Role of Hormones in Hunger, Satiety, and Metabolism

Hormone	Production	Action
Cholecystokinin	In the small intestine, approximately 15 minutes after starting a meal, primarily stimulated by protein and fat	Suppression of gastric emptying, decreasing the feeling of hunger, resulting in reduced food intake[11-13]
Leptin	By adipose cells, mostly in white subcutaneous fat, stimulated by the release of insulin	Lessening of hunger and appetite by blocking the production of neuropeptide Y and increasing the production of hormones that keep hunger levels in check and increase metabolism, such as corticotropin-releasing hormone[13,14]
Insulin	In the pancreas, in response to the rise of blood glucose levels following consumption of food	Reduction of hunger, in part by stimulating the production of leptin[13]
Ghrelin	In the stomach, stimulus unclear	Increase in appetite and hunger (levels rise before eating and fall afterwards)[11,13]
Glucagon-like peptide-1	In the small intestine, prompted by food intake	Increase in satiety, slowing of gastric emptying, and stimulation of metabolism[13,15,16]
Pancreatic peptide YY	In the ileum and colon, following food consumption	Delay of digestion, allowing for longer periods of satiety, and curbing of appetite by binding to receptors in the brain[17]
Triiodothyronine and thyroxine (also known as tetraiodothyronine)	In the thyroid gland, triggered by thyroid-stimulating hormone	Regulation of metabolism[18]
Cortisol	In the adrenal cortex, occurring in a circadian fashion (levels are highest in the morning and drop throughout the day)	Regulation of metabolism and stimulation of appetite[19,20]

SOURCE: FOR REFERENCES, VISIT OUR WEBSITE AT HTTPS://TODAYSDIETITIAN.COM.