



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

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### Message from the Guest Editor

Dear Colleagues,

The role of B vitamins in human metabolism is well established. Thiamin, riboflavin, niacin, pantothenate, pyridoxine, biotin, folate, and cobalamin 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.

Prof. Dr. R. Martin Vabulas

*Guest Editor*





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