

Potential Benefits from Orally-IngestedInternal Aloe vera Gel

Beverages made from the internal gel of Aloe *barbadensis* (Aloe vera) are ingested daily by an increasing number of adherents, who continue to do so because of a number of subjective benefits felt to be derived from the ingestion of aloe. While the juice does contain vitamins and minerals, growth factors, polysaccharides and proteins, one cannot attribute the benefits to the nutritional moieties in the aloe gel. Indeed, as the internal aloe gel, on average, contains less than one percent solids, distributed among more than 200 individual constituents, it would appear that no single constituent would be present in a quantity to provide any significant nutritional beneficial effect. An additional problem concerns how the constituents are handled in the digestive tract, which are digested, which are destroyed, which are absorbed, in what quantity, and by which absorptive mechanism.

Despite these problems, evidence is accruing, both in the experimental laboratory as well as in the clinical setting, that indicates a number of potential benefits, so frequently enunciated in anecdotal reports, may, indeed, have some basis in fact.

Evidence will be presented which suggests increasing credibility for the benefits of ingested aloe gel for:

- (1) A cardiac stimulant, which enhances cellular energy-mechanical contraction coupling not unlike the action of digitalis (Ref. 1);
- (2) Protection of the gastrointestinal mucosal lining against noxious ulcerogenic stimulants (Refs. 2,3,8,12);
- (3) Improvement in hepatic function in experimental cirrhosis (Refs. 9,11);
- (4) Acceleration of incorporation of calcium and phosphorus in callus formation of bony fractures (Refs. 6, 10)

- (5) Improvement in the Glucose Tolerance Test curves in Type I Diabetes mellitus in animal models (Refs. 1,4,5,7).

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