

VITAMIN B12

Also known as cobalamin, this vitamin is **essential for the metabolism of proteins, carbohydrates, and fats**, and together with folic acid (vitamin B9) it participates in the process of DNA production. Vitamin B12 cannot be synthesized by vegetables, so it is found only in food sources of animal origin or **can be produced by some bacteria in our intestinal microbiota**.

FOOD SOURCES



Mollusks
10 units (100 g)
98 µg



Braised beef liver
1 small steak (80 g)
66 µg



Grilled beef
1 medium filet (140 g)
11,4 µg



Tuna
1 can (120 g)
3,5 µg



Milk 1 cup
(200 ml)
1 µg



Shrimp
10 small units (50 g)
0,9 µg



Cheese
2 slices (30 g)
0,7 µg



Egg 1 unit
(40 g)
0,4 µg

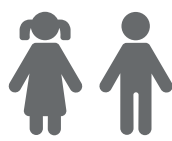
DIGESTIVE TRACT SURGERIES

People who have had part of their stomach removed (bariatric surgery or gastrectomy) are at greater risk of developing a deficiency.

NUTRITIONAL REQUIREMENTS



0 - 3 years old 0,4 - 0,9 µg/day



4 - 13 years old 1,2 - 1,8 µg/day



+ 14 years old 2,4 µg/day



all ages 2,6 µg/day



all ages 2,8 µg/day

SIGNS OF DEFICIENCY

One of the most common causes is **malabsorption**, and the effects include **megaloblastic anemia** (large red blood cells, as opposed to iron deficiency anemia, in which the cells shrink in size), problems with the immune system and gastrointestinal tract in young children, and the possible impact on intrauterine growth in pregnant women.

VEGETARIANS

People who restrict their intake of animal foods may also have an increased risk of developing deficiency.