



PATIENT & CAREGIVER EDUCATION

Amygdalin

This information describes the common uses of Amygdalin, how it works, and its possible side effects.

Tell your healthcare providers about any dietary supplements you're taking, such as herbs, vitamins, minerals, and natural or home remedies. This will help them manage your care and keep you safe.

What is it?

Amygdalin (Laetrile) has not been shown to treat or prevent cancer. It is associated with serious adverse effects.

Amygdalin (also called Laetrile®) is an extract derived from apricot pits and other plants. It can be broken down by enzymes in the intestine to produce cyanide, a known poison. It was first used in Europe and later in the United States as an alternative cancer therapy. Promoters claimed that the cyanide released from amygdalin selectively killed cancer cells, leaving normal tissue cells unharmed. When fed to laboratory animals that had cancer cells implanted in them, amygdalin did not reduce the tumor size or slow their growth. In a clinical study, cancer patients using amygdalin did not have any benefits, but some showed cyanide toxicity.

There is renewed interest in studying amygdalin after the discovery of new anticancer mechanisms. However, cancer patients should not use this product in the current form until more is known about its safety and effectiveness.

What are the potential uses and benefits?

- **To prevent and treat cancer**

Although laboratory experiments suggest anticancer properties, clinical evidence does not support this use. Amygdalin (Laetrile®) has been linked to several cases of cyanide poisoning in cancer patients.

What are the side effects?

- Inflammation and redness of the skin.
- **Cyanide toxicity** from high doses or prolonged use causing nausea, vomiting, headaches, dizziness, mental confusion, bluish skin discoloration, inadequate oxygen supply to tissues, low blood pressure, drooping eyelids, nerve dysfunction, coma, and death.

What else do I need to know?

Patient Warnings:

- Cyanide poisoning has occurred with the intake of amygdalin or apricot kernels.
- Contaminated/adulterated products have been found in both injectable and oral forms.

Special Point:

- The Food and Drug Administration has banned the sale and use of amygdalin (Laetrile®) due to the risk of cyanide poisoning. For this reason, Laetrile® is only offered at alternative medicine clinics outside the United States. Some clinics use it as a component of multi-modality [metabolic therapies](#), but these therapies generally have not been found effective.

If you have any questions, contact a member of your care team directly. If you're a patient at MSK and you need to reach a provider after 5 p.m., during the weekend, or on a holiday, call 212-639-2000.

For more resources, visit www.mskcc.org/pe to search our virtual library.

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