

alternative sweeteners

While it is no longer necessary to eat alternative sweeteners and low joule foods, there is still a place for them in certain circumstances and these products are recognised as safe replacements for sugar.

There are two groups of alternative sweeteners: non-nutritive sweeteners (also known as 'artificial' or 'intense' sweeteners) and nutritive sweeteners.

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 ingredients list on the product for the codes listed in the table on page 2.

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 safe to consume.

Cooking with non-nutritive sweeteners

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

Remember, not all products containing non-nutritive sweeteners are suitable to include in a healthy eating plan. Always read the nutrition 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).

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.



alternative sweeteners

Name (code number)	Brand name	Form	Suitable for cooking?	Examples of foods
Saccharin (954)	Sugarine® Sugarella® Sucaryl® Sweet'n Low® Hermesetas Original®	Tablet Liquid Powder	No, may give a bitter aftertaste	Diet cordials, soft drinks and jellies
Cyclamate (952)	Sucaryl®	Liquid Tablet	Yes	Sugar-free drinks, some low-joule foods, baked goods
Aspartame (951)	Nutrasweet® Equal® Equal® Hermesetas Gold® Sugarless® (also contains Acesulphame K)	Tablet Liquid Sachets/ Tablets Powder	Yes (powder form)	Nutrasweet® is used in diet drinks, yoghurts, ice creams, lollies and chewing gums
Sucralose (955)	Splenda® Equal Baking	Powder	Yes, use in equal quantities as sugar	Diet drinks, yoghurts, jams and lollies
Acesulphame K (950)	Sunnett® Hermesetas Gold®	Tablet	No	Diet drinks and desserts. Generally used in combination with another sweetener
Alitame (956)	Aclame®	Not available	Yes, in commercial products	Various products eg: prepared desserts and cakes
Neotame (961)	Not available	Not available	Yes	Limited availability
Steviol Glycoside (960)	Hermesetas Stevia® Equal Stevia®	Tablet Powder	Yes	Low-joule mineral waters, diet softdrinks, fruit juices

2. Nutritive sweeteners

Nutritive sweeteners are not kilojoule-free and may have different effects on blood glucose levels than non-nutritive sweeteners.

2

Products containing nutritive sweeteners may sometimes be labelled as 'carbohydrate modified'. The different varieties are summarised in the table on page 3.

“ in moderation, alternatively sweetened products are a good alternative to a low saturated fat,

Name (code number)	Brand name	Additional comments	Examples of foods
Fructose (n/a)	Sweetaddin™ Fruisana™	Same kilojoules as sucrose, sweeter and lower GI	Found naturally in fruit
LoGiCane (n/a)	LoGiCane™	Same kilojoules as sucrose but a lower GI	Sold commercially as LoGiCane™
Sugar alcohols - Sorbitol (420) - Mannitol (421) - Xylitol (967) - Maltitol (965) - Erythritol (968)	None available	Same kilojoules as sucrose, except mannitol and erythritol. May have laxative effect and can cause wind and diarrhoea	Sugar-free lollies, chewing gum, mints, chocolates, diet foods and drinks, baked goods and ice cream. Also in some toothpastes and mouth washes
Isomalt (953)	None available	Less kilojoules and half the sweetness of sucrose. May have a laxative effect	Sugar-free lollies, biscuits and crackers
Polydextrose (1200)	Litesse™	Provides minimal kilojoules and has very small effect on blood glucose levels. May have a laxative effect	Some beverages, cakes, lollies, breakfast cereals, dessert mixes, gelatins, frozen desserts, puddings, and salad dressings
Maltodextrin (n/a)	Also known as hydrolysed corn syrup or glucose syrup	Same kilojoules as sucrose and has a very high GI	Soy milk, instant pudding, flavoured gelatins, lollies, sauces and salad dressings
Thaumatococin (957)	None available	A protein so has no effect on blood glucose levels. Contains some kilojoules and should be used in very small amounts as it's much sweeter than sucrose	Savoury products, dairy and non-dairy desserts and drinks, hard lollies, chewing gum and carbonated and water-based beverages
CSR Smart Sugar (n/a)	CSR Smart Sugar	Combination of sucrose and small amount of Stevia (960) making it twice as sweet	Sold commercially as CSR Smart Sugar
Natvia	Natvia	Combination of Stevia and Erythritol (968). Less kilojoules and double sweetness of sucrose	Sold commercially as Natvia.

alternative sweeteners

The advantages and disadvantages of using alternative sweeteners

Advantages

- > Low joule foods and drinks that contain non-nutritive sweeteners (eg: soft drinks, cordials and jellies) can add variety to your healthy eating plan 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 or salt and are therefore not suitable to include in your everyday menu plan eg: 'sugar free' (carbohydrate modified) chocolate.
- > Many nutritive sweeteners listed have a laxative effect and can cause diarrhoea if they are eaten in excessive quantities.

In summary

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

To check the effect alternative sweeteners or foods containing alternative sweeteners 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.

Would you like to join Australia's leading diabetes organisation?

- > Dietary services
- > Free magazines
- > Children's services
- > Educational literature
- > Product discounts
- > Support groups

For more information phone **1300 136 588** or visit your State/Territory Organisation's website:

ACT	www.diabetes-act.com.au	NSW	www.australiandiabetescouncil.com
NT	www.healthylivingnt.org.au	QLD	www.diabetesqueensland.org.au
SA	www.diabetessa.com.au	TAS	www.diabetestas.com.au
VIC	www.diabetesvic.org.au	WA	www.diabeteswa.com.au

The design, content and production of this diabetes information sheet have been undertaken by:

- > **ACT** Diabetes ACT
- > **NT** Healthy Living NT
- > **SA** Diabetes SA
- > **VIC** Diabetes Australia – Vic
- > **NSW** Australian Diabetes Council
- > **QLD** Diabetes Australia – Queensland
- > **TAS** Diabetes Tasmania
- > **WA** Diabetes WA

The original medical and educational content of this information sheet has been reviewed by the Health Care and Education Committee of Diabetes Australia Ltd. Photocopying this publication in its original form is permitted for educational purposes only. Reproduction in any other form by third parties is prohibited. For any matters relating to this information sheet, please contact National Publications at dapubs@tpg.com.au or phone 02 9527 1951.

Health professionals: For bulk copies of this resource, contact your Diabetes State/Territory Organisation as listed.