



B-12 SHOT

Questions & Answers

B12 is a B-vitamin. It is found in a variety of foods such as fish, shellfish, meats, and dairy products. Although methylcobalamin and vitamin B12 are terms used interchangeably, vitamin B12 is also available as hydroxocobalamin, a less commonly prescribed drug product, and methylcobalamin. Methylcobalamin is used to treat pernicious anemia and vitamin B12 deficiency, as well as to determine vitamin B12 absorption in the Schilling test. Vitamin B12 is an essential vitamin found in foods such as meat, eggs, and dairy products. Deficiency in healthy individuals is rare; the elderly, strict vegetarians (i.e., vegan), and patients with malabsorption problems are more likely to become deficient. If vitamin B12 deficiency is not treated with a vitamin B12 supplement, then anemia, intestinal problems, and irreversible nerve damage may occur.

The most chemically complex of all the vitamins, methylcobalamin is a water-soluble, organometallic compound with a trivalent cobalt ion bound inside a corrin ring which, although similar to the porphyrin ring found in heme, chlorophyll, and cytochrome, has two of the pyrrole rings directly bonded. The central metal ion is Co (cobalt). Methylcobalamin cannot be made by plants or by animals; the only type of organisms that have the enzymes required for the synthesis of methylcobalamin are bacteria and archaea. Higher plants do not concentrate methylcobalamin from the soil, making them a poor source of the substance as compared with animal tissues.

Vitamin B12, or methylcobalamin, is essential to growth, cell reproduction, hematopoiesis, and nucleoprotein and myelin synthesis. Cells characterized by rapid division (epithelial cells, bone marrow, myeloid cells) appear to have the greatest requirement for methylcobalamin. Vitamin B12 can be converted to coenzyme B12 in tissues; in this form it is essential for conversion of methylmalonate to succinate and synthesis of methionine from homocysteine (a reaction which also requires folate). In the absence of coenzyme B12, tetrahydrofolate cannot be regenerated from its inactive storage form, 5-methyltetrahydrofolate, resulting in functional folate deficiency. Vitamin B12 also may be involved in maintaining sulfhydryl (SH) groups in the reduced form required by many SH-activated enzyme systems. Through these reactions, vitamin B12 is associated with fat and carbohydrate metabolism and protein synthesis. Vitamin B12 deficiency results in megaloblastic anemia, GI lesions, and neurologic damage (which begins with an inability to produce myelin and is followed by gradual degeneration of the axon and nerve head). Vitamin B12 requires an intrinsic factor-mediated active transport for absorption, therefore, lack of or inhibition of intrinsic factor results in pernicious anemia.

Methylcobalamin B12 Shot

How is ours different from the doctors or weight loss clinics? It comes down to dose size and molecules. Cyanocobalamin is the traditional choice of both places. It is synthetic so it is cheap, stable, and easy to store. Methylcobalamin is naturally occurring, does not shelf well and is quite expensive. We also use a 5mg dose, versus most places using 1mg doses. Cyanocobalamin is made with cyanide molecules to create its stability. The body has to strip the stable cyanide, then put the cobalamin (b12) through the folate wheel to use it. This process causes a lot (80% or more) to not be absorbed by the body. Injecting cyanocobalamin is no more effective than swallowing it. Methylcobalamin is natural, and bioavailable immediately. Achieving as high as 96% absorption rates. As a result, visits to us are far less frequent.

Most people look to B12 injections for energy or metabolic reasons. But B12 affects so much more than just the energy or ability to lose weight. What most people do not know is that B12 helps with Red Blood cell formation and Anemia prevention. It can prevent major birth defects in future babies. It helps bone health and has a hand in preventing Osteoporosis. It can reduce the risk of Macular Degeneration (blurry vision as we get older). It improves mood and has direct effects on depression. It prevents the loss of neurons in the brain. It improves heart health by lowering the level of the amino acid Homocysteine in the body that is linked to heart disease. Lastly, it even plays into the skin, hair and nail health.

How long will it take to feel it?

This is a loaded question. The reason it is difficult to answer is that we are not pulling a blood panel to determine deficiency levels. If VERY deficient one may feel tired after the first round and could potentially develop acne. The tired feeling comes from jump starting a lot of the above listed systems and the body feeling exhausted running them. The acne is proof the immune system is fired back up and is fighting infection below the skin. It is also proof there may not be adequate water intake => Do not overmedicate the skin. Give the immune system some water and time to kill the bacteria. It is not pleasant, but it is normal. If only slightly deficient it may be the same day or in the soon to be days after. If nothing is felt immediately, this is also common. We recommend doing at least 3 rounds of shots to give the body time to recognize that it is going to be supplied regularly. A good judge of these shots working is lowered irritability, mental clarity, better sleep and circulation efficiency. Everyone likens feeling "energy" to a caffeine buzz. That is not what general energy feels like. We are not releasing adrenaline into the blood the way caffeine does. It will not feel like that, so do not expect it.

Most people pair the Methylcobalamin B12 with the Lipo shot because they work well together. This does not mean they are ineffective alone.

Dosage?
1000mcg

