

BRAIN-GUT AXIS IN APPETITE REGULATION

Summary

Brain-gut axis is of great importance in regulation of appetite and gastrointestinal functions. Impulses coming from sense organs such as sight, sound and smell are modified in central nervous system and then they are transmitted to enteric nervous system (ENS) through efferent pathways involving the spinal cord and the autonomic nervous system. There are many hormones, peptides and neurotransmitters involved in the neurohormonal regulation of appetite among them the predomi-

nant role is attributed to enterohormones such as: ghrelin, leptin, corticotropin releasing hormone (CRH), neuropeptides orexins and peptides such as peptide YY, human pancreatic polypeptide (PP), glucagon-like peptide-1 (GLP 1), cholecystokinin (CCK) and neuropeptide Y (NPY). The short overview presents the advances in our understanding of brain-gut axis with major focus being addressed to the recent developments in the control of appetite by brain centers and the central as well as peripheral hormonal mechanisms.