

# Integrated Regional Falls Program



North Simcoe Muskoka LHIN

## Vitamin B12: A Guide to your Needs



**We all need vitamin B12** to make healthy red blood cells and for the proper function of the brain and nerve tissues. It also is used in several enzyme reactions and helps to metabolize carbohydrates, fats and protein.

### What are the symptoms of B12 deficiency?

If you have low vitamin B12 levels, you could have anemia, weakness, fatigue, palpitations, numbness or tingling in your toes or fingers, slowed or abnormal thinking or behaviors, or feel unsteady on your feet.

### What causes of B12 deficiency?

**Poor dietary intake:** food intake that is low in B12 **can contribute to deficiency.** For example, vegetarians are at risk of this type of deficiency because B12 is mainly found in animal food sources such as meat.

**Absorption disorders:** pernicious anemia, pancreatic insufficiency, Crohn's disease, or chronic diarrhea can lead to deficiency.

**Surgical procedures:** gastric bypass surgery or other types of stomach or bowel surgery can impede the body's ability to absorb B12.

**Medications:** Long-term use of medications that suppress acid production such as; Omeprazole and Ranitidine can result in deficiency. Also, Metformin, a medication for diabetes, may also cause decreased absorption of vitamin B12.

### Aging Process:

As we age, our bodies are less able to absorb vitamin B12 and older persons become at increased risk of not getting all the vitamin B12 that they need. As we age often there is decreased acid in the stomach. Some studies report 10 to 30 % of older adults may have decreased production of stomach acid and therefore will have decreased absorption of vitamin B12. A vitamin B12 blood level is considered to be vitamin B12 deficient when it is less than 150 pmol/L.

## How much B12 do I need?

For men and women 19 years of age or older, 2.4 mcg each day is the Recommended Daily Intake or RDI of vitamin B12.

## How do I get B12?

Vitamin B12 is found in its natural form in such foods as; eggs, milk and milk products, meat, fish and poultry.



It may also be found in other “fortified foods” such as; **rice, soy beverages, and meat substitutes.** Certain types of algae plants are the only plants that naturally contain vitamin B12.

Health Canada recommends adults over 50 years of age ***include foods fortified with vitamin B12 or take a supplement*** containing vitamin B12 in order to meet their Recommended Daily Amount.



If your health care professional tells you that you are low in B12, **you may need to take a supplement that could be either in a tablet form or an injection.**

Vitamin B12 causes very **few side effects at the usual doses**, however a small number of people have reported side effects such as; mild diarrhea, itching, discolored urine, blood clots or allergic reactions.

Certain people such as those who have Leber’s Disease (a genetic eye disease) and those allergic to cobalt or cobalamin should not receive vitamin B12 supplements. **All patients should consult with their health care provider before they start on vitamin B12 supplements.**

### References:

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