

## IS GHRELIN A HORMONE OF GLUTTONY?

### Summary

The hypothalamus plays a major role in the control of energy balance and food intake. It integrates hormonal, neural and metabolic signals pertaining to body-energy status and, in response to these inputs, coordinates adaptive alterations of energy intake and expenditure. Ghrelin, a peptide produced mainly in the stomach, stimulates feeding and fat deposition. Plasma level of ghrelin is increased under negative energy balance. Ghrelin strongly and dose-dependently stimulates growth hormone release, as

well as a release of prolactin and adrenocorticotropin. Moreover, pretreatment with ghrelin exhibits protective effect against damage evoked by different noxious agents. This protective effect has been found, between others, in the heart, kidney, brain, stomach, intestine and the pancreas. Apart from protective effect, administration of ghrelin exhibits also therapeutic effect in experimental heart infarct, acute pancreatitis or gastric and duodenal ulcers.