

Selling Health in a Bottle: How Consumers are being Ripped Off

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There are hundreds of nutrition researchers in this country and the United States. Every aspect of diet and health comes under scrutiny. Yet, for some reason, one topic has been almost ignored, namely the way hundreds of supplements with no proven value are being sold to a gullible public. The people of Canada are being swindled out of hundreds of millions of dollars every year.

Now some supplements may be useful. A daily vitamin-mineral supplement can be beneficial for many people. There are a handful of other supplements where scientific studies have produced positive results. For example, chondroitin and glucosamine are helpful in arthritis, while St. John's wort is often effective in depression, at least in less severe cases. But if the folks who market supplements contented themselves with only those products where the science is strong, then sales would be low.

It all boils down to money and market expansion. Most supplements that actually do something useful cost no more than four dollars per month. But millions have been persuaded that what they really need are supplements that cost anything from \$20 to \$50 per month for each one. And there is a sophisticated industry cashing in on the public's dangerous combination of a quest for health and ignorance of medical science.

What we repeatedly see are claims that reduce the exceedingly complex workings of the body down to concepts that are so simple that anyone can easily understand them. Often, weak evidence is presented as if it were proven facts, while, in many cases, the evidence simply does not exist. Here are some of the common claims.

- The supplement will induce detoxification (perhaps by a herb stimulating the liver). The idea is that the supplement helps remove toxic chemicals, leading to improved health. But there is no real evidence to support this.
- The supplement stimulates the immune system and will thereby improve the health. Like the first claim, this one is attractive as it is easily understood. It is certainly true that a weak immune system, as in an AIDS patient, makes a person vulnerable to disease. The only problem is that an almost endless number of

supplements, especially herbs, are being sold with the promise that they will boost the immune system.

- The supplement acts as an anti-oxidant. By this action free radicals are neutralized and the tissues are protected from damage. This will, supposedly, help prevent many diseases, including cancer and heart disease. While there is some limited supporting evidence, most clinical trials using anti-oxidant supplements, such as vitamin E and beta-carotene, have been a disappointment. There is little reason to suppose that other supplements promoted as anti-oxidants are any more likely to prevent disease or improve health. Incidentally, one of the richest sources of anti-oxidants is coffee.

Let's now look at how supplements are marketed. A major way is through health food stores. Here is a typical scenario. A customer walks in and tells the assistant that she has some health concern. The assistant, who might be a high school student, consults a thick book and then recommends a supplement. Rarely, will there be any connection between the advice and scientific evidence. In a study conducted in Ontario a few years ago the researcher posed as a mother of a child with Crohn's disease. She visited 32 health food stores and in 23 of them she was offered advice. There was a complete lack of consistency: 30 different supplements were recommended.

Many supplements are sold by multi-level marketing, just like Avon cosmetics. The focus is profit, not consumer health. One company engaged in this is Body Wise International. A few years ago they put up flyers around Edmonton for a meeting in which they stated that the speaker would be giving the views of Dr. Jesse Stoff, who they described as "the world's leading viro-immunologist." I could find no evidence that he had ever published a scientific paper! At the meeting people were told of the fantastic healing properties of the supplements. The impression was given that they could cure pretty much anything, even cancer.

A similar public lecture in Edmonton was given by Earl Mindell. The advertising described him – with incredible chutzpah – as "Widely regarded as the world's #1 nutritionist." The product here was goji juice, which was promoted as: "The biggest discovery in nutrition in the last 40 years!" Mindell emphatically stated that the many benefits of goji juice had been firmly established in clinical studies on humans. But I was unable to find a single study in the medical literature that reported a clinical trial showing a positive impact on health or disease.

Supplements are also marketed by way of infomercials on TV and as junk mail. The level of dishonesty here is at least as bad as the above cases.

There is intense marketing of supplements with promises of weight loss. The adverts commonly include a photo of a thin woman, probably a model who was never overweight. Often they claim that you can lose weight, rapidly, while eating all you want and without having to exercise. The only place where weight loss will likely occur is your wallet. One such product is Hollywood Celebrity Fast which is sold in health food stores. The promotion claims that you can lose "up to" 10 pounds when the product is used as

part of a two-day fast. The product consists of fruit juice plus some vitamins and plant extracts. The cost is \$30 for a 947 ml bottle. A reasonable price for such a mixture would be closer to \$4. The inference is made that by using this drink there may be a true fat loss of 10 pounds in two days (equivalent to running about 500 km!). Any fat loss will be due to the semi-fasting and not the drink.

In brief, the people carrying out the marketing of supplements often use scientific evidence the way a drunk uses a lamppost: more for support than illumination. Clearly, there is widespread fraud. This also poses a risk to the health of consumers as some consumers may choose supplements of no value over conventional medical treatment. In addition, many supplements, especially herbs, pose a risk of side effects.

My advice to anyone thinking of buying a supplement is to seek advice from a trained health professional, such as a pharmacist in a drug store or a dietitian. There are some reliable websites; a good one is www.supplementwatch.com. Always use common sense. Remember the fundamental rule: if things look too good to be true, they usually are. Ignore all advice from anyone who is selling supplements. And stay out of health food stores.

Finally, I have some good news. The federal government has developed new regulations for dietary supplements. By next year the outrageous marketing activities documented in this chapter should have largely disappeared from Canada. We shall see.

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