



Nut Ed  
by email

## Are Artificial Sweeteners Dangerous?

Artificial sweeteners or non-nutritive sweeteners have become popular in recent years because they can satisfy a sweet tooth without adding the associated energy (calories/ kilojoules) of regular sugar. They are found in several supermarket products such as ice creams, jelly, chocolate, chewing gum, lollies, syrups, coffee, baked goods, and many foods labelled as “sugar free” or “diet” (i.e soft drink and cordial). They can also be sold as ‘tabletop sweeteners’ for people to add to tea, coffee, or their own cooking.

### What are artificial sweeteners?

Artificial sweeteners are intense sweeteners that are manufactured to be 200-600 times sweeter than sugar. Being intensely sweet means that very small amounts are needed to give food a sweet flavour. Artificial sweeteners used and sold in Australia are regulated by Food Standards Australia and New Zealand (FSANZ) as food additives. FSANZ rigorously tests approved artificial sweeteners to ensure that they are safe for human consumption in the amounts present in food. Common artificial sweeteners approved in Australia are:

- Aspartame (Equal)
- Saccharine (Sugarine)
- Sucralose (Splenda)

Despite extensive research and testing to ensure the safety of artificial sweeteners, concerns in relation to their safety continue to be raised and shared through popular media. Some of these myths have been busted below.

**Myth:** Artificial sweeteners have potential carcinogenic (cancer-causing) effects.

**The Facts:** There is no evidence that artificial sweeteners cause cancer or are unsafe in the doses typically consumed. Concerns related to this originated from a study of artificial sweetener consumption in rats more than 50 years ago. The amount of artificial sweetener provided to the rats was in doses 2,400% greater than what could be practically consumed by one person.

**Myth:** Artificial sweeteners contribute to weight gain.

**The Facts:** A review of high-quality studies found that artificial sweeteners do not cause weight gain and they do not trick our metabolism as has been speculated. Swapping high energy products such as soft drink for lower energy, artificially sweetened options can reduce energy intake.

**Myth:** Artificial sweeteners increase blood glucose (sugar) levels.

**The Facts:** An analysis of available research found that artificial sweeteners do not increase blood sugar levels as they themselves do not contain carbohydrates/sugar which is required to create an increase in blood glucose levels.

**Myth:** Artificial sweeteners increase sweet cravings and appetite by activating our brains’ reward circuit.

**The Facts:** Research has found that in order for the brain-reward circuit and appetite to be stimulated, the sweet taste of foods needs to be accompanied by real sugar. Therefore, artificial sweeteners do not increase cravings or appetite because they do not contain sugar.



## Are Artificial Sweeteners Dangerous? continued...

### Are there any concerns with consuming artificial sweeteners?

Artificial sweeteners may contribute to uncomfortable gut symptoms, particularly for those with IBS. Whilst this does not cause physical damage, such symptoms can impact health and wellbeing.

When it comes to sugar free, diet and no sugar soft drinks, based on the Country Kitchen's key message around reducing sugar in your drinks, one could argue that sugar free drinks may be a better alternative. Whilst occasional consumption of sugar free drinks is not going to cause harm, regular consumption of carbonated drinks can have a negative impact on teeth enamel which can lead to tooth decay. As such, water is always the best option.

Foods that contain artificial sweeteners are typically highly processed and of low nutritional value. So, whilst artificial sweeteners may be safe to consume, this does not mean they will positively contribute to overall health and wellbeing. We know that there is more nutritional value to be gained from sweetening foods with naturally occurring sugars in dairy products, fruits, or vegetables due to the fibre and other nutrients that are also present in these products. As such, we recommend limiting artificial sweeteners to make room for more nutritious foods.

For more information about artificial sweeteners, check out the [Food Standards Australia New Zealand website](#)