Acesulphame Potassium

Acesulphame Potassium (Ace-K) is a non-sugar sweetener that contains the mineral potassium. It was discovered in 1967 accidentally by a German chemist. It is 130-200 times sweeter than sucrose[1].

How is Ace-K made?

Ace-K was developed after the accidental discovery of a similar compound by chemists Karl Clauss. After accidentally dipping his fingers into the chemicals with which he was working, Clauss licked them to pick up a piece of paper[1,2].

Ace-K is often blended with other sweeteners (usually sucralose or aspartame). These blends are thought to give a more sucrose-like taste[1].

Where is Ace-K used?

Ace-K is approved for use in a wide variety of foods and drinks[1], including but not limited to:

- Fruit and vegetable juice products
- Water based flavoured drinks
- Electrolyte drinks; Brewed soft drinks
- Formulated beverages
- Flavoured milk
- Yoghurt and dairy based dessrts; custard; ice cream
- Fruits and vegetables preserved in vinegar, oil, brine or alcohol
- Canned fruits and vegetables
- Confectionery, chewing gum
- Tabletop sweeteners

How is Ace-K handled by the body?

Acesulfame K is not metabolised by the body and is excreted by the kidneys unchanged[1].

How do I know Ace-K is added to my food or drink?

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

Ace-K must be labelled as follows:
"Sweetener (950)" or
"Sweetener (Acesulphame K)"

Safety profile of Ace-K.

Food Standards Australia New Zealand (FSANZ) reviewed all the studies and has classified Ace-K as a permitted food additive listed in Schedule 8. Permissions for different food categories are provided within the table in Schedule 15. (Australia New Zealand Food Standards Code 2002).

In 2015, FSANZ conducted an assessment to increase the maximum permitted level of Ace-K in chewing gum [3]. FSANZ concluded that there was no public health and safety concern linked with the proposed increase in the permitted level of Ace-K in chewing gum.

Ace-K is also approved in more than 100 countries, including Japan, Switzerland, Norway, Canada and Australia[1].

IS Ace-K safe for every-body?

No population group has been excluded from using Ace-K 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 Ace-K.

Fast facts

Safety

Ace-K is safe for:

People with diabetes and impaired glucose tolerance

Pregnant women

Ace-K can be used pregnant by women and nursing mothers.

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 as part of a child's diet, the Ace-K in foods and drinks is not hazardous to a young person's health.

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

Sweetness relative to sugar

Ace-K has a sweetness of between 130 and 200 times that of sucrose[2].

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

For more information

FSANZ website

1 ISA 2015. Fact Sheet Acesulfame K. Accessed 11.06.2019. https://www.sweeteners.org/assets/uploads/articles/files/Acesulfame%20K%20-%20Fact%20Sheet_2015.pdf 2.ISA 2018. Low calorie sweeteners: role and benefits A guide to the science follow calorie sweeteners. Accessed 11.06.2019 https://www.sweeteners.org/assets/uploads/articles/files/ISA_booklet_September_2018.pdf 3.http://www.foodstandards.gov.au/code/applications/Pages/A1100MaxPermit-Ace-KinChewing-Gum.aspx