

## POSITION STATEMENT

Sweeteners provide an intense sweet flavour in a variety of foods and drinks. Their use has expanded as food industry look for sweet alternatives without the associated energy (kilojoules) of sugar. The term sweeteners includes both natural and artificial sweeteners.

### Types of sweeteners

#### Artificial sweeteners

- Often used as an alternative to sugar and are mostly energy (kilojoule) free
- Many artificial sweeteners exist as tabletop sweeteners used to add sweet flavour to tea, coffee and cereals instead of sugar
- Also found in cordials, soft drinks, ice creams, lollies etc. and labelled as 'diet', 'low joule' or 'no sugar'
- Under Australian law, food and drink manufacturers must declare the use of artificial sweeteners in products. They are either listed by their name or their three-digit number.

**Most commonly used artificial sweeteners in food and drinks**

Name	Code number	Brand name
Acesulphame K	950	Hermesetas Gold® Sunnett®
Alitame	956	Aclame®
Aspartame	951	Equal® Equal Spoonful® Hermesetas Gold® Nutrasweet®
Cyclamate	952	Sucaryl®
Neotame	961	
Saccharin	954	Hermesetas® Sugarella® Sugarine® Sweetex®
Hermesetas® Sugarella® Sugarine® Sweetex®	955	Splenda®

#### Nutritive sweeteners

- Based on different types of carbohydrates, e.g. fructose, rather than cane sugar (sucrose)
- May have less energy than sugar but are not energy free
- May be labelled as 'carbohydrate modified'.

**Most commonly used nutritive sweeteners in food and drinks**

Name	Code number	Effects
Fructose	No code	Fruit sugar, same energy as sugar but sweeter
Isomalt	953	Less energy than sugar but half the sweetness, may have a laxative effect, can also be listed as 'humectant'
Lactitol Mannitol Maltitol Xylitol Sorbitol	966 421 967 965 420	Sugar alcohols, same energy as sugar, except mannitol, may have a laxative effect and cause wind and diarrhea, can also be listed as 'humectant'
Maltodextrin	No code	Same energy as sugar, also listed as hydrolysed corn syrup' or 'glucose syrup'
Polydextrose	1200	Provides minimal energy, may have a laxative effect
Thaumatococin	957	Can also be listed as flavour enhancer

## *Natural intense sweeteners*

- A more recent addition to the sweeteners market is Stevia, often referred to as a 'natural' sweetener. Stevia is extracted from the Stevia Rebaudiana plant, a shrub from the chrysanthemum family native to South America. Stevia is between 200 - 300 times sweeter than regular sugar and contains no energy (kilojoules). In food and drink products, Stevia is listed by either its name or three digit number (960). It is commonly used in flavoured water and soft drink.

### **Expert advice**

Before artificial sweeteners (or intense sweeteners) can be added to foods and sold in supermarkets in Australia, the [Food Standards Australia and New Zealand](#) (FSANZ) test them to make sure they are safe to eat.

An example is aspartame, one of the most common artificial sweeteners. Aspartame has been declared safe by FSANZ for most people, with the exception of those people with phenylketonuria (PKU), a rare genetic disorder that is screened for at birth.

There has been some concern in recent times regarding the safety of artificial sweeteners. The research that raised concerns about their safety was carried out on animals, not humans and the dosage of artificial sweeteners used were many times greater than it would be possible to eat or drink.

There is a shift towards people using natural sweeteners such as Stevia. However both artificial and intense sweeteners can have a "programming" effect on the body which may lead to an increased desire for sweet foods/drinks. There is also not enough research to understand the long-term effects of intense sweeteners on the body.

### **Sweeteners in the canteen – artificial or intense**

FOCIS recommend consuming a wide range of food drinks in line with the Australian Dietary Guidelines and Australian Guide to Healthy Eating. Furthermore, emphasis should be given to whole foods that are minimally processed. Sweeteners (artificial, intense or natural) are often added to products that are not recommended to be consumed often or in large amounts i.e. discretionary (or sometimes) foods.

A safe level for intake of sweeteners has not been developed to date for children. In light of this, FOCIS does not register products containing artificial or intense sweeteners (e.g. aspartame and stevia) with the exception of dairy products.

FOCIS will register intense sweetened dairy foods such as milk, yoghurt and dairy alternatives that are a core food and are good sources of important nutrients such as calcium and protein.

### **Tips when reducing the amount of sugar in foods without using sweeteners**

1. Use yoghurt (flavoured or plain) instead of milk in recipes such as muffins
2. Add chopped dried or fresh fruit cut into small pieces to distribute the sweetness
3. Use sweet enhancing spices such as cinnamon, cloves, allspice, ginger and nutmeg
4. Over ripe fruits, such as bananas or strawberries, provide more sweetness
5. Use dried fruit puree in place of some sugar.

Sources:

- Diabetes Australia (2013). Alternate Sweeteners. Retrieved from: <http://www.diabetesaustralia.com.au/en/NDSS-Content/Diabetes-Information-Sheets/Alternate-sweeteners//>
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- Healthier Workplace WA (2013) Retrieved from: [http://hchf.com.au/system/resources/resource\\_assets/000/000/031/original/0398\\_HCHF\\_Sweeteners.pdf?1397094406](http://hchf.com.au/system/resources/resource_assets/000/000/031/original/0398_HCHF_Sweeteners.pdf?1397094406)