It’s Time to Bring Tryptophan Back

The British government has recently reversed its 16-year ban of the amino acid tryptophan and will allow its sale once again as a food supplement. The United Kingdom joins other countries such as Japan and the Netherlands in letting the public have access to this valuable nutrient, which is an effective treatment for depression, bipolar disorder, insomnia, premenstrual dysphoric disorder (a component of premenstrual syndrome), bulimia, some types of pain, and possibly migraines and obsessive-compulsive disorder. It is time for the US Food and Drug Administration (FDA) to follow the lead of its counterparts in these other countries by ending its ban on this safe and effective natural compound.

Tryptophan is one of the eight essential amino acids and is present in varying amounts in protein-containing foods. In addition to serving as a building block for protein synthesis, tryptophan is a precursor to serotonin, a neurotransmitter involved in the regulation of mood, appetite, and other aspects of neuropsychiatric function. Tryptophan is also converted in the body to niacin and picolinic acid, the latter of which appears to play a role in zinc absorption and transport.

Numerous clinical trials have demonstrated therapeutic benefits of tryptophan, and tens of millions of people were taking it during the 1980s, without experiencing significant side effects. However, in 1989, an epidemic of eosinophilia-myalgia syndrome (EMS), which affected more than 1,500 people in the US and was responsible for at least 27 deaths, was linked to the use of tryptophan supplements, which were subsequently banned by the FDA.

Further research traced the EMS epidemic to tryptophan made by a single Japanese manufacturer. That company had recently changed its manufacturing process and had inadvertently introduced one or more contaminants into the product. After it was determined that EMS was almost certainly caused by a contaminant, and not by tryptophan itself, the amino acid was allowed to return to the market in several countries. To date, there have been no reports of EMS being caused by ingestion of uncontaminated tryptophan.

Despite tryptophan’s apparent safety and its obvious clinical benefits, the FDA took years before allowing tryptophan back on the market in the US, and then only by prescription, at a price three times what it would cost over the counter (not including the doctor’s fee). Were tryptophan readily available to the public, it would compete successfully against some of the best-selling drugs on the market, including Prozac, Zoloft, Paxil, Celexa, and Ambien, perhaps reducing total annual revenues from the sale of these drugs by several billion dollars. Tryptophan would also compete with Sarafem, a drug approved for the treatment of premenstrual dysphoric disorder.

Sarafem is actually Prozac (fluoxetine) under a different name. Apparently, someone in the marketing department at Eli Lilly determined that women would be turned off by the thought of taking Prozac for PMS, because Prozac is for depressed people. Sarafem, on the other hand, evokes images of Seraphim, the highest order of angels in the Celestial Hierarchy. This apparent willingness of drug companies to mislead people with word-game mind-games is one of many examples of their sell-drugs-any-way-you-can mentality. Therefore, it would not be surprising if the pharmaceutical industry, which is one of the largest contributors to political campaigns and enjoys a cozy relationship with the FDA, has been calling in a few favors to keep tryptophan off the market.

Fortunately, almost everyone is mad at the drug companies right now, for engaging in such misanthropic activities as price gouging, withholding evidence about the dangers of its products, putting out misleading advertisements, and exerting undue influence on the conduct and interpretation of research studies. A lot of people are also mad at the FDA for various reasons. So, now is the perfect time to point out that the public is being harmed, while the drug companies are profiting, from the government’s misguided policy regarding tryptophan.

Of course, with the unrestricted availability of tryptophan comes the responsibility to use it wisely. The package insert should point out that tryptophan interacts with several different antidepressants and with other drugs that inhibit serotonin reuptake, potentially increasing both their efficacy and their toxicity. Therefore, people taking any of these medications should not take tryptophan without supervision by a doctor.

Alan R. Gaby, MD