

STEVIA – A NATURAL SWEETENER

Brand Names: Truvia, PureVia, SweetLeaf
by Theresa Crabtree



With obesity and diabetes on the rise, many are seeking alternatives to sugar as a means to sweeten their foods while managing sugar cravings. One healthy choice is stevia which has no calories or carbohydrates. Due to the way the body metabolizes this super sweet substance, there is no effect on blood sugar levels, making it a better choice for diabetics. Stevia also helps to maintain a proper pH balance, which is crucial to health and vitality.

Unlike chemical sweeteners such as aspartame, stevia is purely plant based. The stevia plant is native to Central and South America, Mexico and the U.S. Southwest and has been in use as a sweetener and medicinally for hundreds of years. Stevia is a healthy alternative sweetener used in sugar-free candies, baked goods, gum, yogurt and colas.

The leaves of the plant are what produces the sweet taste. However, not all stevia plants are created equal. Of the 240 stevia species, *Stevia Rebaudiana* is the one grown for its sweet leaves. In its natural, whole leaf form, stevia leaves are about 30-45 times sweeter than table sugar (sucrose).

To produce Truvia and PureVia commercially, stevia leaves are dried and subjected to a water extraction process. The stevia is then further processed to separate the molecules in order to isolate pure steviolides and rebaudioside A (commonly known as rebiana or Reb A), forming them into granules that are 200-300 times sweeter than sucrose.

As a result of the suspected carcinogenic properties of cyclamates and saccharin (those other pretty colored packets you find on restaurant tables), Japan began to commercially extract the sweetness from stevia leaves in 1971. The U. S. Food & Drug Administration approved Rebiana for sale as a sugar substitute in 2008, conveniently after Cargill, Inc. and The Coca-Cola Company stated their intention to release stevia-sweetened beverages. Shortly afterward, PepsiCo and Whole Earth Sweetener Company (whose roots are tied to Monsanto) announced PureVia, their brand of stevia-based sweetener. Previously, stevia had only been approved as a dietary supplement. The FDA classifies Truvia and PureVia as “generally recognized as safe” (GRAS).

Truvia and PureVia are a combination of two different types of sweeteners: rebiana and erythritol. They also contain natural flavors and cellulose as a bulking agent. Stevia is fairly new on the market and can be found in many processed products such as sodas, mineral water, baked goods and yogurt, as well as packets or in a liquid form to sweeten your favorite drinks and foods.

SAFETY CONCERNS

There is controversy over which is more healthful, using whole leaf stevia or extracts and isolated compounds like rebiana. Compared to chemical sweeteners such as aspartame, Truvia, PureVia and SweetLeaf are a safer sugar substitute.

Millions of Japanese have been using stevia for over thirty years with no reported or known harmful effects. Cargill, the company that produces Truvia, states it has no known side effects.

Although the FDA has classified rebiana as “generally recognized as safe” (GRAS), use caution when adding anything new to your diet, including stevia products. Begin slowly and pay attention to any symptoms or signs of distress.

A small amount of erythritol is used to improve the flavor of rebiana. Read more about erythritol in the “Sugar Alcohol” section on this page. Persons sensitive to erythritol may experience digestive disturbances such as diarrhea, constipation, bloating and gas. Hives are also known to be a side effect of erythritol. If Truvia and PureVia are used in moderation, the chances of sensitivity reactions are minimal.

When used daily in amounts over 250-500 mg, stevia may cause nausea, muscle pain or joint stiffness, fatigue, weakness, headaches and dizziness.

Although there is no evidence that stevia causes cancer or birth defects, there may be problems when used in high amounts with medications to lower blood sugar or blood pressure. Stevia may affect hormones and in vitro development. Before using stevia products, you may want to consult your physician if you are pregnant or taking medications that may be contra-indicative.

COOKING WITH STEVIA

Stevia is a plant-based product with no calories or carbohydrates, making it a wonderful choice for diabetics, vegans and those seeking a healthy lifestyle. The leaves can be eaten fresh or dried and powdered, then added to your favorite foods.

Most packages of stevia have suggested guidelines on how to use as a sugar substitute. Using too much stevia may make the food taste bitter. Some brands use more steviosides to cut the bitterness. As mentioned above, whole leaf stevia is about 30-45 times sweeter than sucrose whereas products such as Truvia and PureVia may be up to 300 times sweeter than sucrose. Check the labels and try different brands until you find the one you prefer. When substituting sugar with stevia, start slowly until you find the amount that makes your taste buds fill with delight. Be sure to note the changes on your favorite recipes.

Many of the brand names have recipes on their websites. Below are some basic conversion guidelines

In recipes, use about a tenth of the recommended amount of sugar.

1 packet of Truvia, PureVia or SteviaPlus = about 2 teaspoons of sugar.

1 ½ - 2 packets of Truvia, PureVia or SteviaPlus or 6 drops of -9 drops of SteviaClear liquid = 1 tablespoon of sugar.

6 packets of stevia are equal to 1/4 cup of sugar.

Stevia extracts are heat stable which makes them usable in cooked and baked foods. Keep in mind that Stevia does not caramelize or brown as sugar does. For cookies, cakes and brownies, you may wish to add a minimum of ¼ cup of sugar and replace the rest of the sugar with stevia.

Some recipes such as fruit purees or yogurt may work best by increasing the amount of liquid by 1/3 cup for each 1 cup of sugar replaced with stevia.

To make powdered sugar or pie filling: blend together for 2-3 minutes: 1 Tablespoon of corn starch and 8 packets of stevia sweetener.

Keep stevia on your counter or table as a sugar substitute.

Blend stevia leaves with other herbs to prepare a sweetened herbal tea.

Stir stevia into a cup of your favorite tea.

Liquid Stevia comes in a variety of flavors to add to beverages.

Sprinkle stevia on top of a bowl of cereal, ice cream or yogurt as a no-calorie sweetener.

GROWING STEVIA

Stevia is a perennial plant and grows to about 3 feet in height. Although it produces many seeds, very few germinate. Processing is simple, gather the leaves in the early morning. Either pluck the leaves individually throughout the summer and allow them to dry or harvest in autumn by cutting off the roots and hanging the entire plant upside down until the leaves are dry. Once the leaves are dried, they can easily be crushed into a fine powder with a mortar and pestle. An extract can be made by mixing the crushed leaves with water.

I was able to grow stevia in my Arizona garden and wonder how it would do in other locations, indoors and outdoors. If you have successfully grown and harvested stevia in areas outside its native territory, I'd like to hear from you!