

U.S. Department of Health and Human Services
National Institutes of Health



Aloe Vera

This fact sheet provides basic information about aloe vera—common names, usefulness and safety, and resources for more information.



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Common Names: aloe vera, aloe, burn plant, lily of the desert, elephant's gall

Latin Name: *Aloe vera*, *Aloe barbadensis*

Background

- Aloe vera's use can be traced back 6,000 years to early Egypt, where the plant was depicted on stone carvings. Known as the "plant of immortality," aloe was presented as a funeral gift to pharaohs.
- Historically, aloe vera has been used for a variety of purposes, including treatment of wounds, hair loss, and hemorrhoids; it has also been used as a laxative.
- Two substances from aloe vera, the clear gel and the yellow latex, are used in health products today. Aloe gel is primarily used topically (applied to the skin) as a remedy for skin conditions such as burns, frostbite, psoriasis, and cold sores, but it may also be taken orally (by mouth) for conditions including osteoarthritis, bowel diseases, and fever. Aloe latex is taken orally, usually for constipation.

How Much Do We Know?

- There's not enough evidence to show whether aloe vera is helpful for most of the purposes for which people use it.

What Have We Learned?

- Aloe latex contains strong laxative compounds. Products made with aloe were at one time regulated by the U.S. Food and Drug Administration (FDA) as over-the-counter (OTC) laxatives. In 2002, the FDA required that all OTC aloe laxative products be removed from the U.S. market or reformulated because the companies that manufactured

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them did not provide the safety data necessary for continued approval.

- There's some evidence that the topical use of aloe products might be helpful for symptoms of certain conditions such as psoriasis and certain rashes.
- There's not enough high-quality scientific evidence to show whether topical use of aloe helps to heal wounds.
- There's not enough scientific evidence to support aloe vera for any of its other uses.

What Do We Know About Safety?

- Use of **topical** aloe vera is likely to be safe.
- A 2-year National Toxicology Program study on **oral** consumption of nondecolorized whole leaf extract of aloe vera found clear evidence of carcinogenic activity in male and female rats, based on tumors of the large intestine. Another study in rats showed that decolorized whole leaf aloe vera did not cause harmful effects. This suggests that a component called aloin, most of which is removed by the decolorization process, may be responsible for the tumors seen in rats fed nondecolorized whole leaf aloe vera. More information, including what products are actually in the marketplace and how individuals use different types of aloe vera products, is needed to determine the potential risks to humans.
- Abdominal cramps and diarrhea have been reported with oral use of aloe latex. Also, because aloe latex is a laxative, it may reduce the absorption and therefore the effectiveness of some drugs that are taken orally.
- People with diabetes who use glucose-lowering medication should be cautious if also taking aloe orally because aloe may lower blood glucose levels.
- There have been a few reported cases of acute hepatitis in people who took aloe vera orally. However, the evidence is not definitive.

Keep in Mind

- Tell all your health care providers about any complementary or integrative health approaches you use. Give them a full picture of what you do to manage your health. This will help ensure coordinated and safe care.

For More Information

- [Using Dietary Supplements Wisely](#)

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- Know the Science: How Medications and Supplements Can Interact
- Know the Science: 9 Questions To Help You Make Sense of Health Research

NCCIH Clearinghouse

The NCCIH Clearinghouse provides information on NCCIH and complementary and integrative health approaches, including publications and searches of Federal databases of scientific and medical literature. The Clearinghouse does not provide medical advice, treatment recommendations, or referrals to practitioners.

Toll-free in the U.S.: 1-888-644-6226

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Web site: www.ncbi.nlm.nih.gov/pubmed

National Institute of Environmental Health Sciences (NIEHS)

To learn more about NIEHS's National Toxicology Program technical report on a nondecolorized whole leaf extract of aloe vera visit www.niehs.nih.gov/news/interviews/aloevera/.

Office of Dietary Supplements (ODS), National Institutes of Health (NIH)

ODS seeks to strengthen knowledge and understanding of dietary supplements by evaluating scientific information, supporting research, sharing research results, and educating the public. Its resources include publications (such as *Dietary Supplements: What You Need to Know*), fact sheets on a variety of specific supplement ingredients and products (such as vitamin D and multivitamin/mineral supplements), and the PubMed Dietary Supplement Subset.

Web site: ods.od.nih.gov

E-mail: ods@nih.gov

Key References

Aloe. Natural Medicines Web site. Accessed at naturalmedicines.therapeuticresearch.com on March 27, 2015. [Database subscription].

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Boudreau MD, Mellick PW, Olson GR, et al. Clear evidence of carcinogenic activity by a whole-leaf extract of *Aloe barbadensis* Miller (aloe vera) in F344/N rats. *Toxicological Sciences*. 2013;131(1):26-39.

Dat AD, Poon F, Pham KBT, et al. *Aloe vera* for treating acute and chronic wounds. *Cochrane Database of Systematic Reviews*. 2012;(2):CD008762. Accessed at <http://www.thecochranelibrary.com> on March 30, 2015.

Rodriguez S, Dentali S, Powell D. Aloe vera. In: Coates PM, Betz JM, Blackman MR, et al., eds. *Encyclopedia of Dietary Supplements*. 2nd ed. New York, NY: Informa Healthcare; 2010:7-14.

Shao A, Broadmeadow A, Goddard G, et al. Safety of purified decolorized (low anthraquinone) whole leaf *Aloe vera* (L) Burm. F. juice in a 3-month drinking water toxicity study in F344 rats. *Food and Chemical Toxicology*. 2013;57:21-31.

Yang HN, Kim DJ, Kim YM, et al. Aloe-induced toxic hepatitis. *Journal of Korean Medical Science*. 2010;25(3):492-495.

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