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## Dietary Modulation of the Immune Function: Direct and Microbiota Dependent Effects

Guest Editor:

**Prof. Dr. Francisco J. Pérez-Cano**

1. Section of Physiology,  
Department of Biochemistry and  
Physiology, Faculty of Pharmacy  
and Food Sciences, University of  
Barcelona, 08028 Barcelona,  
Spain

2. Nutrition and Food Safety  
Research Institute (INSA), 08921  
Santa Coloma de Gramenet,  
Spain

Deadline for manuscript  
submissions:

**closed (10 May 2021)**

### Message from the Guest Editor

Diet is critical in maintaining optimal immune function. Extensive research has demonstrated the immunomodulatory properties of particular nutrients. In this regard, some dietary components are able to modulate the immune response by interacting directly with the mucosal and systemic immune cells, activating receptors (e.g., vitamins) or changing membrane properties or modulating gene expression (e.g., fatty acids). However, some nutrients may influence immune function indirectly, after being metabolized by the microbiota, either by generating new active components (e.g., polyphenol metabolites, short-chain fatty acids derived from fibre) or just by shaping microbial composition and functionality (e.g., probiotics and prebiotics), which in turn, will affect the immune response.

We invite authors to submit review articles and original research describing effects and mechanisms underlying the relationship between nutrition, microbiota and immunity.



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# Special Issue



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2. Research Institute of  
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(IUIBS), University of Las Palmas  
de Gran Canaria, 35001 Las  
Palmas, Spain  
3. Preventive Medicine Service,  
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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

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## Contact Us

*Nutrients* Editorial Office  
MDPI, St. Alban-Anlage 66  
4052 Basel, Switzerland

Tel: +41 61 683 77 34  
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