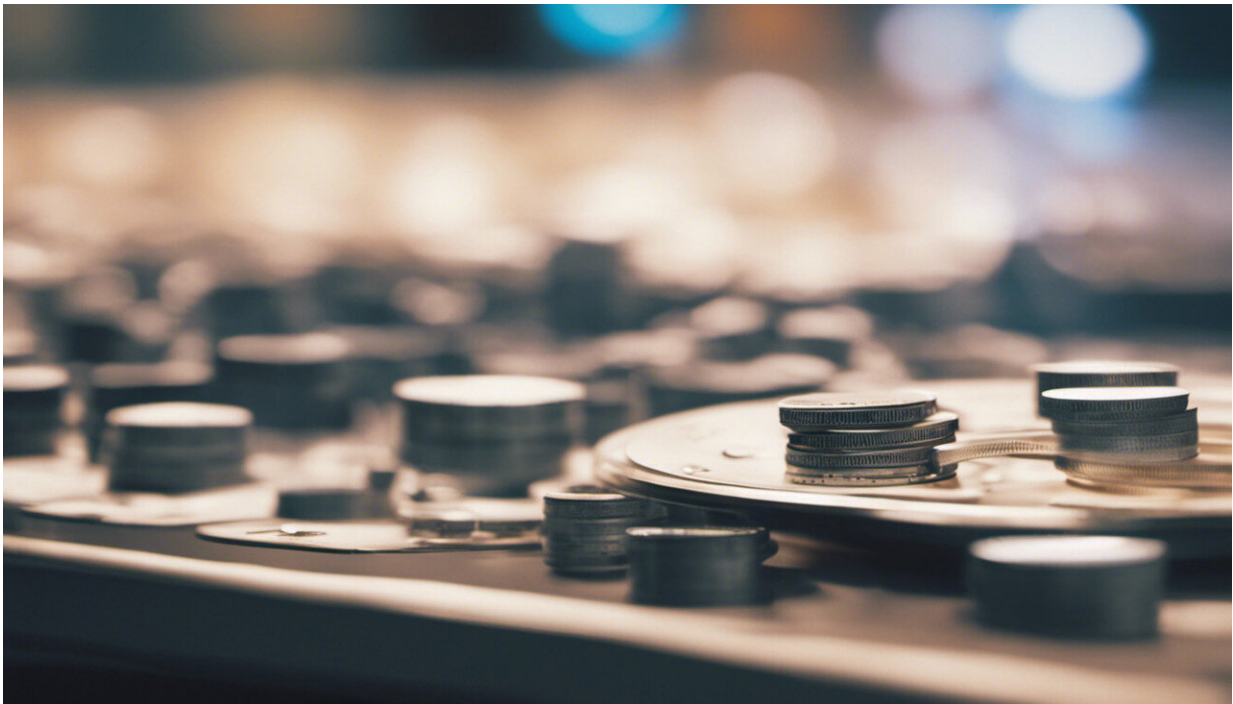


Wegovy: What you need to know about this weight loss drug

February 28 2023, by Simon Cork



Credit: AI-generated image ([disclaimer](#))

A much-hyped [weight-loss jab](#) will soon go on sale at high street chemists in the UK. Although a prescription will still be needed from a doctor to buy the drug, the news will no doubt be welcome to the many millions of people who have struggled to lose weight.

The [drug](#), which will be sold in the UK under the brand name Wegovy, is the same as the drug Ozempic, which has made headlines recently thanks to its popularity as a weight loss aid [used by celebrities](#).

But while in [clinical trials](#) these drugs have been shown to result in [significant weight loss](#) in patients who are overweight or obese, there's still a lot we don't know about it—including its effects on people who are not overweight and simply want to shed a few pounds.

Wegovy and Ozempic are the brand names of the drug semaglutide. Semaglutide belongs to a class of drugs called GLP-1 receptor agonists that mimic the naturally occurring hormone glucagon-like peptide-1 (or GLP-1 for short). GLP-1 is one of a cocktail of hormones that are released by the gut after we eat.

Once released, GLP-1 does two very important things. First, it stimulates the release of insulin (the hormone responsible for regulating blood sugar levels) in the pancreas. It also acts on the brain by turning off hunger signals. This is where semaglutide's anti-obesity actions are most prominent.

It's thought that [body weight](#) is controlled around a "set point"—your default weight. That set point is different for each person and is governed largely by a [person's genetic makeup](#). For some people, this set point is in the "normal" body mass index (BMI) range, but for others, this can be in the [overweight or obese](#) BMI range.

If a person loses weight, the brain will act to increase body weight by increasing [feelings of hunger](#) and [decreasing energy expenditure](#) (calories burned by the body throughout the day). This in turn has the effect of raising weight back to the body's set point.

Semaglutide essentially turns these functions off. So even when weight is

lost, these feelings of hunger are suppressed—thus preventing weight regain.

Significant weight loss

Semaglutide was initially used to control blood sugar for patients with diabetes. But in 2021, a [large-scale clinical trial](#) showed the drug could help aid in weight loss when delivered at higher doses.

The study, which involved 1,961 obese adults, found that 86% of those who received a weekly semaglutide injection in conjunction with a low-calorie diet and daily exercise lost at least 5% of their body weight after 68 weeks. Around 32% lost up to 20% of their body weight.

In comparison, only 32% of people who received a placebo drug combined with diet and exercise lost 5% of their bodyweight. Only around 2% of those who received the placebo lost 20% of their bodyweight.

On the surface, this data looks impressive—and indeed it is [when compared](#) with currently available [weight-loss drugs](#) and [programs](#). But there are some caveats.

First, all trial participants received personal counseling sessions every four weeks to help them stick to their strict diet and exercise regime (eating 500 fewer calories daily and doing 150 minutes of exercise a week).

Many people don't have access to this kind of support in the [real world](#), so it's difficult to know how many participants would have stuck with these changes—and whether semaglutide would have had such significant effects without this level of intervention.

Second, semaglutide is not without side-effects. Between 20% and 45% of participants reported experiencing nausea, vomiting, diarrhea and constipation. These symptoms were typically temporary, with only 7% of participants who received semaglutide leaving the study because of them.

But more concerning was the fact that there was a significant rise in the number of participants taking semaglutide who developed more serious health problems. Nearly 2% of participants developed gallstones (three times more than in the [placebo group](#)), while a small number developed inflammation of the pancreas.

While the number of participants who developed these potentially life-threatening conditions was small, if these drugs are to be offered more widely this could be a concern.

Weight regain

Semaglutide is intended only to be used temporarily to aid in weight loss. So what happens when people stop taking it?

A follow-up study of 232 participants from the original clinical trial showed all had regained nearly all of the weight they lost [within a year of stopping the drug](#). What's more, decreases in blood pressure, blood sugar and cholesterol seen at the end of the original trial were all back to their pre-trial levels.

All of this demonstrates the need to be cautious with these types of drugs. Weight loss is difficult, and a single "miracle drug" is unlikely to undo the many physiological changes that are associated with obesity and weight loss.

We should also be cautious about these drugs, considering they need to

continuously be taken to maintain any lost weight, and we simply don't yet know what the long-term effects of these drugs are.

More drug compounds that mimic gut hormones are in the pipeline, many of which show [even greater weight loss](#) than semaglutide. The future of weight loss therapy looks bright, but in the end changes to diet and lifestyle will always need to be a significant component of any weight-loss attempt. But semaglutide may well be the kickstart to that [weight loss](#) journey that many people need.

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Provided by The Conversation

Citation: Wegovy: What you need to know about this weight loss drug (2023, February 28) retrieved 4 May 2024 from <https://medicalxpress.com/news/2023-02-wegovy-weight-loss-drug.html>

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