



Gastrointestinal Luminal Nutrient Sensing and Physiological Responses—from Basic to Disease

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Message from the Guest Editor

Luminal chemosensory system in the gastrointestinal (GI) tract is considered to sense luminal chemicals, including nutrients, and has a role in inducing suitable local and systemic physiological responses. This system consists of scattered chemosensory cells including enteroendocrine cells, tuft/brush cells such as taste cells in the taste buds, and some unidentified epithelial cells. These cells exist not only in the stomach and small intestine but also in the large intestine; they are considered to sense enterobacterial products, including short-chain fatty acids, and vitamins, etc., and relate to a variety of diseases. Therefore, some beneficial effects of prebiotics, probiotics, and biogenics are possibly based on this system.

The Special Issue solicits manuscripts concerning molecular to whole-body studies in humans and animals, focusing on GI luminal nutrient sensing, as well as physiological and pathophysiological responses, including regulatory responses of the GI motility, mucosal barrier functions, and transepithelial substrate (ion, water, nutrients, and some macromolecules) transport. Experimental papers, review articles, and commentaries are welcome.





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