IS SUGAR PUBLIC ENEMY NO 1?

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Sugar has dominated the news for more than a year, leaving dietitians wondering how the revised targets will be achieved, given the chasm between current and recommended intakes. Should sugar be a special focus of public health nutrition, or would the public benefit more from messages that put sugar into the context of a healthy balanced diet? Is there any need for sugar in the diet at all? This article will consider these points.

Since 1994, sugar recommendations have been couched as non-milk extrinsic sugars (NMES) and set at a limit of 10% daily energy.[1] However, in 2015, the Scientific Advisory Committee on Nutrition (SACN)[2] halved this to 5% of daily energy, equating to no more than 30g sugar per day for an average person over 11 years. In addition, the classification of non-milk extrinsic sugars was changed to free sugars, defined as all mono- and disaccharides added during processing or cooking, plus the sugars naturally present in honey and fruit juices. These recommendations put the UK in line with a 2015 WHO report.[3]

NEW RECOMMENDATION

The new recommendation was based on evidence from randomised controlled trials where sugar consumption had been increased deliberately, mainly by giving participants additional sugar-sweetened soft drinks (SSSD). The results typically showed that higher intakes of free sugars were statistically correlated with an increase in daily energy intakes. In one study, the baseline diet contained less than 5% energy from sugars as well as a lower amount of energy. SACN therefore concluded that cutting average intakes in the UK to less than 5% energy from free sugars would result in a fall in daily energy of around 100kcal.

Interestingly, while SSSD consumption was associated with higher body mass index, weight gain and an increased risk of Type 2 diabetes in cohort studies, no such relationships were found between these outcomes and free/added sugar intake. This suggests that added sugars in liquid form may be more detrimental than sugar present in foods, possibly because of their higher glycaemic load and lesser impact on appetite.

Both free sugars and SSSD were consistently found to be a risk for dental caries in children, but not in adults. There was insufficient evidence to link sugar or SSSD consumption with cardiovascular disease or associated risk factors, such as blood pressure, blood lipids or glucose tolerance.

SACN summary

- Dental caries linked to added/free sugars and SSSD intakes
- Energy intake linked to added/free sugars and SSSD intakes
- Body mass index, weight gain in children and Type 2 diabetes linked to SSSD, not sugars
- No links between added/free sugars and cardio-metabolic outcomes
- No links between cardiovascular disease and SSSD

INTAKES AND SOURCES

Current intakes of sugar, from the National Diet and Nutrition Survey, suggest that the new recommendations will be challenging to implement. As Figure 1 shows, adults consume an average of 11% energy from NMES while children's diets contain around 15%. Males typically eat more sugar than females.

Dr Carrie Ruxton is a freelance dietitian who writes regularly for academic and media publications. A contributor to TV and radio, Carrie works on a wide range of projects relating to product development, claims, PR and research. Her specialist areas are child nutrition, obesity and functional foods.