

alternative sweeteners

While it is no longer necessary to eat artificial sweeteners and low joule foods, there is still a place for them in certain circumstances and these products are available in the supermarket. There are two groups of alternative sweeteners: non-nutritive sweeteners (also known as 'artificial' or 'intense' sweeteners) and nutritive sweeteners. These are listed below.

1. Non-nutritive sweeteners

Non-nutritive sweeteners are essentially kilojoule-free and therefore have no effect on blood glucose levels. There are several varieties that can be found in the supermarket simply by checking the nutrition panel on the product for the codes listed:

Name	Code number	Brand name
Saccharin	954	Sugarine® Sugarella® Sweetex® Hermesetas®
Cyclamate	952	Sucaryl®
Aspartame	951	Nutrasweet® Equal® Hermesetas Gold® Equal Spoonful®
Sucralose	955	Splenda®
Acesulphame K	950	Sunnett® Hermesetas Gold®
Alitame	956	Aclame®
Neotame	961	
Stevia	960	Stevia

Research has shown that including a moderate amount of sugar in a healthy eating plan will not adversely affect blood glucose levels, weight management or the nutritional quality of the food you eat. In fact, some sugar in your meal plan can make low fat, high fibre foods taste better and also provides a greater variety of foods you can enjoy.



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Are non-nutritive sweeteners safe?

Yes. Non-nutritive sweeteners available in Australia have been thoroughly tested and approved by Food Standards Australia and New Zealand (FSANZ) and are considered quite safe to eat.

For women who are pregnant or breastfeeding, and want to take non-nutritive sweeteners, the following sweeteners are recommended: Acesulphame K, Alitame, Aspartame (eg: Equal®) and Sucralose (eg: Splenda®).

How are non-nutritive sweeteners used?

The table below summarises the ways in which non-nutritive sweeteners can be used. Some are available only in commercial food products while you can buy others to add to your tea, coffee, cereal and fruit in place of sugar.

Name	Tabletop sweetener	Form	Suitability for use in cooking	Examples of food products containing the sweetener
Saccharin (954)	Sugarella® Sugarine® Lite & Low®	Tablet Liquid Powder.	No. May give bitter after-taste.	Diet cordials, soft drinks and jellies.
Cyclamate (952)	Sucaryl®	Liquid.	No.	Diet cordials, soft drinks and jellies.
Aspartame® (951)	Equal®	Tablet Liquid Powder.	Yes (powder form).	Known as Nutrasweet® used in diet drinks, yoghurts, ice cream, chewing gum, lollies.
Sucralose (955)	Splenda®	Powder.	Yes. Use in equal quantities to sugar.	Used in diet drinks, yoghurt, jam, lollies.
Acesulphame K (950)	Not available.	Not available.	No.	Used in diet drinks and desserts eg: Pepsi Max® and Fruche®. Generally used in combination with another sweetener.
Alitame (956)	Not available.	Not available.	Yes. In commercial products.	Used in various products eg: prepared desserts and cakes.
Neotame (961)	Not available.	Not available.	Yes.	Limited availability.

“ in moderation, alternatively sweetened products contribute to a low saturated fat,

Cooking with sweeteners

As heat can change the taste of most non-nutritive sweeteners, they are best added after you have finished cooking. Splenda®, Equal Spoonful® and neotame are the only ones that can be added during cooking or baking, without affecting the taste.

When checking if a product containing a non-nutritive sweetener is suitable to include in your eating plan, read the label to check the other ingredients and nutritional values. For example, a product containing an alternative sweetener which is high in fat (particularly saturated fat) should not be eaten in large amounts (eg: 'sugar-free' chocolate).

2. Nutritive sweeteners

Nutritive sweeteners are usually different types of carbohydrate. Therefore they are not kilojoule-free and have different effects on blood glucose levels.

Products containing nutritive sweeteners may sometimes be labelled as 'carbohydrate modified'. The different varieties are summarised below.

Nutritive sweetener	Code number on label	Brand name	Additional comments
Fructose (fruit sugar)	No code number.	Sweetaddin™ Fruisana™	Has the same kilojoules as sucrose, but is sweeter and has a lower GI.
LoGicane	No code number.	LoGicane	Has the same kilojoules as sucrose but a lower GI.
Sorbitol	420	None available.	Has the same kilojoules as sucrose, with the exception of mannitol. May have a laxative effect and cause wind and diarrhoea.
Mannitol	421		
Xylitol	965		
Maltitol (sugar alcohols)	967		
Isomalt	953	None available.	Has less kilojoules and half the sweetness of sucrose. May have a laxative effect.
Polydextrose	1200	Litesse™	It provides minimal kilojoules and has very little effect on blood glucose levels. May have a laxative effect.
Maltodextrin available.	None	Also known as Hydrolysed corn syrup or glucose syrup.	Has same kilojoules as sucrose and has a very high GI.
Thaumatococin	957	None available.	

CSR Smart Sugar is a combination of both sugar (sucrose) and stevia (a non-nutritive sweetener, 960). Although almost entirely sugar (99.6%) the addition of stevia makes the product twice as sweet. This means you use half as much compared to regular sugar and so receive half the kilojoules. CSR Smart Sugar is therefore similar to a nutritive sweetener.

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The advantages and disadvantages of using alternative sweeteners

Advantages

- > Including low joule foods and drinks that contain non-nutritive sweeteners (eg: soft drinks, cordials and jellies) can add variety without affecting your blood glucose levels.
- > Small amounts of nutritive sweeteners will not greatly affect blood glucose levels and can increase your food choices.

Disadvantages

- > Some 'diet' products containing alternative sweeteners may still be high in saturated fat and are therefore not suitable to include in your menu plan eg: 'sugar free' (carbohydrate modified) chocolate.
- > Many nutritive sweeteners listed have a laxative effect and can cause diarrhoea.

In summary

Taken in moderation, alternatively sweetened products can add variety and enjoyment to a low saturated fat, high fibre eating plan.

To check the effect sweeteners or foods containing them may have on your blood glucose levels, do a test just before eating and test again two hours later. You may like to repeat this on a few occasions just to make sure the blood glucose result is actually due to that specific food.

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