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Why too much sugar is bad for children

It's no secret that sugar isn't good for us and contributes to a range of health problems, from type 2 diabetes to heart disease. Despite this, research shows children eat way too much of the sweet stuff – and it's putting their health at risk¹.

Why is sugar bad for a child's health?

Weight gain

One reason why sugar is so bad for children is because it leads to weight gain. Reema Patel, a [paediatric dietitian](#) at [Dietitian Fit & Co](#), explains that foods containing too much [sugar](#) – like biscuits or sweets – can lead to weight gain because they're high in calories but offer few other nutrients. These types of foods are often called empty calories.

“Extra sugar intake can lead to an increase in calories. If we are not using the calories as energy, it will be stored as certain fats within children's bodies,” says Patel. “These fats are linked to health issues such as [type 2 diabetes](#), [heart disease](#), [high cholesterol](#) and even some types of [cancers](#).”

While the occasional biscuit likely won't do a child any harm, a diet that is generally high in sugar can lead to high blood sugar levels. Having high blood sugar contributes to [insulin](#) resistance – when your body is unable to respond to the amount of the hormone insulin it is producing – which is a reason behind type 2 diabetes.

A high-sugar diet also contributes to leptin resistance. Leptin is a hormone that helps energy regulation and reduces hunger. Both insulin and leptin resistance are linked to weight gain and the associated health problems, like type 2 diabetes.

Sugar also affects hormones linked to appetite and feeling full. Eating too much sugar can increase levels of the hormone ghrelin - which promotes the feeling of hunger - while lowering levels of the appetite-suppressing hormone peptide².

And one of the big problems with [sugar](#) is that it is addictive³. When we eat sugar, it stimulates the neurons (brain cells) in the brain's reward system, which is called the limbic system. When this system is switched on, we feel pleasure - which means we're more likely to reach for the sweets and chocolate again and again.

Tooth decay

"A high intake of sugar increases risk of tooth decay, which is a big reason for hospital admission in children," says Patel. A survey by Public Health England found around one quarter of 5 year olds had had dental decay⁴.

[Tooth decay](#) can be painful and distressing for a [child](#) - and lead to infections and other problems. Poor oral hygiene can affect their teeth in adulthood too. This is because children's teeth, also known as milk teeth, act as placeholders for their adult [teeth](#).

Nutritional deficiencies

Children need a diet full of important nutrients in order for them to grow and develop properly, including iron, calcium, vitamin C, potassium and other vitamins and minerals. They also need plenty of fibre - found in fruit, vegetables and whole grains - as well as protein. However, many children are lacking in these key nutrients because they eat unhealthy foods that are packed with sugar⁵.

"Too much [sugar](#) can have an effect on the nutrition a child receives as they are growing and developing," says Patel. "Therefore, they may be at risk of developing nutritional deficiencies, which can have an influence on them in later life."

Brain development

A growing body of research also suggests that eating too much sugar can also have an effect on [brain](#) development. The brain is fuelled by glucose and needs the right amount to be able to perform cognitive functions such as thinking, learning and memory. However, eating too much sugar can lead to problems.

Eating lots of sugar has also been linked to a higher risk of depression and [anxiety](#) too. One study, which analysed more than 23,000 people, found higher rates of sugar consumption were associated with a greater occurrence of depression⁶. However, it's not known if sugar contributes to the development of mood problems, or whether people with [depression](#) are more likely to eat sugary foods.

Sleep

A high-sugar diet may also lead to poor quality [sleep](#), which can have an effect on a child's ability to think and learn⁷. This is because sleep is especially important for children's development, as it is linked to attention, memory, and inhibition control⁸.

"If a child consumes too much sugar, this can negatively influence their quality of sleep, which can be detrimental to learning and behaviour at school," says Patel.

How much sugar should children eat?

The sugars we eat too much of are often called 'free' sugars. These are sugars added to foods and drinks, including biscuits, [chocolate](#), yoghurts, cereals, fizzy drinks and sweets. Although sugars found in honey, natural syrups, fruit juices and smoothies occur naturally, they still count as free sugars.

However, sugar found naturally in milk and in whole fruits and [vegetables](#) aren't classed as free sugars.

The current guidelines state children aged 7 to 10 should have no more than 24g of free sugars a day (6 teaspoons or sugar cubes). Children aged 4 to 6 should have no more than 19g of free sugars a day (5 teaspoons or sugar cubes).

For comparison, a can of Coke contains 39g of sugar and a standard (45g) bar of Dairy Milk contains 25g of sugar. Although there is no sugar guideline for children under 4, it's recommended they avoid foods and drinks with added sugar.

How to help your child eat less sugar

If you're worried about your child's diet, it's never too late to change it and help them develop healthy habits. It's easier to cut down their sugar consumption than to cut it out of their diet completely. A sudden ban or 'going cold turkey' will likely mean your child wants it even more.

Check food packaging for sugar content

You can get an idea of whether a food is high in free [sugars](#) by looking at the ingredients list on the packaging. If sugar is near the top of the list, the food is probably high in sugar. Also, sugar isn't always just listed as sugar. These are all sugar: sucrose, glucose, fructose, maltose, honey, palm sugar, hydrolysed starch, syrup and invert sugar.

Make food swaps

"You could try swapping high sugar cereals for lower sugar options," says Patel. Cereal packets contain a 'traffic light' labelling system which tells you how much sugar they contain. Look for green labels, which indicate a lower sugar content - but generally, cereals with added chocolate or honey are higher in sugar.

"You could also try swapping white bread for wholegrain, or porridge flavoured with fruit, which provides natural sweetness without added sugar," adds Patel.

Ready made sauces tend to contain more sugar - and it's cheaper to make your own too.

Healthy snacks

Another way to reduce sugar consumption in children is to be aware of their snacks. Replace biscuits, sweets, cakes or pastries with healthy snacks.

Healthy low sugar snacks you could put in your child's lunch box include:

- Breadsticks.
- Veggie sticks - carrots, celery, peppers.
- Chopped apple with peanut butter or hummus.
- Mixed berries - blueberries, strawberries and raspberries.

Packing your child off to [school](#) with a healthy packed lunch or snacks may help them get into the habit of eating well.

Watch out for low-fat foods

Often, foods marketed as 'low fat' – such as yoghurts – contain more added sugar than the full-fat alternatives.

Avoid fizzy drinks

“A simple way to cut down on added sugar from sweetened beverages and sugary soft drinks is to try flavoured water infused with fresh fruit, or use a little no added sugar squash,” says Patel.

Keep sugary foods as a treat

And it's important to keep sugary foods as a treat, rather than giving them to your child all the time.

“Setting an example as an adult is important, as children often copy behaviour,” says Patel. If you eat well, it's likely your child will do too – especially with a bit of encouragement.

Further reading

1. [Heggie et al: British toddlers and children consume too much added sugar, study suggests.](#)
2. [Lowette et al: Effects of high-fructose diets on central appetite signaling and cognitive function.](#)
3. [Koekkoek et al: Glucose-sensing in the reward system.](#)
4. [Public Health England: Oral health survey of 5-year-old children 2019.](#)
5. [Di Nicolantonio et al: Added sugars drive nutrient and energy deficit in obesity: a new paradigm.](#)
6. [Knuppel et al: Sugar intake from sweet food and beverages, common mental disorder and depression: prospective findings from the Whitehall II study.](#)
7. [Alahmary et al: Relationship between added sugar intake and sleep quality among university students: A cross-sectional study.](#)

8. [Yang et al: Effects of sleep duration on neurocognitive development in early adolescents in the USA: a propensity score matched, longitudinal, observational study.](#)

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