



The sweet danger of added sugars

DOI: 10.23804/ejpd.2019.20.02.01

Luigi Paglia
Editor In Chief
European Journal of Paediatric Dentistry

editorial

Dietary behaviour is determined by community, family and individual factors, including availability and costs of foods.

Preference for sweetness starts early in life and remains throughout childhood, and starts declining to adult levels only during mid-adolescence. This explains why children are at high risk of sugar overconsumption.

The empty calories of added sugar hinder the proper growth and development, due to the lack of nutrients.

The relationship between added sugar consumption and possible negative health consequences is controversial. For added sugars we mean all those sugars added to food or drinks, or present naturally in unsweetened fruit juices, honey or syrups. It does not include natural sugar found in vegetables, fruits and milk.

Some investigators claim that excessive sugar consumption is associated with increased risk of caries [Paglia et al., 2016], obesity [Costacurta et al., 2014], cardiovascular disease (CVD) [Vos et al., 2017], type-2 diabetes mellitus (T2DM), metabolic syndrome, nonalcoholic fatty liver disease (NAFLD). In addition, obesity is the primary risk factor for the development of SDB (sleep-disordered breathing). Inadequate sleep duration and quality in children and adolescents is associated with an increase in body weight and adiposity, decreased insulin sensitivity, hyperglycemia, and prevalent cardiometabolic risk factors.

Finally, the interest in attention deficit and hyperactivity disorder (ADHD) during childhood has recently increased. Some researchers are looking for a link between high sugar consumption over a long period and ADHD [Del-Ponte et al., 2019].

These statements have influenced organisations such as the American Heart Association (AHA), the American Academy of Pediatrics (AAP) and the World Health Organization (WHO), who recommend to limit free sugars intake to less than 10% of the total energy intake for adults and children, observing that a further reduction of 5% would provide additional health benefits [WHO, 2015].

The first few months of life are crucial for the flavour learning process in humans. Early experience with different tastes is very important for later acceptance of foods, especially the healthy ones.

Clinicians and parents can and should support in synergy the healthy development of children's taste preference and eating behaviour.

References

1. Paglia L, Scaglioni S, Torchia V, De Cosmi V, Moretti M, Marzo G, Giuca MR. Familial and dietary risk factors in Early Childhood Caries. *Eur J Paediatric Dent* 2016 Jun; 17(2):93-9.
2. Costacurta M, DiRenzo L, Sicuro L, Gratteri S, De Lorenzo A, Docimo R. Dental caries and childhood obesity: analysis of food intakes, lifestyle. *Eur J Paediatr Dent* 2014 Dec;15(4):343-8.
3. Vos MB, Kaar JL, Welsh JA, et al. Added sugars and cardiovascular disease risk in children: a scientific statement from the American Heart Association. *Circulation* 2017 May 09; 135(19):e1017-e1034.
4. Del-Ponte B, Anselmi L, Assunção MCF, Tovo-Rodrigues L, Munhoz TN, Matijasevich A, Rohde LA, Santos IS. Sugar consumption and Attention-Deficit/Hyperactivity disorder (ADHD): a birth cohort study. *J Affect Disord* 2019 Jan15; 243:290-296.
5. WHO. Sugars intake for adults and children. Geneva (Switzerland): WHO; 2015.