



Aloe Vera and GI Tract Health

Introduction

The American College of Gastroenterology reports that 95 million Americans experience some kind of digestive problem in their lifetime and over 10 million of them are hospitalized each year for these problems. One of the major causes is that excessive hydrochloric acid secretion will manifest into various disease conditions. Acid reflux, heartburn, peptic ulcers, functional dyspepsia, and irritable bowel syndrome are all gastrointestinal issues caused or accelerated in part by excessive hydrochloric acid in the stomach^{1,2}. Antacids neutralize the stomach acid but cannot change excessive secretion due to the protective nature of the stomach. Pharmaceutical drugs have been designed to inhibit the signal from the brain to the cells of the stomach that release hydrochloric acid. Although both of these categories of drugs work as designed they can cause more harm than good. The best way to solve excessive secretion of hydrochloric acid is to orally consume a good quality Aloe vera that raises the pH of the stomach within the safe limits. Properly processed organic Aloe vera inner leaf gel powder will raise pH to eliminate discomfort, facilitate healing of the gastrointestinal tract and act as a probiotic for gut health.

Case Study

Antacids come in a variety of over the counter and prescription pharmaceutical forms. Over the counter antacids typically contain calcium carbonate and other alkali to neutralize the acid. By neutralizing stomach acid, antacids actually have a damaging effect by raising the stomach pH beyond the safe threshold of the body. When this occurs the brain receives a signal that the pH is too high and the body responds to release more hydrochloric acid to compensate. This cycle of too high a pH and more hydrochloric acid by the body persists as the sufferer consumes more antacid pills which then reinitiates the process.

Pharmaceutical drugs use a technology to block the brain signal receptors for the acid producing cells³ in the stomach. These drugs are called “proton pump inhibitors” since they block the signal coming from the brain to secrete more hydrochloric acid. The first problem is that a person would have to continue to use these drugs in order to keep the acid levels low. The second problem is that these drugs block the communication-response system to the brain disrupting the entire digestive process. The continued use of proton pump inhibitors impairs the digestion process since the body has no way to adjust for the right amount of acid to be released during or between meals. This interferes with the normal digestive process. Chronic use of these proton pump inhibitors have been associated with increased risk of losing bone density resulting in fractures and osteoporosis. It is believed the long term use of these drugs can impair absorption of calcium and other important minerals.^{4,5}

The healing effect of Aloe vera has been documented throughout the decades. The Ukrainians are credited with preliminary research concerning a “wound hormone” found in certain plant tissues. They observed that this plant hormone accelerated the healing of injured plant surfaces. Using skin lesion models in rats and rabbits they observed that this plant “wound hormone” had the same effect in mammals. Testing was done by injection and topical application. The topical application was much more rapid and complete resulting in a systemic response and accelerated healing.⁶ Additional research found that Aloe vera gel was a safe and effective source of the “wound hormone” which was later identified as Acemannan. Oral ingestion of Aloe vera appeared to be the best route of administration for gastric ulcers. A group of Osteopathic Doctors in Florida decided to test these observations on a group of their patients in the early 1960's. The patients

were diagnosed as having peptic ulcers. Using Aloe vera inner leaf gel that was separated from its cellulose matrix they prepared an emulsion that utilized a teaspoon amount as a single dose. The only change in their diet was the daily consumption of the Aloe vera emulsion. All of the patients had completely recovered by the end of 1961.⁶

Aloe does much more than deliver the wound hormone Acemannan to ailing tissue. Aloe vera contains a natural buffer system that can restore a healthy level of stomach acid by raising the pH enough⁷ to relieve the discomfort of indigestion, but not enough to trigger the release of more acid. Orally administered high quality Aloe vera powder eliminates the up and down cycle common to antacids.

Aloe vera also functions as a probiotic to promote the growth of good flora in order to optimize digestive function. Millions of bacteria thrive in our intestine and play a vital role in our health, both in our immune system balance as well as in the digestion of many of our dietary components. It has been shown that human intestinal flora metabolize polysaccharides after ingestion of Aloe vera.⁸ Bland had shown earlier that ingestion of Aloe vera by healthy individuals aids in the health of the bacterial flora which in turn results in improved health of the digestive system as a whole. This was evidenced by better protein digestion when tested from urine samples.⁷

Stomach acid balancing, soothing of the gastrointestinal tract, promoting growth of good bacteria and delivery of the wound hormone Acemannan are some of the properties that have made Aloe vera the plant of choice for ages. Daily oral consumption of Aloe vera can eliminate dependence upon both types of drugs commonly used to control excessive hydrochloric acid without any of the negative side effects. To reduce potential contamination of the digestive tract from pathogens it is important to consume properly processed organic Aloe vera inner leaf gel powder from a reputable source.

References:

1. Dyspepsia Overview. www.mayoclinic.com
2. Laura Noddin, MD; Michael Callahan, PhD; Brian E. Lacy, MD, PhD. Irritable Bowel Syndrome and Functional Dyspepsia: Different Diseases or a Single Disorder With Different Manifestations? Posted: 08/29/2005; Medscape General Medicine. 2005;7(3):17 © 2005 Medscape.
3. Wright MJ, et.al. Proton pump-inhibiting drugs, calcium homeostasis, and bone health. *Nutr Rev.* 2008 Feb;66(2):103-8
4. Insogna KL. The effect of proton pump-inhibiting drugs on mineral metabolism. *Am J Gastroenterol.* 2009 Mar;104 Suppl 2:S2-4.
5. Li XQ, et.al. Comparison of inhibitory effects of the proton pump-inhibiting drugs omeprazole, esomeprazole, lansoprazole, pantoprazole, and rabeprazole on human cytochrome P450 activities. *Drug Metab Dispos.* 2004 Aug;32(8):821-7.
6. Blitz, JJ, et. al., Aloe vera gel in peptic ulcer therapy: Preliminary report. *Journal of the A.O.A.,* Vol. 62, April 1963: p.731-77.
7. Bland, J., Effect of Orally Consumed Aloe Vera Juice on Gastrointestinal Function in Normal Humans, *Preventive Medicine,* March/April 1985.
8. Robert A. Sinnott et.al. Utilization of Arabinogalactan, Aloe vera Gel Polysaccharides, and a Mixed Saccharide Dietary Supplement by Human Colonic Bacteria In Vitro. *INTERNATIONAL JOURNAL OF PROBIOTICS AND PREBIOTICS,* Volume 2, Number 2/3, pp. 97-104 (2007)