

YOU NEED TO KNOW THE TRUTH ABOUT VITAMIN B6 TOXICITY

Over the past several years, the Health Food Ninnies have worked themselves into a frenzy over the discovery that Vitamin B6 can be toxic. The Health Food Industry Supplement Manufacturers try to smother the information because they have so much invested in mega vitamin products that would suffer a huge sales decline if the bad news about B6 spreads.

And among Alternative Health Care Providers there is a dualistic response to the news. Those who base much of their “natural” therapy on mega doses of supplements want to poopoo the idea because again, it would stymie sales of the remedies they peddle. On the other side of the fence are the Alternative Medicine Practitioners who do not use vitamin supplements to any great degree, and they would love for the bad news about B6 to get out.

So what is the truth? Is Vitamin B6 really toxic? Yes and no.

The accusation against B6 is specifically that it is neurotoxic --- causing peripheral neuropathy. Is Vitamin B6 guilty or not guilty? ----- The first thing to understand is that Vitamin B6 is a critically essential nutrient --- and --- there has never been a single case of neuropathy associated with food intake. There have, however, been reported cases of peripheral neuropathy associated with Vitamin B6 toxicity from over-supplementation.

Up until a few years ago, the number of B6 neuropathy cases reported worldwide was only about 50 --- not 50 per year --- but 50 ever. But once the “news” of potential toxicity got out, the number of reported cases has multiplied many fold among those who supplement with Health Food Store vitamins.

Again, what’s the story?

One good study from the literature refers to the condition as “The Vitamin B6 paradox”. ----- Vrolijk NF, et al. The Vitamin B6 Paradox: Supplementation with High Concentrations of Pyridoxine Leads to Decreased Vitamin B6 Function. Toxicol In Vitro. 2017.

Both the paradox and the misunderstanding about Vitamin B6 toxicity derive from a failure to define clearly the nature of what is commonly called “Vitamin B6”. ----- The term B6 collectively refers to 6 different isomers ---- and only one of those 6 forms --- Pyridoxal 5-Phosphate --- is the biologically active form. The other five forms of Vitamin B6 can, to a limited extent, be converted to the active Pyridoxal 5-Phosphate. Only one of those 5, Pyridoxine, is neurotoxic.

Guess which form of Vitamin B6 is found in at least 90% of all Health Food Store supplements and 90% of all remedies pushed by Alternative Medicine Practitioners? Yes --- unfortunately, it is the cheap, neurotoxic Pyridoxine --- often found in mega dose quantities. Guess which form of Vitamin B6 you find in your Nutri-Spec Supplements? Yes, of course --- your Nutri-Spec supplements contain only the biologically active and totally non-toxic form of Vitamin B6, Pyridoxal 5-Phosphate.

What is the mechanism by which Pyridoxine is neurotoxic? ----- Pyridoxine inhibits the production of two enzymes essential to Pyridoxal 5-Phosphate function. In nerve cell culture, the inactive Pyridoxine completely inhibits the active Pyridoxal 5-Phosphate. Consequently, the neurological symptoms of "Vitamin B6" supplementation are similar to those of Vitamin B6 deficiency. That, then, is "The Vitamin B6 Paradox". The more Health Food Industry "Vitamin B6" you take, the greater your Vitamin B6 deficiency.