NutraMedix

Stevia

Applications

- Cardiovascular Support
- Metabolic Support
- Microbial Support
- Antioxidant Support
- Healthy Inflammatory Response Support

Introduction

NutraMedix Stevia is a hydro-ethanol extract made from **stevia leaf** (*Stevia rebaudiana*). *S. rebaudiana,* formerly known as *Eupatorium rebaudiana*,[1] is part of the Asteraceae family, native to Brazil and Paraguay, and used as a dietary supplement as well as a sweetener.

Constituents responsible for the sweet taste include steviol glycosides, including stevioside, rebaudiosides A-F, steviolbioside, isosteviol, and dulcoside A, of which stevioside and rebaudioside A are the most abundant.[2,3] Steviol glycosides are approximately 250-300 times sweeter than sucrose.[3] Stevia also contains phytosterols such as stigmasterol, beta-sitosterol, and campesterol,[2] as well as flavonoids, diterpenes, triterpenes, vitamins, and minerals.[2]

NutraMedix Stevia 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 NutraMedix's 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.

Cardiovascular and Metabolic Support

Stevia (*S. rebaudiana*) and its constituent stevioside may help maintain healthy blood pressure levels already within the normal range.*[4] Blood pressure support from steviol glycosides may be related to alterations in glomerular filtration rate and transport of water and salt in renal tubules, resulting in changes to sodium and potassium excretion.*[5] Stevioside may support vasodilation through changes in Ca^{2+} ion inflow to vascular smooth muscle[1] and may help maintain angiotensin II levels already within the normal range.*[6]

The constituent stevioside may help maintain cholesterol levels already within the normal range.*[7] It may help maintain total cholesterol (TC), triglycerides (TG), low density lipoprotein (LDL), very low density lipoprotein (VLDL), and LDL/HDL ratios within the normal range. It may help support HDL levels and atherogenic index already within a healthy range.[8,9] In addition,, Stevia may help support hepatic cellular health.*[10]

Stevia (*S. rebaudiana*) may help maintain a healthy energy intake and support satiety.*[11,12] Colonic microbiota convert steviol glycosides into steviol glucuronides, which are then excreted into the

urine.[13] In a human study comparing Stevia to 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 control.*[9] In animal studies, *S. rebaudiana* has shown support of a healthy body weight.*[14]

Stevia may help with blood glucose support, maintaining both fasting and postprandial glucose levels already within the normal range.[9,15,16] It may help decrease the intestinal absorption of glucose.*[16] Steviol glycosides such as stevioside and rebaudioside A may help support pancreatic health and maintain both insulin and glucagon levels already within the normal range.*[9,17,18] Stevia extract may also help maintain healthy insulin sensitivity in 3T3-L1 adipocytes.*[19] Lastly, stevia may help support healthy glycogen levels in both liver and muscles.*[20]

Microbial Support

Stevia (*S. rebaudiana*) leaf extract may help with diverse types of microbial support, including variety of morphological forms.[21-23] It may also help with mycelial support.*[1]

Other Support

Inflammatory Response Support

Stevia (*S. rebaudiana*) may help with inflammatory response support.*[24] The constituent stevioside and its metabolite steviol may help with cytokine support, maintaining healthy levels of TNF-alpha, IL-1-beta, IL-6 and NF-kappaB already within the normal range.[24]* It may also help maintain levels of cytokine-governing lipopolysaccharides already within the normal range.*[1]

Antioxidant Support

Stevia (*S. rebaudiana*) may contribute antioxidant support to help with normal oxidative stress, attributed to its polyphenols and flavonoids.*[26, 27] Stevia may help maintain superoxide dismutase (SOD) levels already within the normal range, contributing antioxidant support.*[14]

Safety and Cautions

Stevia (*S. rebaudiana*) is generally well tolerated. Nausea and dizziness have been known to occur, though at a similar rate to placebo, and usually resolves after the first week of use.[4] While one study found stevia to weakly inhibit CYP3A4 and CYP2C9,[27] another found only minor or no changes to CYP activity or expression. The latter group concluded that stevia is unlikely to cause cytochrome P450 interactions with pharmaceuticals.[28] Stevia may theoretically increase pharmaceutical lithium levels due to increased diuresis and decreased lithium excretion.[29] It may also, theoretically, have additive effects when taken concurrently with hypoglycemic and hypotensive medications.[29]

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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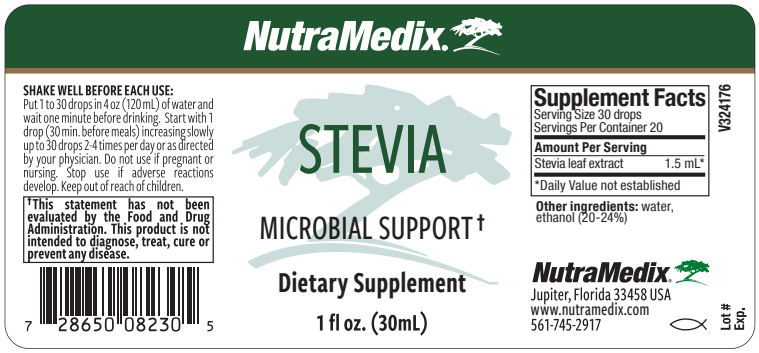

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