



The Complete Story of Aloe Vera

The semi-tropical plant, Aloe Vera, has a long and illustrious history dating from biblical times. It has been mentioned throughout recorded history and given a high ranking as an all-purpose herbal plant.

Aloe's thick, tapered, spiny leaves grow from a short stalk near ground level. It is not a cactus, but a member of the tree lily family, known as *Aloe barbadensis*. Aloe is related to other members of the Lily family such as the onion, garlic and turnip families. Aloe's relationship to the lily family is evident from the tubular yellow flowers produced annually in the spring that resemble those of the Easter lily.

There are over 250 species of aloe grown around the world. However, only two species are grown today commercially, with *Aloe barbadensis* Miller and *Aloe aborescens* being the most popular. The Aloe plant is grown in warm tropical areas and cannot survive freezing temperatures.

In the United States, most of the Aloe is grown in the Rio Grande Valley of South Texas, Florida and Southern California. Internationally, Aloe can be found in Mexico, the Pacific Rim countries, India, South America, Central America, the Caribbean, Australia and Africa.

The leaves of the Aloe plant grow from the base in the rosette pattern. Mature plants can grow as tall as 2 and a half inches to 4 feet with the average being around 28 to 36 inches in length. Each plant usually has 12-16 leaves that, when mature, may weigh up to three pounds. The plants can be harvested every 6 to 8 weeks by removing 3 to 4 leaves per plant.

The original commercial use of the Aloe plant was in the production of a latex substance called Aloin, a yellow sap used for many years as a laxative ingredient. This product became synonymous with the name "Aloe" and recorded in the trade, technical and government literature during the early 20th century. This terminology created much confusion later when Aloe's other main ingredient, Aloe Gel, a clear colorless semi-solid gel, was stabilized and marketed. This Aloe Vera Gel, beginning in the 50's, has gained respect as a commodity used as a base for nutritional drinks, as a moisturizer, and a healing agent in cosmetics and OTC drugs. Chemical analysis has revealed that this clear gel contains amino acids, minerals, vitamins, enzymes, proteins, polysaccharides and biological stimulators. Public interest in Aloe has grown quickly, and now there is a considerable amount of research into the various components of Aloe to find out more about their properties and to characterize these components so that more specific research can provide clues to the "magic" that is attributed to Aloe Vera.

This "magic" concept brought the industry under the Federal Food and Drug Administration's microscope in the late 70's and early 80's. The claims made to the consumer about uses and effectiveness of Aloe were exaggerated.

Aloe Vera Gel, like most natural juices, both fruit and vegetable, is an unstable product when extracted and is subject to discoloration and spoilage from contamination by microorganisms. The great success of Aloe as a commodity for use in nutritional foods and cosmetics is due to the proper stabilizing procedures that enable processors to store and ship the Aloe Gel without fear of spoilage throughout the market places of the world. Research conducted around the world leaves little doubt that certain biochemical properties of Aloe will be proven facts. Such attributes as moisturizing and penetrating properties are known, but the attributes such as its healing abilities and analgesic action to bacterial activity has not been clearly defined and documented through properly controlled scientific research and testing.

Today, the Aloe industry has established high ethical standards for businesses and their Aloe products. Through the International Aloe Science Council, the industry has solidified its dedication to providing the world with the highest quality Aloe. The wide acceptance of Aloe by society in so many consumer products suggests that the IASC is moving in the proper direction. The image of Aloe has never been higher. The IASC has a dedicated group of professionals committed to the further growth, research and marketing of quality Aloe Vera Gel and Aloe products made from this Gel. This is because the IASC knows the future of Aloe is full of promise for those willing to make the necessary effort.

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