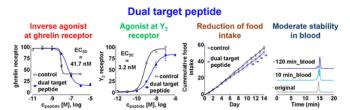


Potential obesity treatment targets the two sides of appetite: Hunger and feeling full

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Our bodies' hormones work together to tell us when to eat and when to stop. But for many people who are obese, this system is off-balance. Now scientists have designed a hormone-like compound to suppress hunger and boost satiety, or a full feeling, at the same time. They report in ACS' *Journal of Medicinal Chemistry* that obese mice given the compound for 14 days had a tendency to eat less than the other groups.

In their study, Constance Chollet and colleagues targeted two main receptors in the body that help keep appetite in check. When hormones bind to ghrelin receptors, we feel hungry, but when others bind to Y2 receptors, we feel full. Researchers are exploring compounds targeting the ghrelin receptor to treat obesity. But because appetite is the result of multiple hormones acting in concert, Chollet's team wanted to design a compound to better address this complexity.

The researchers designed a peptide that binds both the ghrelin and Y2 receptors. They administered it to obese mice and found that those that received the novel peptide ate less than the other mice.

More information: Rational Design of Dual Peptides Targeting Ghrelin and Y2 Receptors to Regulate Food Intake and Body Weight, *J. Med. Chem.*, Article ASAP. DOI: 10.1021/im501702g



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