



## **Dietary Glycemic Index and Glycemic Load: Clinical Significance and Limitations in the Prevention, Pathophysiology, and Treatment of Disease**

Guest Editors:

**Prof. Dr. George Dimitriadis**

2nd Department of Internal  
Medicine, Research Institute and  
Diabetes Center, "Attikon"  
University Hospital, National and  
Kapodistrian University of  
Athens, Athens, Greece

**Dr. Vaia Lambadiari**

2nd Department of Internal  
Medicine Research Unit and  
Diabetes Centre, Attikon  
Hospital, Medical School,  
National and Kapodistrian  
University of Athens, Rimini 1  
Street, Chaidari, 12462 Athens,  
Greece

Deadline for manuscript  
submissions:

**closed (20 July 2021)**

### **Message from the Guest Editors**

The glycemic index (GI) was introduced to facilitate carbohydrate exchange in meal planning strategies. This index was subsequently extended to take into account the total amount of carbohydrates in a meal (glycemic load (GL)). There is evidence suggesting that carbohydrate quality is linked to human health. The consumption of high GI/GL foods increases the following: (1) obesity, T2D, dyslipidemia, hypertension, coronary heart disease, and stroke; (2) risk of certain cancers; (3) the activity of brain regions related to reward and craving; and (4) glucose fluctuations and oxidative stress. GI and GL have also been linked to exercise performance. However, although these indices are practical in estimating the plasma glucose-raising potential of foods' carbohydrate contents, their value may be limited, because postprandial glucose excursions may depend on factors such as tissue sensitivity to insulin, the fat/fiber content of meals, time spent consuming meals, method of cooking food, intestinal microbiota, consuming vegetables before carbohydrates when eating, and consuming/skipping breakfast.





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