

Rethinking & Clarifying the Vitamin B12 Issue

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There is no such thing as a B12 deficiency, even in 100% raw vegan food eaters. They do not have to eat dirt, animal products, or take pills to secure coenzymes of B12. Bacteria in the intestinal tract make it for us, and the metabolically usable and necessary forms of coenzyme B12 are contained in unprocessed, fresh natural plant foods, particularly in nuts and seeds. The real problem in so-called B12 deficiency is a failure of digestion and absorption of foods, rather than a deficiency of the vitamin itself.

Vitamin B12 coenzymes are found in nuts and seeds as well as in many common greens, fruits, and many vegetables. If we ate 100 grams of green beans, beets, carrots, and peas we would have half of our so-called daily minimum requirement of Vitamin B12 coenzymes providing our digestion and absorption are normal. From Rodale's *The Complete Book of Vitamins*, page 236 we find the following clarification: "As you know, the B complex of vitamins is called a 'complex' because, instead of being one vitamin, it has turned out to be a large number of related vitamins, which appear generally in the same foods."

A little publicized source of active Vitamin B12 coenzymes is from bacteria in the mouth, around the teeth, in the nasopharynx, around the tonsils and in the tonsillar crypts, in the folds at the base of the tongue, and in the upper bronchial tree. This source alone will supply sufficient quantities of Vitamin B12 coenzymes for the very small requirement of total vegetarians, especially considering that their needs for this vitamin are not as great as for those on conventional diets.

I have studied the Vitamin B12 issue thoroughly, and have learned that biochemists, nutraceutical scientists, and many writers mistakenly use the term Vitamin B12 for cyanocobalamin, **THAT IS NOT USABLE BY THE BODY BUT** which is in all vitamin B12 supplements. When speaking of Vitamin B12 they are referring to the semisynthetic Vitamin B12 (cyanocobalamin) that initially as contaminated with poisonous cyanide during its chemical extraction from animal tissues. Carbon columns are used during the extraction process and the carbon combines with nitrogen from the medium forming the poisonous cyanocobalamin, that scientists insist on calling Vitamin B12. The original method used to extract Vitamin B 12 from its sources included heating the medium in a weak acid, the addition of cyanide ion, and exposure to light. In this process the coenzymes were converted to cyanocobalamin, yet this was over looked. (Review of Physiological Chemistry, Harper, Harold A., Lange Medical Publications, New York, 1977, page 181. Also refer to Cobalamin: Biochemistry and Pathophysiology, Wiley. N. and F. Sicuteri, New York, 1972.) **MOREOVER**, in the manufacture of vitamin supplements, cyanide is added to the medium because the carbon and nitrogen are needed to form large molecules as are found in vitamins; and **IN ADDITION** they need it to extract the B12 from fermentation liquors and liver homogenates. Carbon is needed in great quantities when making vitamins or any other manufactured vitamin or substance that mimics the natural vitamin that normally contains a lot of carbon.

THE TWO VITAMIN B12 COENZYMES KNOWN TO BE METABOLICALLY ACTIVE IN MAMMALIAN TISSUES ARE 5-deoxyadenosylcobalamin and methylcobalamin (methyl-B12).

When extracted in light, these two coenzymes undergo photolysis and are destroyed. Natural B12 is found solely in plants and animals, and that is the only form that can be called “coenzyme B12.” If an animal or individual is given cyanocobalamin the body removes the cyanide because it is not usable as a coenzyme and it is toxic. Then the cobalt of the former cyanocobalamin can combine with other substances that are not toxic and actually form Vitamin B12 coenzymes that are usable by the body. These normally existing Vitamin B12 coenzymes are labile and break down easily unless inside living tissue.

Potassium in the body can react with the cyanide found in cyanocobalamin – the “Vitamin B 12” – and form toxic potassium cyanide (KCN). Potassium cyanide is a poisonous compound used as a fumigant. This is one reason why the body jettisons the “Vitamin B 12” (i.e., cyanocobalamin) injections so rapidly. Within 24 hours most (about 90%) of the cyanocobalamin in supplements has been eliminated.

The names of cobalamins formed by the body or in a laboratory are: 1. hydroxocobalamin if it combines with a hydroxyl ion (OH), and 2. aquocobalamin, when it combines with water. Cobalamin also combines with anions such as nitrite a form of nitrogen, chloride, and sulfur. These are not usable by the body. The two active coenzymes that can be formed in the body after stripping off the cyanide are 5’deoxyadenosylcobalamin, or adenosylcobalamin for short, and methylcobalamin. The problem is that the cyanide is toxic and makes many people sicker than they were before taking the supplement.

Cyanocobalamin is in every vitamin B12 supplement known because it is stable and less costly to manufacture. But it is not usable in the body. If the body has sufficient energy it may be able to offload the cyanide and benefit from the useful component. Mainly, what people experience after taking cyanocobalamin supplements is stimulation. The toxic effect of the cyanide triggers a rush of energy as the body works hard to excrete the poison, and this fools people into believing that the supplement has “worked” to heal them. Meanwhile, if their blood tests show an increase in B12, it mainly reflects the amount of the CYANOCOBALAMIN in the blood stream. The usable forms are carried into the cells and can’t be discovered by testing the blood as is the current practice. Blood tests are often inaccurate and, as previously stated, in the case of cyanocobalamin supplementation and B12 injections, about 90 % of it has been eliminated from the body in 24 hours.

Looking at it Hygienically, no Vitamin B12 therapy can cause a recovery from any so-called efficiency disease. It may only hide the symptoms and cannot give an individual health. When people report that their apparent B12 deficiency symptoms have been relieved by cyanocobalamin supplementation, they are mistaken. They are not getting usable Vitamin B12 coenzymes, and their bodies are forced to convert the cyanide form into the active forms, methylcobalamin, and adenosylcobalamin. This extra function stimulates but wastes nerve energy, and they are actually getting worse, not better. They have not addressed the cause of their troubles.

In summary, vegans and raw fooders all have sufficient amounts of coenzyme B12 in their diets, and FROM THAT produced in their bodies. The most common basic cause of a natural cobalamin deficiency is a failure to digest, absorb and utilize the various cobalamins from food and from the intestinal tract as in the case of gastritis or gastroenteritis. The cause of malabsorption is commonly

a gastrointestinal disorder and this was known by pathologists way back in the 1800s. In this case, one's lifestyle must be assessed and brought into unison with the needs of the living organism.

Furthermore, absorption of the natural B12 coenzymes can take place in the mouth, throat, esophagus, bronchial tubes and even in the upper small intestines, as well as all along the intestinal tract. THIS DOES NOT INVOLVE THE COMPLEX ENZYME MECHANISM FOR ABSORPTION (INTRINSIC FACTOR) IN THE SMALL INTESTINE AS REQUIRED BY CYANOCOBALAMIN. THE COENZYMES ARE ABSORBED BY DIFFUSION FROM MUCOUS MEMBRANES.

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