daily, ideally 160 calories every 3 waking hours, and exercise 40 min daily.

**Results:** Among 250 patients with initial BMI 36+5 using weekly semaglutide injections for up to 9 months, discontinuation was < 15%. By > 3 months, 62 had weight loss > 7% and 36 had>10%. Most successful treatments included tirzepatide with weight loss 25 lbs to 119 lbs (13% to 23%) and HbA1c decrease from 14.0% to 6.1%. Remarkable tirzepatide cases included an adrenal insufficient, severely insulin-resistant woman requiring > 1000 units insulin daily whose weight and HBA1C decreased from 314 lbs to 249 lbs (21%) and from 14% to 7.2%, despite 20 mg hydrocortisone daily: and a 382 lb nondiabetic, hyperlipidemic, hypercortisolemic, insulin-resistant, hypogonadal man who lost 119 lb (23%) taking testosterone 200 mg IM every 10 days. An Asian-Indian dulaglutide-treated man highlighted separation of insulin-resistance and weight, dropping HbA1c from 10.2% to 6.1% with weight loss only 165 to 161 lbs < 3%. Despite total cost much less than usual in our area, > 70% of patients avoided dieting consistently and used only one or two of the least expensive treatments.

**Conclusion:** Multimodality weight loss therapy is well tolerated and remarkably effective; however, optimal results are mainly prevented by incomplete dietary adherence and overall cost.

berberine 257 mg-alpha lipoic acid 67 mg,

160 Calories every 3 hrs while awake, either 2 days per week or for 4 days, twice per month, consuming calories at basal metabolic rate on the non fasting mimicking diet days.