



Vegan Trend

Micronutrient premixes for vegan products



Fortification of vegan products

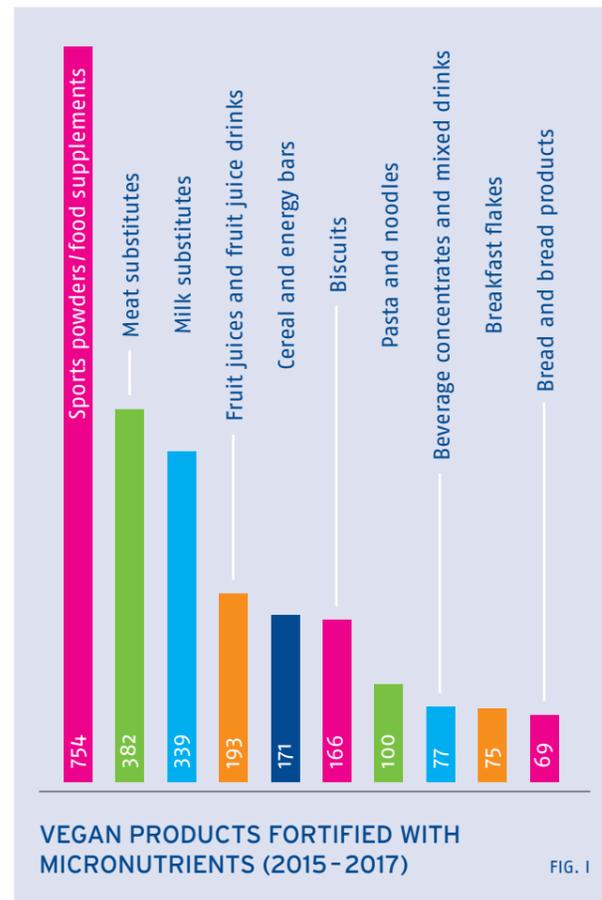
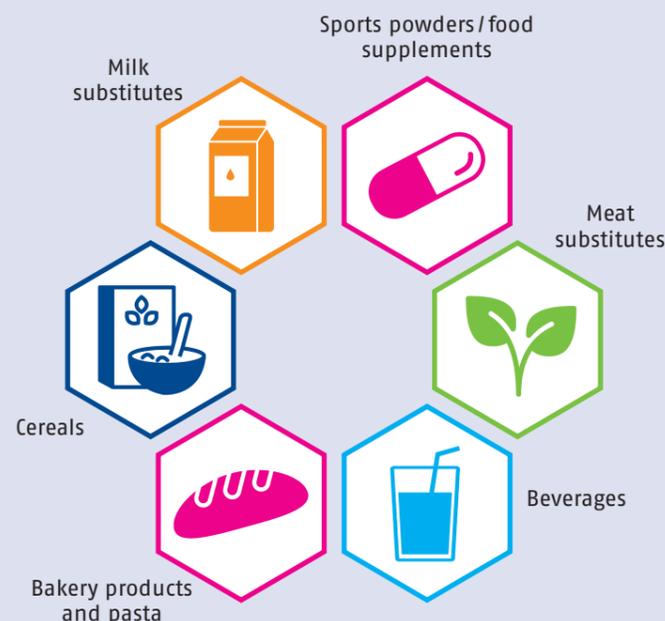
Many people would like to achieve a healthier way of life and make a positive contribution to animal welfare and the environment. That is what leads vegans to do without all products of animal origin – including eggs and dairy products.

With a clever combination of vegetable foods, vegans usually manage to ensure a healthy diet. This often includes legumes, nuts and soy products (e.g. tofu or tempeh), as these contain many of the necessary nutrients. But the supply of micronutrients, which are mainly found in meat, fish, milk and eggs, is lower with vegan nutrition than with a normal mixed diet.

Vegan nutrition may result in a critically low intake of micronutrients. (See green info box and “Micronutrients and their significance”.

Specially composed micronutrient products enable vegans to supplement their diet. Many vegan products are already fortified with micronutrients, and the trend towards these foods is steadily increasing.

Vegan product categories that are often fortified with micronutrients



3,500 VEGAN PRODUCTS

An analysis of the years 2015 to 2017 shows that over 3,500 vegan products fortified with micronutrients were launched worldwide. During this period, the volume of the product group increased. The largest sub-category here is sports powders/food supplements, with a total of about 750 articles, followed by meat substitutes with just under 400 products (see Fig. 1). Milk substitutes are becoming more and more popular, too, and in 2017 the number doubled compared to the year before.

TRENDS

There is a strong trend towards vegan products. According to Innova, there were three times as many vegan products in 2016 as in the reference year 2012. Meat substitutes achieved an increase of 14%, and milk substitutes rose by as much as 20%. This development is still continuing. Vegetable protein claims increased by 49%, which underlines the trend towards foods based on vegetable protein: plant sources are becoming more and more common in traditional applications such as yoghurt, and they are also used in more recent applications such as quark.

Recommendations of the DGE and FDA: In order to prevent deficiency diseases, the German Nutrition Society (DGE) recommends all vegans to supplement their diet with a vitamin B12 preparation. The US Food & Drug Administration (FDA) even goes a step further and explicitly recommends all “mature consumers” over the age of 50 to buy foods fortified with vitamin B12 or the corresponding food supplements. The intake of iron, zinc, omega-3 fatty acids, vitamin D, vitamin B2 and calcium may also be on the borderline or even inadequate.



We offer you detailed information on authorized health claims in our **SMART MICRONUTRIENT CONCEPTS FLYER.**

SternVEGA

The premix with 9 micronutrients, geared to your products for healthy vegan nutrition

- 1... • Vitamin B12
- 2... • Vitamin B2
- 3... • Vitamin D
- 4... • Lysine (amino acid)
- 5... • Iron
- 6... • Zinc
- 7... • Calcium
- 8... • Iodine
- 9... • Selenium

BENEFITS OF THE MICRONUTRIENT PREMIXES

- Each premix is developed individually for a specific application
- Synergisms between the nutrients are taken into account
- We ensure that the products are economical and have optimum processing properties
- Consistent ratios of the ingredients facilitate use of the products and reduce the risk of error
- Free-flowing raw materials permit homogeneous mixing
- SternVitamin offers support in the form of troubleshooting and analytical services

MICRONUTRIENTS AND THEIR SIGNIFICANCE

Vitamin B12 The most critical micronutrient for vegans is vitamin B12, since it only occurs in appreciable amounts in animal products. A severe vitamin B12 deficiency may result in fatigue, “pins and needles” in the hands and feet and memory impairment.

Vitamin B2 The intake of vitamin B2 may be inadequate with vegans, too, since the majority of foods rich in vitamin B2 are of animal origin. Cracked skin at the corners of the mouth and permanent fatigue are possible signs of a deficiency.

Calcium The best sources of calcium are dairy products, but vegetable foods like dark-green leafy vegetables and cabbage varieties contain the mineral, too. Nevertheless, many vegans are unable to cover their calcium requirement. In the long term, this may lead to reduced bone density and an increased risk of osteoporosis.

Vitamin D Besides fatty salt-water fish, our bodies above all need sunlight in order to produce vitamin D from a precursor. In winter, when there is little sunshine, endogenous synthesis is greatly reduced. This may result in deficiency disorders such as unstable bones, allergies and autoimmune diseases.

Iron Many vegetable foods contain iron, but it is less readily available from vegetable sources than from products of animal origin. The intake of iron is increased

by the simultaneous consumption of foods containing vitamin C. Iron is essential for blood formation; a deficiency results in anaemia.

Iodine The main source of iodine is salt-water fish, but it is also present in smaller amounts in milk and eggs. A deficiency may lead, among other things, to hypothyroidism and thus cause fatigue and slowed metabolism. In children it also retards growth.

Lysine is one of the essential amino acids which cannot be synthesized by the body itself. In order to ensure an adequate supply, vegans must be sure to consume a diversity of vegetable foods. Otherwise deficiency diseases such as anaemia, reduced muscle mass, impaired skin regeneration, fatigue and weight loss may occur.

Selenium Fish, eggs and offal are important sources of selenium. The vegetable sources include legumes, fungi and above all Brazil nuts. Impaired muscle and cardiac function and increased susceptibility to bacterial infections may indicate a deficiency.

Zinc The bioavailability of this trace element is higher from animal foods than from vegetable sources. Vegans should therefore increase their zinc intake slightly in order to cover their requirement. Typical symptoms of a zinc deficiency include increased susceptibility to infections.



What can we do for you?

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