

## Secondary Metabolites in Food Digestion

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### Abstract

Probiotics are viable cultures of bacteria or yeasts that benefit human health when ingested in adequate amounts. Their administration is recommended for the prevention or (in some cases) treatment of certain diseases or dysfunctions, such as diarrhoea, irritable bowel syndrome, ulcerative colitis, etc. Recent studies indicate that probiotics have received particular attention due to their ability to modulate nutrient absorption and act as a barrier against pathogenic bacteria in the intestinal mucosa, influencing the gut-brain axis. Although the use of probiotic microorganisms in dietary supplements has increased considerably in recent years, their mode of action has yet to be fully known.

Previous research indicates that the level of minerals in the human body is mainly associated with their amounts in the diet. At the same time, the optimal functioning of the human body is related not only to the amount of minerals but also to their proportion and the percentage of their absorption. In this context, our research aims to investigate the mode of action of probiotic microorganisms regarding their influence on the bioaccessibility and absorption of minerals from various food matrices.

In this direction, the literature points to the possible beneficial effects of probiotic microorganisms on the bioaccessibility of minerals, highlighting that they are involved in the metabolism of minerals (calcium, magnesium, selenium, zinc, etc.), facilitating their absorption.

**Keywords:** Bioaccessibility, Gut Microbiota, Mineral Metabolism, Probiotics.