

Achieving sugar reduction targets could cut child obesity and healthcare costs

April 17 2019



Credit: CC0 Public Domain

Reducing the sugar content of certain foods by 2020, in line with UK government policy targets, could cut child obesity and related illness, and save the NHS in England £286 million over 10 years, suggests a study published by *The BMJ* today.

But these benefits could be easily lost if the targets are not fully met, or if the programme leads to unintended changes in consumer or industry behaviour, warn the researchers.

Childhood obesity affects one in 10 children aged 4-5 years and one in 5 children aged 11-12 years, while the proportion of obese adults has risen from 15% in 1993 to 26% in 2016.

In 2016, the UK government set out plans to work with [food manufacturers](#) to reduce the [sugar](#) content of certain high-sugar products, such as cereals and confectionery, by 20% by 2020.

The strategy consists of three sugar reduction approaches: reformulating products to contain less sugar, reducing portion size, and shifting sales from high-sugar products to low-sugar alternatives.

But the potential health impacts of these measures have not been studied.

So a team of researchers, led by Ben Amies-Cull at Oxford University, set out to estimate the impact of this strategy on child and adult obesity, related diseases, and healthcare costs.

Data from the National Diet and Nutrition Survey (2012-13 and 2013-14) were used to simulate a scenario where the strategy had been successfully implemented in England. Changes to child and adult weight were then estimated, and their impact on disease burden and healthcare costs were modelled.

Several assumptions were made. For example, baseline diet would remain unchanged (apart from the portion size or sugar content of target food items), and there would be no unintended changes in eating patterns or products (e.g. individuals substituting foods due to differences in taste or manufacturers changing non-target nutrients like salt).

The results show that fully achieving the government's sugar reduction targets could reduce the number of obese 4-10 year olds by 5.5% of the obese population, 11-18 year olds by 2.2% and adults (19-80 year olds) by 5.5%.

Calorie intakes could be cut by 25 kcal/day for children and 19 kcal/day for adults.

In adults, this could lead to 155,000 fewer cases of type 2 diabetes, 3,500 cases of cardiovascular disease, 5,800 fewer cases of bowel (colorectal) cancer and a total NHS cost saving of £286m over 10 years.

However, they warn that the potential health benefits of the government's strategy could be lost if any of the three sugar reduction approaches fail to have the intended effect.

The limitations of this modelling study include the reliability of the survey data, which may have led to an under-estimate of the effect.

Nevertheless, the researchers say their findings remained largely unchanged after further analyses and conclude that the sugar reduction strategy "could be an effective means of reducing obesity-related illness and costs, although targets must be met."

In a linked editorial, Dr. Annalijn Conklin from the University of British Columbia says the research makes "an important contribution to the current knowledge of the population benefits of public health

collaborations."

Future studies could assess whether the government's programme is also an extension of 'business as usual', she writes, and thus whether the potential beneficial effects modelled by Amies-Cull and colleagues would be attributable to the programme or to a pre-programme trajectory.

Finally, although the programme may contribute, "a complete solution to the challenge of improving diets and reducing the burden of nutrition related chronic diseases requires a multi-sectoral package of policies which also includes the UK sugar tax, other fiscal tools, and hard regulation for improving public health," she concludes.

More information: Estimating the potential impact of the UK government's sugar reduction programme on child and adult health: modelling study, *BMJ* (2019). [DOI: 10.1136/bmj.11417](https://doi.org/10.1136/bmj.11417)

Provided by British Medical Journal

Citation: Achieving sugar reduction targets could cut child obesity and healthcare costs (2019, April 17) retrieved 3 May 2024 from <https://medicalxpress.com/news/2019-04-sugar-reduction-child-obesity-healthcare.html>

This document is subject to copyright. Apart from any fair dealing for the purpose of private study or research, no part may be reproduced without the written permission. The content is provided for information purposes only.