GlucoMedix®

Applications

- · Glucose Support
- Metabolic Support
- Healthy Inflammatory Response Support
- Cardiovascular Support
- Microbial Support
- · Immune Support



Introduction

NutraMedix GlucoMedix® is a proprietary blend of hydro-ethanol extracts from stevia leaf (Stevia rebaudiana) and Samento™ cat's claw bark (Uncaria tomentosa).

Stevia leaf (*S. rebaudiana*) belongs to the Asteraceae family.¹ It is native to parts of South America and is used as a dietary supplement as well as a sweetener. The constituents responsible for the sweet taste are steviol glycosides, including stevioside, rebaudiosides A-E, steviolbioside, and dulcoside A.¹ Stevia also contains phytosterols such as stigmasterol, beta-sitosterol, and campesterol;¹ as well as flavonoids, diterpenes, and triterpenes, among others.¹

Cat's claw bark (*U. tomentosa*) belongs to Rubiaceae family. Samento cat's claw bark is extracted from the rare pentacyclic chemotype of *U. tomentosa*, which is TOA-free, with levels in trace amounts or undetectable. This pentacyclic oxindole alkaloid (POA)-predominant, tetracyclic oxindole alkaloid (TOA)-free form of cat's claw bark may help with blood sugar support, metabolic support, cardiovascular support, and immune system support.²⁻⁶

NutraMedix GlucoMedix is made at our U.S. manufacturing facility using a specialized proprietary extraction process that optimizes the constituents of the herbs in their original, unprocessed state to obtain broad-spectrum

concentration. Because our extracts are made in our own facility, we control all aspects of quality, including stringent ID testing, microbial testing, and heavy metal testing. NutraMedix rigorously follows current good manufacturing practices (cGMP), as do our suppliers.

Glucose Support Metabolic Support

Both stevia leaf (*S. rebaudiana*) and cat's claw bark (*U. tomentosa*) may help maintain blood sugar levels already within the normal range. ^{2,7-10} Healthy blood glucose regulation depends on pancreatic health; insulin and glucagon secretion in response to blood glucose levels; insulin sensitivity; and a balance between glycogen synthesis and glycogenolysis. Steviol glycosides such as stevioside and rebaudioside A may help support pancreatic health as well as maintain post-prandial insulin levels already within the normal range. ¹¹¹ According to animal studies, stevioside may also help support glycogen synthesis, ^{12,13} slow gluconeogenesis, ¹⁴ and support glucagon and insulin levels already within the normal range. ¹¹⁴⁻¹⁶

Both stevia leaf and cat's claw bark may help inhibit the enzyme alpha-glucosidase and delay the intestinal absorption of saccharides. 16,17 Both may also support normal insulin sensitivity. 14-18

Stevia leaf (S. rebaudiana) may help maintain a healthy energy intake and support satiety. 19,20

Colonic microbiota convert steviol glycosides into steviol glucuronides, which are then excreted in the urine.²¹ In a human study comparing Stevia to a control without dietary restrictions, a 24-hour diet recall was used to track calories, carbohydrates, protein, fat, and fiber. The stevia group was found to have a higher protein intake, lower carbohydrate intake, and lower overall calorie intake, compared to the control group.⁷ In animal studies, isosteviol from *S. rebaudiana* has shown support of a healthy body weight.²²

Cardiovascular Support

Stevia (*S. rebaudiana*) and its constituent steviosides may help maintain cholesterol levels already within the normal range. ^{7,23,24} Stevia may help maintain total cholesterol (TC), triglycerides (TG), low density lipoprotein (LDL), very low density lipoprotein (VLDL), and the LDL/HDL ratio within the normal range. It may also help maintain HDL levels and the atherogenic index already within a healthy range. ^{7,25} Additionally, Stevia may help support hepatic cellular health. ²⁶ Stevia and Cat's claw (*U. tomentosa*) have synergistic effects for cardiovascular support, as cat's claw may also help maintain cholesterol levels already within the normal range through the support of liver health. ^{3,7}

Stevia and its constituent stevioside may help maintain healthy blood pressure levels already within the normal range. 27,28 Blood pressure support from steviol glycosides may be related to changes in glomerular filtration rate and transport of water and saltin renal tubules, supporting normal sodium and potassium excretion. 29 Stevioside may support normal vasodilation through changes in Ca²⁺ ion inflow to vascular smooth muscle and may help maintain blood pressure levels already within the normal range. 30,31

Other Support

Inflammatory Response Support

Stevia (*S. rebaudiana*) may help with healthy inflammatory response support. ³² Stevioside and its metabolite steviol may assist with cytokine support, helping maintain healthy levels of TNF-alpha, IL-1-beta, IL-6, and NF-kappaB already within the normal range. ³² It may also help maintain

levels of cytokine-governing lipopolysaccharides already within the normal range.³⁰

Immune System Support

Cat's claw (*U. tomentosa*) may help maintain a healthy immune response and support immune system homeostasis. It may help maintain neutrophil, Th1, and Th2 levels already within the normal range. Cat's claw may also help maintain CD4+ CD25+ Foxp3+ regulatory T cells within the normal range. It should be noted that only TOA-free cat's claw (such as Samento) helps with immune support.

Microbial Support

Stevia (*S. rebaudiana*) may help with microbial support." ³⁷⁻³⁹

Safety & Cautions

Stevia (*S. rebaudiana*) is generally well tolerated. Nausea and dizziness have been known to occur, though at a similar rate to placebo, usually resolving after the first week of use.⁴⁰ Stevia may theoretically increase pharmaceutical lithium levels due to increased diuresis and decreased lithium excretion.⁴⁰ Stevia may theoretically have additive effects when taken concurrently with hypoglycemic and hypotensive medications.⁴⁰

Cat's claw (*U. tomentosa*) is generally well tolerated. Gastrointestinal effects such as nausea, constipation, and diarrhea have been reported.⁴¹ Cat's claw may inhibit P450 CYP3A4 enzymes and therefore may slow the metabolism of drugs metabolized by CYP3A4.⁴¹ Cat's claw should be avoided in those taking immunosuppressants, as it may interfere with immunosuppressant therapy.⁴¹ It may have additive effects with anticoagulants, generally attributed to the TOAs rhynchophylline and isorhynchophylline,⁴² as well as additive effects with hypotensive drugs, generally attributed to the TOAs rhynchophylline and isorhynchophylline.^{43,44} As a reminder, Samento cat's claw is TOA-free, with levels in trace amounts or undetectable.

Safety is not documented in breastfeeding or pregnant women, or in children under age 3, due to insufficient safety research.

*This statement has not been evaluated by the Food and Drug Administration. This product is not intended to treat, cure, or prevent any diseases.

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