

Natural Toxins in Beans are No Cause for Alarm

by Steve Meyerowitz, Sproutman®

People have been alarmed by articles alleging that alfalfa and other sprouts contain toxins. This news has struck fear in Vegetarians and others because sprouts have always been considered "health food." Most of us have heard this news from the very popular author and proponent of natural healing, Andrew Weil. When questioned for more detail, Dr. Weil refers us to well known toxicologist Bruce Ames. Ames has written extensively on plant toxins. In a recent telephone interview, Dr. Ames claimed that he is not against sprouts. "Eat any sprouts you want..." he said. "There's nothing wrong with sprouts....If I was to be against sprouts then I would be against every kind of vegetation."

Ames tells us that there are toxins in the seeds of many common plants and vegetables as a natural protective mechanism against insects and other predators. The natural toxin identified in sprouting seeds is known as L-canavanine, a pre-cursor necessary for the development of the amino acid arginine. L-canavanine is one of 600 non-protein amino acids synthesized by plants. It is found in hundreds of legumes (beans) and other arginine rich foods such as garlic and onion.

However, it's presence in beans (alfalfa is a tiny bean) is not a cause for alarm. During the germination process, L-Canavanine is converted to Arginine, one of the essential amino acids. In 1960, Dr. E.A. Bell, demonstrated that once alfalfa reaches the green stage, this toxin is reduced to a trace amount. More recently, L-Canavanine biochemist Gerald A. Rosenthal of the University of Kentucky found that this natural toxin "was shown to exhibit significant antineoplastic activity against MIAPaCa-2, a human pancreatic cancer." This natural plant protectant can also protect us against cancer! This work is underscored by that of John Hopkins researcher Paul Talalay who in 1997 found that the cancer protectant sulphoraphane is present in broccoli sprouts in quantities up to 50 times greater than in broccoli.

The research quoted on this subject involved feeding monkeys L-canavanine sulfate tablets plus biscuits made from raw, unsprouted alfalfa beans and "sprouts." However, none of this research actually involved alfalfa sprouts as they are typically consumed by people. The "sprouts" were beans germinated for 1-3 days and then oven dried. They never turned green. Sprouts for human consumption are grown for approximately 7 days and contain only a trace of L-canavanine.

The thrust of the research was to explore the connection between this toxin and the auto-immune disease Lupus. It was not a test of alfalfa sprouts. In fact, "sprouts" played only a marginal role in 2 of the numerous studies on this toxin between done between 1981 and 1984. According to Lupus specialist Dr. Emil J.

Bardana, who worked with Dr. Rene Malinow on the two studies involving the so called "sprouts," there is no basis to say that eating alfalfa sprouts would cause lupus or SLE. "I wouldn't discourage my lupus patients from eating alfalfa sprouts." The amount of sprouts you eat on a salad "isn't anywhere near the dose we fed the monkeys."

Keeping things in perspective, many common foods contain toxins all of which are consumed in greater quantities than sprouts: potatoes have solanine, mushrooms have strychnine, apples and apricots have cyanide. If you believe such toxins threaten our health, then you should also eliminate tomatoes, eggplants and peppers, mustard, cottonseed oil, peanuts, black pepper, root beer (sassafras) and last but not least, coffee which, according to Dr. Ames, contains the "natural mutagen chlorogenic acid and highly toxic atractylosides".

Let us not forget that as living plants, sprouts are some of our richest sources of phytochemicals, enzymes, anti-oxidants, nitrosamines, trace minerals and chemo-protectants such as sulphoraphane and isoflavone which work against toxins, resist cell mutation and invigorate the body's immune system. Don't doubt the sprout!

"Until Man duplicates a blade of grass, nature can laugh at his so called scientific knowledge." --Thomas Edison

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