

## **About Vitamin B12 and B12 Deficiency**

### *What does vitamin B12 do?*

Vitamin B12 is one of the B-complex vitamins. It is important for the function of your nerves and for the production of the DNA and RNA in your cells. It also works together with folic acid to make red blood cells and other compounds that are important for your cardiovascular and immune systems.

### *What happens if my B12 is low/if I don't get enough B12?*

If you do not have enough B12 you may notice that you become fatigued easily and feel tired and weak. You may experience dizziness, heart palpitations (rapid heart beats), and feel short of breath. Other common symptoms are poor appetite, sore/swollen tongue, and numbness and tingling of the hands and feet.

It is common for people with low B12 to develop anemia because they can't make blood cells normally. The cells become large and the nucleus of the cell is not formed properly. This called pernicious anemia. If B12 deficiency is allowed to continue for a long time, serious problems can develop such as permanent damage to the nerves, memory loss and dementia.

### *What are other symptoms?*

- Diarrhea
- Yellowish skin and eyes
- Irritability and depression
- Psychosis
- Muscle weakness, difficulty walking
- Changes in vision
- Burning sensation around mouth

### *Where can I get B12?*

B12 is only found in foods of animal origins. Plants do not make B12 – so fruits, vegetables, beans and grains will not supply this vitamin. Good dietary sources of vitamin B12 include fish, dairy products, organ meats (particularly liver and kidney), eggs, beef, and pork. You can also get B12 in dietary supplements. It is found in most multivitamins, in B-complex, and alone in tablets, capsules, liquids and sublinguals (pills that dissolve under the tongue). It is also available as a prescription as injections or as a nasal spray. If you have B12 deficiency, your doctor will probably ask you to take supplemental or prescription B12 and watch your dietary intake.

### *Other important things*

If you have had malabsorptive weight loss surgery such as gastric bypass, it is harder for the body to absorb B12 from food and from some types of supplements. For this reason, you must take B12 through another route, such as nasally, sublingual (under the tongue) or regular injections to prevent problems. If you have B12 deficiency, it is important that you follow up with your doctor for lab tests and other recommended care.