

About Laetrile (aka) Amygdalin or Vitamin B17

Laetrile is the commercial name for a modified form of amygdalin, which is also known as bitter almonds.

Chinese doctors allegedly used this substance, which is highly concentrated in the pits of apricots and other fruits, some 3,500 years ago for the treatment of tumors. Dioscorides of Anazarbos, 2000 years ago, was perhaps the first to document it. It was usually administered in the form of bitter almonds.

Modern laetrile is usually derived from apricot kernels where it comprises about 2-3% of the kernel, a relatively large amount. It's also found in the kernels of other fruits, such as plums, cherries, peaches, nectarines, and apples. All fruit seeds have a healthy form of organic cyanide in them, from apple seed to apricot seed, although laetrile treatments have been alleged to cause cyanide poisoning.

The fruit kernels or seeds generally have other nutrients as well — some protein, unsaturated fatty acids, and various minerals. Although often called B17, laetrile is not found with other B vitamins in yeasts. Many plants do contain some laetrile, with the sprouting seeds, especially mung bean sprouts, containing the highest amount.

The diet of primitive man and most fruit-eating animals was very rich in nitrilosides. They regularly ate the seeds (and kernels) of all fruits, since these seeds are rich in protein, polyunsaturated fats, and other nutrients. Seeds also contain as much as 2% or more nitrilose. When civilized humans eat less than the whole fruit — for example, by discarding the seed or kernel — they experience a specific and total deficiency not only in oils and proteins but also in minerals and such vitamins as B17 (nitrilose) because it is found only in the seed, not in the flesh of the fruit.

Several other foods are naturally rich in nitrilose, including lima beans, succotash containing nitrilose-rich chick peas, plum jam, elderberry wine, bean sprouts, millet sprouts, sorghum molasses, wild berries, raspberries, macadamia nuts, and nitrilose-rich bamboo sprouts.

Nitrilose was “rediscovered” in 1920 by a California physician, Ernest Krebs while experimenting with flavorings for bootleg whisky. His son, Dr. Ernest Krebs, Jr., purified it and coined the name ‘laetrile’ in 1952. Krebs’s studies showed that when a human or animal system ingests sufficient amounts of laetrile (or in its natural form, hydrocyanic acid), this substance becomes selectively toxic to cancer cells.

In the early seventies, Dr. Harold Manner of the Biology Department at Loyola University, Chicago, conducted a study on a strain of mice using a combination of enzymes, Vitamin A, and laetrile. He reported in his book, *Death of Cancer*:

“After 6-8 days, an ulceration appeared at the tumor site. Within the ulceration was a pus-like fluid. An examination of this fluid revealed dead malignant cells. The tumor gradually underwent complete regression in 75 of the experimental animals. This represented 89.3% of the total group.” (quoted in Moss, 1982).

Laetrile needs to be taken with vitamin A and enzymes to be most effective.

Pure laetrile has been illegal in the U.S. for decades and was pulled from the shelves in Britain. Challengers claim it is potentially toxic and leads to cyanide poisoning. As late as the end of the 1970s, between 50,000 and 100,000 cancer patients were ingesting close to 1 million grams per month. Only between two and three deaths were reported from accidental overdose.

Considering these statistics, laetrile does not seem as toxic or dangerous as opponents make it out to be.

Laetrile has been described as a parcel that contains poisons that are only released once the parcel is unwrapped. It has an effect on cancer cells because those cells secrete the enzyme beta-glucosidase that releases the cyanide, which then poisons the cancer cells. In contrast,

normal cells have the enzyme rhodanase which effectively renders the cyanide molecule inactive. In the absence of cancer cells, the toxic cyanide is not released.

Laetrile/amygdalin is not digested in the stomach by hydrochloric acid. Instead, it passes into the small intestine where it is acted on by enzymes that split it into various compounds, which are then absorbed.

Laetrile can be separated by appropriate enzymes, in the presence of water, into glucose, benzaldehyde, and hydrocyanic acid. The last two substances are each, individually, a poison, but together they work synergistically and become more powerful when combined than when used separately.

In the treatment of cancer, laetrile is used to reduce tumor size and further spread of the disease, as well as to alleviate the sometimes severe pain of the cancer condition.

Laetrile does not make tumors grow smaller, so the question of tumor regression is sometimes brought up as evidence that laetrile is ineffective. Laetrilists argue that tumor size is not a good indicator of anticancer activity because a tumor does not just consist of malignant cells. Tumors also contain normal cells.

When chemotherapy is used, all cells are attacked so it's not unusual to see short-term tumor regression (because both malignant and normal cells are killed). Unfortunately, the long-term result of such treatment is for the tumor to become more aggressive due to the chance of increasing the ratio of malignant cells. In the case of laetrile, however, normal cells are not affected and so tumors do not decrease in size. Instead, they become benign.

According to pathologist Gerald Dermer, "There is a marked discrepancy between ostensible tumor response and actual patient survival. In only about 32% of the clinical trials that reported significant tumor responses to new drugs was survival also prolonged." In other words, tumor "response" or shrinkage may be largely irrelevant to controlling cancer, and the charge that laetrile doesn't shrink tumors may be likewise irrelevant.

Nearly all laetrile supporters advocate a diet of raw vegetables in conjunction with the therapy, partly because such a diet contains a large amount of dietary laetrile. Indeed, one of the things that makes the laetrile controversy so bizarre is that laetrile is a very common component of food.

Between 1,200 and 2,500 plants contain laetrile. This includes most cereals and fruits and many vegetables. A diet that contains high quantities of the following will also be high in laetrile: chickpeas, bean sprouts, nuts, mung beans, blackberries, raspberries, and the seeds of apples, apricots, cherries, plums, and pears.

Laetrile's safety was demonstrated in an experiment with mice undertaken at a leading US cancer research institution (Memorial Sloan-Kettering Cancer Center). For thirty months, mice were injected daily with laetrile at a rate of 2 grams per kilogram of body weight (equivalent to giving a human a quarter of a pound a day). At the end of the period, the mice were healthier and exhibited greater wellbeing than the control group that did not get any laetrile.

Refer to *The Cancer Syndrome* by Ralph Moss for more details.

In addition, it should be noted that some young plants develop their own naturally occurring pesticides to provide some protection against insects and rodents. These pesticides are rich in nitrilosides, which are similar in chemical structure to laetrile. This presents the question that a diet high in young fresh plants such as alfalfa sprouts is like undergoing continuous non-toxic chemotherapy that kills pockets of cancer cells before they divide and grow.

Laetrile authority Elson M. Haas M.D. says, "When used, laetrile is administered at 250-1,000 mg. (a gram is a thousand milligrams) daily. Higher amounts, up to 3 grams per day, have been used, but divided into several smaller dosages, each usually limited to 1 gram. If the source is whole apricot kernels, the quantity is usually about 10-20 kernels per day; 1-2 cups of fresh mung bean sprouts may provide an equivalent amount. If apricot kernels are blended or

pulverized, it is suggested that they be consumed immediately.” **SOURCE: Alternative Cancer Research Institute**

Further Reading & References

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