

## Newsmaker

“...But my surgery was 2 years ago...” This was the response that I got after I questioned a patient as to why were we not contacted when the patient was having abdominal pain. Granted, not all of the aches and pains following a weight loss surgery, are related to it. However it is important for post weight loss surgical patients to remember that as your surgeon, we would like be kept informed, especially if new changes occur.

Thank you.  
Ara Keshishian, MD, FACS

## What Is Stevia?

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Stevia is one of the most health restoring plants on earth. What whole leaf Stevia does both inside the body and on the skin is incredible. Native to Paraguay, it is a small green plant bearing leaves which have a delicious and refreshing taste that can be 30 times sweeter than sugar. Besides the intensely sweet

glycosides (Steviosides, Rebaudiosides and a Dulcoside), various studies have found the leaf to contain proteins, fiber, carbohydrates, iron, phosphorus, calcium, potassium, sodium, magnesium, zinc, rutin (a flavonoid), true vitamin A, Vitamin C and an oil which contains 53 other constituents. Quality Stevia leaves and whole leaf concentrate

are nutritious, natural dietary supplements offering numerous health benefits.

### Stevia as a Sweetener

Stevia is the sweetener of the future. Because the human body does not metabolize the sweet glycosides (they pass right through the normal elimination channels) from the leaf or any of its processed forms, the body obtains

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no calories from Stevia. Processed forms of pure Stevia can be 70-400 times sweeter than sugar. Whether these products are called Stevia, Stevioside, Rebaudioside, Stevia Extract, or Stevia Concentrate, if they are in their pure unadulterated form they do not adversely affect blood glucose levels and may be used freely by both diabetics and hypoglycemics. For people with blood sugar, blood pressure or weight problems Stevia is the most desirable sweetener.

In all of its current forms Stevia has a taste unique to itself. Along with its sweetness there is also a bitter component. The poorer the quality of the leaf the more bitterness is evident in the taste. In good consumer products, however, this bitter flavor disappears as does the slight licorice taste of whole-leaf products when appropriately diluted for consumption. Unlike artificial sweeteners, the sweet glycosides do

not break down in heat which makes Stevia an excellent sweetener for cooking and baking.

## Stevia as a Dietary Supplement

The vast majority of reported health benefits, both from the research laboratory and consumer experience, comes from daily use of a water based whole leaf Stevia concentrate. Scientific research has indicated that Stevia effectively regulates blood sugar and brings it toward a normal balance. It is sold in some South American countries as an aid to people with diabetes and hypoglycemia. Since its introduction into the US, numerous people have reported that taking 20-30 drops with each meal brought their blood glucose levels to normal or near normal within a short time period. Obviously each individual's condition is different and such experimentation should be done

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under the supervision of a qualified physician. An important benefit for hypo-glycemics is Stevia's tonic action which enhances increased energy levels and mental acuity. Studies have also indicated that Stevia tends to lower elevated blood pressure but does not seem to affect normal blood pressure. It also inhibits the growth and reproduction of some bacteria and other infectious organisms, including the bacteria that cause tooth decay and gum disease. This may help explain why users of Stevia enhanced products report a lower incidence of colds and flu and why it has such exceptional qualities when used as a mouthwash or added to toothpaste. Many people report significant improvement in oral health after adding Stevia concentrate to their toothpaste and using it, diluted in water, as a daily mouthwash. Stevia is an exceptional aid in weight loss and weight management because it contains no calories and reduces one's craving for sweets and fatty foods. Hunger sensations are lessened when 10 or 15 drops are taken 20 minutes before meals. Preliminary research data indicates that Stevia may actually reset the hunger mechanism in people where the pathway between the hypothalamus and the stomach has become obstructed. If so, Stevia would help people to feel satiated sooner, helping them to eat less. Other benefits of adding Stevia to the daily diet include improved digestion and gastrointestinal

function, soothed upset stomachs and quicker recovery' from minor illness. Users have also reported that drinking Stevia tea or Stevia enhanced teas helped to reduce their desire for tobacco and alcoholic beverages.

Stevia concentrate tablets are available for those who want the medicinal benefits of Stevia concentrate in an easy to swallow tablet form.

## The Stevia Leaf

Stevia leaves vary widely in quality due to many environmental factors including soil, irrigation methods, sunlight, air purity, cleanliness, farming practices, processing and storage. There are also numerous species of Stevia with differing Stevioside/Rebaudioside content. Bacterial and fungal contamination is a serious problem and one must be careful about the original source of Stevia. Chinese Stevia leaves are a poor quality, containing only 5-6% of the sweet Steviosides/Rebaudiosides, while Paraguayan leaves contain 9-13%. Stevia should be compared according to aroma, taste, appearance and sweetness. Leaves are available in tea bags (only from Wisdom of the Ancients at the time of writing) and make a delicious tea. Tea bags may be placed in any beverage desired and make a delightful lemonade. The sweet glycosides are released more rapidly in hot liquid than in cool liquid. You may want to place a tea bag in a small amount of hot water

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for a few minutes and then add the sweetened water to the beverage. A mild Stevia tea offers excellent relief for an upset stomach. After use, a Stevia tea bag placed over the eyes (similar to using a cucumber) for a few minutes effectively tightens the skin and smoothes out wrinkles. Ground Stevia is excellent when sprinkled lightly over cooking vegetables and meats, cereals and salads. Besides adding its own sweet taste it significantly enhances the flavor and nutritional value of the food. Ground Stevia can be used in many cooking and baking applications.

## Stevioside

Refined Steviosides & Rebaudiosides are the sweetest form of Stevia and may be purchased in a semi-white powder form (usually referred to as an extract) or in a clear liquid made by adding the powder to water and a preservative. The powder may be added directly to food and beverage but in very tiny amounts. The liquid is used drop by drop.

Stevioside has over 50% of the commercial sweetening market in Japan, which consumes 90% of the world's supply of Stevia leaves. The refined Chinese Stevioside product is only 80-91% pure and some samples have been found to be high in pathogens.

Although Stevioside is a desirable sweetener it does not have the extraordinary health benefits of the

Stevia leaf or products made from whole leaf Stevia concentrate.

## Stevia for Exceptional Skin Care

Water based whole leaf Stevia concentrate offers several exceptional benefits when used regularly in skin care. When applied as a facial mask it effectively softens and tightens the skin, smoothes out wrinkles and helps to heal various skin blemishes including acne. One simply smoothes the dark liquid over the entire face, allowing it to dry for at least 30-60 minutes. As it dries you will feel the skin tightening. A drop of the concentrate may be applied directly on any blemish, acne outbreak, lip or mouth sore. People report success from applying Stevia to a variety of problem skin conditions. Stevia concentrate is also effective when used on seborrhea, dermatitis and eczema. Reports indicate that when a few drops of the concentrate are placed in cuts and scratches there is a more rapid healing of the wound without scarring. This will sting for 30-40 seconds followed by a significant lowering of pain. The concentrate is easily washed away with soap and warm water. In Paraguayan experiments the Stevia concentrate was added to a unique native herbal soap made from edible oils extracted from the seeds and leaves of trees native to the Paraguayan rain forest. Marketed in the U.S. under the name Cream of Coco Hair & Body

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Shampoo, the soap blends well with the concentrate. Used together these two natural products help retard the graying process and retain natural hair color, eliminate dandruff and various scalp problems, and improve the health and luster of the hair. Many Americans today add the concentrate to this native soap or to their regular shampoo and report excellent results. Most people wash the hair first and then add Stevia concentrate to the second shampoo, allowing it to remain on the hair for a few minutes before rinsing.

## Safety of Stevia

There has never been a complaint that Stevia, in any of its consumable forms, has caused any harmful side effects in the 1500 years of use in Paraguay and about 20 years in Japan. Scientists who have studied Stevia state that it is safe for human consumption.

Following extensive research Dr. Daniel Mowrey reported:

"More elaborate safety tests were performed by the Japanese during their evaluation of stevia as a possible sweetening agent. Few substances have ever yielded such consistently negative results in toxicity trials as have stevia. Almost every toxicity test imaginable has been performed on stevia extract [concentrate] or stevioside at one time or another. The results are always negative. No abnormalities in weight change, food intake, cell or membrane characteristics, enzyme

and substrate utilization, or chromosome characteristics. No cancer, no birth defects, no acute and no chronic untoward effects. Nothing."

This brief review of the Stevia plant and its worldwide uses in no way constitutes an endorsement of such uses. At this time the FDA permits Stevia to be imported, labeled and sold only for its approved use as a dietary supplement and in skin Care. The information contained is provided for educational purposes only. Medical advice is neither implied nor intended. Please consult your health care professional for medical advice.