

*Aloe barbadensis, Aloe capensis*

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## ***Aloe Vera (Aloe barbadensis, Aloe capensis)***

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**ALSO KNOWN AS:** Burn plant, lily of the desert, elephant's gall, cape aloe, first aid plant, ghai kunwar, Sabila.

**BACKGROUND:** Aloe vera, a succulent plant prevalent in hot, dry regions of Asia, Africa, and other areas, has been used in traditional medicine for many centuries. It is easily propagated in most places where the climate is hot and dry.

The gel and dried latex obtained from aloe leaves are used for relief of constipation; for wound healing; and for treatment of burns, psoriasis, frostbite, ulcerative colitis, and diabetes.

Aloe is marketed via the Internet and in health food stores in juice, softgel, and capsule forms, and as an ingredient in topical creams.

Despite lack of substantial evidence, aloe products are promoted to cancer patients, especially for use against radiation-induced skin toxicity.

**RESEARCH:** In vitro studies indicate that aloe has immunomodulatory, anticancer,[1,2] antioxidant, and anti-inflammatory properties.[3] Emodin, an extract of aloe, inhibits cell proliferation and induces apoptosis in human liver cancer cell lines via p53- and p21-dependent pathways.[4]

One study showed topical aloe vera to be superior to [silver sulfadiazine](#)([Drug information on silver sulfadiazine](#)) cream, an agent commonly used to treat second-degree burns.[5]

A few trials have explored aloe's anticancer effects. Concurrent oral administration of aloe with chemotherapy was reported to increase the efficacy of chemotherapy in patients with metastatic cancers[6] and to prevent oral mucositis.[7] Data on topical aloe's role in alleviating radiation therapy-induced skin damage are inconsistent.[8,9] More research is needed to determine the safety and efficacy of aloe vera in cancer patients

**ADVERSE REACTIONS:** Topical administration of aloe gel is considered safe, but oral consumption of aloe can cause gastrointestinal upset, diarrhea,



and electrolyte abnormalities.

Inappropriate use of aloe supplements has been linked to thyroid dysfunction[10] and perioperative bleeding.[11] A case of hypokalemia was reported in a patient using aloe during chemotherapy.[12] Several cases of toxic hepatitis have been reported following the use of aloe preparations.[13-15]

### HERB-DRUG INTERACTIONS:

**Sevoflurane:** Aloe may have additive antiplatelet effects that could result in excessive bleeding during surgery.[11]

**Digoxin:** Aloe may increase the risk of toxicity stemming from [digoxin](#) ([Drug information on digoxin](#))'s hypokalemic effects.

- *Aloe is a succulent plant, the leaves of which are used for relief of constipation, for wound healing, and for the treatment of burns, skins disorders, and diabetes.*
- *There is limited evidence of aloe's usefulness in controlling the adverse effects of cancer treatment. Further studies are warranted.*
- *Oral use of aloe can cause diarrhea, and aloe also may interact with prescription medications*

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For additional information, visit the Memorial Sloan-Kettering Cancer Center Integrative Medicine Service website, "About Herbs," at <http://www.mskcc.org/AboutHerbs>.

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