

Aloe vera L.

Simply, the most extensively tested Aloe vera available



Aloecorp, Inc

International Aloe Science Council Certified Facility and Products

Qmatrix® The GRAS Ingredient

A Highly Purified Fraction of *Aloe vera* L.

The GRAS Aloe food ingredient*



Conducted extensive scientific studies for over 2 years

Formed independent panel to determine safety

Achieved fully defensible position on ingredient safety

Simply, the most extensively tested Aloe vera available

* Safety Studies Conducted on a Proprietary High-Purity Aloe Vera Inner Leaf Fillet Preparation, Qmatrix®. *Regul Toxicol Pharmacol.* June 2010. Epub Jan. 2010

Research & Clinical Trials

Qmatrix[®] GRAS Ingredient



Research Report

*This information is provided for scientific and education purposes only.

Disclaimer

The information in this presentation is provided for scientific and education purposes only.

Indications and claims relating to health benefits of products are governed in accordance with country-specific laws or regulations. In the United States, it is your responsibility as manufacturer or marketer of consumer products to ensure that product claims and indications are in compliance with laws and regulations, including the Federal FD&C Act and the FTC Act. In all other countries, please consult with a local regulatory or legal professional who may provide you with competent advice and guidance regarding acceptable claims.

Research & Clinical Trials

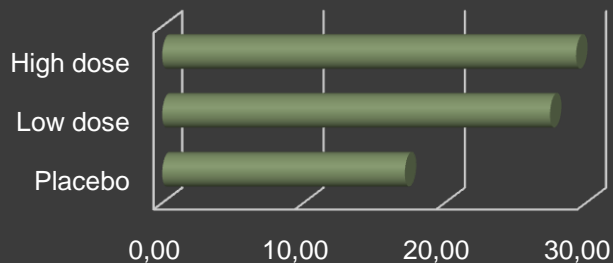
Aloe Juice

Made with Qmatrix[®] GRAS Ingredient

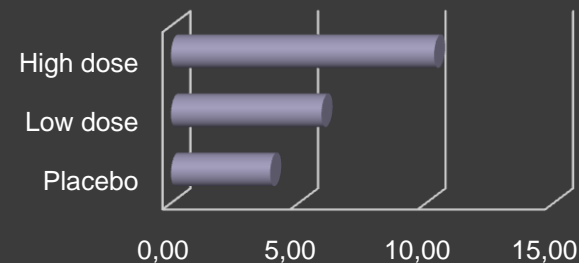
A Single Center, Randomized, Double-Blind, Placebo Controlled Human Test to Evaluate the Efficacy and Safety of Aloe regarding the Immunity Enhancing Effect. (Phase IV)

Percent Change Week 8 vs. Pre-dosing (n=102)

Cell-Killing Capability by NKC Cells



Peripheral Blood Monocytes CD56

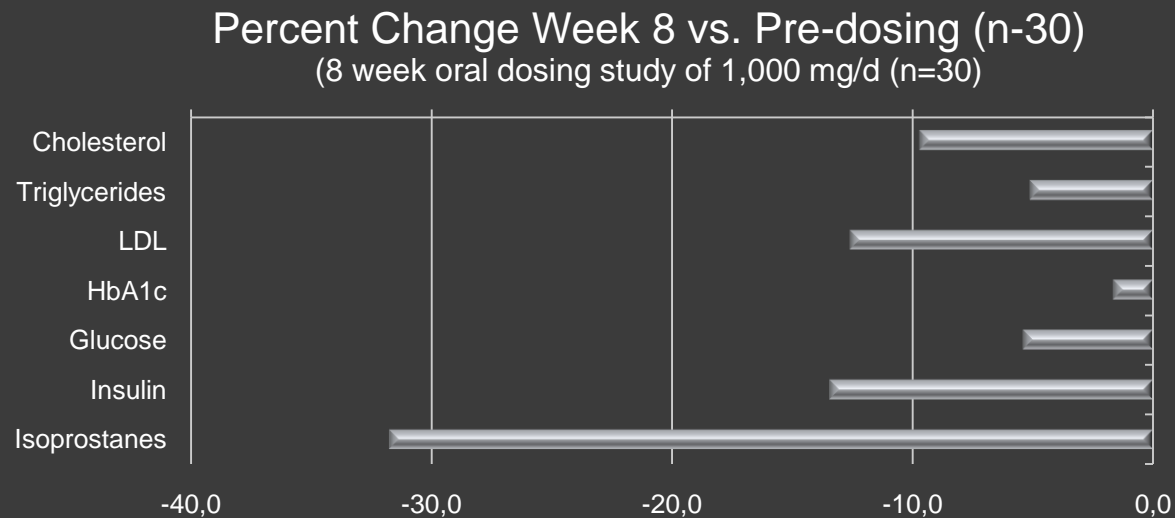


- Cell-Killing Capability of Natural Killer Cells increased significantly
- PBM CD56 increased significantly in both low and high-dose groups
- No side effects in either the low-dose (0.6g BID) or high-dose (1.2g BID) groups after 8 weeks

The Korean FDA concluded from this study that functional health foods containing aloe taken orally supports immune function

Qmatrix[®] GRAS Ingredient

An 8-Week, Double-Blind, Placebo-Controlled Pilot Trial of the Safety and Effects of Qmatrix *Aloe vera* in Subjects with Pre-Diabetes/Metabolic Syndrome.



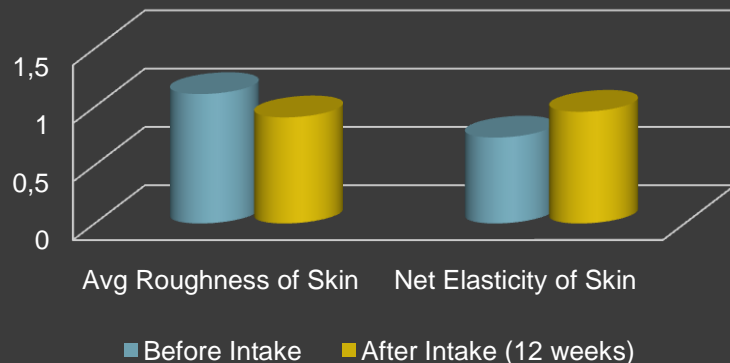
- Cholesterol , triglyceride and LDL levels are used to assess cardiovascular health
- HbA1c is an indicator of average blood glucose concentration over prolonged periods of time
- Fasting blood glucose and insulin are a measure of metabolic homeostasis
- Isoprostanes are indicators of oxidative stress status

Qmatrix[®] – Skin Function Beverage

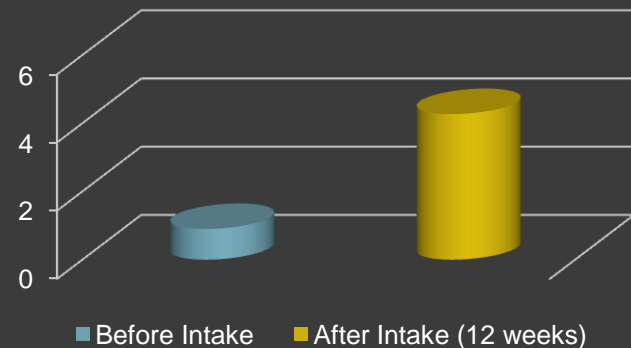
Dietary Aloe Vera Supplementation Improves Facial Wrinkles and Elasticity and Increases Type I Procollagen Gene Expression in Human Skin *in vivo*

Percent Change Week 12 vs. Pre-dosing
(12 week oral dosing study of 1,200 mg/d and 3,600 mg/d. n=30)

Effect on Wrinkles & Elasticity



Effect on Procollagen



Type I procollagen mRNA levels increased 4.74 times the baseline level ($p > 0.05$)

Aloe significantly improves wrinkles and elasticity with an increase in collagen production

No toxicity was observed in association with oral aloe intake.

Research & Clinical Trials

Qmatrix[®]

Qmatrix hydrates the skin
in as little as one hour



Moisturizing Effects of Cosmetic Formulations Containing *Aloe vera*
Assessed by Skin Bioengineering Techniques.

Dal'Belo et al. *Skin Research & Technology* 2006

Prebiotic Performance

Qmatrix® GRAS Ingredient

Qmatrix Increases SCFA Production Without Significant Gas Production

	Qmatrix	Nutraflora	Beneo p95	Fructose I90	Oligo-Fiber	Beneo Synergy	Agave inulin
Gas Production (ml/g)	84	148	141	143	115	146	148
pH Change	-0.41	-1.32	-1.23	-0.96	-0.95	-1.19	-1.21
Acetate (mg/g)	312	265	263	278	169	229	187
Propionate (mg/g)	197	77	67	71	5	52	63
Butyrate (mg/g)	115	152	149	141	163	172	185
Total SCFA (mg/g)	625	495	479	490	384	452	435

Qmatrix Increases Healthy Gut Bacteria

Microbiota	Qmatrix	Nutraflora	Beneo p95	Fructose I90	Oligo-Fiber	Beneo Synergy	Agave inulin
Bifidobacteria (log10 cfu/tube)	8.95	8.5	8.5	8.4	7.4	8.3	7.6
Lactobacilli (log10 cfu/tube)	10.58	9.2	8.6	9.2	9.3	9.3	9.3

12 hour fermentation study

Introducing Qmatrix Prebiotic

Composition of Qmatrix in this study

Qmatrix	Aloecorp N=5
Total Dietary Fiber	21%
Soluble Fiber	21%
Insoluble Fiber	0%
Acemannan	13.3%
Fructose	3.6%
Glucose	17.8%
Sucrose	0.6%
Protein	1.1 %
Carbohydrates	65%
Calcium	3.9%
Potassium	6.9%

Factoids

Prebiotics stimulate the growth of beneficial bacteria in the gut and the subsequent fermentation of certain carbohydrates produces short chain fatty acids (SCFA) that contribute to health.

Quality

What's the Difference?

Qmatrix[®] GRAS Ingredient

Simply, the most extensively tested Aloe vera available

Bioactivity guided manufacturing design



Safety
and
Efficacy

Con *sábila* vivimos

With Aloe we live

