Gastrointestinal factors involved in appetite regulation

Tanya Little
University of Adelaide, Australia

The gastrointestinal tract plays a pivotal role in the regulation of appetite and energy intake. The presence of nutrients in the small intestine induces a number of changes in gastrointestinal function, including the modulation of gastric emptying, gastrointestinal motility and the stimulation of a number of gastrointestinal hormones, including cholecystokinin (CCK), glucagon-like peptide-1 (GLP-1), peptide YY (PYY), and the suppression of ghrelin, which contribute to the suppression of appetite, induction of fullness, and suppression of subsequent food intake. This presentation will examine the role of these factors in energy intake regulation in lean and obese humans, and will cover recent advances in knowledge of the mechanisms underlying nutrient detection in the small intestine.

Biography

Little completed her Ph.D. in 2007, and is currently a full-time researcher at the University of Adelaide, supported by a prestigious National Health and Medical Research Council of Australia Career Development Fellowship. Her research is focussed on understanding how the gastrointestinal tract senses the food we eat and regulates appetite and metabolic health. She has published 26 papers in this field, and has a burgeoning international reputation for her work, attested to by invitations to present at national and international conferences and to write expert reviews.