

## **Aloe Vera—The Universal Healer**

*The use of Aloe vera will be the most important single step forward in the treatment of diseases in the history of mankind.*

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More than one writer about Aloe vera has observed that when he begins to enumerate its healing and other qualities it makes him feel like a nineteenth century snake-oil salesman. I know the feeling, for I have seen the dubious frowns of potential customers at fairs and shows where we have sold our products. For this reason I developed the practice of reading appropriate references from books and other sources rather than just telling people what Aloe vera can do.

One of my fondest memories is of a prospect that was the quintessential skeptic who had heard it all before and didn't believe a word of it. I quickly read him a number of relevant passages from Bill Coats's book [The Silent Healer](#) and Alasdair Barcroft's book [Aloe Vera, Nature's Legendary Healer](#), and was gratified to see the skeptical frown turn into an expression of intense interest. When I was finished, he bought a liter of Aloe vera concentrate and a jar of cream.

I sense a certain reluctance on the part of some writers to tell everything they know about Aloe vera for fear their readers will simply find it unbelievable. Most books on Aloe vera and many research articles and other sources of information make an attempt to catalogue Aloe vera's many qualities, but in my research for this article I noted a number of omissions.

For example, a handout, prepared by a well-known manufacturer of Aloe vera products, describing the pharmacological actions of Aloe vera, neglected to mention its immunostimulant capabilities, which have far-reaching implications for the treatment of infectious diseases and immune system disorders such as AIDS. Having assembled all this information from many different sources, I have decided not to leave anything out. As a consequence, what you are now reading may be the most comprehensive (and longest) discussion of aloe vera's many qualities presently available.

If, when you have finished reading it, you find some of it too hard to swallow, e-mail me your comments, and I will be happy to refer you to my sources. There is one additional observation I would like to make before we begin. We are accustomed in this country (USA) to single-purpose medications. Thus, we take aspirin or one of its clones for headaches but not for heartburn or

constipation. Aloe vera, on the other hand, is a broad spectrum healing substance that brings many different pharmacological actions to bear on a given problem.

We think of Aloe, for example, as a great healer of wounds. But this is not a single healing action. First of all, with its analgesic action Aloe vera stops the pain, then it kills any bacteria present, penetrates the skin, stimulates increased blood flow to the area, promotes blood clotting, reduces inflammation, stimulates the growth of new tissue, and breaks down and digests dead tissue to promote a more rapid healing.

In doing all this, it has used only a fraction of its total capabilities. And so, while cataloguing Aloe vera's many healing powers will increase our understanding of what it can do, we should keep in mind that in addressing any physical problem it brings a constellation of abilities to bear rather than merely attacking isolated symptoms. It is a symphony orchestra, not a solo performer.

### **Tissue Healing**

I wish I had a dollar for every time a prospect has come up to our booth at a show or fair and shared with us some amazing (to them) story about how Aloe vera healed this cut or that burn or somebody's terrible sunburn. To our credit, I hope, we always try to act suitably impressed. Their enthusiasm is understandable.

Put a little Aloe vera on a burn such as you might get from a hot pan (as I have often done), and the first thing you notice is that the pain is relieved. Later on that day or the next morning, you glance at the burned spot and find that there is no redness, no blistering, and no pain. More severe burns, even those that blister, will heal without leaving a scar. In addition to thermal burns, Aloe vera has also proven effective in healing sunburn, chemical burns, radiation burns, X-ray burns, and even wind burn and razor burn.

And, in addition to burns of all kinds, it heals abrasions, bed sores, blisters, boils, bruises, canker sores, carbuncles, chapped lips, chemical peel, cuts, dermabrasion, diaper rash, dry skin, duodenal ulcers, eczema, epidermitis, fever blisters, frostbite, heat rash, hemorrhoids, hives, insect bites, leg ulcers, minor scars, peptic ulcers, poison ivy and poison oak, pre-cancerous lesions, psoriasis, seborrhea, stretch marks, styes, urticaria (an allergic rash), varicose veins, and wounds.

In an article titled "The 'Wonder Drug' Challenge," Bob Hayward cites research showing that topically-applied Aloe vera gel can speed wound healing times by as much as 35% by dilating capillaries, which

increases blood supply to the wound site, thus accelerating cell proliferation. A study by Dr. Faith Strickland showed that topically-applied gel not only speeds the healing of sunburn but also helps restore the immune system to normal functioning when it has been compromised by sunburn.

In 1981, a University of Chicago research team developed a protocol for treating frostbite with a combination of Aloe vera and aspirin. All but one of 44 patients with frostbite injuries ranging from first to third-degree, given topical Aloe vera every six hours and aspirin every four hours, healed without major tissue loss in the affected areas. "These results are startling," said Dr. Martin Robson, professor of surgery at the Pritzkin School of Medicine. "A much greater amount of tissue loss is usually associated with frostbite injuries."

In 1990, J.E. Fulton, Jr. of the Acne Research Institute reported a study documenting the stimulation of post-dermabrasion wound healing with stabilized Aloe vera. The abraded face was divided in half. One side was treated with the standard polyethylene oxide gel wound dressing. The other side was treated with a polyethylene oxide gel dressing saturated with stabilized Aloe vera. Overall, wound healing was approximately 72 hours faster on the Aloe side.

A number of studies have documented Aloe vera's effectiveness in treating X-ray burns, and in 1953 a study was conducted under the auspices of the U.S. Atomic Energy Commission to determine its effectiveness in treating radiation burns. Groups of ten rabbits were first exposed to beta irradiation, then treated with fresh Aloe gel and a commercially prepared Aloe ointment. After several months of testing, the doctors determined that "Treatment was found to hasten both the degenerative and reparative phases of the lesion so that complete healing of an ulcer of 28,000 rep of beta radiation was accomplished within two months of treatment, while the untreated ulcerations were still not completely healed more than four months after irradiation."

I am personally opposed to animal testing for any purpose whatsoever. Aloe vera can find its rightful place in the field of medicine without causing unnecessary suffering to innocent animals. But my opposition does not extend to depriving you of the results or such testing, so a number of other animal studies will be cited in this article.

Steven R. Schechter, N.D. cites a study in which Aloe vera was applied topically after radiation treatments to 260 human patients. Researchers claimed that the Aloe emulsions were far more therapeutic than most

synthetic preparations in reducing skin reactions due to irradiation. Aloe was also found to accelerate tissue repair and normal cell growth, and to help treat other dermatological problems.

In 1992, the Fujita Health University reported a study in which gastric ulcers were induced in rats by occluding the pylorus (the exit of the stomach). If the pylorus is occluded, gastric juice cannot be eliminated from the stomach, which results in the onset of gastric ulcers. Rats treated with Aloe vera did not develop gastric ulcers, but untreated rats developed numerous ulcers.

Dr. John Hegggers, a staff member at the Shriners' Burn Institute and Chief of the Division of Plastic Surgery at the University of Texas, has devoted a good part of his life to burn and wound studies. In 1992 he reported a study in which Aloe vera and three other popular topical therapeutic agents were compared for their wound healing performance. Rats were anesthetized, then acute wounds were created on their backs. At the end of the fourteen-day test period, the groups were measured for overall healing, and the Aloe vera group showed the greatest rate of healing over all other groups, including the untreated control group.

As mentioned earlier, the healing of tissue involves many different healing actions, but it bears repeating that perhaps the most dramatic are Aloe vera's ability to penetrate tissue and to accelerate tissue growth up to eight times the normal rate, as documented by Dr. Ivan Danhof, MD, PhD, a man whom many consider to be the world's foremost expert on Aloe vera.

## **Pain and Inflammation**

Aloe vera's reputed ability to reduce pain and inflammation in cuts and burns parallels its reputation as a legendary healer. Less well known is its widespread use today in the locker rooms of the world, where it is used as a primary or adjunct treatment to relieve the pain and inflammation associated with athletic injuries.

It has also proven effective in reducing the pain and inflammation of systemic conditions such as ulcers and arthritis. In the book Amazing Medicines the Drug Companies Don't want you to Discover the authors mention salicylates in Aloe vera which have both painkilling and anti-inflammatory properties and an enzyme which inhibits bradykinin, a producer of pain in inflamed tissue.

Dr. Bruce Hedendal of Hedendal Chiropractic & Nutritional Center treats his arthritis patients with Aloe vera and claims 90 percent positive results with patients previously considered medical failures. "For

arthritis patients,” he says, “Aloe has proven to be very nutritional, antiseptic and anti-inflammatory. Comparative studies now show that Aloe with sitosterol is as effective as the anti-inflammatory drugs pTgOmsalone and indomethacin, yet lacks their long-term toxicity.” His patients use an Aloe cream topically to reduce pain and inflammation and to increase range of motion. They also drink one to two ounces a day of Aloe concentrate to boost the immune system and improve digestion.

In studying arthritis in the laboratory, scientists induce this condition in rats by injecting their paws with protein capsules impregnated with a certain bacterium and mixed with oil. This substance produces the same symptoms as rheumatoid arthritis—inflammation characterized by deformity, swelling, pain, and diminished mobility.

In a series of tests performed by research groups headed by Robert Davis Ph.D., Aloe vera demonstrated its ability as both an anti-inflammatory agent and an anti-arthritic agent in and of itself. In one test, Aloe vera gel administered subcutaneously produced a 48% inhibition of inflammation and a 72% inhibition of the immune response, i.e., the arthritis itself.

According to an article published in “Runners’ World” magazine, a number of athletic coaches and trainers are now using Aloe vera gel mixed with aspirin to treat the pain and peripheral bleeding associated with muscle strains and sprains. The exceptional penetrating properties of Aloe vera enable it to “transport aspirin right through the skin, taking the aspirin directly to the bloodstream.”

## **Antipruritic**

Antipruritic is a fancy word that means “stops itching.” Studies suggest that Aloe vera controls itching by inhibiting histamine reactions produced by insect bites and stings, as well as the body’s reaction to Poison Oak and Poison Ivy.

## **Bactericidal, Virucidal, Fungicidal**

Aloe vera’s well-documented performance against a wide range of microorganisms makes it an ideal antiseptic, antibiotic, antiviral, and antifungal medication. Unlike conventional antibiotics that destroy everything in sight, including friendly intestinal bacteria needed for digestion, Aloe vera possesses the uncanny ability to distinguish friend from foe and destroys only the harmful organisms.

A study was done in the former Soviet Union involving seventy-five patients with pulmonary tuberculosis. They were given inhalations of Aloe vera extract twice

a day, and began to show improvement within two days. They slept better, coughed less, their chest pains ceased, their appetites improved, and their temperatures became normal. X-rays showed a decrease in infiltration in the lungs.

South African researchers also found Aloe vera juice effective against the bacillus that causes tuberculosis.

In 1994 Kathleen Shupe-Ricksecker, an assistant professor of Biology at the University of Dallas, undertook a series of in vitro (laboratory) tests to determine the effectiveness of Aloe vera against four common pathogens: Streptococcus pyogenes—a genus of nonmotile, parasitic bacteria that cause various serious diseases; Staphylococcus aureus—a species of round bacteria that causes pus formation in boils, abscesses, etc.; Pseudomonas aeruginosa—a genus of short rod-shaped pathogenic bacteria; and Escherichia coli—better known as E. coli, a potent bacterium common to the rectal cavity of every living mammal.

Dr. Shupe found that all these microorganisms were killed within twenty-four hours of exposure to high levels of Aloe vera. The Strep and Staph strains were virtually killed (99.5%) within the twenty-four hour period. The more resistant strains—E. coli and pseudomonas—were killed upon an increase of the Aloe percentage to 90%, and at that rate there was a 90% bactericidal ratio.

In 1970 Simms and Zimmermann found Aloe vera effective against the fungi that cause athlete’s foot and those that cause ringworm of the nails. Later in the same year they tested it and found it effective against both herpes simplex and herpes zoster strains of virus (herpes zoster is the chickenpox virus that also causes shingles). In other testing Aloe vera has been found to be broadly effective against a wide range of other pathogens, including Salmonella, Candida Albicans, Measles, the AIDS virus and Trichomonas vaginalis, one of the more prevalent forms of vaginal infections.

## **Biogenic Stimulator**

A recurring theme in reports about Aloe vera is that it speeds healing. One of the more remarkable ways in which it does this is by stimulating cell reproduction. When you couple this ability with the ability to penetrate deep into tissue, you have a healing agent with awesome potential. In studies conducted by Dr. Ivan Danhof, he found that Aloe vera increased the production of human fibroblast cells up to eight times the normal rate. In his book [Remarkable Aloe: Aloe Through the Ages](#), he suggests using Aloe to treat eye disorders because “some agents contained in Aloe

stimulated positive cell growth in the retina,” in this way preventing some kinds of blindness.

In a study reported in the *Journal of the American Osteopathic Society*, a group of duodenal ulcer patients took a tablespoon of an Aloe preparation daily for a year. At the end of the year, all of them had recovered.

In an article entitled “Miracle Aloe,” Glenn Troelstrup cites ulcer studies showing that Aloe heals by enhancing reproduction of normal cells and improving intestinal tissue. Laurie Taylor-Donald, in an article entitled “Aloe Vera, Nature’s Miracle,” cites Russian studies showing that Aloe extract in an aqueous solution regenerated nerve fibers. They also found it effective in treating hearing impairments. Application of the extract halted the destruction of remaining nerve fibers and restored auditory function in patients with poor hearing.

## Tissue Penetration

The ability to penetrate deep into tissue is what makes Aloe vera so effective in relieving the pain of sore muscles and arthritic joints. It also helps to account for its effectiveness in treating a long list of skin problems, including such things as acne, psoriasis, eczema, rashes, wounds and burns. According to Ivan Danhof, M.D., Ph.D., Aloe vera penetrates all seven layers of the skin and does so four times faster than water. It literally penetrates to the bottom layers of skin and heals from the bottom up.

The recent upsurge in the use of Aloe vera in cosmetics is also attributable to this ability. As a moisturizer it has no equal, for unlike other moisturizers that merely coat the skin to prevent moisture loss, Aloe vera penetrates all seven layers of the skin, carrying moisturizing and healing ingredients with it. Then, to top it off, the polysaccharides in Aloe vera create a barrier in the skin to prevent moisture loss.

This is particularly fascinating because that is what polysaccharides do in the plant itself whenever the outer surface is injured. When you cut off an Aloe vera leaf, there is an immediate migration of polysaccharides from the inner rind to the site of the wound, where they quickly seal off the end of the leaf to prevent moisture loss. When applied to the human epidermis, they perform the same function.

This penetration ability makes Aloe vera the ideal carrier for other medications. Studies have shown that Aloe vera normally enhances the effect of other medications rather than counteracting them. Bill Coats, in his book *Aloe Vera—The Inside Story*, attributes this penetration ability to the proteolytic enzymes and lignin contained in aloe vera. He says that Aloe vera is one of the most tissue penetrative healants known to modern

science, which makes it useful in treating injuries not easily reached by normal topical medications.

## Skin Rejuvenation

By now you have been introduced to the qualities that make Aloe vera an effective skin rejuvenator: the ability to penetrate tissue and carry other healing ingredients to where they are needed and the ability to stimulate the growth of new cells up to eight times the normal rate.

In a study sponsored by Bill Coats, Dr. Peter Pugliese, a Pennsylvania dermatologist evaluated the effects of stabilized Aloe vera gel in conjunction with a 10% glycolic acid exfoliant (alpha-hydroxy) treatment on five female volunteers ranging in age from fifty to fifty-five. In his final report, Dr. Pugliese cited the following areas of improvement:

1. The skin is brighter and has a greater clarity.
2. The overall tone of the skin shows improvement within 4 weeks with the skin color becoming more uniform. Certain areas of discoloration were noted to fade significantly.
3. There is an overall softening and improvement in skin smoothness that is perceptible within one week of use.
4. The skin appears moister over a longer period of time.
5. There is a significant improvement in elasticity of about 20%.
6. There is an improvement in fine dry lines of about 28%.

## Normalization of Oil Production

In an article entitled “[Aloe Vera—Nature’s Miracle](#),” Laurie Taylor-Donald cites a study in which three people suffering from seborrhea and dandruff had their scalps treated with Aloe pulp. Oiliness of the scalp decreased within the first week, and the pulp treatment even seemed to cause hair re-growth. This ability to normalize the production of skin oils was also noted in the preceding section.

In the cosmetics industry, separate products are formulated for women with dry, oily, or normal skin. With an Aloe vera moisturizer this is not necessary, since the Aloe vera will correct the imbalance in oil production in either direction. Acne is a condition characterized by an over-production of oil by the sebaceous glands in the skin, resulting in infection and inflammation. Aloe vera’s ability to penetrate tissue, destroy the bacteria causing the infection, and then

normalize the oil production that caused the acne in the first place, make it an ideal acne remedy.

## **Digestive Problems**

As effective as Aloe vera is in treating the outside of the body, it should come as no great surprise that orally-ingested Aloe vera should prove equally beneficial to the inside of the body. As early as 600 B.C., Arabs were using Aloe vera internally, so it has now been used as a folk remedy for digestive problems for several thousand years.

Dr. Ivan Danhof reports that for 300 years the curanderos (healers) of the Rio Grande Valley have recommended consumption of Aloe vera for “Las enfermedades del estomago y los intestinos, pero especialmente para las ulcers.” (The diseases of the stomach and intestines, but especially for ulcers.)

In a paper entitled “Effect of Orally Consumed Aloe Vera Juice on Gastrointestinal Function in Normal Human Beings,” Dr. Jeffrey Bland, of the Linus Pauling Institute of Science and Medicine, reported on the results of a study designed to evaluate the impact of orally consumed Aloe vera juice on colonic bacterial activity, gastrointestinal pH, stool specific gravity, and gastrointestinal motility in normal subjects. The most marked result was a decrease in stool specific gravity indicating a greater water-holding characteristic of the stool and improved gastrointestinal motility with reduced bowel transit time.

The average gastrointestinal pH after aloe supplementation increased by 1.86 units, indicating that Aloe vera juice supplementation acts as a mild antacid. A reduction in urinary indican indicated an improvement in protein digestion and absorption that was seen as lowered bowel putrefaction. Clinical improvements included reduced bloating after meals and reduced flatulence, indicating improved colonic bacterial function.

Other studies have demonstrated that Aloe vera is effective in the treatment of ulcers, irritable bowel syndrome, colitis, indigestion, heartburn, and maldigestion associated with immuno-depressive conditions such as Chronic Fatigue Syndrome, Candidiasis, and AIDs. Inasmuch as our bodies are what we eat, the consumption of a few tablespoons of Aloe vera concentrate each day could greatly enhance our overall health and sense of well-being. It’s pretty cheap insurance too.

## **Detoxification**

When taken orally, Aloe vera gently cleanses and detoxifies the body. In his book, Aloe Vera—Nature’s

Legendary Healer, Alasdair Barcroft points out that this detoxification process can result in temporary symptoms such as skin rashes, headaches, puffy skin, wind, tiredness, queasiness, aches and pains.

In describing the effects of Aloe vera on the immune system, John C. Pittman, M.D. pointed out that Acemannan, a mucopolysaccharide constituent of Aloe vera, is a long chain sugar that interjects itself into all cell membranes. “This results in an increase in the fluidity and permeability of the membrane allowing toxins to flow out of the cell more easily and nutrients to enter the cell. This results in improved cellular metabolism throughout the body and an overall boost in energy production.” This detoxification ability makes orally ingested Aloe vera useful in the treatment of such skin conditions as psoriasis and eczema, which are actually systemic in origin.

## **Laxative**

H.S. Odes and Z. Madar of the Intestinal Diseases Unit, Soroka Medical Center conducted a double-blind study to determine the effect on constipated patients of a novel laxative preparation composed of celandin, Aloe vera and psyllium. Thirty-five men and women were randomized to receive capsules containing the laxative or a placebo for a period of 28 days. In the laxative group, bowel movements became more frequent, the stools were softer, and laxative dependence was reduced. In the placebo group, all these parameters were unchanged. These results showed that the preparation is an effective laxative in the treatment of constipation.

## **Anti-allergy**

In a report on the uses of Aloe vera in his own practice, Lee Cowden, MD reported that “Patients who use the Aloe on a regular basis also appear to have fewer episodes of viral infection and allergic symptoms from both food and inhalant allergies than they had prior to starting the Aloe products.”

## **Anti-insomnia**

In the aforementioned report by Lee Cowden, MD he also stated that “When using whole leaf Aloe orally for these various conditions (i.e., esophagitis, gastritis, peptic ulcers, irritable bowel syndrome, etc.), I also noticed that patients who had sleep disturbance demonstrated an improved quality of sleep while on the Aloe, and that when the Aloe was discontinued for the other condition, that oftentimes the sleep disturbance recurred. This observation has also been

made in a controlled study on alcoholic patients in Washington.”

## **Anti-stress Factor**

In primitive man the stress reaction was a survival mechanism that quickly prepared him to fight or flee from oncoming danger. In modern times, when the apparent source of danger might be an unsympathetic boss who doesn't think you are carrying your share of the load, you still get the stress reaction—in fact, it becomes chronic—but fight or flight may not be viable options. In which case, you just sit there and stew in your own adrenalin and eventually wind up with ulcers, hypertension, depression or cancer.

Some studies have shown that Aloe vera may be helpful in ameliorating the effects of stress. In an article entitled “Internal Uses of Aloe Vera,” Dr. Ivan Danhof cites studies using laboratory rats that have shown that if Aloe vera is administered prior to the ulcer-inducing stress (immobilization), there is an 80% decrease in the number of ulcers formed compared with control animals given saline instead of the Aloe vera.

Many similar rat studies have produced the same results. In *Aloe Vera—The Inside Story*, Bill Coats cites a study he sponsored in which laboratory rats were kept in small “maximum confinement” spaces. Half of the rats were given nothing but water, and the other half were given nothing but Aloe vera. The Aloe vera group wound up with 85% less ulcers than the water group.

## **Normalization of Blood Sugar**

In 1992 a series of studies were conducted at the Fujita Health University to determine the effect of Aloe vera on the blood sugar levels of diabetic mice. In one study using mice with non-insulin-dependent diabetes, injections of Aloe vera reduced blood glucose levels to a normal range 8-12 hours after injection.

In a second study, two groups of mice were injected with a drug called streptozotocin, known to destroy the beta cells of the pancreas, thereby inducing diabetes mellitus. One group was then injected with an extract from the Aloe leaf itself and the other was injected with an extract from the inner gel. In the mice treated with the Aloe leaf extract the beta cells were preserved. In the mice treated with the gel extract the cells were destroyed, but these mice also showed normalization of blood glucose levels, leaving the scientists to surmise that some substance in the Aloe vera itself, like insulin, reduces the level of blood glucose.

## **Circulatory Problems**

Despite a wealth of information concerning the causes and treatment of circulatory problems, coronary heart disease continues to be one of the major causes of death in the Western world. Both animal and human studies have shown that the use of Aloe vera can lower serum cholesterol, triglycerides, and phospholipids, which seem to accelerate the deposition of fatty materials in the arteries.

In one study, a group of laboratory rats fed on a high-cholesterol diet were separated into two groups. To the diet of the experimental group was added a polysaccharide called Glucomarman derived from Aloe vera. Compared to the control group, the group fed the Glucomarman showed:

1. Decreased total cholesterol levels.
2. Decreased triglyceride levels.
3. Decreased phospholipid levels.
4. Decreased nonesterified fatty acid levels.
5. Increased HDL (good) cholesterol levels.
6. Markedly increased HDL total cholesterol ratios.

In 1984, Dr. O. R. Agarwal reported on the results of a 5-year study involving 5,000 people diagnosed as having angina pectoris. To their diets was added Aloe vera and the husk of a fibrous plant called Isabgol. They showed a marked reduction in serum cholesterol and the frequency of angina attacks was reduced. After five years, all the patients were still alive and had reported no adverse side-effects.

## **Glandular Stimulation**

Since one of Aloe vera's best-documented abilities is that of stimulating the growth of new tissue, it should not be surprising that Aloe vera can improve the performance of weakened glands. In trials conducted at Fujita Health University in Japan, it was reported that Aloe vera normalized the blood sugar levels of diabetic patients. The report states that “These effects are attributed to the stimulation of insulin secretions from residual pancreatic beta cells.”

Scientists consider that positive experiences reported by or about individuals are “anecdotal” and, as such, have no scientific value. So, be warned: this next report has no scientific value. While in the early recovery stages of a yearlong siege of what had been diagnosed as major depression, I read somewhere that Aloe vera could stimulate the thyroid gland. Since my condition was complicated by, or perhaps largely due to, an

under-active thyroid gland, I was taking two grains of thyroid hormone per day. I have long been opposed to taking drugs of any kind, so I decided to try Aloe vera and see if I could get off the hormones.

After about two months I noticed my energy level improving, so I began reducing my hormone intake by one-half grain per day. In four days I was off of them altogether. For a few days, perhaps even a few weeks, I experienced a certain amount of sleepiness in the afternoons and evenings, but eventually even this went away, and I have not taken (or needed) any thyroid hormone now for about a year.

## **Immunostimulant**

Bill Coats does a good job of describing what the immune system is and how it's different constituents operate and interact with each other to repel foreign invaders in chapter 8 of his book [Aloe Vera—The Inside Story](#). I highly recommend it. The story on macrophages, phagocytes, lymphocytes, leucocytes, neutrophils, cytokines, T-cells, B-cells, interferon and interleukin, not to mention the antigens which create the whole mess in the first place, is a fascinating read. Here is some of the research in this area and its implications for the victims of AIDS and other immune system disorders.

A study conducted by the University of Utrecht in the Netherlands isolated two polysaccharides in Aloe vera that have the capability of increasing the number and activity of circulating lymphocytes, which are the body's first line of defense against invading pathogens.

A paper by Lawrence G. Plaskett, a researcher in Cornwall, England, describes a study in which Aloe vera increased the resistance of mice to a killer pneumonia bacterium. According to Plaskett, "It had this effect not through any action of directly killing the bacterium—no antibiotic effect—but, rather, through positive effects on the performance of the animals' immune systems."

Dr. Terry Pulse reported in the "Journal of Advancement of Medicine" that half of his 29 AIDS patients went into remission within 18 months after taking Aloe vera, fatty acid capsules, vitamins and minerals.

Researchers at Tokyo Women's Medical College have shown that certain lectins in Aloe vera may stimulate the immune system by increasing the production of cells that kill bacteria and tumor cells.

According to Ivan Danhof, MD, PhD, scientific evidence suggests that Aloe vera contains substances

that are active both in stimulating phagocytosis as well as stimulating the formation of antibodies.

John C. Pittman, MD, practices in Raleigh, NC, where he specializes in a multidimensional treatment plan for immune disorders utilizing nutritional and alternative therapies along with conventional medicine. In a lengthy and erudite article entitled "Immune Enhancing Effects of Aloe" he describes the pathologies present in immune system disorders and the effects of a mucopolysaccharide called Acemannan on these conditions.

According to Dr. Pittman, "The most striking commonality found in individuals suffering with immuno-depressive conditions (Epstein-Barr virus, Chronic Fatigue Syndrome, systemic candidiasis, HIV infection and others) is their high incidence of digestive dysfunction and maldigestion."

Maldigestion results in cellular starvation, which decreases the effectiveness of all internal chemical processes, and affects the cells of the immune system along with all other cells. In addition, maldigestion results in partially digested food remnants that then become involved in several pathological reactions. The foreign proteins of the partially digested food leak into the lymphatic channels of the intestinal wall and from there gain access to the circulation. Here, these proteins are recognized as foreign and are attacked by cells of the immune system. This, then, produces a hyperimmune state that drains the immune system down like a battery when the headlights are left on.

The Aloe-derived Acemannan has been shown to have a remarkable ability to normalize all of these damaging processes and contribute significantly to the enhancement of immune system function. Its effects are due to one simple process at the cell membrane level. It injects itself into all cell membranes, which results in an increase in the fluidity and permeability of the membrane. This allows toxins to flow out of the cell more easily and nutrients to enter the cell. This results in improved cellular metabolism throughout the body and an overall boost in energy production.

Dr. Pittman summarized his findings as follows: "It is because of these versatile and comprehensive characteristics that concentrated Aloe vera juice is strongly recommended in the treatment of immune deficiency disorders. It plays a prominent role along with other therapies, nutritional supplements, and medications in the multidimensional treatment of these illnesses." Aloe Vera is not a cure for AIDS, but at the present time it appears to be the most useful treatment modality, and unlike AZT and other drugs, it is relatively inexpensive and has no known toxicity or side effects.

## Anti-cancer Actions

Aloe vera is not a cure for cancer either, but it has proven its value in treating cancers in both animals and humans. And at least one study has shown that it can be useful in preventing cancer. According to Dr. Ivan Danhof, Aloe vera causes the release of tumor necrosis factor Alpha, which blocks the blood supply to cancerous growths.

A study at the University of Okinawa found that daily doses of Aloe vera could help prevent the onset of lung cancer in smokers. Dr. Keisuke Fujita, MD, PhD, of the Fujita Health University reported that pre-cancerous lesions induced in the livers of rats were reduced in size by oral administration of Aloe vera. When researchers fed the rats Aloe vera before administering the cancer-inducing agent, Aloe vera appeared to have some potential for preventing cancer.

Dr. Ivan Danhof, in his article entitled “Internal Uses of Aloe Vera,” cites research in which a specific molecule derived from Aloe vera was shown to possess anti-cancer activity against lymphocytic leukemia. Additional investigations revealed that another molecular species derived from Aloe vera had anti-tumor activity, but the action was a bolstering of the immune system rather than direct anti-tumor activity.

## Longevity

According to the Seminole Indians the legendary Fountain of Youth was a sparkling pool surrounded by Aloe vera plants. Perhaps if Ponce de Leon had looked for the plants instead of the pool, he might have fared better. Considering the fact that Aloe vera can regenerate tissue, increase cell permeability and thus improve both the utilization of nutrients and the removal of waste and toxins, improve circulation, stimulate the glandular systems, and enhance the operation of the immune system, doesn't it follow that it might also be able to slow down the aging process? And even if this is presently only a possibility, doesn't it make a lot of sense to drink the juice of this nutritious plant and, if nothing else, enjoy all of its other health benefits?

Aloe vera's life-extending potential occurred to me some time back, and I take a tablespoon of Aloe vera concentrate every morning and evening. This intriguing possibility has, of course, occurred to many other people, some of them in a position to test it out.

The University of Texas Health Science Center has launched a long-term study to determine whether dietary Aloe vera can slow down the aging process in humans. Preliminary work on rats appears very

promising. An earlier rat study involving the use of a substance that was a close relative of the polysaccharides contained in Aloe vera, showed that it was useful in improving the immune function of aging rats.

## Adaptogenic

In Aloe Vera—Nature's Legendary Healer, Alasdair Barcroft describes this as Aloe vera's most extraordinary property, the ability to act appropriately on the specific problem or problems of the person using it. People taking Aloe vera for one problem are often surprised when it handles something else.

I began taking Aloe vera juice because of an underactive thyroid gland and was pleasantly surprised to find that it also handled my heartburn. Later on, a combination of the juice and topically applied Aloe vera gel handled a painful toe joint in my left foot that had prevented me from doing any backpacking or hiking for more than five years.

Aloe vera provides the body with what it needs, and in a greater abundance and variety than any other plant on earth.

## Miscellaneous

African Congo hunters rubbed their bodies with Aloe vera to reduce perspiration and human scent, enabling them to approach their prey with less chance of detection. Following their lead, manufacturers have now formulated Aloe vera antiperspirants and deodorants.

Other Africans hung Aloe vera over the entrances to their huts to ward off evil spirits. Central American Indians rubbed the bodies of their children with Aloe vera to keep mosquitoes away.

Mexican women to this day use it as a shampoo and to set their hair. Research indicates that Aloe vera penetrates the hair just as it does the skin and gives it body and sheen.

Russian researchers have found Aloe vera useful in eliminating bed-wetting. They have also found it useful as a spray to eliminate nasal congestion. Unlike other sprays it did not cause irritation of the nasal passages.

I use eyedrops made from a solution of half Aloe vera concentrate and half distilled water. It stings for just a moment, but then makes your eyes feel very refreshed.



## Prevention

“An ounce of prevention is worth a pound of cure,” said Poor Richard in his celebrated Almanack. When you consider that bypass surgery could cost you (or your insurance company) \$30,000 or more, it certainly seems as though it would be cost effective to prevent the heart disease in the first place. And the same could be said for many other degenerative diseases.

Treatments for cancer and arthritis are not exactly cheap. So far, we have only been talking about Aloe vera's healing powers and the conditions it can heal. But surely if it can help or heal arthritis, heart disease, diabetes, asthma, candida, ulcers, colitis, AIDS, and cancer, isn't it logical to assume that it could also help to prevent these conditions in the first place? Scientific studies bear this out, for example, the rat study which showed that Aloe vera prevented the onset of gastric ulcers. Bottom line: Aloe vera is some of the cheapest insurance you can buy.

## The A to Z of Aloe Vera

Several writers have attempted to catalogue all the conditions that Aloe vera has been used for. Herewith are the results of their efforts with an addition or two of my own.

Abrasions, abscesses, acidity, acne, AIDS, allergies, anemia, arthritis, asthma, athlete's foot.

Bad breath, baldness, bed sores, bee stings, bladder infections, blisters, blood pressure, boils, bronchitis, bruises, burns, bursitis.

Candida, canker sores, cancer, carbuncles, cataracts, chapped lips and skin, C chemical burns, chemical peel, chemotherapy, chicken pox, circulatory problems, colds, cold sores, colic, colitis, conjunctivitis, constipation, contusions, corneal ulcers, cradle cap, cuts, cystitis.

Dandruff, denture sores, depression, dermabrasion, dermatitis, diabetes, diaper rash, dishpan hands, dry skin, duodenal ulcers, dysentery.

Ear infection, eczema, edema, epidermitis, Epstein-Barr virus, erysipelas.

Fever blisters, flea bites, fissured nipples, folliculitis, fungus.

Gangrene, gastritis, genital herpes, gingivitis, glands (swollen), glaucoma.

Headaches, heartburn, heat rash, hemorrhoids, hepatitis, herpes, hives, hypothyroidism.

Impetigo, indigestion, inflamed joints, insect bites, insomnia, irritable bowel syndrome, itchy skin.

Jaundice, jock itch.

Keratoses, kidney infections.

Laryngitis, leg ulcers, leukemia, liver ailments, leprosy, lupus.

Menopausal flushes, multiple sclerosis, muscle cramps/strains.

Nausea, nervous stomach.

Peptic ulcers, pin worms, poison ivy, poison oak, prostatitis, psoriasis.

Radiation burns, rashes, ringworm, rosacea.

Scabies, sebaceous cyst, seborrhea, shingles, sickle-cell disease, skin rashes, skin sores, sore throat, sprains, staph infections, stings, stretch marks, styes, sunburn.

Thrush, tendonitis, tonsillitis, trachoma, tuberculosis.

Ulcers, urticaria.

Vaginitis, varicose veins, venereal sores, vulvitis.

Warts, wind burn, wounds.

X-ray burns.

Yeast infections.

I would like to leave you with a couple of summary thoughts. It may have occurred to you to wonder why, if Aloe vera is so great, the orthodox medical establishment has largely ignored it. I wonder about that myself, and if you should figure it out, I wish you would let me know. I do have a couple of ideas on the subject.

First of all, the medical establishment has tended to be conservative. Elsewhere on this website I described how Aloe vera had outperformed both prednisone and indomethacin as an anti-inflammatory agent in arthritis, with none of their side effects, and yet these two drugs continue to be the treatments of choice by orthodox physicians.

Another reason, I believe, is that Aloe vera cannot be patented as a prescription drug. When a drug company gets a patent on a drug, they can charge what they want

for it, and if the drug is popular, they make millions from it. Eli Lilly has made billions from Prozac, and the FDA has received more adverse reaction reports on Prozac than on any drug in history. When there is this kind of money to be made from a drug, the pharmaceutical companies are willing and able to spend millions promoting it. There is no incentive to provide that kind of promotion money for Aloe vera.

The good news, so far as Aloe vera is concerned, is that today we are in the midst of an epic paradigm shift in the field of medicine. Allopathic medicine, to which we owe the germ theory of disease, antibiotics, immunization, and many other medical marvels, has proven to be impotent in the face of degenerative illnesses such as cancer, arthritis, heart disease, etc.

A new kind of doctor, the holistic physician, who looks at the whole body and the interactions among its parts rather than at individual body parts and isolated symptoms, is rapidly gaining the field. I can recall a time, not too distant, when my doctor in California suffered from constant harassment from the State Medical Board and the local medical society for prescribing dietary supplements.

Today, almost half of the people in America have visited an alternative practitioner of one kind or another. It is among these holistic practitioners and their patients that Aloe vera will find its warmest reception, and it is they, rather than the orthodox medical establishment, who will ultimately elevate Aloe vera to its rightful place as a vitally important treatment modality.

Meanwhile, there is no reason why you and I should wait to enjoy the health benefits of Aloe vera. It has no known toxicity, no side effects, no contra-indications. According to Bill Coats, it is as safe as tap water (probably safer). It is a vegetable juice, and drinking it is similar to drinking carrot juice or orange juice.