

# DSM's position on vitamins and nutritional ingredient efficacy

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**Vitamins and nutritional ingredients (e.g., carotenoids, lipids), include micronutrients that support human health and well-being. People need micronutrients to grow, develop, function and stay healthy. Micronutrients also reduce the risk of disease. They help manage and improve our health by enabling essential and/or beneficial actions in our body. Micronutrient inadequacies or deficiencies have been reported as a root cause of health problems.**

**Many micronutrients are essential, which means they are not produced by our body and must be obtained through our diets. A balanced diet can provide the vast majority of essential micronutrients our body needs to stay healthy. However, not all people have access to, or consume, a balanced diet, which results in inadequate or deficient micronutrient intake and potential health problems. The latter is particularly true for populations at risk, such as the elderly, whom often consume an imbalanced diet resulting in frailty and illness.**

## Do vitamin supplements really work?

Yes. As a global science-based company, DSM is a strong believer in, and advocate for, the health benefits of vitamin supplements, particularly in populations at risk of nutritional deficiencies. Vitamins are essential micronutrients and are recognized to be indispensable to human growth, development and health.

DSM is also one of the leading global suppliers of vitamins, carotenoids, minerals, trace elements, nutritional lipids, enzymes and other food or nutritional ingredients to the food, pharmaceutical, personal care and feed industries.

We continue to support scientific research into the efficacy of vitamins and nutritional ingredients to further improve our product portfolio and the benefits it can bring to the health and wellbeing of people around the world.

DSM recognizes that there are diverging views on this topic and is always willing to engage in a discussion on the topic, provided the basis is scientific fact.

## Why are vitamins and nutritional ingredients needed?

Most people in both developing and developed countries do not meet recommended micronutrient intake levels. For example, for vitamin D around 75% of the population in India and over 90% of the population in Northern Europe does not meet the recommended vitamin D dietary intake levels. A recent scientific review also reported that the vitamin E status is inadequate in a substantial part of the studied populations.

Among children, it is estimated that 155 million under five years of age are chronically malnourished. At the same time, approximately 650 million people are obese (WHO), which can also impede the intake and absorption of micronutrients. Micronutrient deficiency, or “hidden hunger,” affects over two billion people worldwide – or one in three people – impeding human and socio-economic development and contributing to the vicious cycle of malnutrition and underdevelopment. As the term ‘hidden hunger’ suggests, the signs are not always visible in those affected, which compounds the difficulty of tackling this nutritional problem adequately.

<sup>1</sup> <https://www.vitamindwiki.com>

<sup>2</sup> Péter et al, A Systematic Review of Global Alpha-Tocopherol Status as Assessed by Nutritional Intake Levels and Blood Serum Concentrations, Int J Vit Nutr Res, 2016