

## Glucose Tolerance II

## with Glucevia<sup>™</sup>

European Ash (*Fraxinus angustifolia Vah*I), a tree indigenous to Europe and the Near East and cultivated in North America for centuries, has long been used in the Mediterranean region for its support of digestive, urinary and hepatic systems.\* Now a standardized extract of European Ash seeds/fruits called Glucevia™ has demonstrated it can markedly reduce post-prandial glucose levels, support normal insulin sensitivity in liver and muscles, and support liver metabolism.\* It also helps increase hepatic and muscle uptake of simple and complex sugars.\*

Investigators at the University of Navarra, Pamplona, Spain, enrolled 22 overweight but otherwise healthy individuals in a crossover, randomized, double blind study comparing Glucevia™ against placebo. They reported data from 17 subjects who completed the trial and who followed a balanced, but energy-restricted diet for 7 weeks, taking daily either 1 gram of Glucevia™ or placebo capsules for three weeks. After a 1-week washout, the participants were crossed over to the other treatment arm of the study.

## **Key Features**

- Patented Glucevia<sup>™</sup> (European Ash extract)
  may reduce post-prandial glucose levels,
  support normal insulin sensitivity in liver
  and muscles, and support liver metabolism\*
- It also helps increase hepatic and muscle uptake of simple and complex sugars\*
- Blood sugar support already in the normal range, enhanced with berberine, chromium, milk thistle, resveratrol, and biotin\*



SKU #76890 120 vegetarian capsules





## Glucose Tolerance II

Daily supplementation with Glucevia™ resulted in consistently and significantly lower incremental glucose areas-undercurve (AUC) values following oral glucose tolerance tests, approximately 28% glucose reduction, as compared to nonsignificant 8% in placebo. There was also a significant change in fructosamine, a marker of average blood glucose concentration over the previous 2-3 weeks, in those who took Glucevia™.\* There were no significant changes in body weight or lean muscle mass associated with Glucevia™.\*

In an earlier trial at the University of Toronto, 16 healthy volunteers were given either 1 g of Glucevia™ or a placebo, immediately followed by 50 g of glucose. Glucevia™ reduced glucose AUC by almost 9% compared to placebo. Differences were apparent within 15 minutes, and peaked at about 50 minutes.



Glucevia™ is the only available extract of Fraxinus that is standardized to 10% nuzhenide and GI3, which have been shown in preclinical animal studies to increase the rate of glucose absorption in liver and muscle.\* Glucevia™ appears to be extremely safe.\* In these studies, as well as an earlier dosing study, there were no adverse effects or detrimental impacts on six clinical and 12 hematological parameters.\*



Berberine is a naturally occurring alkaloid found in goldenseal, Oregon grape, and barberry. It has been used for hundreds of years in Chinese and Ayurvedic medicine, as well as traditionally in the Middle East and Europe. Berberine has been found to help support normal healthy blood glucose already within normal levels, including post-prandial glucose levels, glucose tolerance, and healthy insulin sensitivity. It has many other health benefits, including supporting and protecting liver function.\*



**Chromium** is a trace mineral which plays an essential role in normal carbohydrate metabolism and glucose tolerance.\* Chromium supports insulin receptor formation, insulin

receptor phosphorylation, and insulin binding.\* The result is the potentiation of insulin while supporting normal insulin sensitivity.\* Chromium may also support glucose tolerance by decreasing hepatic extraction of insulin.\* Chromium polynicotinate is the preferred form of chromium because Glucose Tolerance Factor (GTF) is generally considered to include chromium bound to nicotinic acid.\*



Milk thistle (Silybum marianum) has been used as a traditional liver supportive herb for more than 2,000 years.\* It was mentioned in the writings of the Greek healer Dioscorides, and Pliny the Elder. Milk thistle is native to Europe and was introduced into North America by the early colonists. It was utilized by the Eclectic physicians in the 19th century as well as by herbalists. The early United States Pharmacopeia listed a tincture of milk thistle. The main active component is the flavonoid complex silymarin. Besides its well-studied support for liver function, silymarin may help support healthy insulin function and blood lipids within normal levels.\* It may also help support the pancreas.\*



**Resveratrol** is a hydroxystilbene found in red wine, nuts, grapes, pine trees, and certain vines, which appears to play a role in supporting healthy heart function.\* Preliminary evidence suggests it may also support healthy insulin sensitivity, and healthy blood glucose already within normal levels.\*



**Biotin**, a B vitamin, is a necessary coenzyme for carboxylases involved with the synthesis of fatty acids from glucose, and glucose formation from proteins or fats. Preliminary evidence suggests that biotin and chromium in combination may support healthy blood glucose already within normal levels, and normal, healthy peripheral circulation.\*

The ingredients in Glucose Tolerance II may have additive effects when used with other herbs, supplements, or medications that also lower glucose levels. Glucevia $^{\text{\tiny M}}$  is a trademark of Naturex.

Supplement Facts Serving Size Servings Per Container		capsules 60
Amount Per Serving	% Daily Value*	
Biotin Chromium (as Polynicotinate)	8 mg 500 µg	26667% 1429%
European Ash (Seed, Fruit) Extract (Glucevia™) Berberine HCl	500 mg	†
Milk Thistle (Seed) Extract (standardized to 70-80% Silymarin)		<u> </u>
Resveratrol (as 98% pure trans-Resveratrol)	250 mg	†
† Daily Value not established		

Other ingredients: Hydroxypropyl methylcellulose, magnesium stearate, silicon dioxide, microcrystalline cellulose, gum acacia.

\* Percent Daily Value are based on a 2,000 calorie diet

**Suggested Use:** As a dietary supplement, 2 capsules two times daily with food, or as directed by a healthcare professional.

Warning: Individuals with diabetes or related conditions should monitor blood glucose levels, as these ingredients may lower them. Not recommended during pregnancy. Breastfeeding women, and children should use only under the supervision of a healthcare professional. Discontinue use for 15 days before any lab test that uses (strept)avidin-biotin technology. Candidates include thyroid, cardiac, fertility, hormonal, bone metabolism, and other tests. Raised blood levels of biotin may interfere with results.