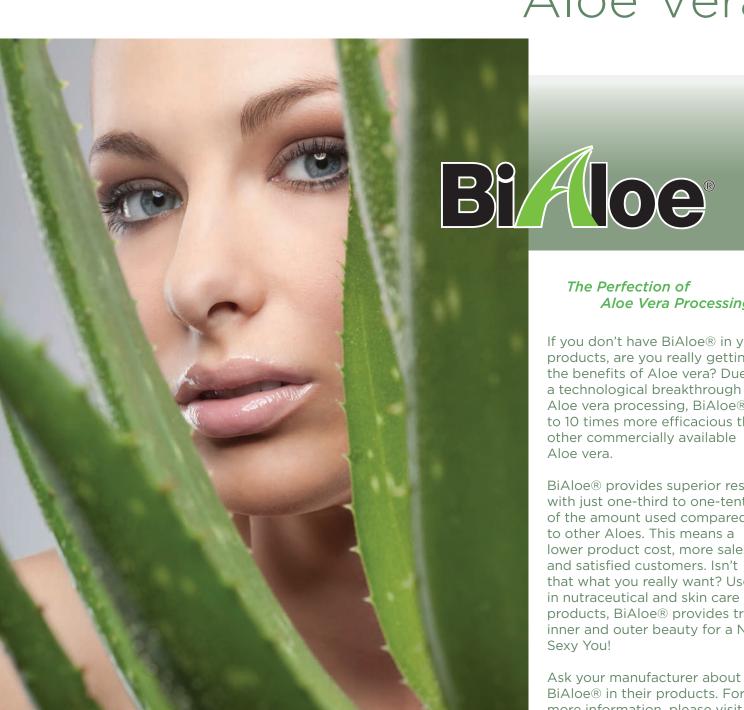


There is something new and sexy in Aloe Vera



Aloe Vera Processing™

If you don't have BiAloe® in your products, are you really getting the benefits of Aloe vera? Due to a technological breakthrough in Aloe vera processing, BiAloe® is 3 to 10 times more efficacious than other commercially available

BiAloe® provides superior results with just one-third to one-tenth of the amount used compared to other Aloes. This means a lower product cost, more sales and satisfied customers. Isn't that what you really want? Used in nutraceutical and skin care products. BiAloe® provides true inner and outer beauty for a New

BiAloe® in their products. For more information, please visit us at www.lorandlabs.com.



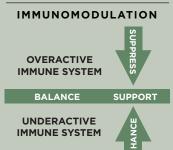
Aloe Vera Processing™

Aloe vera L. Facts

Acemannan. In a 2004 study 32 (thirty-two) products representing most of the world's suppliers of aloe demonstrated a lack of consistency in Acemannan content. The amount and molecular weight of the Acemannan component varied widely depending upon harvesting and processing techniques used. The molecular weight ranged from 10.59 to 1330.33 KDa.1

Bioavailability. Intestinal epithelial cells "IEC's" form a monolayer covering the inside surface of the intestinal tract. These cells facilitate absorption. The mechanisms used are paracellular transport for small molecular compounds, transcellular passive diffusion and intracellular transcytosis for high molecular compounds.² The villus epithelial of the small and large intestine readily absorb properly prepared substances with a molecular weight less than 50 KDa.

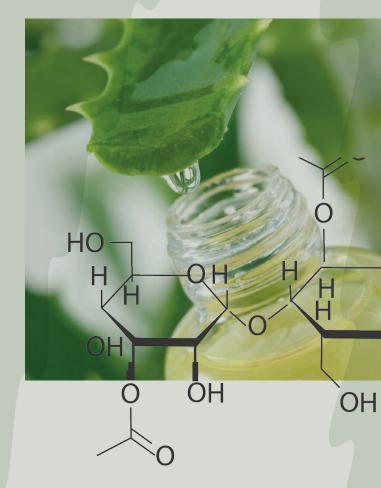
Immunomodulation. Smaller molecular weight molecules are usually preferred to higher molecular weight molecules since they are more bioavailable. Acemannan must be the correct size to be detected and engulfed by macrophages.



Aloe polysaccharides larger than 400 KDa have only marginal immunomodulatory activity, while polysaccharides smaller than 400 KDa have potent immunomodulatory activity.3

References:

- 1. Turner CE, Williamson DA, Stroud PA, Talley DJ. Evaluation and comparison of commercially available Aloe vera L. products using size exclusion chromatography with refractive index and multi-angle laser light scattering detection. International Immunopharmacology. 2004;4(14):1727-1737.
- 2. Shimizu M, et al. Interaction between Food Substances and the Intestinal Epithelium. Department of Applied Biological Chemistry, Graduate School of Agricultural and Life Sciences, The University of Tokyo, Bunkyou-ku, Todyo 113-8657, Japan. 2010; Online Publication, February 7, 2010.
- 3. Im SA, Oh ST, Song S, et al. Identification of optimal molecular size of modified Aloe polysaccharides with maximum immunomodulatory activity. International Immunopharmacology. 2005;5(2):271-279.





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