

**Sweeteners, Good, Bad, or Something even Worse.**  
(Part 6)

These are non-calorie sweeteners other than Aspartame

## **Stevia**

### **Steviol Glycoside** (zero calorie)

All so labeled as:

- **Rebiana** is the trade name for a zero-calorie sweetener containing mainly rebaudioside A.
- **Truvia** is the consumer brand for Rebiana marketed by Cargill and developed jointly with The Coca-Cola Company.
- **PureVia** is PepsiCo's brand of rebaudioside A sweetener which was developed jointly with Whole Earth Sweetener Company.
- **Enliten** is Corn Products International's brand of rebaudioside A sweetener.
- **Erylite Stevia** is the trade name for Jungbunzlauer's sweetener with rebaudioside A.

**Steviol glycosides** are responsible for the sweet taste of the leaves of the stevia plant (*Stevia rebaudiana* Bertoni). These compounds range in sweetness from 40 to 450 times sweeter than sucrose. There are many extraction processes for the steviol glycosides and due to the fact that the specific Steviol glycosides have to be extracted from the plant, they are no longer natural. People have many different definitions to the word natural. But natural should mean the way God made it in the leaf of the plant, which is far from the product that is sold to you. And natural is not always that good for you to eat, lead, arsenic and poison Ivy, are very natural.

In terms of weight fraction, the four major steviol glycosides found in the stevia plant tissue are:

- 5–10% stevioside (250–300X of sugar)
- 2–4% rebaudioside A — most sweet (350–450X of sugar) and least bitter
- 1–2% rebaudioside C
- ½–1% dulcoside A.

Rebaudioside B, D, and E may also be present in minute quantities; however, it is suspected that rebaudioside B is a byproduct of the isolation technique. The two majority compounds stevioside and rebaudioside, primarily responsible for the sweet taste of stevia leaves, were first isolated by two French chemists, Bridel and Lavielle (1931).

Stevia is one of those products that has a lot of conflict surrounding it. I believe that much of this exists because so many people are desperate to find something to satisfy their sweet addictions they are willing to overlook many warnings. Unfortunately even though the stevia plant is nontoxic we do not eat the plant itself but the extracted Rebaudiosides and steviol glycosides of the plant. There are many extraction processes of these components but all of them can create toxic effects. Plus, stevia has no calories thereby it still has to trick the body into thinking that you are eating a sweet carbohydrate when it is not. This alone has adverse effects on the physiology of the body.

In the 1970s, the Japanese government approved the plant for use in food. Japanese food processors use stevioside in a wide range of foods: pickled vegetables, dried seafood, soy sauce and miso, beverages, candy, gums, baked goods and cereals, yogurt, ice cream, and as a tabletop sweetener. In salty applications, stevioside modifies the harshness of sodium chloride. Combining it with other natural and synthetic sweeteners improves taste and functionality.

FDA considers stevia leaves and stevioside as unapproved, non-GRAS (Generally Recognized As Safe) food additives. In 1992, the American Herbal Products Association (AHPA) petitioned the FDA to declare stevia as GRAS, citing historical usage and referring to numerous toxicology studies conducted in Japan and other countries. The FDA rejected AHPA's petition, contending inadequate evidence to approve the product. The agency does allow the herb to be used in dietary supplements as covered by DSHEA (Dietary Supplement Health and Education Act).

**Weight loss, Does consuming Stevia help with weight loss?**

It's difficult to say. One would think that consuming a substance that is sweet and replaces sugar in some instances would lead to fewer calories consumed and weight loss, but this has not been the case with artificial sweeteners and we do not know if it applies to stevia, also.

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