

# FOOD FORTIFICATION

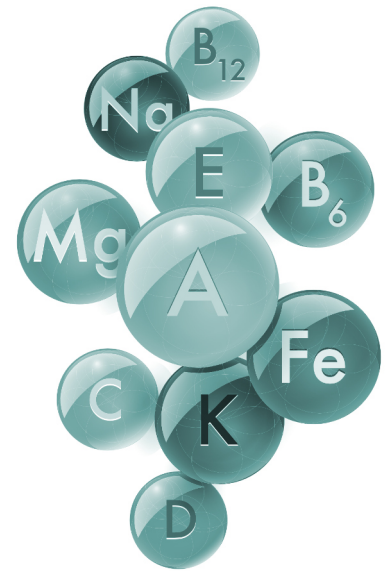
## Why are vitamins and minerals added to some foods?

### Vitamins and minerals are essential for maintaining overall health

Vitamins and minerals play a **vital role in supporting essential body functions**, including strengthening the immune system, promoting healthy growth and development, and enabling cells and organs to function properly. A **deficiency in vitamins and minerals** can lead to **various health issues**.

In many cases, a well-balanced diet can provide the necessary nutrients. However, in other situations, fortified foods or dietary supplements can be beneficial. In fact, food **fortification is sometimes required by regulation** to ensure appropriate nutritional composition or to address nutrient deficiencies, especially in vulnerable or specific populations.

In particular, **Foods for Special Medical Purposes (FSMPs)**, **Infant Formula (IF)**, **Follow-On Formula (FOFs)**, and **Baby Foods** have specific compositional requirements by Regulation, including the addition of vitamins and minerals, to meet the specific needs of the target population. For other food categories (e.g., Sports Foods, Young Child Formula), however, such regulatory requirements do not exist.



### Fortification to support specific nutritional needs

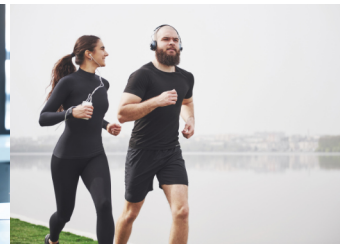
The millions of people with specific nutritional needs include:



Infants and young children



People with medical conditions, disorders and diseases



Sports people



People managing their weight

### The European Commission would like to set harmonised maximum levels for vitamins and minerals

There are **ongoing discussions at EU level to set maximum levels** for vitamins and minerals in fortified foods and food supplements. While the industry supports harmonization, the currently discussed approach would have a **detrimental impact on specialised nutrition products**, which are often fortified to meet the particular nutrient needs of vulnerable or specific populations.

These examples show why appropriate fortification of specialised nutrition products should continue to be allowed:

#### Sports foods

Sportspeople often have **increased requirements for certain nutrients** compared to the general population, depending on the intensity and duration of their activity. While sports foods must comply with general EU regulatory framework including food safety, labeling, and nutrition claims legislation, there are currently **no specific EU-wide compositional standards** for these products.

Fortifying sports foods with **sodium is key to maintaining electrolyte balance and preventing dehydration** during prolonged or intense activity. Sodium supports fluid retention, nerve function, and muscle contractions - essential for performance. Since large amounts are lost through sweat, especially in hot conditions, deficiency can lead to cramps, fatigue, or even hyponatremia.

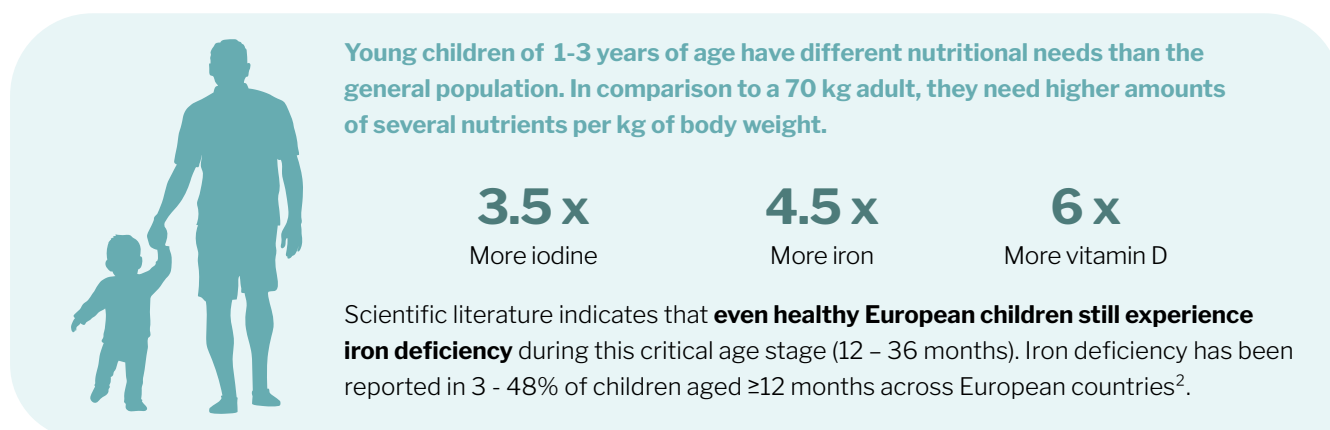
Water alone is insufficient to replace **lost electrolytes**. Recognizing this need, there are specific health claims at EU level regarding the addition of sodium to carbohydrate-electrolyte solutions<sup>1</sup>. However, there are also other sport foods on the market, such as energy gels and protein-rich products in which incorporating an adequate amount of sodium, or other micronutrients, is crucial to **optimize performance, sustain endurance, and support recovery**.



In addition, Regulation (EU) 432/2012 recognises the role of other nutrients in supporting exercise performance and recovery. For example, **vitamin C contributes to the normal function of the immune system** during and after intense physical exercise, as well as to the reduction of tiredness and fatigue and the protection of cells from oxidative stress. **Vitamin D contributes to the maintenance of normal muscle function**, while calcium is essential for both normal muscle function and the maintenance of normal bones, critical for athletes exposed to repetitive mechanical stress. Similarly, **potassium contributes to normal muscle function** and maintenance of **normal blood pressure**.

## Formula for Infants and Young Children

**Infant formula** (0-6 months) and **Follow-on Formula** (6-12 months) must be fortified, according to legislation in the EU and elsewhere. Unlike Infant formula and follow-on formula, the composition of **young child formula** (12-36 months) is not regulated in the EU. Young child formula is fortified inter alia with iron, and existing nutritional data demonstrate that YCF can be a suitable measure to increase the intake of this critical nutrient in addition to a balanced diet.



**Fortification has been shown to improve haemoglobin levels** and reduce **anaemia prevalence**, making it a key public health strategy in combating childhood malnutrition. This is at **odds with the current EC proposal**, where iron would no longer be accepted for use in fortified foods and food supplements.

## Meal replacements for weight control

These products are **designed to replace one or two main meals per day** and must provide between 200 and 250 calories per serving. To ensure adequate nutrient intake, the EU has set **specific compositional criteria**, including the required addition of certain vitamins and minerals.

Composition requirements for **meal replacements are regulated through a health claim at EU level**<sup>1</sup>. These products are intended to partially replace the overall diet, and do not add up to it. Hence, the conditions of use of the authorized health claim states that **meal replacements should provide at least 30% of the nutrient reference values (NRV) of vitamins and minerals per meal as laid down in the Regulation on food information to consumers**<sup>3</sup>. Therefore, it is important that the setting of maximum amounts for vitamins and minerals in food does not lead to the situation where the minimum required 30% of vitamins and minerals per meal is also the maximum allowed amount.

<sup>1</sup> Regulation (EU) No 432/2012 establishing a list of permitted health claims made on foods

<sup>2</sup> van der Merwe LF, Eussen SR. Iron status of young children in Europe. Am J Clin Nutr. 2017 Dec;106 (Suppl 6):1663S-1671S. doi: 10.3945/ajcn.117.156018. Epub 2017 Oct 25. PMID: 29070549; PMCID: PMC5701725

<sup>3</sup> Regulation (EU) No 1169/2011 on the provision of food information to consumers