

Viewpoint: Brain theory—We thought weight loss drug Ozempic worked in the gut. We were wrong

When scientists first created the class of drugs that includes Ozempic, they told a tidy story about how the medications would work: The gut releases a hormone called GLP-1 that signals you're full, so a drug that mimics GLP-1 could do the exact same thing, helping people eat less and lose weight.

...

In recent years, studies have shown that GLP-1 from the gut breaks down quickly and has little effect on our appetites. But the hormone and its receptors are naturally present in [many parts of the brain](#) too. These brain receptors are likely the reason the GLP-1 drugs can curb the desire to eat—but also, anecdotally, [curb other desires](#) as well. The weight-loss drugs are ultimately drugs for the brain. Follow the latest news and policy debates on sustainable agriculture, biomedicine, and other 'disruptive' innovations. Subscribe to our newsletter.

[SIGN UP](#)

A more refined understanding of how GLP-1 works in the brain could help improve the current injections. [Nausea and vomiting](#) are among the most common side effects and would seem to go hand in hand with a lack of appetite. But these symptoms appear to be governed by distinct systems in the brain, Scott Kanoski, a neuroscientist at the University of Southern California, told me. In fact, scientists have been able to find brain areas in rodents where GLP-1 analogues can suppress appetite without causing nausea, which hints at the possibility of developing drugs that do the same.

[**This is an excerpt. Read the full article here**](#)