

# Sucralose

## The Facts

Sucralose is the only non-caloric sweetener made from sugar. Its unique combination of sugar-like taste and excellent stability allows sucralose to be used as a replacement for sugar in virtually every type of food and beverage, including in most home cooking and baking recipes.



Sucralose is derived from sugar through a multi-step, patented manufacturing process that selectively substitutes three atoms of chlorine for three hydroxyl groups on the sugar molecule. Chlorine is present naturally in many of the foods and beverages that we eat and drink every day and plays an important role in many biological processes and in nature. The presence of chlorine in sucralose produces a sweetener that has no calories, yet is 600 times sweeter than sugar. Sucralose tastes like sugar. It has a clean, quickly perceptible, sweet taste that does not leave an unpleasant aftertaste. Moreover, sucralose retains its sweetness during all food and beverage manufacturing processes and this enables it to be used virtually anywhere sugar is used, including cooking and baking in the home.

Sucralose is not utilized for energy in the body because it is not broken down like sucrose (sugar). It passes rapidly through the

body virtually unchanged. Sucralose has been extensively tested in more than 100 studies during a 20-year period and found to be a safe and remarkably inert ingredient. It can be used by all populations, including pregnant women, nursing mothers, and children of all ages. Sucralose is beneficial for individuals with diabetes because research demonstrates that sucralose has no effect on carbohydrate metabolism, short- or long-term blood glucose control, or insulin secretion.

One advantage of sucralose for food and beverage manufacturers and consumers is its exceptional stability. It retains its sweetness over a wide range of temperature and storage conditions over time. Because of its unique combination of great sugar like taste coupled with its stability, food manufacturers have used sucralose to create a wide range of great-tasting new foods and beverages. Examples include categories such as canned fruit, low-

**Continued on page 2**



**Discovered in 1976, sucralose has been developed jointly by Tate & Lyle PLC and McNeil Nutritionals, LLC, a Johnson & Johnson company. Sucralose is approved for use in the European Union and also in leading countries including USA, Mexico, Canada, Australia and Japan.**

Continued from page 1

calorie fruit drinks, baked goods and sauces and syrups. Sucralose can also be used as a sweetener in nutritional supplements, medical foods, vitamin/mineral supplements, and pharmaceuticals. All in all, consumers have had a greater choice of low calorie foods and beverages due to sucralose.

## BENEFITS



### ► Tastes Like Sugar

Sucralose tastes like sugar and has no unpleasant aftertaste. In scientific taste tests conducted by independent research organizations, sucralose was found to have a taste profile very similar to sugar.

### ► Heat Stable

Sucralose is exceptionally heat stable, making it ideal for use in baking,

canning, pasteurization, aseptic processing and other manufacturing processes that require high temperatures. In studies among a range of baked goods, canned fruits, syrups, and jams and jellies, no measurable loss of sucralose occurred during processing and throughout shelf life.

### ► Can Help Control Caloric Intake

Sucralose is not metabolized for energy, thus it has no calories. It passes rapidly through the body virtually unchanged, is unaffected by the body's digestive process, and does not accumulate in the body. By replacing sucralose for sugar in foods and beverages, calories can be reduced or in many products, practically eliminated.

### ► Suitable for People with Diabetes

Sucralose is not recognized as sugar or a carbohydrate by the body. Thus, it has no effect on glucose utilisation, carbohydrate metabolism, the secretion of insulin, or glucose and fructose absorption. Studies in persons with normal blood glucose levels and in persons with either Type 1 or Type 2 diabetes have confirmed that sucralose has no effect on short or long-term blood glucose control.

### ► Does Not Promote Tooth Decay

Scientific studies have shown that sucralose does not support the growth of oral bacteria and does not promote tooth decay.

## ► Long Shelf Life

Sucralose combines a sugar-like taste with the heat, liquid and storage stability required for use in all types of foods and beverages. It is very stable in acidic products, such as carbonated soft drinks, and in other liquid based products (e.g., sauces, jelly, milk products, processed fruit drinks). Sucralose is also very stable in dry applications such as hot beverage mixes, instant desserts, and tabletop sweeteners. Consumers can therefore be confident of a great sugar-like taste with products sweetened with sucralose.

## SAFETY

The safety of sucralose is documented by one of the most extensive and thorough safety testing programs ever conducted on a new food additive. More than 100 studies conducted and evaluated over a 20-year period clearly demonstrate the safety of sucralose.

Studies were conducted in a broad range of areas, at amounts many times higher than actual consumption levels, to assess whether there were any safety risks regarding cancer, genetic effects, reproduction and fertility, birth defects, immunology, the central nervous system and metabolism. These studies all concluded that sucralose was safe for human consumption and there are no side effects.

## MEETING CONSUMER DEMAND

Recent research shows that consumers are increasingly interested in incorporating low-calorie, sugar-free foods and beverages into their meal plans as part of a healthy lifestyle. This growing calorie consciousness challenges food manufacturers



Continued on page 3

Continued from page 2

to provide consumers with a wider selection of good-tasting, reduced-calorie products. The development and approval of a variety of safe, low-calorie sweeteners and other low-calorie ingredients are helping to meet this consumer demand.

## FUTURE



People are demanding a greater variety of low-calorie products as they strive to make healthier food choices. Sucralose can help meet this demand because its combination of sugar-like taste and excellent stability make it uniquely suited for numerous products, many of which have been previously unavailable in a reduced-calorie, reduced-sugar form.

Sucralose can be used to create whole new categories of food and beverage products, such as reduced-calorie cookies,

cakes, ice cream toppings, and fruit and pie fillings. It also can be used to expand markets for existing low-calorie products, such as jams and jellies, chewing gum, and carbonated soft drinks. The availability of sucralose will expand the market to provide products with improved taste, increased stability, lower manufacturing costs, and, ultimately, more choices for consumers.



*Calorie Control Council*

1100 Johnson Ferry Road, Suite 300 • Atlanta, GA 30342  
404-252-3663

**For more information on sucralose, visit [www.caloriecontrol.org](http://www.caloriecontrol.org) and [www.sucralose-org.co.uk](http://www.sucralose-org.co.uk)**

Copyright © 2009 Calorie Control Council • Permission to reprint information in whole or in part is granted, provided customary credit is given.



**Sucralose is available as an ingredient for use in a broad range of foods and beverages under the name SLENDA® Sucralose. Currently, a range of products sweetened with SLENDA® Sucralose are on supermarket shelves, such as carbonated soft drinks, low-calorie fruit drinks, sugar free squashes and cordials, yogurts, breakfast cereals, ice cream and dietary supplements. Some foods and beverages also display the “Sweetened with SLENDA® brand” logo on their packaging. SLENDA® Brand tabletop products are also available in certain markets.**

A range of products containing sucralose are available at retail as a tabletop sweetener for use in the home as SLENDA® Low Calorie Sweetener including:

- SLENDA® Low Calorie Sweetener Tablets: Ideal for sweetening hot beverages such as tea and coffee.
- SLENDA® Low Calorie Sweetener Granulated: A spoon-for-spoon replacement for sugar. It pours, measures, cooks and bakes like sugar. Also ideal for sprinkling onto cereal or fruit.
- SLENDA® Brown Sugar Blend is ideal for baking and reduce sugar used by half.
- More information on the complete range of SLENDA® Sweetener products is available by visiting [www.splenda.co.uk](http://www.splenda.co.uk).