

New scientific study indicates that eating quickly is associated with overeating

November 4 2009

According to a new study accepted for publication in The Endocrine Society's *Journal of Clinical Endocrinology & Metabolism* (JCEM), eating a meal quickly, as compared to slowly, curtails the release of hormones in the gut that induce feelings of being full. The decreased release of these hormones, can often lead to overeating.

"Most of us have heard that eating fast can lead to food overconsumption and obesity, and in fact some observational studies have supported this notion," said Alexander Kokkinos, MD, PhD, of Laiko General Hospital in Athens Greece and lead author of the study. "Our study provides a possible explanation for the relationship between speed eating and overeating by showing that the rate at which someone eats may impact the release of gut hormones that signal the brain to stop eating."

In the last few years, research regarding gut hormones, such as peptide YY (PYY) and glucagon-like peptide (GLP-1), has shown that their release after a meal acts on the brain and induces satiety and meal termination. Until now, concentrations of appetite-regulating hormones have not been examined in the context of different rates of eating.

In this study, subjects consumed the same test meal, 300ml of ice-cream, at different rates. Researchers took blood samples for the measurement of glucose, insulin, plasma lipids and gut hormones before the meal and at 30 minute intervals after the beginning of eating, until the end of the session, 210 minutes later. Researchers found that subjects who took the

full 30 minutes to finish the ice cream had higher concentrations of PYY and GLP-1 and also tended to have a higher fullness rating.

"Our findings give some insight into an aspect of modern-day food overconsumption, namely the fact that many people, pressed by demanding working and living conditions, [eat](#) faster and in greater amounts than in the past," said Kokkinos. "The warning we were given as children that 'wolfing down your food will make you fat,' may in fact have a physiological explanation."

Source: The Endocrine Society ([news](#) : [web](#))

Citation: New scientific study indicates that eating quickly is associated with overeating (2009, November 4) retrieved 24 May 2024 from <https://medicalxpress.com/news/2009-11-scientific-quickly-overeating.html>

This document is subject to copyright. Apart from any fair dealing for the purpose of private study or research, no part may be reproduced without the written permission. The content is provided for information purposes only.