

### What Is Aloe Vera Good For?

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#### STORY AT-A-GLANCE

- > A succulent plant that grows wild in tropical regions, aloe vera has had innumerable uses for thousands of years, both medicinal and nutritional, due to the 75 potentially active compounds it contains
- > Antioxidant, antibiotic, antimicrobial, antifungal, antiseptic these are some of the properties of aloe vera that can help detoxify your body, fight infection, aid digestion, heal canker sores and prevent dental plaque
- > Aloe vera plants produce offshoots or "babies" that can be removed to produce an entirely new plant; in fact, you can have hundreds in just a few years, but when grown in pots, holes at the bottom allow for drainage so the roots don't rot
- You can grow aloe vera very easily, as it requires little upkeep; indirect sunlight and drying out between waterings will produce hundreds of plants you can keep in your kitchen and cut for a healing salve or a nutritious drink

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When you think of aloe vera, you may remember it as a spiky plant with tiny spines along both sides of the thick, variegated leaves that fan out from their base. A succulent plant that grows wild in tropical regions, including the warmest areas and arguably thousands of households across the U.S., aloe vera has had a plethora of uses for thousands of years, both medicinal and nutritional. An open access website of peer-reviewed journals and blogs, Biomed Central, notes:

"Such extensive human use of aloe vera is nothing new; historical sources suggest aloe vera trade routes were well-established in the Red Sea and Mediterranean regions as far back as the 4th century B.C ... Over 500 species of aloes exist, spread over Africa, the Middle East and various Indian Ocean islands."

Part of its popularity is that it's a striking plant to look at, but the gel inside the leaves also has strong healing capabilities for a number of maladies and conditions. In fact, the gel could easily remedy many of the problems thousands of people purchase creams and lotions for, purportedly containing extracts from the aloe vera plant, but often containing only a fraction of the healing power available from the genuine article.

Aloe vera's commercial success for cosmetic, pharmaceutical and food use worldwide, is estimated to be somewhere around \$13 billion annually. As Medical News Today reveals:

"Aloe vera contains various powerful antioxidant compounds. Some of these compounds can help inhibit the growth of harmful bacteria ... Aloe vera definitely has some unique therapeutic properties, especially when applied as an ointment for the skin and gums."

# Where Does the Healing Come From?

It's the gel inside the leaves that contain the highest levels of bioactivity, but here's what's really amazing, according to holistic nutritionist and author Laura Dawn, who launched Happy and Raw.<sup>3</sup> Aloe vera's got you covered at least eight different ways, as it's:

Disinfectant	Antibiotic
Antimicrobial	Antiseptic
Antibacterial	Germicidal

Antiviral Antifungal

These capabilities come from aloe vera's many compounds and phytonutrients, such as vitamins A, C and E, choline, folic acid and B1, B2, B12 and B3 (niacin). Minerals include selenium, zinc, calcium, iron, copper, manganese, potassium, magnesium and chromium. You'll also find high amounts of:

- Polyphenol antioxidants These help combat free radicals, which contribute to disease, infections and hasten the aging process.<sup>4</sup>
- Fatty acids Aloe contains plant sterols, which are valuable fatty acids, including campesterol and B-sitosterol, as well as linoleic, linolenic, myristic, caprylic, oleic, palmitic and stearic acids.<sup>5</sup>
- Amino acids There are about 22 amino acids, called the "building blocks of protein," that are necessary for your body, and aloe vera contains 18 to 20 of them, including all eight of those considered essential for human health.

One study shows aloe vera contains 75 potentially active compounds, including lignin, saponins and salicylic acids and amino acids, 12 anthraquinones, which are phenolic compounds traditionally known as laxatives. It also provides campesterol,  $\beta$ -sitosterol and lupeol, and the hormones auxins and gibberellins that help in wound healing and have anti-inflammatory action.<sup>6</sup>

As an adaptogen, aloe boosts your body's ability to adapt to external changes and increases your ability to deal with stress, be it physical, emotional or environmental. Scientists believe adaptogens balance your system and stimulate your natural defense and adaptive mechanisms, further helping to combat illness and disease. Also:

"Aloe alkalizes the body. Disease cannot manifest in an alkaline environment. Most people are living and subsisting on mostly acidic foods. For great health, remember the 80/20 rule — 80 percent alkaline forming foods and 20 percent acidic. Aloe vera is an alkaline forming food. It alkalizes the body, helping to balance overly acidic dietary habits."

# **Topical and Internal Benefits of Aloe Vera**

The first aloe vera-based ointment for sunburn entered the marketplace in 1959, but studies allow that it's effective for first- and second-degree burns. Whether it's a burn, puncture wound, cut, psoriasis<sup>8</sup> or bug bites, topically applied aloe vera exerts powerful healing benefits.

Aloe's analgesic qualities help with pain relief while preventing and relieving itching as an antipruritic. Being astringent, aloe gel causes body tissues to contract, which helps reduce bleeding from minor abrasions. As an antipyretic, it's used to reduce or prevent fever, and being 99% water, it's great for hydrating your skin. Happy and Raw asserts:

"Aloe increases the elasticity of the skin making it more flexible through collagen and elastin repair. Aloe is an emollient, helping to soften and soothe the skin. It helps supply oxygen to the skin cells, increasing the strength and synthesis of skin tissue and induces improved blood flow to the skin through capillary dilation."

The Journal of Pharmacognosy and Phytochemistry notes that aloe helps the body cleanse itself,<sup>10</sup> and a four-study review acknowledged that it could reduce the healing time of burns by as much as nine days in comparison with conventional medicine's remedies.<sup>11</sup> In addition, aloe vera:

Reduces dental plaque, kills plaque- forming bacteria and Candida albicans <sup>12</sup>	Helps heal and alleviates pain of canker sores <sup>13</sup>
Improves cardiovascular health as beta sitosterol helps optimize cholesterol	Aids digestion; reduces constipation due to the compound aloin, or barbaloin <sup>14</sup>
Lowers blood sugar levels <sup>15</sup>	Reduces inflammation
Helps detoxify your body	Boosts your immune system due to polysaccharides

May improve skin, increase collagen production<sup>16</sup> and alleviate wrinkles

From all the above advantages from using aloe vera, weight loss is considered to be a secondary benefit simply because things like improved digestion, reduced constipation (aka regularity), detoxification and lowered blood sugar are all related, and have a varied but direct impact on your weight.

# **Growing Aloe Vera Plants for Medicinal (and Other) Use**

Native to tropical regions, aloe vera plants can grow outdoors even in Northern climates during warm weather. Growing them in the ground is very straightforward. Rather than just plain soil, I would highly recommend adding compost and a layer of wood chips, which improve the soil quality and provide valuable plant nutrients.

One thing about growing aloe vera is that it's incredibly easy to do, and the baby plants they produce are so plentiful, you can remove new shoots fairly regularly and pop them into separate pots to give away or fill several window sills with the spiky succulents.

They grow faster when their roots aren't crowded, so leave several inches of space in between so they'll grow bigger faster. It's probably no surprise that these plants love bright light, but especially if they're in a pot, allowing them to bake in hot sun and high temperatures all day might scorch and kill them. Indirect light is best. If you don't grow it yourself, you can purchase a plant from many health food or grocery stores.

Water your aloe plants well, but to keep rot from setting in, allow at least 1 or 2 inches of top soil to become completely dry in between waterings. Water less often in the winter. Additionally, when placing aloe vera plants in pots, even tiny plants, the pots must have drainage holes at the bottom. Otherwise they'll eventually become waterlogged and die unless you pick them out, dry the roots for a few days, then place them in dirt again.

When a plant gets large enough, you can cut individual leaves off, as close to the ground (or just under the soil level) as you can. Carefully slice off the little spines on each side,

slice off 2 or 3 inches (or as much as you need), then cut through the flat side of the leaf to expose and scrape off the gel for use as a cooling aftershave lotion or sunburn remedy.

In fact, fresh gel from an aloe plant (rather than an aloe product) is one of the best remedies for sunburn. You can even slice open the leaves and open like a book to lay the exposed gel directly on skin needing its healing properties. For a refreshing drink, place a few teaspoons of the gel (not the skin) in a small glass bowl and use a hand mixer or high-speed blender for several seconds, then add a bit of fresh lime juice.

# Products Containing Aloe Vera (or Claiming to) Not Always What They Claim

It's already been mentioned that the most potent way to get the effects of aloe vera is to use the plant itself, not some product containing percentages along with a lot of other stuff, including chemicals. There is such a thing as certification by the International Aloe Science Council (IASC), which was created in the early 1980s due to rampant abuse in the representation of many different consumer products claiming to contain at least a percentage, but many did not.

There are still "wannabe" (aka scam) products with zero aloe content out there hoping for a corner of the market. In addition, Happy and Raw includes a paragraph addressing intake precautions:

"This plant is incredibly medicinal, yet there are some cautions against longterm use. Just because a little is beneficial, doesn't mean that a lot is more beneficial. This is an incredibly potent plant and should be used with a level of respect for its potency.

Long-term use can lead to loss of electrolytes, especially potassium. Tip: Avoid taking aloe internally during pregnancy, menstruation, if you have hemorrhoids or degeneration of the liver and gall bladder."

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If you don't currently have an aloe vera plant in your home, you may find having one helpful for many of the problems listed above, or to try it as a fresh, healthy drink.

#### **Sources and References**

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