

## Special Issue

# The Complexity of the B Vitamin Household in Health and Disease

### Message from the Guest Editor

The role of B vitamins in human metabolism is well established. Thiamin, riboflavin, niacin, panthotenate, pyridoxine, biotin, folate, and cobalamine are precursors of essential enzyme cofactors and are called vitamins B1, B2, B3, B5, B6, B7, B9, and B12, respectively. These vitamins must be acquired from food. In addition, humans assimilate B vitamins produced by gut microbiota. The classical picture of the B vitamin household has become more complex recently. It turns out that an estimated 35–60% of the human gut bacteria lack one or more steps in the B vitamin biosynthetic pathways and thus rely on the cohabitant prototrophic species and, presumably, on the dietary status of the host. This interdependence becomes highly relevant when considering the stability of the gut microbiota, the dynamics of pathogenic bacterial populations in the gut, and the effects of both on the development of pathologies in the host. This Special Issue focuses on the human B vitamin household in its increasing complexity that links diet, gut microbiome, and host health.

### Guest Editor

Prof. Dr. R. Martin Vabulas

Charité-Universitätsmedizin, Institute of Biochemistry, Charitéplatz 1, 10117 Berlin, Germany

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Editorial Office  
MDPI, Grosspeteranlage 5  
4052 Basel, Switzerland  
Tel: +41 61 683 77 34  
[ijms@mdpi.com](mailto:ijms@mdpi.com)

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Prof. Dr. Maurizio Battino

Department of Odontostomatologic and Specialized Clinical Sciences,  
Sez-Biochimica, Faculty of Medicine, Università Politecnica delle  
Marche, Via Ranieri 65, 60100 Ancona, Italy

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