

Sweeeeet Perceptions



Some benefits
of consuming

sugar-free
foods include:
reduced calorie
consumption,
reduced risk of
tooth decay,
and stable
blood sugar
levels.

Cutting out a
little bit of
sugar in your
diet can be
easier than you
think.

With the increasing number of products that are now available as 'sugar-free' and 'reduced sugar' it can be useful to understand what they actually mean. Increasingly, companies are turning to sugar substitutes to give their products the sweetness we all love and desire without the added calories. Consuming sugar-free products can also help decreasing your risk of developing cavities, and keeping your blood sugar levels constant. Here are some facts about some sugar substitutes that are available on the market.

WHAT ARE ARTIFICIAL SWEETENERS?

Artificial sweeteners are chemicals that taste sweet, but unlike sugar, they do not contribute any calories. They are generally much sweeter than sugar (up to 600x), and are used in very small quantities to achieve the equivalent sweetness as table sugar. Artificial sweeteners may be used for a variety of reasons including weight loss, weight maintenance, control of blood sugar (especially for people with diabetes), or to prevent cavities. They are safe for everyone to use, but children should use them with caution as they need the calories for growth.

Aspartame (NutraSweet)

Aspartame has been around on the market for about 25 years and is used in a variety of foods and beverages to provide sweetness without the calories. There has been much controversy surrounding the safety of aspartame, but more than 200 studies indicate that it is safe for consumption. In addition, a recent study done by the National Cancer Institute found that the consumption of aspartame did not increase the risk of leukemia, lymphoma, or brain cancer.

In the body, aspartame breaks down into aspartic acid and phenylalanine and methanol – compounds that are naturally present in foods such as meat, milk, fruits and vegetables. Products that contain aspartame will have a label that lists aspartame as an ingredient. Caution: individuals who have phenylketonuria (PKU) should not consume aspartame as they cannot properly metabolize phenylalanine.

Acesulfame potassium (Sunnett)

Acesulfame potassium has been approved for use for about 20 years and is now approved for use in baked goods, frozen desserts, candies, and beverages. It is approximately 200x sweeter than sugar, but is often combined with other sweeteners. Acesulfame potassium is very stable and doesn't breakdown when exposed to heat.

Sucralose (Splenda)

Sucralose is another no-calorie sweetener made from sugar but is 600x sweeter and has no aftertaste. To produce sucralose, chlorine is added to the sugar, which alters its structure. Chlorine is naturally present in a wide variety of foods including lettuce, mushrooms, and table salt.

Sucralose is used to sweeten many foods and beverages on the market such as soft drinks, applesauce, syrups, yogurt, and ice cream. In addition, it can be used in most home cooking and baking and the granular form can be used as a spoon-for-spoon replacement for sugar.

The safety of sucralose has been confirmed by over 100 studies over a 20 year period. No concerns were identified relating to cancer, genetic effects, reproduction, fertility, birth defects, immunology and central nervous system and metabolism. Thus, it can be used safely by everyone including adults, pregnant women, children, and people with diabetes.

Artificial sweetener	Acceptable Daily Intake	Estimated ADI equivalent	OK for cooking?
Aspartame (NutraSweet, Equal)	50 milligrams (mg) per kilogram (kg)	18 to 19 cans of diet cola	No
Saccharin (Sweet'N Low, SugarTwin)	5 mg per kg	9 to 12 packets of sweetener	Yes
Acesulfame K (Sunett, Sweet One)	15 mg per kg	30 to 32 cans of diet lemon-lime soda	Yes
Sucralose (Splenda)	5 mg per kg	6 cans of diet cola	Yes

SUGAR ALCOHOLS

Another class of sugar substitutes are sugar alcohols and includes sorbitol, xylitol, lactitol, mannitol, and maltitol. Sugar alcohols are used in sugar-free foods such as candies, cookies, and chewing gums. They are not considered artificial sugars, and contributes calories (fewer than sugar) to our diet. However, unlike sugar, they do not promote tooth decay or increase blood sugar.

How to painlessly decrease the amount of sugar in your diet

Cutting out a little bit of sugar in your diet can be easier than you think. There are a few things you can do to cut back, but still satisfy your sweet tooth.

1. Reducing the sugar by 1/4 to 1/3 in recipes usually will not dramatically affect the product.
2. Replace the sugar with spices or flavours such as vanilla, cinnamon, and almond extract to get the impression of sweetness
3. Try baking or cooking with Splenda – it measures just like sugar and is stable in cooking and baking
4. Try replacing sugar-filled foods with sugar-free or low sugar foods (eg. jams, drinks, syrups, canned fruit)

The Prostate Education & Research Centre



Spring 2008

Developed by:

Meredith Cushing, RD, MS, MSHSE
Diana Trang, BSc (FNH)

For more information, please call (604) 875-5006.
Visit The Prostate Centre on the World Wide Web:

www.prostatecentre.com