# Don't Take Chances with Blood Sugar!



edentary lifestyles, obesity, and sugar-rich diets are prevalent in our society. The result: challenges to your multiple, interdependent body systems involved with blood sugar levels and insulin activity.

Now is the time to learn how a healthy diet and lifestyle can help you maintain healthy blood sugar levels. For further support, Source Naturals offers you GLUCO-SCIENCE<sup>™</sup>, a breakthrough formula. GLUCO-SCIENCE is uniquely effective because it is a Bio-Aligned Formula<sup>™</sup>. Source Naturals evaluates the underlying causes of system imbalances. Then we design formulas that provide targeted nutrition to bring your interrelated body systems back into balance. GLUCO-SCIENCE can help bring your body's systems for carbohydrate metabolism back into alignment.

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#### GLUCO-SCIENCE<sup>™</sup> Maintains Healthy Blood Sugar Levels When Used as Part of Your Diet

### A Bio-Aligned Formula<sup>™</sup>

GLUCO-SCIENCE is a comprehensive herbal-nutrient formula, based on the newest clinical research into key herbs and special ingredients. Source Naturals studied the scientific research, and then designed GLUCO-SCIENCE. This Bio-Aligned Formula provides targeted nutrition to five different body systems involved with healthy blood sugar levels and insulin activity.

#### Glucose/Carbohydrate Metabolism

GLUCO-SCIENCE supports glucose/carbohydrate metabolism with a range of nutrients. B-vitamins are required for glycolysis and the Krebs cycle, the metabolic pathways by which the body con-

verts glucose into cellular energy. Chromium is believed to work closely with insulin to facilitate the uptake of glucose into cells. Manganese is also involved in glucose uptake. The formula also features herbs from several traditions, such as *Gymnema sylvestre.* 

#### Insulin/Pancreatic Activity

Insulin is secreted by the pancreas in response to high blood glucose levels after meals. Without insulin, glucose cannot enter cells to provide fuel for cellular energy. Certain nutrients (see chart) support these vital metabolic processes, including mediation of insulin release and activity, and enhancing insulin sensitivity. *N*-acetyl cysteine protects pancreatic beta cells from oxidative damage in animal studies. In addition, vanadium, zinc, and selenium are notable for their insulin-like actions.

#### Heart and Circulatory System

Vitamin E supports a healthy lipid status, while myricetin has been shown in animal studies to influence triglyceride levels. *Gymnema sylvestre* and vitamin C are involved with lipid metabolism. Additional heart-healthy ingredients include CoQ10, garlic, fenugreek, and hawthorn.

#### Nervous System

Antioxidants are important for a healthy nervous system. Lipoic acid helps prevent lipid peroxidation, which can impact nerve function. Many B-vitamins are vital to the metabolic processes of the nerves or are present in the phospholipids of cell membranes. Methylcobalamin, an active form of vita-



min B-12, supports the central nervous system. Other supportive ingredients are included (see chart).

#### Vision

GLUCO-SCIENCE provides antioxidants, nutrients and herbs with an affinity for eyes and the physiological processes involved in sight. Alpha-lipoic acid, quercetin, and vitamin C support healthy lens function. Bilberry, shown to support microcirculation in animal studies, is widely recognized for supporting vision.

#### Lifestyle Tips for Healthy Blood Sugar Levels: A Strategy for Wellness<sup>\*\*\*</sup>

• Eat a Glucose-Healthy Diet: Fiber: Soluble fiber helps modulate glucose absorption and lowers plasma cholesterol levels. Adding 50 grams per day to your diet could help lower blood sugar up to 10%. Foods high in soluble fiber include oranges, grapefruits, raisins, zucchini, oatmeal, oat bran, strawberries and apples. Viscous fibers, including guar gum, psyllium, and galactomannan can be helpfulthey should be taken with liquid and mixed with carbohydrate foods. Protein: A high-protein, low-carbohydrate diet is associated with healthy blood sugar levels.

*Fat:* Too much fat may increase your risk for heart disease and/or hardening of the arteries, which compromises circulation. Monounsaturated fats such as olive oil, however, are helpful for managing blood sugar.

*Glycemic Index:* Avoid sugar and other foods with a high glycemic index. Different carbohydrates evoke different glycemic responses. Beans, peas, and oats, for example, raise blood glucose levels much less than bread and potatoes. The Glycemic Index, a useful educational tool in choosing foods to help modulate blood glucose levels, is available in the *American Journal of Clinical Nutrition* [1995;62:871S-93S (88)], or go to the Internet at www.mendosa.com/gilists.htm.

• Maintain a Healthy Weight: If you are overweight, lose weight. Although a Body Mass Index (BMI) between 18.5 and 22 is considered "healthy," problems arise at a BMI of 22, especially for women.

• Exercise: Exercise lowers blood sugar and helps reduce risks associated with elevated levels, such as nerve and eye damage. Exercise also improves insulin sensitivity, and supports heart function and circulation. Try to get 20-45 minutes of aerobic exercise at least 3 days per week.



- Maintain Healthy Blood Pressure Levels: If your blood pressure is 140 over 90 or higher, you are more likely to experience challenges to healthy blood sugar levels. Eat a "DASH Diet" containing 8-10 servings of fresh fruits and vegetables, 2-3 servings of low-fat dairy products and less than 2,400 mg of sodium per day.
- **Stop Smoking:** Smoking raises glucose levels and aggravates related health problems.
- Manage Stress: During stress, the level of many hormones increases and stores of glucose are released into your bloodstream, clogging and weakening vessels and capillaries. You can relax and reverse the hormonal response to stress by practicing deep breathing, meditating or doing yoga, exercising regularly, or talking with friends, family, or a support group.

## GLUCO-SCIENCE Bio-Aligned Formula<sup>™</sup> Helps Maintain Healthy Blood Sugar Levels When Used as Part of Your Diet

Glucose/Carbohydrate Metabolism	American Ginseng, Bitter Melon, Blueberry, Fenugreek, Gymnema sylvestre, Maitake, Myricetin, Pterocarpus marsupium, Chromium, Magnesium, Manganese, Vitamins B-1, B-2, B-5, B-6 & B-12, Biotin, Inositol, Niacinamide
Insulin/Pancreatic Activity	alpha-Lipoic Acid, Bitter Melon, Gymnema sylvestre, Maitake Fruit Body, Myricetin, N-acetyl-L-Cysteine, Pterocarpus marsupium, Taurine, Chromium, Manganese, Selenium, Vanadium, Zinc
Heart and Circulatory System	Bilberry, Blueberry, CoQ10, Fenugreek, Garlic, Grape Seed, Gymnema sylvestre, Hawthorn, Myricetin, Taurine, Siberian Ginseng, Magnesium, Selenium, Vitamins B-6, C & E, Folic Acid, Niacinamide
Nervous System	alpha-Lipoic acid, Glutamine, Magnesium, Taurine, Vitamins B-1 & B-6, Biotin, Choline, Inositol, Methylcobalamin
Vision	alpha-Lipoic Acid, Bilberry, Quercetin, Taurine, Zinc, Vitamins B-6, C & E



To learn more about Source Naturals Bio-Aligned Formulas<sup>™</sup>, visit our website, www.sourcenaturals.com, or look for the Bio-Aligned Chart Book at participating health food stores.



### SOURCE NATURALS®

Strategies for Wellness<sup>sm</sup>

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