

Stevia A Bio – Sweetener with Proven Health Benefits

Nameeta Shah*

Department of clinical Dietitian, India

***Corresponding Author:** Nameeta Shah, Department of clinical Dietitian, India.

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- o Zero Calories and no Carbohydrates
- o Natural sweetener that lacks any chemical components
- o Known to cure varied ailments
- o Completely natural herbal sweetener
- o Great alternative for sugar and safe for diabetics and the health conscious



Figure 1

Now-a-days *Stevia* has become very popular. Question is what *Stevia* is? So *Stevia* is a sweetener and sugar substitute extracted from the leaves of the plant species *Stevia rebaudiana*, which is native to Brazil and Paraguay. The active compounds of *Stevia* is 'steviol glycosides' (mainly stevioside and rebaudioside), which is heat-stable, pH-stable, and not fermentable.

As all of us are aware about harmful effects of Refined sugar. in day to day life we love sweets, we need sweets. For this reason, people are looking for healthy alternatives for refined sugar.

There are many low calorie artificial sweeteners in the market but most of them are chemically processed and produced in factories. However, there are few natural sweeteners out there and *Stevia* is one of them. The body does not metabolize the glycosides in *Stevia* and therefore it contains 0 calories like some artificial sweeteners. However, there are a few natural sweeteners out there such as *Stevia*(200-300 times), Erythritol (70 times), Maltitol (90 times) as well as Fructooligosaccharides (50 times), that taste just as good, but *Stevia* ranks higher in sweetness compare to others. This sweetener has become immensely popular in recent years. *Stevia*'s taste has a slower onset and longer duration than that of sugar, and some of its extracts may have a bitter or licorice-like aftertaste at high concentrations.

Stevia is a 100% natural, zero calorie sweetener with a number of health benefits that have been confirmed in human studies. Born out of the elements of nature, *Stevia* is completely safe for people with diabetes and due to the fact that it has no calories it is a great alternative for people that are health conscious.

Stevia (Stevia rebaudiana) even if it is a plant native to Paraguay and Brazil, it grows easily in many areas of the world. It has been used for its sweet taste for centuries and is a traditional medicinal herb for obesity and blood sugar disorders. *Stevia* being 2 to 300 times sweeter than table sugar, does not affect blood glucose levels and is considered safe for diabetics. In Japan, *Stevia* has been the sugar-free sweetener of choice, over saccharin, aspartame and other artificial sweeteners, in soft drinks and foods since 1977.

Studies have uncovered additional attributes of *Stevia*, beyond imparting a sweet flavor; *Stevia* has been shown to decrease blood sugar in patients with type 2 diabetes and improve insulin resistance, anti-inflammatory and immune supportive actions. It is available in many forms, including the whole leaf (green), a liquid extract (brown), and a powder (white). The white powder is also

sold in convenient little packets that make it very user-friendly, since it is used the same way as artificial sweeteners such as saccharin and aspartame. Be aware that the green and brown preparations use the whole leaf, while the white powder may contain isolated compounds such as stevioside.

However, the refined *Stevia* sweeteners used today often don't resemble the Main Preparation Method whole *Stevia* plant at all. You can buy whole or crushed *Stevia* leaves, but most often you are getting an extract (either liquid or powder), or a refined version of the plant's isolated sweet compounds.

Properties of Stevia

<i>Stevia</i>		
Herbal properties and actions		
Main Actions	Other Actions	Standard Dosage
Naturally sweetens	kills bacteria	Leaves
Lowers blood sugar	kills fungi	Ground leaves: 1/4 tsp =
increases urination	kills viruses	1 tsp of sugar
lowers blood pressure	reduces inflammation	Infusion: 1 cup 2-3
Dilates blood vessels		times daily

Table 1

Main Preparation Method

Infusion or dry powder extract.

Main Actions (in order)

Sweetener, hypoglycemic, hypotensive (lowers blood pressure), cardio tonic (tones, balances, strengthens the heart), antimicrobial.

Main Uses

1. As a natural sweetener
2. For diabetes
3. For high blood pressure
4. For cavity prevention
5. As a weight loss aid.

Properties/Actions Documented by Research

Antibacterial, anticandidal, antifungal, antiviral, cardio tonic (tones, balances, strengthens the heart), diuretic, hypoglycemic, vasodilator.

Other Properties/Actions Documented by Traditional Use

Tonic, wound healer.

Cautions.

None.

Worldwide ethnomedical uses	
Brazil	For cavities, depression, diabetes, fatigue, heart support, hypertension, hyperglycemia, infections, obesity, sweet cravings, tonic, urinary insufficiency, wounds, and as a sweetener
Paraguay	For diabetes, and as a sweetener
South America	For diabetes, hypertension, infections, obesity, and as a sweetener
United States	For candida, diabetes, hypertension, hyperglycemia, infections, and as a vasodilator and sweetener

Table 2

How to use Stevia

- You can find a good *Stevia* option at your local health store or online. Make sure to buy *Stevia* without additives and one that has been less processed.
- I recommend green *Stevia* as the best option.
- If you want to try green *Stevia* powder, I recommend Organic Traditions. Another good brand of *Stevia* that tastes great and you can find it pretty much any health food store is Sweet Leaf® *Stevia*.
- Sweet Leaf® has zero calories, zero carbs, a non-glycemic response and no sweeteners.
- You can also buy ground *Stevia* leaf online, and a huge bag lasts a long time.
- You can buy whole dried leaves as well and ground them yourself.
- If you purchase products already sweetened with *Stevia*, make sure "whole leaf *Stevia*" is on the ingredient label.
- You can use *Stevia* powder or liquid *Stevia* extract in place of sugar in your coffee or tea.
- You can also use it in baking recipes or any other recipe that recommends sugar.
- It's important to realize that a little bit of *Stevia* goes SUCH a long way. You need so much less *Stevia* in com-

parison to sugar. Conversions vary depending on your specific *Stevia* product.

Conversions

Helpful General Conversions Using a *Stevia* Product are as Follows

- 1 Teaspoon sugar = 1/2 packet or 1/8 teaspoon powdered *Stevia* = 5 drops liquid
- 1 Tablespoon sugar = 1.5 packets or 1/3 teaspoon powdered *Stevia* = 15 drops liquid *Stevia*
- 1 Cup of sugar = 24 packets or 2 tablespoons powdered *Stevia* = 2 teaspoons liquid *Stevia*.

Applications

Stevia: Usage of the Herbal sweetener *Stevia* extract is zero calories, healthy, organic and can replace sugar in almost all food and beverage products. It is beneficial for both Diabetic and Weight watchers who wish to reduce sugar intake. The primary use of *Stevia* as a sweetener is to enhance the deliciousness of food and drinks. Unlike other artificial sweeteners, *Stevia* is heat stable up to 200°C and thus can be cooked, boiled or baked like sugar.

Here is a list of some of its delicious range of usage

- Soft drinks and fruit juices
- Jams, sauces and pickles
- Table top sweetener for tea, coffee and beverages
- Weight-watcher's diets
- Pastries, pies, baking products
- Ice cream, yoghurts, sherbets
- Alcoholic beverage
- Jellies and desserts
- Chewing gum
- Candies and confectioneries
- Diabetic diets
- Sea foods and vegetables

To sum up with I would highly recommend people to use *Stevia* which is known as green sugar, a bio sweetener to replace with your refined sugar. But it's very important and necessary to consult your doctor, nutritionist, your dietician first before adding it to your regime to avoid any health issues as it may have side effects if taken in larger doses.



Figure 2

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