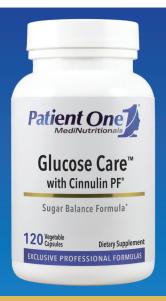


# Glucose Care™



# Nutritional support for healthy glucose and insulin metabolism

## APPLICATIONS / BENEFITS

- Helps reduce glycemic impact of meals
- Supports healthy glucose metabolism
- Protects beta cells of the pancreas
- Improves insulin utilization

#### **OVERVIEW**

Patient One Glucose Care™ combines clinically verified and highly bioavailable nutrients and botanicals to help support insulin sensitivity and healthy blood sugar levels. Supplying five advanced trademarked and patented ingredients, and more, Glucose Care is an ideal formula for patients with compromised glucose metabolism.

# **KEY INGREDIENTS**

Chromium (ChromeMate®) increases insulin's ability to bind to cells, increases insulin receptor numbers on cells, and improves insulin's ability to detect glucose molecules in the blood. Chromium is often deficient in those with impaired glucose metabolism. Restoring chromium levels in these individuals helps to stabilize their blood sugar levels. Patient One Glucose Care supplies chromium as ChromeMate®, a unique, patented niacin-bound chromium complex that significantly increases the bioavailability, biological activity and efficacy of chromium.

Studies have shown that ChromeMate is 18-times more bioactive than other forms of niacin-bound chromium. In animal models used to estimate bioavailability in humans, ChromeMate was absorbed and retained more than 600% greater than chromium chloride and 300% greater than chromium picolinate.

Cinnulin PF® is a patented water-soluble extract of Cinnamomum. It is the only extract standardized for doubly linked Type-A Polymers, shown in clinical research to have a host of health benefits, particularly those related to metabolic syndrome. Cinnulin PF has demonstrated ability to reduce the risk factors associated with diabetes and cardiovascular health issues.1

Cinnamon has been studied extensively for its roles in glucose uptake, glycogen synthesis, insulin action, and support for healthy blood lipid metabolism. Human studies have shown that water-extracted cinnamon supplementation helped the body maintain healthy blood sugar levels, improved antioxidant status, and supported healthy blood pressure and body composition changes. 1,2,3

Impaired glucose metabolism has been linked with manganese deficiency, which can result in pancreatic insufficiencies. Manganese (as TRAACS® Manganese Glycinate Chelate) is also a component of the free radical scavenger Superoxide Disumutase (SOD) that protects cells, most notably pancreatic beta-cells that produce insulin. Supplementing with manganese can help restore pancreatic function.

Vanadium (as TRAACS® Vanadium Nicotinate Glycinate Chelate) is believed to enhance the effects of insulin and can also help support balanced glucose metabolism. Vanadium may be therapeutic for those who do not have sufficient levels of insulin, as vanadium improves insulin function rather than mimics it completely.

Zinc (as TRAACS® Zinc Glycinate Chelate) homeostasis is negatively affected by impaired glucose metabolism, resulting in zinc malabsorption. Hyperglycemia may also lead to increased excretion of zinc by the kidneys. Zinc plays an important role in improving insulin's ability to bind to receptors on cell membranes and transport glucose into the cells to be used as energy.

Zinc is also needed for the beta cells in the pancreas to produce insulin. Additionally, zinc is an integral component of antioxidant enzymes and a cofactor for enzymatic processes in glucose and sugar metabolism.

High concentrations of glucose levels combined with low zinc levels can result in an increase of free radicals known to cause neuropathy, nephropathy, and retinopathy seen in diabetic individuals.

**Thiamine** is a cofactor for two important enzymes which are fundamental for intracellular glucose metabolism. Found in nerve tissue, thiamine also modulates nerve impulse transmission. Vitamin B1 levels are lower in diabetics, partly because the elevated blood sugar causes increased thiamine excretion by the kidney, at a rate of 16 to 25 times higher than normal.

Vitamin B6, as pyridoxine, is another important coenzyme. It is important for amino acid and carbohydrate metabolism. Vitamin B6 deficiency is common among those with poor blood sugar control, and clinical data show that diabetics who take insulin have lower vitamin B6 levels than those taking oral antidiabetics. This demonstrates that vitamin B6 levels get even lower as diabetes progresses. Studies also show that vitamin B6 deficiency is strongly associated with glucose intolerance and reduced secretion of insulin and glucagon.

#### **RESEARCH**

- A study showed that 83% of those given Cinnulin PF® experienced a significant decrease in fasting blood sugar (about an 8% drop), compared to only 33% in the placebo group.
- A 2012 review of several recent studies concluded that the use of cinnamon had a potentially beneficial effect on glycemic control. One study published in 2009 found that a 500 mg capsule of cinnamon taken twice a day for 90 days improved hemoglobin A1C levels in people with poorly controlled Type 2 diabetes (hemoglobin A1C greater than 7%). (Mayo Clinic)
- In a randomized, double-blind, placebo-controlled, 20-patient study, researchers from Georgetown University and Creighton University found that taking 3mg of ChromeMate delivering 300mcg of chromium a day for three months significantly lowered fasting blood glucose levels while placebo had no effect. The study showed that ChromeMate also decreased HbA1c levels.

## **REFERENCES**

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- 6. Olin KL, Stearns DM, Armstrong WH, Keen CL. Comparative retention/absorption of 51chromium (51Cr) from 51Cr chloride, 51Cr nicotinate and 51Cr picolinate in a rat model. Trace Elem Electrol. 1994;11:182-186.
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Supplement Facts Serving Size: 3 Capsules Servings Per Container: 40		
Amount Per Serving		% DV*
Thiamine (Vitamin B-1) (as Thiamine HCl)	50 mg	4,167%
Vitamin B-6 (as pyridoxine HCl)	50 mg	2,941%
Zinc (as TRAACS® Zinc Glycinate Chelate)	30 mg	273%
Manganese (as TRAACS® Manganese Glycinate Chelate)	5 mg	217%
Chromium (as Chromemate® chromium polynicotinate)	600 mcg	1,714%
Sugar Balance Proprietary Blend: 500.06 mg Cinnulin PF® (water soluble extract of cinnamon bark) (Cinnamomum burmanni) (Standardized to 3% Type A Polymers), Vanadium (as TRAACS® Vanadium Nicotinate Glycinate Chelate)		
% Daily Values are based on a 2,000 calorie diet.     Daily Value not established		

Other Ingredients: rice flour, vegetable cellulose (capsule), leucine

**Free of:** milk, egg, fish, peanuts, crustacean shellfish, soy, tree nuts, wheat, yeast and gluten. Free of ingredients derived from GMOs.

**Suggested Use:** Take 3 capsules daily in divided doses with meals as a dietary supplement, or as directed by your health practitioner.

**Caution:** If you are pregnant, nursing, or taking any medications, consult health practitioner before use. Discontinue use and consult health practitioner if any adverse reactions occur. **Keep out of reach of children.** 

Chromemate®, a biologically active oxygen-coordinated niacin-bound chromium complex, is a registered trademark of InterHealth N.I. Cinnulin PF® is a trademark of IN Ingredients Inc. TRAACS® is a registered trademark of Albion Labs, Inc.

Vegetarian

Gluten Free

Non-GMO



The statements in this document have not been evaluated by the FDA. This product is not intended to diagnose, treat, cure, or prevent any disease.

