

Sweet talk on childhood How can low/no calorie sweeteners help?

Children need adequate energy (calories) and a wide variety of nutritious foods to provide them with the right amounts of nutrients to support growth and development.¹ Eating well and being physically active will also help children grow into a healthy weight, which is equally important at a time when childhood obesity has risen more than 10-fold in the last 40 years.²



Childhood obesity in numbers

The rates of overweight and obesity in children and adolescents have beer rising globally over the last decades:

- The prevalence of overweight and obesity among children and adolescents aged 5-19 has risen dramatically from just 4% in 1975 to just over 18% in 2016.³
- > 340 million children and adolescents aged 5-19 were overweight or obese in 2016

Obesity can affect a child's health, quality of life and educational performance Children living with obesity are more likely to stay obese into adulthood and are at risk of developing non-communicable diseases such as diabetes and cardiovascular diseases at a younger age.⁴

Eating well and staying active in childhood

A healthy lifestyle in childhood means eating well and staying physically active every day for better health and wellbeing and less risk of developing chronic diseases. Most countries have issued nutritional guidelines for children and adolescents, which recommend: ^{5,6}

- increasing consumption of fruit and vegetables, as well as legumes, whole grains and nuts;
- limiting the calorie intake from total fats and shift fat consumption away from saturated fats to "good" unsaturated fats such as in fish and olive oil;
- limiting the intake of added salt and sugars.

In both adults and children, the World Health Organization (WHO) recommends reducing the intake of free sugars to less than 10% of total energy intake, based on the impact of excess sugars intake on weight gain and dental health.⁷ Dietary guidelines recommend swapping sugary foods and drinks for diet, sugar-free or no added sugar varieties to reduce sugar intake within a healthy diet and lifestyle.⁶



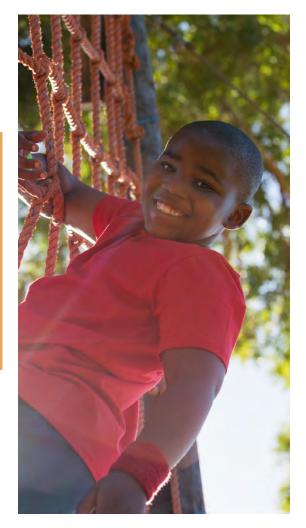
staying physically active



increasing consumption of fruit and vegetables, legumes, whole grains and nuts



limiting the intake of added fat, salt and sugars



Why children like sweet foods?

We are all born with a natural liking for sweet taste, but research has repeatedly shown that sweetness liking is stronger in children and decreases into adulthood.^{8,9}

Research has shown that the consumption of low/ no calorie sweeteners is associated in many instances with a lower intake of sweet tasting foods, suggesting that they may help to satisfy a desire for sweetness. 10 Recent reviews indicate that there is no evidence that consuming low/no calorie sweeteners could encourage a "sweet tooth". 11,12,13

When can low/no calorie sweeteners be useful for children and adolescents?

Low/no calorie sweeteners can be used to help bring down calorie and sugar intake - when required. In general, calorie restriction should not be promoted during growth unless a child or adolescent needs to control excess weight gain. However, in managing overweight and obesity in children and adolescents, lifestyle and dietary changes should aim at decreasing total caloric intake, increasing physical activity and reducing sedentary time.¹⁴

Research in children and adolescents studying the impact of replacing sugar-sweetened beverages with alternatives sweetened with low/no calorie sweeteners have shown beneficial effects of this substitution in children adiposity. 15.16.17.18

Paediatric associations indicate that children with conditions that require sugar and/or calorie reduction, such as obesity and type 1 or type 2 diabetes mellitus, may benefit from the use of low/no calorie sweeteners in place of sugar. 14,19 Diabetes-related associations also agree that low/no calorie sweeteners can be used as part of a strategy for adults and children in the management of weight and diabetes, as they do not affect blood glucose levels. 20

At the same time, dental diseases are the most prevalent non-communicable diseases worldwide.²¹ Contrary to fermentable carbohydrates, low/no calorie sweeteners are not metabolised to acids by oral microorganisms; thus, they cannot cause dental caries.²² By being non-cariogenic ingredients, low/no calorie sweeteners can contribute to good dental health, when used in place of sugar.²³ Studies in children also show that chewing sugar free gum is linked to lower rates of tooth decay.²⁴



tooth decay at a global level.

Low/no calorie sweeteners are amongst the most thoroughly researched ingredients worldwide. Al approved low/no calorie sweeteners have undergone a stringent safety assessment by food safety agencies around the world, including the Joint Food and Agriculture Organization (FAO)/World Health Organization (WHO) Expert Committee on Food Additives (JECFA) and the European Food Safety Authority (EFSA), which have consistently confirmed their safety including for children.

Of course, children, particularly young children, need ample calories for rapid growth and development, so choosing a wide variety of nutritious foods in the right amounts will allow a child to grow into a healthy weight. For this reason, low/no calorie sweeteners are generally not used in foods and beverages intended for infants and young children under the age of three.²⁵

Source: Oral Health Worldwide. A report by FDI World Dental Federation. 2015. Available at: https://www.fdiworlddental.org/sites/default/files/2020-11/2015_wohd-whitepaper-oral_health_worldwide.pdf

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