



Aloe Vera Juice

Stock #1680-4 (32 fl. oz.)

Use of the Aloe vera plant for medicinal and therapeutic purposes dates back over 4,000 years. Of more than 300 species of aloe plants, only 4 have been found to provide medicinal properties, the most potent of which is the species *Aloe barbadensis*. The most commonly utilized part of the aloe plant is the gel obtained from the inner layer of the leaf. This gel is comprised of 99% water, along with small amounts of more than 75 constituents, including vitamins, minerals, amino acids, enzymes and polysaccharides. The combined actions of these substances helps explain the numerous health benefits attributed to Aloe vera use, including anti-inflammatory, hypoglycemic (blood sugar-lowering) and lipid-reducing (the reducing of blood fats like cholesterol) effects.¹⁻⁷

For example, the polysaccharides in Aloe vera gel exhibit antioxidant, immunostimulating, antibacterial, antiviral and antitumor properties. In particular, the polysaccharide acemannan has been shown to enhance immune system function by stimulating the production of various white blood cells, as well as interferon—a powerful immune substance that fights viral infection by inhibiting viral growth. Aloe gel also contains enzymes that inhibit the action of bradykinin—a substance that causes pain and inflammation. In addition, aloe gel contains salicylic acids—substances that provide anti-inflammatory activity and help heal wounds by removing dead tissue that would otherwise promote infection and slow the healing process.^{1-4,6,8-14}

Various studies have documented the anti-inflammatory actions of Aloe vera gel and its potential therapeutic effect in the treatment of inflammatory bowel disease—the general name for diseases that cause inflammation in the small intestine and colon—and peptic ulcers. In a recent double-blind, randomized, placebo-controlled trial of Aloe vera gel for the treatment of mildly to moderately active ulcerative colitis, results showed clinical remission in 30% of patients taking Aloe vera versus only 7% of those taking a placebo, and an overall positive clinical response (defined as remission or improvement) in 47% of patients taking Aloe vera, compared to 14% of those taking a placebo.^{1,5,15,16}

Research has also determined the presence of several trace minerals in Aloe vera gel that possess hypoglycemic (blood sugar-lowering) properties, as well as glucomannan, a water-soluble fiber that also exhibits hypoglycemic effects. The presence of these substances help explain the reported hypoglycemic nature of Aloe vera. Preliminary human clinical studies involving patients with Type 2 (non-insulin-dependent) diabetes have documented reductions in fasting blood glucose levels with no adverse effects. Such results suggest a potential role for Aloe vera in controlling blood sugar levels in diabetics.^{1,7,17,18}

In addition, the results of controlled clinical trials suggest that oral administration of Aloe vera might be a useful adjunct, or complementary therapy, for reducing blood lipid levels in patients with hyperlipidemia (an excess of fats in the blood such as cholesterol and/or triglycerides).³

Another study found that supplementation with Aloe vera gel extract was able to reduce the severity of chemically-induced liver cancer in rats.¹⁹

Furthermore, Aloe vera gel has been shown to improve the absorption of both vitamins C and E. The combined intake of vitamins C and E with 2 ounces of Aloe vera gel showed that the absorption of these vitamins was slower and they lasted longer in the blood than when taking either vitamin alone.²⁰

NSP's Aloe Vera Juice is derived from 100% pure Aloe vera (*Aloe barbadensis*) gel, obtained from the inner portion of the aloe leaf, and purified water. NSP's Aloe Vera Juice contains only the Aloe vera gel, which contains no anthraquinones—substances such as aloin that are responsible for the plant's strong laxative effects.^{2,3,12}

NSP's Aloe Vera Juice carries the IASC (International Aloe Science Council) Certification Seal of Approval.

References:

- ¹Devi RN, L. "Aloe vera (*Aloe barbadensis*)."
American Botanical Council, 1998.
<<http://herbalgram.org/herbclip/review.asp?i=41499>>. Accessed June 2006.
- ²Presser PharmD, A.M. *Pharmacist's Guide to Medicinal Herbs*. Petaluma, CA: Smart Publications; 2000.
- ³Vogler, B.K. & Ernst, E. "Aloe vera: a systematic review of its clinical effectiveness."
British Journal of General Practice; 1999, 49(447):823-828.
- ⁴Yagi, A., et. al. "Radical scavenging glycoprotein inhibiting cyclooxygenase-2 and thromboxane A2 synthase from aloe vera gel."
Planta Medica; 2003, 69(3):269-271.
- ⁵Langmead, L., et. al. "Anti-inflammatory effects of aloe vera gel in human colorectal mucosa in vitro."
Alimentary Pharmacology & Therapeutics; 2004, 19(5):521-527.

- ⁶Lee, J.K., et. al. "Acemannan purified from Aloe vera induces phenotypic and functional maturation of immature dendritic cells." *International Immunopharmacology*; 2001, 1(7):1275-1284.
- ⁷Rajasekaran, S., et. al. "Mineral contents of aloe vera leaf gel and their role on streptozotocin-induced diabetic rats." *Biological Trace Element Research*; 2005, 108(1-3):185-195.
- ⁸Reynolds, T. & Dweck, A.C. "Aloe vera leaf gel: a review update." *Journal of Ethnopharmacology*; 1999, 68(1-3):3-37.
- ⁹Harris, C., et. al. "Efficacy of acemannan in treatment of canine and feline spontaneous neoplasms." *Molecular Biotherapy*; 1991, 3(4):207-213.
- ¹⁰Ferro, V.A., et. al. "In vitro susceptibilities of *Shigella flexneri* and *Streptococcus pyogenes* to inner gel of *Aloe barbadensis* Miller." *Antimicrobial Agents and Chemotherapy*; 2003, 47(3):1137-1139.
- ¹¹Wang, Z., et. al. [Study on antitumor effect and mechanism of aloe polysaccharides]. *Zhong Yao Cai*; 2001, 24(5):350-353.
- ¹²Fetrow, C. & Avila, J. *Professional's Handbook of Complementary & Alternative Medicines*. Springhouse Corp., 1999.
- ¹³Klein, A.D. & Penneys, N.S. "Aloe vera." *Journal of the American Academy of Dermatology*; 1988, 18(4 Pt 1):714-720.
- ¹⁴Hu, Y., et. al. "Evaluation of antioxidant potential of aloe vera (*Aloe barbadensis* miller) extracts." *Journal of Agricultural and Food Chemistry*; 2003, 51(26):7788-7791.
- ¹⁵Robinson, M. "Medical therapy of inflammatory bowel disease for the 21st century." *European Journal of Surgery Supplement*; 1998, (582):90-98.
- ¹⁶Langmead, L., et. al. "Randomized, double-blind, placebo-controlled trial of oral aloe vera gel for active ulcerative colitis." *Alimentary Pharmacology & Therapeutics*; 2004, 19(7):739-747.
- ¹⁷Yeh, G.Y., et. al. "Systematic review of herbs and dietary supplements for glycemic control in diabetes." *Diabetes Care*; 2003, 26(4):1277-1294.
- ¹⁸Ghannam, N., et. al. "The antidiabetic activity of aloes: preliminary clinical and experimental observations." *Hormone Research*; 1986, 24(4):288-294.
- ¹⁹Shamaan, N.A., et. al. "Vitamin C and aloe vera supplementation protects from chemical hepatocarcinogenesis in the rat." *Nutrition*; 1998, 14(11-12):846-852.
- ²⁰Vinson, J.A., et. al. "Effect of Aloe vera preparations on the human bioavailability of vitamins C and E." *Phytomedicine*; 2005, 12(10):760-765.