



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

Guest Editor:

Dr. Shin-ichiro Karaki

Department of Environmental
and Life Sciences, School of Food
and Nutritional Sciences,
University of Shizuoka, Shizuoka
422-8526, Japan

Deadline for manuscript
submissions:

closed (25 August 2022)

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.





an Open Access Journal by MDPI

Editors-in-Chief

Prof. Dr. Lluís Serra-Majem

1. Centro de Investigación Biomédica en Red Fisiopatología de la Obesidad y la Nutrición (CIBEROBN), Institute of Health Carlos III, 28029 Madrid, Spain
2. Research Institute of Biomedical and Health Sciences (IUIBS), University of Las Palmas de Gran Canaria, 35001 Las Palmas, Spain
3. Preventive Medicine Service, Centro Hospitalario Universitario Insular Materno Infantil (CHUIMI), Canarian Health Service, 35016 Las Palmas, Spain

Prof. Dr. Maria Luz Fernandez

Department of Nutritional Sciences, University of Connecticut, Storrs, CT 06269, USA

Author Benefits

Open Access: free for readers, with article processing charges (APC) paid by authors or their institutions.

High Visibility: indexed within Scopus, SCIE (Web of Science), PubMed, MEDLINE, PMC, Embase, PubAg, AGRIS, and other databases.

Journal Rank: JCR - Q1 (Nutrition and Dietetics) / CiteScore - Q1 (Nutrition and Dietetics)

Contact Us

Nutrients Editorial Office
MDPI, Grosspeteranlage 5
4052 Basel, Switzerland

Tel: +41 61 683 77 34
www.mdpi.com

mdpi.com/journal/nutrients
nutrients@mdpi.com
X@Nutrients_MDPI