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Aloe Veracity

If anything becomes evident after a time it is that we have inherited a legacy of contradiction about Aloe Vera. It is especially true in modern times and stems largely from two major sources. The first is a seeming failure of the plant to respond under exacting, rigid, and often contradictory results of laboratory analysis which provide no means of measuring the biological subtleties of nature. The second is that, in its way, the plant has been victimized by its own mythology and the inability of professionals to separate fact from fiction.

To set the matter right we must deal with each of these issues, clear up the misconceptions, and back up what we know to be the scientific truth. And if we are ever going to put Aloe Vera into an objective, scientific context, we're going to have to rid ourselves of one of the most basic and perhaps most enjoyable facets of human nature—the inclination to gossip. Folklore, legend, and false assumptions about the plant, though they may have contributed to its allure, have done no small damage to its credibility. At some point we're either going to have to substantiate the folklore or else strike it from consideration. We can begin to sort some of the fact from fiction by examining each.

Folklore: According to legend, Egyptian queens Nefertiti and Cleopatra bathed in the juices of the Aloe Vera plant to help keep them young and beautiful. Additionally, Seminole Indian mythology points to the "Fountain of Youth" and the rejuvenating powers of a clear stream which allegedly flowed from a cluster of Aloe Vera. So potent were the waters from the spring, according to the tale, they could turn the aged young again.²⁶

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Fact: Properly Stabilized* Aloe Vera contains natural emulsifiers, emollients, and humectants that can actually help regenerate dead skin, tighten facial tissue, and rejuvenate a youthful appearance in its users. Furthermore, these compounds help promote the elimination of such distasteful conditions as acne, blackheads, and chloasma (liver spots). ** So the tap of the Fountain of Youth may not be closed just yet.

Folklore: In Pliny's Natural History, the archives of ancient China, and the medical annals of the modern Philippines are recorded blends of aloe pulp and wine (and/or vinegar) which purportedly promoted the growth of hair.

Fact: There is absolutely no laboratory proof that Aloe Vera in any form will replace hair loss. However, in our own series of hair-skin analysis, Stabilized* Aloe Vera is one of the most effective treatments against some of the primary causes of hair problems that lead to balding such as eczema, sebborhea, and dandruff.²⁷

Folklore: In the villages of the Sutos it is said that when there is an epidemic of catarrh (common colds), the people are required to bathe publicly with infusions of Aloe.²⁸ And in the seventeenth century, extracts from the drug aloes when taken internally were found effective against consumption.

Fact: Modern research by Gottshall et al., in 1950, found Aloe Vera to be effective against certain strains of tubercule bacilli.²⁹ Additionally, our own records both from physicians prescribing Aloe Vera regimens and from case histories show Stabilized* Aloe Vera Gel to be markedly effective against many forms of respiratory disorders, including fluid in the lungs and chronic sinus infections.

Folklore: Throughout history, there are various hints at European remedies using Aloe Vera for treating gouty conditions, aches in bones and joints, and muscle spasms.

Fact: Stabilized* Aloe Vera lotions and creams are now being recognized by trainers, team physicians, and coaches from some of the premier collegiate and professional athletic associations—the University of Texas Athletic Department, the Baltimore Colts, the

^{*} Stabilized * Aloe Vera Gel is an exclusive formula developed and patented by AVA, Inc.

^{**} For a complete examination of Aloe Vera's role in prescriptive skin care, we recommend Chapter 9, "Aloe Vera in the Care and Feeding of the Skin," in the complete hardbound version of *The Silent Healer*.

Dallas Cowboys, the Minnesota Twins, and many others—as being useful in treating torn and bruised muscles, strains and sprains to joints and ligaments and acute athletic injuries and for being extremely effective in reducing pain, diminishing inflammation, and shortening required healing time.³⁰

In many of the instances we have just cited, the line dividing fact and folklore is a thin one. And if one tends to reinforce the other then we are well advised to examine the facts more closely.

For example it is a fact that in northern Mexico and the Rio Grande Valley of South Texas where savilla (the local colloquialism for Aloe Vera) grows abundantly, there are more that a million people and—at the time of this writing—not one registered dermatologist. Since the populace is accustomed to using Aloe Vera properly, diseases of the skin or at least complications arising from them seem to be minimal.

It is also a fact that the skin disorder, psoriasis, persists without a know cure but not without an effective mode of treatment. Notwithstanding the still experimental packing treatments in the saline mud of the Dead Sea, about the only other effective program to treat psoriasis is a plan offered by Aloe Vera of America, Inc. The plan includes topical applications of Stabilized* Aloe Vera compounds, internal doses of Aloe Vera gel, and a rigid diet supplemented by a specific regimen of megavitamins. The program must be applied conscientiously; when it is, the results are uniformly satisfactory.³¹

Topical success with Aloe Vera has become pretty much a commonplace affair. Doctors from Cairo to San Diego are now using it to treat everything from decubitous ulcers to alopecia (baldness) and acne vulgaris. The results are consistently good, providing there is an adherence to certain criteria of usage.

Once again, Aloe Vera's effectiveness is emphasized in treating diseases of the skin. Yet if one were to enumerate the diseases this magic plant has been credited with helping to heal, those of a systemic internal nature might well exceed those of dermatology and cosmetology.

To be sure, some of the infirmities that are claimed to have been cured or at least helped by Aloe Vera cannot be sustained in modern times. Still, Aloe Vera's broad spectrum uses grow, and so proportionately do our records of them. Once again, however, we appear to push credibility by proclaiming the "cure-all" value of the healing plant. And if its detractors are justified in one regard it is when they query: "If Aloe Vera is so exceptional, why does it

have such a controversial track record? Why doesn't it always work?" Good questions.

Why Aloe Vera Doesn't Always Work

The answer is a complex one and has perhaps as many facets as there are aspects of the plant itself. There are actually five answers to that question: 1) use of the wrong species of aloe, 2) use of an immature plant or one with degenerated leaves, 3) use of leaves from a plant that is decomposed or gel that has already dried, oxidized, or been neutralized by overexposure, 4) the use of improperly stabilized Aloe Vera products, and 5) the subtleties of Aloe Vera itself, including the almost cryptic way it works.

Each of these answers merits some individual study and will perhaps bring us to a better understanding of what Aloe Vera can do and how we can make it work for us. In all examples we need to mention that misuses can be avoided if the individuals involved will only seek the proper professional guidance prior to using the plant, the gel from the plant, or products derived from it. There should be at least one doctor of medicine, dentist, osteopath, homeopath, pharmacist, or botanist in your area who understands the plant, its products, and how to apply them in your particular case. Failing any of those alternatives you may get in touch with us at Aloe Vera of America, Inc., 802 Easy Street, Garland, Texas/ phone (214) 494-3357. In lieu of any of those alternatives, you may make a thorough study of this book. You'll probably learn what you need to know, here.

In the meantime, let's clear up the misuses of Aloe Vera and the repercussions that may possibly result from them.

1) Use of the wrong species of aloe. In most instances, failure to understand what Aloe Vera is stems from a failure in education. Needless to say, not everyone is expected to be a botanist. But if you're going to use the plant, a proper identification is essential, and there are some simple things to look for.

First, the rosette configuration is something that will be consistent with all True Aloes. Second, the leaves will be of a triangular spear-like shape coming to a point. In the first two modes of identification it's easy to be fooled by false aloes unless you remember too that the leaves of Aloe Vera will have thorny ridges only along the spines. Otherwise they will be smooth and meaty to the touch, an indication that they are pregnant with gel. Many false aloes will not have meaty leaves and will exhibit bumps or wart-like patterns

all over the rind. Additionally, the coloring of many false aloes tends to be darker green while the leaves of a mature Aloe Vera will be consistently pale green to medium green with yellow flecks or smooth yellow-white highlights.

We stress the word "mature" in our use of Aloe Vera, because it is with the mature plant that we are able to obtain maximum benefit from the intricate chemistry of the True Aloe. Very often, even people knowledgeable about Aloe Vera fail to recognize the importance of maturity which leads us to our second potential problem area.

2) The use of an immature plant. Perhaps the most perplexing misuse of Aloe Vera appears in its most benign expression—the use of an immature plant. The incidents of such use are beyond counting. And though they net limited results and are generally non-traumatic, they nonetheless contribute to the undermining of the plant's reputation.

People who first attempt to use Aloe Vera tend to commit two fundamental errors. First, they try to use a plant that is only a few months old and expect it to perform like a mature plant. In so doing they disregard a cardinal rule: you can't rush nature. Peaches when plucked too early taste woody. Bananas when eaten green cause indigestion. You don't build houses with Christmas trees, and you can't expect a medicinal plant to possess its full potency before it has grown to maturity.

In the case of Aloe Vera that maturity will come between three and five years of growth at a height of from one-and-a-half to four feet and an individual leaf thickness of three inches or more at the base. You don't get that from something growing in a small five-inch pot, and you shouldn't expect to (an even more diminutive species such as *Aloe chinensis* will grow over a foot in height and display a dense leaf configuration). Once again, when in doubt consult someone who knows, an authority who understands the species of Aloe Vera and how to use them.

A second common error is a tendency to pull leaves from the inner part of the rosette; this is the least potent area. Aloe Vera should always be harvested from the outer leaves first, working inward. Not only do these possess leaf-gel with the most medicinal potential, they are also the most nearly ripe and should be used before they become so. You can always detect a ripe leaf because it will become so plump with juice that it will begin to buckle. Prune it before it does, and either use it or throw it away.

3) Use of leaves from a plant that are decomposed, or a gel that has already oxidized, dried, or been neutralized by overexposure.

A degenerated Aloe Vera leaf can often net the user the same non-results as using leaves from too young a plant. The leaves sustain their potency for a finite period of time. Aloe Vera leaves are organic and therefore perishable. Don't expect them to last forever. The pulp inside a degenerated leaf loses its potency just like those of many other succulent plants. When it does, it can become bitter and rancid. The gel turns yellowish and mustard-like in color and (if taken internally) can cause some nausea. This dehydrating form is of course the beginning stage of the dried processing for drug aloes (aloin) and can net similar purgative results.

This is the category in which there have been more professional violations of the integrity of Aloe Vera than any other. The error stems from a centuries old tradition of mistaking the effect of the "drug aloes" of ancient times as being from the fresh leaf-gel and from a failure of practitioners to acknowledge that there is in fact a difference in leaf freshness.

The tradition of "refining Aloe Vera plants into the black viscous aloin or the dried dessicated drug aloes dates back to the Sumerians and perhaps the Egyptians before them. Some of these must be recognized as primitive attempts to stabilize the properties of the plant, to make it more transportable in a world where refrigeration was virtually unheard of and where perishability was a constant challenge. In 1693, the English historian Ligon described the necessary process of preserving the aloes: "These thick leaves we take, and cut them through, and out of them issue the Aloes which we set in the Sun, and that will rarifie it and make it fit to keep." 32

"Rarifying" it in the sun or overexposing it to the elements will guarantee its partial decomposition within hours and with it most of its chemical potency. Even the average layman knows that fresh fruits and fresh or blanched vegetables are forms in which foods present their maximum nutritional benefits. The same principle applies to Aloe Vera. It is only when the gel is completely fresh or has been properly stabilized that we can expect it to achieve its most effective level of potency.

There is a paradox inherent in that statement, because if we have been presented with a dilemma concerning Aloe Vera over the centuries it has been that even in cases where it has been processed, decomposed, and violated ad absurdum it has still managed to display some convincing medicinal potentials. Yet

there can be no dismissing the existence of tests in which supposedly "fresh" Aloe Vera juice has fallen short of remarkable or even successful results in the labs.

Admittedly, there does exist an *X-factor* innate to Aloe Vera, a Catch-22 that befuddles even those of us who believe we understand its complex chemistry.

For instance, as recently as 1978, AVA, Inc. sent a batch of Stabilized* Aloe Vera gel to the U.S. Army Research Institute at Walter Reed Hospital. The gel was tested in solutions of varying strength which were introduced to several forms of native bacteria. In solutions tested with as little as 40% Stabilized * Aloe Vera Gel, the Aloe Vera killed all organisms introduced to it.

In a subsequent test the Walter Reed U.S. Army Research Staff requested that we send them fresh whole leaves cut from a mature plant to introduce the fresh gel to the same series of organisms. When tested, however, the pure 100% gel from the plant failed to kill the same native bacteria killed earlier by the 40% solution.***

There is, of course, the possibility that somewhere en route the leaves had been exposed either to extreme heat or to extreme cold. Nevertheless, these results showed us two important things. First, in its native state there does exist an "instability factor" about Aloe Vera. Second, the only way to remove that instability factor is to make sure that the gel derived from it is properly stabilized.

It is in the attempts to stabilize Aloe Vera that the industry has undergone its most serious crisis of credibility in the eyes of the medical profession, the government, and the public at large. It is under their critical gaze that many companies have tried and failed to stabilize the plant's potency. Let's examine some of the reasons.

4) The use of improperly stabilized Aloe Vera products or non-stabilized Aloe Vera products. The history of Aloe Vera is an ongoing record of attempts to stabilize the silent healer. Baking, boiling, drying in goat-skin bags, soaking, stewing, dessication, crystalization into aloin, and other alterations have been tried, all in the name of rendering it pure for all to use. Many approaches to the problem have been medieval and smack of the mentality that cleansed the souls of heretics by burning them at the stake; in a way, some of that mentality is still with us.

Since the number of improper Aloe Vera stabilizing processes

^{***} Telephone reports made from Walter Reed Research Institute to Bill C. Coats, 1979. AVA, Inc. Archives. Stabilized * Aloe Vera. Vol. III

comprise a larger group than the proper ones, we will list those first. Briefly, they are: a) refrigeration, b) boiling or excessive cooking, c) pasteurization, d) freeze-drying, e) adding chemicals to the unstable gel, and f) sanitation.

Refrigeration is not so much a means of stabilizing the Aloe Vera leaf-gel as it is a means of forestalling spoilage. If done with utmost care, the refrigerated gel can remain at least partly effective for a minimum of two weeks and a maximum of four. This is fine for individual use. But in mass quantities it could hardly be considered viable by virtue of simple logistics; turnover would have to be extremely rapid to prevent the selling of a spoiled or contaminated product. Heating or boiling Aloe Vera gel is a prevalent way of attempting stabilization and does render the product stable; it also renders it practically inert. On its own pasteurization produces results that are little better since this is no more than a technique of prolonged cooking designed to kill bacteria. Since excessive heating tends to be detrimental to the survivability of Aloe Vera, the process by itself will at best limit the enzymatic activity of the gel. At worst, it will destroy almost all its curative potential. To our knowledge, all attempts to stabilize Aloe Vera in a freeze-dried form have failed. Yet we observe with a sense of concern that there are companies that still sell "freeze-dried" Aloe Vera compounds to pharmacies and physicians for as much as \$100 a pound. Frankly, we are of the opinion that these products are of negligible curative value, and the companies who sell them should be challenged to prove their efficacy. Adding chemicals to the unstable gel, we have found, only accentuates its instability. Sanitizing conditions around packaging the gel as a sole means of stabilization, though admirable in a way, is almost naive in its approach. And unless the gel is stabilized in some manner, it will become grossly contaminated within a few days at room temperature.

At this point we might note that some of these attempts to stabilize Aloe Vera come close to the answer or at least aspects of it. We can only sympathize with those who are trying to find a sound stabilization process and wish them God's speed. It was only with a lot of divine guidance that we were able to arrive at our formula.

5) The subtleties of Aloe Vera and the cryptic way in which it works are also perennial challenges to the credibility of the plant. And even with a properly Stabilized* Aloe Vera gel, lotion, or cream, one of the most insidious reasons for the oft perceived weaknesses of Aloe Vera lies in the simple fact that it works its wonders perhaps a little too well.

One of the reasons this occurs is the lack of toxicity from the gel. In laboratory studies run by ourselves and others, we have found no measureable toxicity. Consequently, there are no side-effects; no withdrawal symptoms; no tics, quirks, smarting, or blatant messages to the body that it is being healed. After all, it is known as the "silent healer" and the "forgotten plant" precisely because it works in such a subtle way upon the system.

An illustration of that quality can be found in the case of Dr. Eugene Zimmermann's mother who had been suffering from severe rheumatoid arthritis in her knees and legs. Her son prescribed our Stabilized * Aloe Vera Cream to be applied topically, and within a couple of hours the woman was up and making her way around. When her son confronted her with her recovery by asking the academic question about whether or not the cream had helped, she responded absently at first. She stopped. She thought. And then she said, "Son, my pain is gone."

How quickly we can forget.

How Aloe Vera Can (Almost) Always Work

We know that the healing plant works best in two essential forms: as the pure fresh gel extracted from the leaf, and as a properly stabilized gel, lotion or creme derivative from it.

If you grow your own Aloe Vera, it is best to give it partial sun at least two hours a day, porous or sandy soil, and a good wind exposure. We also suggest thorough but infrequent watering. As a rule of thumb, be sparing with the water and generous with the wind. ****

Assuming you have a yard, it is best to grow Aloe Vera in a garden. If you don't have one, grow it in a large planter. We stress large planter, because it is only in a container at least eighteen to twenty-four inches in diameter that the plant will be able to grow to its full maturity and its most complete form of expression.

One advantage of growing Aloe Vera is that, given the proper climate, it can be prolific. About twice a year it produces offspring (suckers) that can be transplanted and grown into healthy mature blooms.

When you decide to use the leaf gel from the plant, harvest the leaves from the outside in. The big bulky leaves on the perimeters

^{****} About two inches of water per month should be sufficient to keep the plant healthy.

are the most mature, and it is these leaves that will provide gel with the strongest potential. Filet the leaves very much in the way you would a fish. Using a very sharp knife, split the outside back, scraping the juice and pulp into a sanitary container. You may separate the juice from the meat of the plant or mix the two in a blender.

If you keep the gel for a time, be sure to refrigerate it. But no matter what some home experts recommend, don't try to play chemist with it. Don't boil it, cook it in a casserole, or mix it with bizarre medicinal compounds that you let sit on your kitchen shelf. Don't try to cook it in a soup. Or if you insist on doing so, cook it over a low heat and eat it quickly. In all the above cases, you're risking a considerable loss of nutritive potency and will net proportionate results. Neither should you chop up, dice, or try to whipblend the gel with the rind for internal consumption. At best it will taste lousy. At worst, it may cause some digestive discomfort.

By itself, the gel is a wonderful long-range laxative, probably the best of all.

In topical applications, perhaps the best use of Aloe Vera is with a portion of the leaf split in half and administered (with the gel) directly contacting the wound. Although chemically no one has yet been able to explain the reason, all natural poultices applied to wounds, burns, and strains of various kinds work more effectively if the gel is left in context with the matrix leaf. Once the leaf is split, the leaf, gel and all should be applied to burn, wound, or bite and left as long as possible—at least a couple of hours. This method unlocks an effective healing rate often twice that of even the pure gel or of a wrap of gel-soaked bandage.

Theories abound about the interrelation of the gel with the rind. One is that the rind in context with the gel acts as a natural incubator for regeneration of tissue. Another is that the outer leaf passes phytochemical messages to the gel almost as a director for its potency. Still, the mystery of the rind-gel relationship remains exactly that—a mystery.

One aspect that is a mystery no longer is that Aloe Vera is most effective in areas where the plant can be relatively free of climatic trauma such as dampness and freezing weather. On this continent, that limits its effective growing range. It grows abundantly in Central America, Mexico, and the Southern United States but would perish in nearly three-fourths of North America where you will find over four-fifths of the population.

The significance of this statistic is that roughly four people out of

every five who might otherwise benefit from the use of fresh Aloe Vera are unable to do so. That situation points to an obvious alternative—the production of properly stabilized Aloe Vera products that can match the broad spectrum healing capabilities of the fresh plant, that will hold their stability for a prolonged period of time, and that can be applied topically, taken internally, and used in the varied ways credited to the original source.

In the next chapter you'll be presented with the opportunity to make a detailed examination of the intricate chemical composition of Aloe Vera, understand at least one point of view of how it works in the human system, and come to a solid awareness of its "active ingredient." In so doing you'll find, like everything else that works according to divine plan, it's really a matter of chemistry.