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In The Age of Ozempic

Semiglutide's Impact on the Weight-Loss Frontier

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Content Warning:
Body Image, Weight Loss

Whether through weight-watchers, an organic juice cleanse, or the latest workout circuit, Americans have long been obsessed with novel methods to shed pounds. This new addition, however, is in a class of its own.

Ozempic, generically known as semaglutide, was introduced as a type-2 diabetes mellitus treatment in 2017. After initial clinical studies revealed a 15-percent drop in body weight for patients taking Ozempic, the drug was reformulated and approved in June 2021 as a weekly injection for chronic weight management under the name Wegovy. Excitement for the effectiveness of the weight-loss drug spread quickly in both clinical circles and the general public. This should not come as a surprise in a country where over one in three adults have a BMI over 30, designating them as clinically obese. Compared to previous 'last resort' obesity treatments — bariatric procedures such as sleeve gastrectomies and gastric bypass surgeries — semaglutide promises easy use, avoiding surgical complications and lengthy recoveries. It is only natural to ask — is it all too good to be true?

Ozempic and the increasingly popular Wegovy use the same active ingredient: the GLP-1 (glucagon-like peptide) receptor agonist semaglutide. GLP-1 is produced by the body's endocrine system after eating to regulate blood sugar levels and, over time, weight. It does so by stimulating the release of insulin, a hormone critical to moving glucose out of the blood and into storage cells. It also reduces the speed at which food is digested and moved through the body. These mechanisms send signals to the brain that express satiation, a sense of fullness, minimizing food cravings. Mimicking this biochemical pathway, semaglutide binds to GLP-1 receptors and mimics the appetite-suppressing effects of GLP-1. Currently, Ozempic is considered 'off label' for weight loss treatment. This means that it is being used and prescribed for a purpose that was not explicitly permitted by the FDA. Considering that the (functionally identical) Wegovy is FDA approved, it seems illogical to make such a distinction. It is easy to forget that semaglutide was developed and prescribed for type 2 diabetes management, a purpose for which many Americans still rely on it. As semaglutide medications rose in popularity and began to be used in people who were not clinically obese, concerns over medication shortages grew. Maintaining these seemingly strict regulations may work to conserve inventories for diabetic patients.

One of the major shortcomings of this class of medications is the tendency for their effects to plateau or even be undone. For many patients, a 15 percent drop in weight is not enough to satisfy their doctor's or their own weight aspirations. Once the body's metabolism slows down in response to decreasing food intake at about 60 weeks, it is often challenging to lose more weight without major changes in activity or diet. Weight loss plateaus are not uncommon and reflect a general unwillingness for our bodies to lose the fat deposits that helped our early ancestors survive. Patients who stop taking semaglutide typically begin to regain the lost weight, returning to the pre-treatment equilibrium that their

bodies desire. Medications like Ozempic or Wegovy allow people to briefly maintain further weight loss, as it does not long-term.

The cost comes at a shocking list price: \$935.77 per month for Ozempic and \$1,349.02 for Wegovy. Although insurance plans may bring the price down for some qualifying consumers, there is no doubt that this new era of weight loss intervention will bring enormous profits for pharmaceutical companies and even higher average healthcare spending in the United States. The willingness of many to shell out these costs cannot be explained without considering the ability of media and celebrities to amplify a cultural fascination with thinness.

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Since the introduction of Wegovy to the pharmaceutical market, celebrities have been unusually vocal about this drug and their use of it. Some have sung praises of its efficacy, showing off their slim figures on sites like X (formerly Twitter) and Instagram, while others have taken to the platforms to disprove accusations of them using it.

"Let's not discredit my years of working out . . . Please stop with your assumptions," Khloe Kardashian replied to a comment on how "disturbing" it was that she was taking the medicine to "get [that] skinny."

On TikTok, #Ozempic has gone viral, filled with video testimonials made primarily by non-medical professionals. In this era, 'patient influencers' have gained traction in online circles, paid brand endorsements with the goal of gaining more patients. In both realms, body image dominates the conversation and overshadows more holistic discussions of health. At a time when scientific literacy seems to be lacking and misinformation is on the rise, the carelessness with which these medications are discussed poses a serious threat.

Semaglutide is a medication with enormous potential for meaningful and life-changing results when properly used. However, in practice these medications are advised to accompany the standard lifestyle modifications: regular physical activity, reduced sugar intake, four servings of vegetables daily, etc. With so many options, the time has never been better for a conversation with a trusted physician about various medications — especially before making any rash decisions. ● ● ●