

Sex Hormone Lessens Snacking Oxytocin reduces pleasure eating without interfering with normal hunger

Add another credential to oxytocin's impressive resume: the hormone crucial for bonding also reduces the calories people consume when they are snacking for pleasure, making it a possible therapeutic target for obesity.

German researchers gave a group of men a dose of oxytocin thought to be roughly the amount released by the brain after breast-feeding or sex, according to lead author Manfred Hallschmid of the University of Tübingen. These men and another group who took a placebo then had a chance to eat as much as they wanted at a breakfast buffet, and later the same day they were offered snacks. Those who took oxytocin ate fewer snack calories, but the hormone did not change how much the men ate during the main meal, suggesting that oxytocin affected pleasure eating without suppressing normal appetite mechanisms.

The researchers hypothesize that the hormone diminished reward-seeking behavior initiated in the ventral tegmental area of the brain, a region found to be highly sensitive to oxytocin in rodent studies. The effect may also be stress-related: subjects who took oxytocin saw a drop in their levels of the stress hormone cortisol, according to the paper published in 2013 in the journal *Diabetes*. More work is needed to understand whether oxytocin could be used to treat obesity, but until then the finding at least hints that it may be possible to curb your cravings by having more sex. —*Meredith Knight*

When Eating Goes Awry



Insula

Processes feelings of hunger and other sensations, such as taste, flavor and texture

Less sensitive than normal in anorexia

More sensitive than normal in bulimia



Anterior cingulate cortex

Involved in decision making and anticipation of reward

Less active in response to food in anorexia

More active in response to food in bulimia



Dorsolateral prefrontal cortex

Regulates self-control More active in anticipation of food in anorexia

Less active in anticipation of food in binge-eating disorder



Food Tastes Bland while Multitasking

Eating while distracted is well known to cause overindulgence, as confirmed by a recent review of 24 studies published in April 2013 in the American Journal of Clinical Nutrition. The exact mechanism behind such mindless bingeing, however, has been unclear. A recent study in Psychological Science suggests that mentally taxing tasks dampen our perception of taste, causing us to eat more. In four experiments, participants attempted to memorize either a seven-digit number (a heavy load on the brain) or one digit (a light cognitive load) while tasting salty. sweet and sour substances and rating each food's taste intensity. In all experiments, participants under the heavy cognitive load rated each type of taste as less intense, and they also ate more of the sweet and salty substances. The researchers believe cognitive load may compete with sensory input for our attention. Other studies have found that simply paying mindful attention to one's food-fully focusing on its taste, aroma and texture, for example-leads to less intake. This study adds yet another reason not to multitask at mealtime: your food will taste better. -Tori Rodriguez

can continue to elicit fear two generations later—at least in mice. | A new study suggests that gut bacteria can play a role in autism.