

Position Summary

Dietary sugars and acids cause damage to teeth. Oral health education should discourage consumption of discretionary sugar. ADA supports proposals to apply a tax to sugar-sweetened foods and beverages in Australia in an effort to reduce consumption and provide funding for oral health promotion and oral care. .ⁱⁱⁱ

1. Background

- 1.1. Nutrition and health are linked.ⁱⁱⁱ
- 1.2. Individuals' behaviour influences their health but also has the ability to influence those around them.
- 1.3. The role of dietary carbohydrates (especially monosaccharides and disaccharides) in the causation of dental caries is well established. The process of caries initiation consists of the metabolism of simple carbohydrates by bacteria in the dental plaque which produces acids. The production of these acids causes the pH of dental plaque to fall below the critical level leading to softening of tooth structure which may overtime result in the development of dental caries. The form, frequency, timing and total amount of sugar intake are significant in the initiation of the caries process.
- 1.4. Exposure to acid from the consumption of acidic or sugar-sweetened foods and beverages can lead to softening and loss of tooth structure. The combination of sugar and food acid can be particularly destructive.
- 1.5. Medications, including over-the-counter vitamin and mineral tablets, may include sugars (particularly those that are chewable and dissolved in the mouth) or contribute to dry mouth, both of which can contribute to tooth decay or softening and loss of tooth structure.
- 1.6. Sugar-free confectioneries without added acids, including chewing gums, are dentally safe alternatives to caries-producing confectionery containing sugar. However, the main objective of oral health education is to encourage individuals to consume a recommended limited amount of simple carbohydrate foodstuffs and thus reduce the need for sugar and sugar substitutes.
- 1.7. In both adults and children, the World Health Organization (WHO) strongly recommends reducing the intake of free sugars to less than 10% of total energy intake. WHO suggests it is desirable to further reduce the intake of free sugars to below 5% of total energy intake to further decrease the risk of developing tooth decay.^{iv}
- 1.8. Free sugars include monosaccharides and disaccharides added to foods and beverages by the manufacturer, cook or consumer, and sugars naturally present in honey, syrups, dried fruit, fruit juices and fruit juice concentrates.
- 1.9. Governments have the ability to influence consumer choice via education, labelling, taxation and other methods.
- 1.10. A tax on sugar sweetened drinks reduces the consumption of soft drinks and is a cost-effective method of decreasing dental caries.^v

Definitions

- 1.11. DIET is defined as the types and amounts of food and drink consumed by an individual.
- 1.12. NUTRITION is the intake and absorption by the body of nutrients.

2. Position

2.1. Public education campaigns must promote beneficial dietary behavior, particularly in relation to the oral health risks from sugar and acidic foods and drinks. Special emphasis should be placed on the form,

This Policy Statement is linked to other Policy Statements: 2.2.1 Community Oral Health Promotion: Fluoride Use, 2.3.1 Delivery of Oral Health Care: Special Groups: Children, 2.3.2 Delivery of Oral Health Care: Special Groups: Adolescents and Young Adults, 2.3.3 Delivery of Oral Health Care: Special Groups: Aged Persons & 5.12 Dentist's Relationships with the Pharmaceutical Industry.

This Policy is consistent with NHMRC Australian Dietary Guideline.

frequency, timing and total amount of sugar consumption; particularly snacking on sugary-beverages and/or sugar-rich foods that have limited nutritional value.

- 2.2. Calcium rich foods and drinks such as milk, cheese and some fish should be promoted as the preferred source of dietary calcium.
- 2.3. Acidic foods and drinks should be avoided especially when an individual is at high risk of developing caries or erosion of teeth, including:
 - individuals with poor oral hygiene;
 - Individuals with low or no fluoride exposure;
 - individuals with conditions which lead to a reduction in salivary flow;
 - exertion resulting in a dry mouth;
 - individuals using medication(s) which lead to a reduction in salivary flow;
 - sipping drinks, other than water, during interrupted sleep; and
 - chewing and sucking acidic vitamin tablets.
- 2.4. Health warnings on labels, in advertisements and other promotions should be mandatory for all consumables that significantly contribute to dental disease and tooth erosion.
- 2.5. Dietary education should be targeted to specific high risk age groups:
 - Parents/carers of infants and babies sleeping with sweetened pacifiers/dummies, food or bottles with products containing sugar, including milk and fruit juices, should be discouraged.
 - Children and young adults frequent consumption of drinks and foods with high sugar and/or acid content should be discouraged.
 - The elderly reducing the dietary sugar and acid intake should be encouraged because of the increased risk of caries from reduced saliva flow and more exposed root surfaces.
- 2.6. The pharmaceutical industry should be encouraged to provide sugar-free formulations or minimise sugar content for medications taken orally.
- 2.7. Oral health education should encourage individuals to limit consumption to no more than 6 teaspoons (24 grams of free sugar (5% of total energy intake) per day.
- 2.8. The inclusion of information/warnings regarding the 'total sugars' and 'added sugars' content of foods and beverages should be mandatory.
- 2.9. Education campaigns ranging from individually targeted information to high level policy information should be freely available to help Australian consumers to understand and interpret food labels, and to make healthy food choices.
- 2.10. Governments should apply a tax to sugar-sweetened foods and beverages in Australia in an effort to reduce consumption and moneys raised from such taxation be used to fund health promotion and oral care for disadvantaged Australians.
- 2.11. Long term, high alcohol consumption and in particular in association with tobacco (including ecigarettes) use should be avoided as it significantly increases the risk of oral cancer and other health issues.

Policy Statement 2.2.2

Adopted by ADA Federal Council, November 21/22, 2002. Amended by ADA Federal Council, November 2/3, 2006. Amended by ADA Federal Council, April 12/13, 2007. Amended by ADA Federal Council, April 16/17, 2009. Amended by ADA Federal Council, April 22/23, 2010. Amended by ADA Federal Council, April 18/19, 2013. Amended by ADA Federal Council, April 14/15, 2016. Amended by ADA Federal Council, April 6/7, 2017. Editorially amended by CPC, October 5/6, 2017. Amended by ADA Federal Council, August 21, 2020 Amended by ADA Federal Council, November 20, 2020 Amended by ADA Federal Council, November 17, 2023 ^v <u>Mauricio Hernández-F, Alejandra Cantoral, M. Arantxa Colchero; Taxes to Unhealthy Food and Beverages and Oral</u> <u>Health in Mexico: An Observational Study. Caries Res 3 June 2021; 55 (3): 183–192.</u>

Lal et al. Modelled health benefits of a sugar-sweetened beverage tax across different socioeconomic groups in Australia: A cost-effectiveness and equity analysis. PLoS Med. 2017;14(6):e1002326.

Nguyen et al. Modeled health economic and equity impact on dental caries and health outcomes from a 20% sugar sweetened beverages tax in Australia. Health Econ. 2023. doi: 10.1002/hec.4739

ⁱ impact of a sugar-sweetened beverages tax on oral health and costs of dental care in Australia | European Journal of Public Health | Oxford Academic (oup.com)

ⁱⁱ <u>The impact of sugar-sweetened beverages tax on oral health-related outcomes: a systematic review of the current</u> <u>evidence | Evidence-Based Dentistry (nature.com)</u>

iii Nutrition - 2018 | Australian Medical Association (ama.com.au)

^{iv} <u>Healthy diet (who.int)</u>