

Obesity is associated with reduced sensitivity to fat

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Research to be presented at the Annual Meeting of the Society for the Study of Ingestive Behavior (SSIB), the foremost society for research into all aspects of eating and drinking behavior, finds marked differences between obese and lean men in how they respond to the taste of fat. Fat also is less effective in obese men in stimulating certain gut hormones that are released into the bloodstream and normally suppress appetite.

The rate of obesity continues to rise within the United States and around the world, and over-consumption of calorie-laden fatty foods are an obvious culprit. How much we eat can be influenced by how foods taste and their effects on physiological responses in the gut. A reduced ability to taste and react to fat could lead to overeating and [obesity](#). A team led by Prof. Christine Feinle-Bisset, from the University of Adelaide, Australia, asked lean and obese men to sip drinks with small amounts of fat and indicate when they could taste the fat. The researchers also measured blood levels of a hormone that is normally released from the gut when fat is consumed. Dr. Feinle-Bisset said: "We found that being obese was associated with a reduced ability to detect fat taste, and with reduced release of an appetite-suppressing gut hormone". The results could help researchers understand more about why some [obese individuals](#) are more prone to eating a high-fat diet than lean individuals.

"At this point it is not possible to tell whether reduced responsiveness to the taste of fat or reduced gut [hormone](#) release causes over-consumption of fat, or whether eating a high-fat diet impairs taste and hormonal

responses to fat " said Feinle-Bisset. To investigate this question, her research team is performing studies to determine whether [consumption](#) of a high-fat diet over a period of time can produce similar effects in lean individuals, and also whether a low-fat weight loss diet can improve the ability to taste fat and secrete gut hormones when fat is consumed.

Provided by Society for the Study of Ingestive Behavior

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