



# Glucose Balance



## Clinical Applications

- Supports Healthy Glucose Metabolism\*
- Supports Healthy Blood Lipid Levels Already in the Normal Range\*
- Improves/Maintains Healthy Nerve Function\*

Glucose Balance features significant quantities of key ingredients that support insulin utilization and glucose metabolism. CinSulin® is a safe, patented, 100% water-soluble, 10:1 concentrated form of cinnamon that provides polyphenol polymers. Standardized American ginseng, green tea, gymnema, and alpha-lipoic acid help protect pancreatic cells, support insulin sensitivity, and provide antioxidant activity. Albion®'s TRAACS® patented chromium is added for its role in enhancing insulin activity.\*

All Vitality Natural Health Care Formulas Meet or Exceed cGMP Quality Standards

## Discussion

**CinSulin®** is a clinically proven, patented water extract of cinnamon (*Cinnamomum cassia*) shown to powerfully influence glucose metabolism. The unique, proprietary extraction and dehydration process for manufacturing CinSulin results in a concentrated (10:1) extract that minimizes undesirable substances, while retaining those that are health-promoting, such as type-A polyphenolic polymers. Cinnamon has been studied extensively for its roles in glucose uptake, glycogen synthesis, insulin action, and support for healthy blood lipids.<sup>[1,2]</sup> Anderson et al. demonstrated a 20-fold increase in glucose uptake in fat cells treated with water-soluble type-A polymers.<sup>[3]</sup>

**American Ginseng** (*Panax quinquefolius*) exhibits activities that support blood sugar levels already in the normal range.<sup>[4,5]</sup> The American ginseng in Glucose Balance is a standardized 12% (ginsenosides) extract.

**Gymnema Leaf Extract** (*Gymnema sylvestre*) is a water-soluble extract made from the leaves of *Gymnema sylvestre* and standardized to 25% gymnemic acid. This form does not decrease iron absorption as other forms may.<sup>[6]</sup> Gymnema can enhance the effects of insulin and oral hypoglycemic agents by reducing glucose absorption in the intestine, stimulating pancreatic beta cell growth, and possibly supporting endogenous insulin secretion. Gymnema may also support serum lipid levels already in the normal range.<sup>[7]</sup>

**Green Tea Polyphenols** (*Camellia sinensis*) protect erythrocytes from oxidative stress, possibly supporting the health of tissues that could otherwise be affected by too high levels of blood glucose.<sup>[8]</sup> In research studies EGCG enhanced insulin activity,<sup>[9]</sup> protected the pancreatic cells by reducing undesirable cytokines (e.g. IL-1beta), and reduced IFN-gamma-induced nitric oxide production. It affected genes that inhibit activation of NF-kappaB<sup>[10]</sup> and reduced the level of messenger RNA for the hepatic gluconeogenic enzymes.<sup>[11]</sup>

**Alpha Lipoic Acid** is a potent antioxidant that acts by multiple mechanisms, both physiologically and pharmacologically, to support healthy peripheral nerves and maintain blood pressure already in the normal range.<sup>[12,13]</sup> In higher doses, alpha lipoic acid supports blood sugar levels already in the normal range.

**Chromium**: The Albion® TRAACS® patented process that combines chromium with glycinate and niacin increases its bioavailability and supports healthy glucose metabolism.<sup>[14]</sup> Individuals with poor glucose metabolism tend to have lower blood chromium levels. Chromium enhances the metabolic action of insulin and may support heart health, especially in overweight individuals.

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\*These statements have not been evaluated by the Food and Drug Administration.  
This product is not intended to diagnose, treat, cure, or prevent any disease.



# Supplement Facts

Serving Size: 2 Capsules  
Servings Per Container: 60

	Amount Per Serving	%Daily Value
Chromium (as TRAACS® chromium nicotinate glycinate chelate)	200 mcg	167%
American Ginseng Extract ( <i>Panax quinquefolius</i> )(root and leaf)(15% ginsenosides)	375 mg	**
Alpha-Lipoic Acid	200 mg	**
Green Tea Aqueous Extract ( <i>Camellia sinensis</i> )(leaf) (80% polyphenols, 60% catechins, 30% EGCG, 6% caffeine)	200 mg	**
Gymnema Extract ( <i>Gymnema sylvestre</i> )(leaf)(25% gymnemic acids)	200 mg	**
Cinnamon 10:1 Aqueous Extract ( <i>Cinnamomum cassia</i> )(bark)(3% type-A polymers)(CinSulin®)	200 mg	**

\*\*Daily Value not established.

Other Ingredients: HPMC (capsule), microcrystalline cellulose, stearic acid, magnesium stearate, silica, and medium-chain triglyceride oil.



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CinSulin® is registered trademark of Tang-An Medical Co., Ltd. US patent 6,200,569.

## Directions

Take two capsules daily, or as directed by your healthcare practitioner.

Consult your healthcare practitioner prior to use. Individuals taking medication should discuss potential interactions with their healthcare practitioner. Do not use if tamper seal is damaged.

## Cautions

Do not use if you are pregnant or lactating.

## References

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## Does Not Contain

Wheat, gluten, yeast, soy, animal or dairy products, fish, shellfish, peanuts, tree nuts, egg, ingredients derived from genetically modified organisms (GMOs), artificial colors, artificial sweeteners, or artificial preservatives.

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