

-Glycation-

What is Glycation?

Does it affect our health?

Sugar = Energy

Excess Sugar = **Glycation**

Glycation occurs when a **sugar** molecule binds to a protein or lipid (fatty acid) molecule without the controlling action of an enzyme which would normally control where the sugar binds and its orientation. This puts the sugar molecule in a "random place," on the protein or lipid molecule, thus forming a misshaped molecule our bodies cannot metabolize or dispose of easily.

These mis-shaped molecules, known as Advanced Glycation End-Products (AGE), come in an array of forms, many of which are toxic to cells and tissue. As a result, over time, a great deal of damage can occur to cells and tissue.

The results of this damage are an array of diseases and conditions that have a major effect on the function of our bodies and our longevity.

Can Glycation Be Stopped? What Can We Do?

- **Use products that contain **Totála****

Totála help the body to resist the devastating effects of glycation and its end products.

- **Reduce sugar Intake –**

A reduction in the amount of sugar ingested, will result in a decrease in the formation AGE's.

Totála
NUTRIENTS

A unique, scientifically validated, blend of minerals and micro-nutrients that will enhance and add value to your foods, beverages and supplements.

A NEW PARADIGM IN CELLULAR METABOLISM

- **Totála** shows great promise as an ingredient that could be beneficial in countering metabolic aging factors.
- **Totála** demonstrates magnificent effects in stimulating cellular metabolism!
- **Totála** effects on every part of every body represent the new frontier in health and younger living.
- The ultimate state of cellular equilibrium.

Use in Food, Snack & Beverages

Totála is a Generally Recognized as Safe (GRAS-Affirmed) at levels of 300 mg/serving:

- added ingredient to fortify fruit juice products.
- added ingredient to sports drinks (e.g., Gatorade, Powerade, etc.).
- added ingredient to sparkling beverages.
- added ingredient to "better for you" snack foods.
- added ingredient to "other" food products.



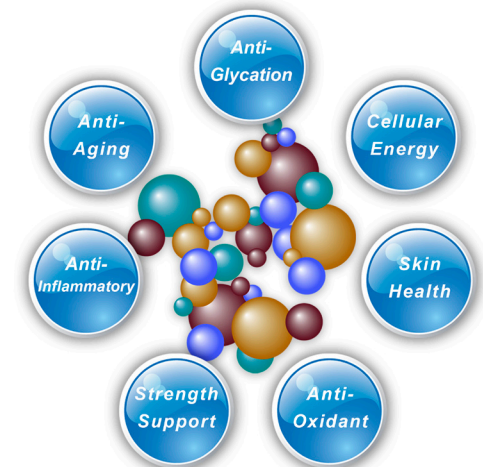
4050 S. Sarival Ave. • Goodyear, AZ 85338
800-471-1522 • www.mineralbiosciences.com

www.totalanutrients.com

NEW

Totála
NUTRIENTS

A NEW PARADIGM IN CELLULAR METABOLISM



Totála
NUTRIENTS

A patent pending blend of scientifically validated minerals and micro-nutrients.



Anti-Glycation

- Promotes anti-glycation effects and encourages healthier Glucose management.
- Helps reduce sugar-induced cellular degradation.
- Aids in Protection against glycation-induced stress and free-radical damage.
- Promotes enhancement of cellular metabolic activity without chemicals, stimulants and caffeine.

Anti-Aging

- Helps suppress stress response
- Promotes rapid recovery from stress-induced inflammatory conditions.
- Helps reduce sugar-induced cellular degradation.
- Encourages new collagen output.
- Promotes stimulation of the body connective tissue matrix for greater strength.

Anti-Inflammatory

- Enhances cellular defense against stress-induced inflammation.
- Helps suppress stress response.
- Promotes rapid recovery from stress-induced inflammatory conditions.



Anti-Oxidant

- Helps energize cellular membranes against free radical damage.
- Encourages protection against oxidative stress.
- Helps scavenge free radicals and protects cellular membranes.
- Encourages cellular defense against oxidation.
- Helps reduce oxidative induced inflammatory responses.

Cellular Energy

- Helps in energizing cellular activity and metabolic kinetics for enhanced performance.
- Helps to energizes cellular activity for optimal performance.
- Promotes enhancement of cellular metabolic activity.
- Encourages the strengthening of cellular respiration and energy output.

Skin Health

- Helps to replenish electrolytes and minerals metabolized in exertion.
- Promotes cellular respiration and energy output.
- Conducive to help restoration of optimal cellular energy for greater endurance.



Strength Support

- Promotes stimulation of the body connective tissue matrix for greater strength.
- Aids in the restoration of optimal cellular energy for greater endurance without stimulants, caffeine or chemicals.
- Encourages new collagen output.
- Helps Stimulate the body connective tissue matrix.
- Aids in strengthening bone and tendons, helping support physical activity and reducing injury.



Naturally Derived Minerals and Micro-Nutrients for a Better Life

Caffeine Free
Guarana Free
Taurine Free
Stimulant Free
Sugar Free
Sucralose Free

GRAS Affirmed

