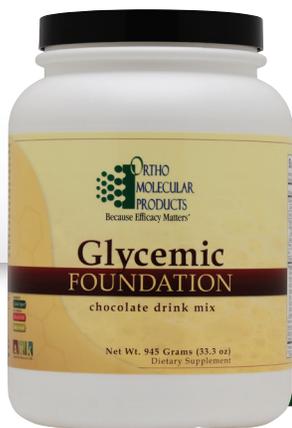


GLYCEMIC FOUNDATION CHOCOLATE



CLINICAL APPLICATIONS

- Supports Healthy Blood Sugar Levels
- Strengthens Cardiovascular Health
- Provides Key Nutrients for Blood Sugar Regulation

GLYCEMIC SUPPORT

Glycemic Foundation is designed to help promote healthy blood sugar levels. Its high fiber (12 g) and high soluble fiber (9 g) content, as well as fermentable fibers from inulin and FiberAid, and 10 g of protein from brown rice, Glycemic Foundation helps manage the spike in blood sugar and insulin levels after a meal, as well as the associated afternoon drops, leading to less fatigue. Glycemic Foundation also provides 1.3 g of omega-3 fatty acids from organic flax seed and has no added sugar. Lipoic acid is added for its powerful antioxidant support, insulin regulation and AMPK signaling. This supports optimal glucose disposal and weight management. Chromium is added to support glucose tolerance factor (GTF) production, which is critical for cellular uptake of glucose. Vanadyl sulfate is also included for its support of more optimal insulin sensitization. Glycemic Foundation is available in a delicious chocolate or vanilla flavor.

Overview

Maintaining healthy blood sugar levels has become a concern for many in the United States and across the globe. The prevalence of refined sugars and carbohydrates and the low presence of fiber in the Western diet have been directly linked to many of the blood sugar challenges of this century. Glycemic Foundation provides a helpful blend of nutrients that support the body's response to sugar, signal optimal glucose disposal, increase cellular sensitivity to insulin, reduce glucose absorption and support microcirculation.

Glucomannan[†]

Glucomannan is a water-soluble dietary fiber derived from konjac root (*Amorphophallus konjac*). A meta-analysis of 14 randomized controlled trials of glucomannan found 2.0-3.87

g/day significantly balanced total blood fats, reduced body weight by 0.79 kg and supported healthy blood sugar levels. In one 28-day study, 3.6 g/day of glucomannan supplementation, given to 22 individuals, significantly promoted healthy blood fat and cholesterol profiles, Apo B and before-meal blood sugar levels, compared to placebo.¹ A review of seven clinical trials on glucomannan supplementation (2-4 g/day, for eight weeks) found the supplement significantly reduced body weight by 3.08-5.5 lbs, even without dietary restrictions.² Even at low doses of 1 g/day, over an eight-week period, consumption of glucomannan resulted in significant mean weight loss (5.5 lbs) in 20 subjects.³

Arabinogalactan[†]

Larch arabinogalactan is a fermentable polysaccharide fiber from the larch tree that supports healthy immunity by supporting the growth of beneficial gut flora and strengthening the activity of natural killer (NK) cells.⁴ In one placebo-controlled, double-blind, randomized trial, arabinogalactan was found to modulate immune activity and support upper respiratory health.⁵ The same arabinogalactan-based formula was also found to boost the immune response to seasonal challenges.⁶

Alpha Linolenic Acid[†]

Flax seeds are a generous source of omega-3 fatty acids and fiber. The organic flax seeds in Glycemic Foundation provide a total of 1.3 g of alpha linolenic acid per scoop, while contributing additional protein, lignans and numerous micronutrients.

[†] 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.

Alpha Lipoic Acid[†]

Alpha lipoic acid (ALA) is an antioxidant that has a potent effect on blood sugar metabolism. Recent studies have shown that ALA's ability to regulate insulin is mediated by its activation of AMP-activated protein kinase (AMPK), which acts as a type of cellular fuel sensor to upregulate activity in the peripheral skeletal muscle. While in the hypothalamus, ALA downregulates AMPK, thereby reducing appetite. Administration of alpha lipoic acid in animal models was found to increase AMPK activity and fatty acid oxidation in skeletal muscle. ALA was also found to increase insulin-stimulated glucose disposal, both in whole body and in skeletal muscle.⁷ One study, using oral dosing, showed that ALA increases insulin sensitivity by 27%.⁸ Other research has found that a dose of 600 mg/day of ALA over three months lead to a 36% reduction in blood fats and a 38% improvement in the oxidative stress to oxidative defense ratio.⁹ ALA has also been shown to increase GLUT4 stimulated glucose transport, independent of insulin, to lower oxidative stress and to increase nerve conductivity in related neuropathy.

Chromium[†]

Chromium is a critical element in the GTF, a complex shown to be crucial for glucose uptake into the cells. Studies using 1,000 mcg/day of chromium showed a significant improvement in markers of blood sugar balance, insulin sensitivity and blood fats.¹⁰⁻¹² In a study of 43 patients receiving either 600 mcg of chromium and 2 mg biotin a day or placebo, a significantly greater improvement for blood sugar was seen after four weeks, during the two hour oral sugar test.¹³

Vanadyl Sulfate[†]

Vanadyl sulfate (VS) stimulates glucose uptake within cells helping to use blood sugar more efficiently and maintain healthy blood sugar levels. VS increases GLUT-4 synthesis, a glucose transport protein which allows glucose to enter the cell. This improved glucose consumption promotes increased muscle cell sensitivity to insulin. 100 mg/day of VS was shown to support insulin sensitivity (fasting plasma glucose and HbA1c) in those with blood sugar imbalances.¹⁴ In a three-week study, VS given at 100 mg/day significantly improved hepatic and peripheral muscle sensitivity in individuals with elevated blood sugar levels within the normal range.¹⁵ VS was also shown to decrease endogenous glucose production by 20%.

Directions

For the first three days of use, add 1 scoop (15.65 g) of Glycemic Foundation to at least 8 oz of water or the beverage of your choice, stir and drink between or before meals one to three times daily. Increase dose to 2 scoops (31.3 g) of Glycemic Foundation after three days, or as recommended by your health care professional.

Does Not Contain

Gluten, yeast, artificial colors and flavors.

Cautions

If you are pregnant or nursing, consult your physician before taking this product. As with all dietary supplements, some individuals may not tolerate or may be allergic to the ingredients used. Please read the ingredient panel carefully prior to ingestion. Cease taking this product and consult your physician if you have negative reactions upon ingestion. Glycemic Foundation contains a high amount of soluble fiber and pre-biotic nutrients. Some individuals may experience increased gas discomfort for the first three to five days of use until bowel microflora have adjusted to the fiber intake. To reduce this effect, use ½ of the recommended dose for the first 3-5 days. Increase to full dose once you have become accustomed to the product. Because glucomannan is a bulk-forming fiber, the drink becomes viscous within 20 minutes of its preparation. Without drinking enough liquid, the product may swell in the throat, causing blockage or choking. Avoid use if you ever had esophageal narrowing or swallowing difficulties.

Supplement Facts		
Serving Size 2 Level Unpacked Scoops (31.5 Grams)		
Servings Per Container 30		
2 level unpacked scoops contain	Amount Per Serving	% Daily Value
Calories	130	
Calories from Fat	30	
Total Fat	3.5 g	5%*
Saturated Fat	0.5 g	3%*
Total Carbohydrate	16 g	5%*
Dietary Fiber	12 g	48%*
Soluble Fiber	9 g	
Sugars	3 g	**
Protein	10 g	
Calcium	120 mg	12%
Iron	5 mg	28%
Chromium (as O-polynicotinate) [†]	400 mcg	333%
Sodium	50 mg	2%
Proprietary Blend	26.5 g	
Rice Protein (ORYZAPRO)		**
Larch Arabinogalactan (FiberAid™)		**
Flaxseed Flour (Organic)		**
Inulin		**
Gum Arabic (<i>Acacia senegal</i>)		**
Guar Gum		**
Glucomannan (from Konjac Root)		**
Alpha Linolenic Acid (from Organic Flaxseed Flour)	1.3 g	**
Alpha Lipoic Acid	100 mg	**
Vanadyl Sulfate Hydrate	5 mg	**

* Percent Daily Values are based on a 2,000 calorie diet.
** Daily Value not established

ID# 920977 945 GRAMS

[†] 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.

EFFICACY
the power of *e*

References

1. Chen, H. L., Sheu, W. H. et al. Konjac supplement alleviated hypercholesterolemia and hyperglycemia in type 2 diabetic subjects--a randomized double-blind trial. *J Am Coll Nutr.* 2003; 22(1):36-42.
2. Keithley, J. and Swanson, B. Glucomannan and obesity: a critical review. *Altern Ther Health Med.* 2005; 11(6):30-34.
3. Walsh, D. E., Yaghoubian, V. et al. Effect of glucomannan on obese patients: a clinical study. *Int J Obes.* 1984; 8(4):289-293.
4. Kelly GS. Larch arabinogalactan: clinical relevance of a novel immune-enhancing polysaccharide. *Altern Med Rev.* 1999 Apr;4(2):96-103.
5. Riede L, Grube B, Gruenwald J. Larch arabinogalactan effects on reducing incidence of upper respiratory infections. *Curr Med Res Opin.* 2013 Mar;29(3):251-8.
6. Udani JK, Singh BB, Barrett ML, Singh VJ. Proprietary arabinogalactan extract increases antibody response to the pneumonia vaccine: a randomized, double-blind, placebo-controlled, pilot study in healthy volunteers. *Nutr J.* 2010 Aug 26;9:32.
7. Lee,WJ, Song,KH, Koh,EH, Won,JC, Kim,HS, Park,HS, Kim, MS, Kim,SW, Lee,KU, Park,JY: Alpha-lipoic acid increases insulin sensitivity by activating AMPK in skeletal muscle. *Biochem Biophys Res Commun* 332:885-891, 2005.
8. Osler,ME, Zierath,JR: Minireview: adenosine 5'-monophosphate-activated protein kinase regulation of fatty acid oxidation in skeletal muscle. *Endocrinology* 149:935-941, 2008.
9. Ruderman,NB, Saha,AK, Kraegen,EW: Minireview: malonyl CoA, AMP-activated protein kinase, and adiposity. *Endocrinology* 144:5166-5171, 2003.
10. Anderson RA et al. Elevated intakes of supplemental chromium improve glucose and insulin variables in individuals with type 2 diabetes. *Diabetes* 1997; 46(11): 1786-91.
11. Morris BW et al. Chromium homeostasis in patients with type II (NIDDM) diabetes. *J Trace Elem Med Biol* 1999;13(1-2):57-61.
12. Ghosh D et al. Role of chromium supplementation in Indians with type 2 diabetes mellitus. *J Nutr Biochem.* 2002 Nov; 13(11): 690-697.
13. Singer GM, G eohas J. The effect of chromium picolinate and biotin supplementation on glycemic control in poorly controlled patients with type 2 diabetes mellitus: a placebo-controlled, double-blinded, randomized trial. *Diabetes Technol Ther.* 2006; 8(6): 636-43.
14. Cohen N et al. Oral vanadyl sulfate improves hepatic and peripheral insulin sensitivity in patients with non-insulin-dependent diabetes mellitus. *J Clin Invest* 1995; 95(6):2501-9.
15. Halberstam M, Cohen N, Shlimovich P, Rossetti L, Shamoon H. Oral vanadyl sulfate improves insulin sensitivity in NIDDM but not in obese nondiabetic subjects. *Diabetes* 1996; 45(5):659-66.