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NEWS

Sugar should make up less than 5% of total energy consumption, says WHO

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Free sugar should make up less than 5% of a person's total energy consumption, new guidance from the World Health Organization states.[1]

In the new guidance WHO is backing a 2002 recommendation that monosaccharides and disaccharides—that is, sugar added to food or found in honey, fruit syrups, fruit juice, and fruit concentrate—should make up no more than 10% of a person's energy intake. However, WHO is now urging that the total consumption drop to less than 5% "if possible." Last year the authors of a study recommended that intake should be no more than 3%.[2]

The guideline does not refer to intrinsic sugar found in fruit, vegetables, and milk products, as there is no evidence that such sugar is harmful to health, says WHO.

The guidance is based on evidence showing that adults who consume less sugar have lower body weight. Research also shows that children with the highest intake of sugar sweetened drinks are more likely to be overweight or obese than children with a low intake of such drinks. Evidence also shows higher rates of dental caries when the intake of free sugars is above 10% of total energy intake.

Just three population based studies have looked at the effect of a diet in which sugar is less than 5% of total energy intake. These were conducted in Japan after the second world war, when sugar consumption fell from 15 kg to 0.2 kg per person per year in 1946.[3-5] This "natural experiment," which showed a reduction in the prevalence of dental caries, formed the basis for the recommendation that cutting the consumption of free sugars to less than 5% would reduce tooth decay. However, because the evidence is scant, the recommendation is conditional.

In Europe the average intake of sugar by adults varies, with consumption high in the United Kingdom and Spain, where it makes up 16-17% of total energy consumption, and low in Hungary and Norway, where it is 7-8%. Intake is higher among children, ranging from 12% in Denmark, Slovenia, and Sweden to 25% in Portugal.

Nita Forouhi, leader of the UK Medical Research Council's nutritional epidemiology programme, said that the tiered guidance was a "win-win" situation as it sent a clear message that less sugar was better. She added that the guidance allows "room for stakeholder and policymaker consultation and weighing up of trade-offs for the lower cut-off." She said that the challenge now was to move to action, which would depend on both individual behaviour change and public health and policy interventions. WHO's singling out of sugar sweetened drinks "provided support for the notion that [these drinks] may represent the low hanging fruit for the first wave of public health and policy action," said Forouhi.

1 World Health Organization. Guideline: sugars intake for adults and children. Mar 2015. www.who.int/nutrition/publications/guidelines/sugars_intake/en.
2 Kmietowicz Z. Reduce sugar intake to 3% to protect against tooth decay, say researchers. *BMJ* 2014;349:g5622.
3 Takeuchi DDS. Epidemiological study on dental caries in Japanese children, before, during and after World War II. *Int Dent J* 1961;11:443.
4 Takeuchi M. Epidemiological study on relation between dental caries incidence and sugar consumption. *Bulletin of Tokyo Dental College* 1960;1:58-70.
5 Okuya Y. The epidemiological study of the relation between caries incidence and sugar consumption on the second molar. *J Dent Res* 1960;60:1120-34.

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