

Special Issue

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

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.

Guest Editor

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Message from the Editorial Board

Nutrients is an on-line open access journal that was first published in 2009. *Nutrients* adheres to rigorous peer-review and editorial processes and publishes only high quality manuscripts that address important issues related to the impacts of nutrients on human health. The Impact Factor of *Nutrients* has risen rapidly since its establishment and it is now ranked in the first quartile of journals publishing in the field of nutrition and dietetics research.

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