- Pharmacology

SCIENCE

WHAT IS OZEMPIC?

This diabetes drug controls blood sugar levels and suppresses appetite

WORDS AILSA HARVEY



Ozempic is a liquid solution inside an injection pen

Ozempic is the brand name for a drug that contains the active ingredient semaglutide. Semaglutide is a polypeptide – a chain of amino acids – that helps the body produce insulin when needed. This is a vital drug for some diabetics. People with diabetes either produce little to no insulin (type 1 diabetes) or insulin in the body isn't used effectively (type 2 diabetes). Insulin is a hormone that regulates a person's blood sugar levels, and Ozempic benefits those with type 2 diabetes by enhancing the existing insulin-producing response. Ozempic also works to reduce how much sugar the liver makes and slows down the rate of digestion. This helps to lower blood sugar levels, as high blood sugar is a common symptom of diabetes.

Did you know?

90 per cent of diabetic adults are diagnosed with type 2

Ozempic is prescribed to diabetic patients over the age of 18, and it's taken in the form of an injection once a week. There are other forms of medication that contain semaglutide, too. One is called Rybelsus and is ingested in tablet form. Not everyone can take Ozempic safely, so before a prescription is made, a thorough check of a person's medical history and body weight needs to take place.



Wegovy is an alternative brand of semaglutide drug more widely approved for weight loss

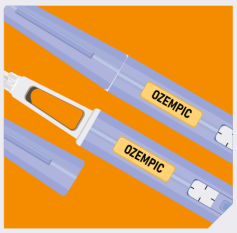
IS IT A WEIGHT LOSS DRUG?

The use of Ozempic for weight loss is becoming more popular, as the drug makes a person feel full and prevents them from overeating. However, it's not recommended to use Ozempic for this purpose, and it should solely be used by patients with type 2 diabetes. Ozempic hasn't been approved for weight loss by healthcare professionals, but many people access it via private prescriptions.

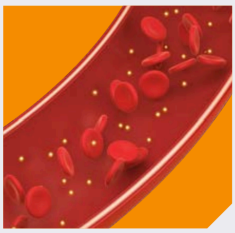
There are other drugs with the same active compounds that are often prescribed to individuals for this purpose. Many celebrities and online influencers still use Ozempic for weight loss, but as a result the trend has seen a shortage of the drug that many diabetic patients rely on for their health. Some of the side effects of taking Ozempic can include gastrointestinal issues, inflammation of the pancreas and gallbladder disease.

INJECTION AND EFFECT

What happens when Ozempic enters the body?



1 INJECTION
Ozempic is injected under the skin of the abdomen, thigh or upper arm to be slowly absorbed into the bloodstream.



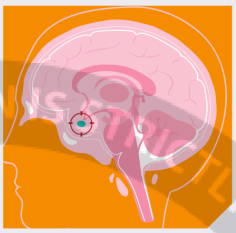
2 ENTERING THE BLOODSTREAM
Semaglutide enters the bloodstream slowly. One dose will last for about a week. Semaglutide is a medication that mimics GLP-1 – a natural hormone for regulating blood sugar.



3 PANCREAS ACTION
Semaglutide binds to hormone receptors in the pancreas and increases insulin secretion. Insulin is the hormone usually stimulated by GLP-1 to use glucose for energy. Glucagon, the hormone which raises blood sugar, is suppressed.



4 SLOW STOMACH
The speed of food moving through the stomach is delayed. This makes a person feel full for longer and prevents glucose spikes after meals.



5 REDUCED HUNGER CRAVINGS
In the brain, areas within the hypothalamus responsible for appetite are reduced. A person's food cravings are also reduced, lowering their food intake as a result.

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