

ALTERNATIVE SUGARS

Lactose (milk sugar)



Elaine Gardner, British Dietetic Association (BDA) Spokesperson, discusses the sugar content in syrup and provides related oral health advice.

Lactose (milk sugar)

What is it? The sugar found in animal milks and dairy products. It has 20% the sweetness of table sugar.

Found in? As a powder, it is available from health food stores and online. In the pharmaceutical industry, lactose is a filler when forming tablets. It is also used widely by the food manufacturing industry and in home brewing. Lactose is most commonly consumed within milk and dairy products.

The quantity of lactose in animal milks remains similar at about 4.7% lactose, whether the milk is from a cow, goat or sheep and whether it is semi-skimmed or skimmed. Flavoured milks (such as strawberry, chocolate) can have sugary additions.

Effect on general health: If you are lactose intolerant, you cannot digest milk sugars because the body cannot produce the enzymes needed to digest lactose. There are now a number of lactose-free milks available.

Oral health impact: Lactose is a non-fermentable sugar so is not cariogenic and is not harmful to teeth. Milk and the associated dairy foods also tend to be high in protein, calcium and phosphates which help neutralise the effects of acid production which is beneficial to oral health.

Dairy products without added sugar or a small piece of cheese can be advised as snacks or as after-meal desserts for positive oral health. It is noted, however, that eating a piece of cheese may not be a practical solution and that this may have a detrimental



impact on overall dietary intakes, especially if eaten frequently.

Dairy-based foods such as fruit yoghurts may also have free sugars added to sweeten them. On average, three teaspoons of free sugars can be added to a small pot (125 g) of yoghurt. Likewise flavoured milks can contain over 5% sucrose and as such have cariogenic potential.

Advice for patients: Plain milk and dairy based choices with no added sugars, such as natural yoghurt, are the best options to choose. While lactose is not harmful to teeth, patients are often unaware of the additional sugars added to dairy products that can impact on oral health. Oral hygiene should always be maintained.

Further reading

1. Al-Jobair A, Khouranian R. Evaluating the cariogenic potential of flavored milk: an experimental study using rat model. *J Contemp Dent Pract* 2015; **16**: 42–47.
2. Telgi R L, Yadav V, Telgi C R, Boppana N. *In vivo* dental plaque pH after consumption of dairy products. *Gen Dent* 2013; **61**: 56–59.



Find out more about the British Dietetic Association at: www.bda.uk.com.

Coming up in our final instalment: Sucralose

Dental professionals urged to #keepantibioticsworking

To coincide with European Antibiotic Awareness Day (EAAD) on 18 November 2017, UK-wide dental and public health organisations joined forces to urge oral health professionals to pledge their support for more responsible prescribing.

In the UK, dentists prescribe more than 5% of all antibiotics and approximately 60% of the total metronidazole in primary health care. Antimicrobial resistance is a global problem that leads to antibiotics no longer being effective in treating even simple infections.

The Faculty of General Dental Practice (UK) (FGDP[UK]) has been working with the Association of Clinical Oral Microbiologists (ACOM), the British Dental Association (BDA), Public Health England, Health Protection Scotland, Public Health Wales, the British Society for Antimicrobial Chemotherapy and the Antibiotic Action initiative and asked members to join a social media 'Thunderclap' on 18 November.

To help dentists appropriately prescribe antibiotics and to educate families on the indications for antibiotics, a Dental Antimicrobial Stewardship Toolkit is available on the Public Health England website. Regular auditing of antibiotic prescribing by dentists will also ensure appropriate use and reduce resistance.

The FGDP(UK) publishes free online guidance (<https://www.fgdp.org.uk/standards-online>) to help dentists decide when antibiotics are required. Dentists can help their patients understand that for dental pain, dental care is usually a more effective treatment than antibiotics, and that when antibiotics are prescribed, taking and disposing of them responsibly can help fight the rise in antibiotic-resistant infections.

Dentists, other healthcare professionals, educators and members of the public are also encouraged to sign up as Antibiotic Guardians: <http://antibioticguardian.com/>.