

Changing Behavior and Weight One Shot at a Time

By Narendra Singh, MD

The pandemic has brought out the best and worst in us with respect to weight management. During the shelter in place stage many of us found solace through treks to the fridge and the TV. That decadent duo led to unprecedented weight gain for many. Others found that a less hectic lifestyle and more outdoor activities allowed for weight loss and overall improved cardiovascular fitness.

We are not, however, winning the battle over obesity. A staggering 42.4% of the USA population is deemed obese defined as a BMI (body mass index) of greater than 30. BMI tables can easily be found on the web and require only your height and weight to calculate. A BMI between 23-27 is healthy, 27-30 is overweight, 30-40 is obese and greater than 40 is morbidly obese.

My previous articles have focused on the key steps to losing weight. They are not complicated but a challenge to sustain over time. Key strategies include avoiding refined sugars and sugar-sweetened drinks, eating more protein, eating less carbohydrates, eating more fiber-rich foods, exercising regularly, reducing portion size, tracking your food intake, eating slowly, and getting good quality sleep.

Unfortunately for many, dietary changes and exercise are not enough. Some supplements such as caffeine and green tea extract have provided modest benefit. Weight loss pills in the past have had limited success and a poor safety profile with many being pulled from the market. A new class of medications called GLP-1 RA (glucagon like peptide receptor agonist) hope to change that trend. The first to be approved was a daily injection called liraglutide (Saxenda). More recently a weekly injection semaglutide (Wegovy) has become the leader in this class. In a pivotal trial of about 2000 overweight individuals there was a 15% weight loss (average of 33 lb.) over 68 weeks. The top dose was 2.4 mg per week and the

discontinuation rate was under 5% in this trial.

The main side effects of the medication also contributes to its success. Semaglutide causes delayed gastric emptying and slows down transit time through the gut. It also reduces glucagon (normally raises sugar) and increases insulin (normally lowers sugar) as well as working on the brain to curb appetite. The net effect of all this is to give a feeling of fullness in the stomach which reduces the desire to eat. Should you choose to overindulge the side effects kick in (nausea, vomiting, constipation, diarrhea, and bloating). As a result, you are less likely to overeat the next time! This negative feedback loop is an important behavioral change that will contribute to your weight loss success.

Semaglutide first started as a medication for the treatment of type 2 diabetes. An oral formulation (Rybelsus) and an injectable formulation (Ozempic) improve the A1c level in diabetics while causing weight loss. Importantly in the diabetic population semagutide has been shown to be safe and help reduce serious cardiovascular events such as heart attacks, stroke, and death. Our research team at NSC Cardiology is involved in a worldwide trial called SELECT to see if semaglutide in overweight individuals without diabetes can show the same cardiovascular benefit!

Mechanical options to lose weight such as the gastric balloon, bariatric surgery and lapband procedures also exist but are reserved for conventional treatment failures. Drugs should never be first line therapy. Our current strategies however are not effective enough to curb this other pandemic called obesity. We need to use all our resources to help reverse projected trends. If diet and exercise are not getting you to goal, then see your health care provider about some of these promising new options!

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