

Sucralose

Sucralose was discovered in 1976 and was approved for use in Australia in 1993.

Sucralose is well recognised as having a taste profile very close to that of sugar.

How is it made?

It is made from sucrose by a chemical process that substitutes three chlorine atoms for three hydroxyl groups on the sucrose molecule. This intensifies the sugar-like taste while creating a safe, stable low kilojoule sweetener with zero kilojoules/calories. It is 600 times sweeter than sucrose.

Where is sucralose used?

Due to its unique sensory and functional characteristics, sucralose is used across the food, beverage and pharmaceutical industries. It is used in beverages, ice cream, yoghurts, canned fruits, confectionery and as a table top sweetener.

In addition to its sugar like taste, sucralose is also extremely stable and maintains its sweetness even when exposed to high temperature processing such as pasteurisation, sterilisation, UHT processing and baking.

It remains stable in food products throughout extended periods of storage even at low pH.

How do I know sucralose is added to my food or drink?

Ingredients in packaged foods must be listed from greatest to smallest by ingoing weight including added water.

Sucralose must be labelled as follows
"Sweetener (955)" or
"Sweetener (sucralose)"

How is sucralose handled by the body?

Although sucralose is derived from sucrose it is not perceived by the body as a carbohydrate. The body does not metabolise it, hence it provides no energy (kilojoules/calories). Additionally, it does not cause tooth decay.

Safety profile of sucralose

Comprehensive toxicology studies have clearly demonstrated the safety of sucralose. These studies have shown that, for all practical purposes, sucralose is biochemically inert and is rapidly excreted from the body with no side effects.

Food Standards Australia New Zealand ([FSANZ](#)) reviewed all the studies and has classified sucralose as a [Schedule 16](#) additive with permission for usage at GMP levels (Australia New Zealand Food Standards Code 2002).

Furthermore, the safety of sucralose has been confirmed by the Joint FAO/WHO Expert Committee on Food Additives and EU ([JECFA](#)).

Is sucralose safe for everybody?

No population group has been excluded from using sucralose. It is appropriate for any person wishing to reduce sugar or energy intake. There are no warning labels or information statements required for products sweetened with sucralose.

Fast facts

Safety

Sucralose is safe for:

People with diabetes and impaired glucose tolerance.

Pregnant women

Sucralose can be used by all individuals including pregnant women and nursing mothers.

Absorption of sucralose into the bloodstream is minimal, so the amount that passively crosses these barriers is extremely small.

It is important for all pregnant women to consult with their doctors regarding nutritional needs during pregnancy.

Children

Although foods made with low joule sweeteners are not usually recommended s part of a child's diet, the sucralose in foods and drinks is not hazardous to a young person's health.

With obesity rates rising amongst Australian children and adolescents, sucralose-sweetened beverages may help this group reduce their energy/kilojoule intake without compromising their overall diet.

Sweetness relative to sugar

Sucralose has a sweetness 600 times that of sucrose².

By having a very high sweetening power compared to sugar, non-sugar sweeteners are used in minute amounts.

For more information

FSANZ [website](#)