

PBS ExposÃ© Spotlights Truth About Dangerous Supplements



By Ruth Kava — January 21, 2016



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Approximately 50 percent of Americans take some sort of dietary supplements whether it's a standard vitamin/mineral mix, herbal or other botanical product, amino acids and proteins or essential fatty acids. The options are aplenty, as there are some 85,000 different dietary supplements in the United States.

Despite their variety, one thing they all have in common is a lack of oversight and regulation, according to a hard-hitting exposÃ© by the PBS show "[Frontline](#) [2]," which aired this week. The results of these deficits, clearly outlined by the investigation, leave Americans prey to adulterated products, those with no active compounds, and even to those with excess products in other words, to snake oil. And this is not just a simple case of mislabeling, since some of these supplements have caused death and serious illnesses.

Adulterated products comprise one aspect of the problem for example, a vitamin/mineral mix that accidentally contained anabolic steroids. As the broadcast showed, this resulted in changes in sexual characteristics in users, such as female voice changes and excess hair, and male breast growth.

More perturbing was the situation in Hawaii, where a popular sports supplement contained a botanical that caused over 50 cases of liver damage, some of which required consumers to have liver transplants. Similarly, supplements containing ephedra (now banned) were linked to 120 deaths.

Even supplements that contain what the label lists can cause health issues as was the case described by researchers at the Children's Hospital of Philadelphia. Their pharmacy tests supplements designed for patients, and in one case they found that a vitamin D supplement for premature infants contained more than twice the labeled amount of the vitamin. Or in another

situation, fish oil supplements, very popular items which are supposedly sources of essential fatty acids that are anti-oxidants, were rancid. These spoiled items would harm, rather than help cardiovascular disease.

Fortunately, technology is helping pinpoint some frankly fraudulent products. DNA analyses been used by investigators who found that many botanical products contain none, that's right none of the labeled ingredient. For example, they found that supposed black cohosh supplements contained DNA from rice and other plants, but none from black cohosh (this product supposedly ameliorates the symptoms of menopause and premenstrual syndrome, among others). Indeed, 60 percent of the botanical supplements tested contained the wrong ingredients, and one third were out and out fakes.

All of this, of course, begs the second most important question about dietary supplements: Even if they were all safe, are they effective?

And here we have a crucial issue because of the 1994 Dietary Supplement Health and Education Act (DSHEA), dietary supplements do not have to undergo the rigorous testing required of pharmaceutical products before they hit the marketplace. The FDA can't act to remove a dangerous product unless harm can be demonstrated as Frontline put it, you almost have to have someone die before the FDA can act.

Supposedly supplement manufacturers have to adhere to good manufacturing procedures, but with over 4,000 manufacturers of such products and only 25 FDA employees dealing with these issues, the completeness of the oversight is highly questionable, at best.

If I have one issue with the Frontline exposé, it would be that the limitations imposed on the FDA by DSHEA are not discussed in more detail. But perhaps that topic by itself could be the focus of another investigation. One thing that is clear is that "Promotion does not equal proof," and no matter what the ads say, there is little or no science to back up most supplement health claims.

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