

Stevia

By Allison Tannis, BSc., MSc.

Let me introduce Stevia. Stevia is a naturally sweet tasting plant called stevia rebaudiana. Stevia is a native shrub to South America but, today is cultivated in many places around the world.

Traditionally, stevia has been used by South American natives for hundreds of years as a sweetener. However, scientists discovered stevia and its active compounds, steviosides, at the turn of the century and have been studying since.

The research on stevia variable and not terribly extensive. However, a few trends appear in the studies. In particular, stevia appears to be a sweet substance that does not cause the same detrimental effects as sugar. It does not cause a rise in blood glucose as stevia is not a form of glucose. (Metabolism, March 2003) Also, stevia appears to stimulate insulin production from the beta-cells of the pancreas and appears to increase glucose tolerance (i.e. anti-hyperglycemic effects). (Metabolism, February 2000) Therefore, diabetics may find stevia to be beneficial.

Stevia also shows anti-hypertensive effects. Chan et al. 2000, performed a multi-centered, double blind, placebo controlled human trial in which Chinese hypertensive men received about 750 mg of stevia each day for a month. The results show that stevia is a well tolerated anti-hypertensive in humans.

Stevia has also been studied for its anti-cancer, anti-microbial and anti-viral properties.

Currently, there is great debate in the media about the safety of Stevia. There is a large amount of safety data on stevia from research studies. The debate is from two animal studies which suggest that stevia may be toxic. Of note, the dosages used are greater than the amount one human could possibly ingest in a day. For example, one of the studies would be the equivalent of a human consuming 600 packets of stevia per day. (Wasuntarwat, et al. 1998. Drug Chem Toxicol 21(2):207-22)

In Canada and the United States, regulations prohibit the use of stevia as a food additive. Why? That is not clear. In South America Stevia has been used for centuries without any known harmful effects. And, in Japan, Stevia is used as an additive to foods, including pops, for over 30 years without health concerns or reported adverse reactions.

How to use this sweet ingredient? It's simple. Replace one cup of sugar with ¼ to ½ teaspoon of stevia. Just remember that stevia is not sugar, so it will not behave the same in the chemistry of cooking. For example, stevia is great as a way to sweeten drinks or in jellies, but does not caramelize well.

There are 3 forms of stevia available in Canada. Packets offer an easy way to carry stevia. The purest form of stevia is the powder which is great for baking as its easiest to measure. If you like to use stevia to sweeten your drinks than the liquid form is for you.

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