

Sugars not the main culprit in obesity-related illness

By [James Rippe](#)

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The world is in the midst of twin epidemics of obesity and diabetes, often lumped together as diabetes. It has been estimated there are more than 1bn people who are obese.

With this grim statistic, it is not surprising that investigators have looked at various aspects of nutrition to try to get to the bottom of what causes obesity and its interrelated conditions, such as heart and liver disease.

Recent attention has been focused on the consumption of sugars in general, and liquid sugars in particular. Some studies have linked the consumption of added sugars to increased risk of weight gain and obesity; increased risk factors for heart disease and diabetes.



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Potential linkages between added sugars and various diseases have public health implications and effect on public policy. The World Health Organisation (WHO) has issued guidelines recommending that added sugars should constitute no more than 10% of overall calorie consumption.

In this controversial debate, it is important that members of the scientific community stand on firm ground and base opinions on the best available science.

High-quality evidence from recent randomised controlled trials related to sugar consumption and its health effects does not support a unique link between added sugars and various adverse health effects when consumed at normal levels in the human diet.

The modern concern about a potential role of sugars as a unique cause for obesity seems to have originated with a review article published in the *American Journal of Clinical Nutrition* in 2004 by George Bray, Samara Nielsen and Barry Popkin.

It raised the provocative question of whether there was a unique relationship between high-fructose corn syrup (liquid sugar) and the rapid increase in the obesity epidemic in the US.

The study argued that consumption of liquid sugar could result in increased likelihood of overconsumption of calories, leading to obesity and associated metabolic diseases.

However, multiple subsequent studies have not found any unique properties with regard to weight gain in normal weight and obese people. Further studies, especially where added sugars were controlled with other foods of similar calorie values, suggest that weight gain appears to be due to increased consumption of calories and the associated energy imbalance rather than any unique aspect of sugars.

Between 1970 and 2010 in the US, the average total energy intake increased by 474 calories per person.

Virtually all of this increase in energy intake (about 94%) can be attributed to an increase in flour and cereal products and added fats, while added sugars only contributed 7% of the total increased caloric intake.

Therefore, data related to added sugar intake as a potential significant contributor to weight gain and obesity must be treated with great caution.

Moreover, public policy attempts to limit sugar consumption as a mechanism for helping individuals control weight seem unlikely to succeed. Single-nutrient strategies have been tried and tested throughout the world and, without exception, have failed.

For now, it is safe to state that the current literature provides little support for a unique relationship between consumption of added sugars, risk factors for heart disease, diabetes or nonalcoholic fatty liver disease at normally consumed amounts in the human diet.

However, abundant evidence suggests the consumption of all energy-dense nutrients, including added sugar, represents an important step, along with decreased physical exercise, in increasing the risk of interrelated metabolic diseases such as obesity, heart disease and type 2 diabetes.

We should all be careful not to apply oversimplified so-called solutions to what is a complex and multifaceted problem of obesity. Targeting sugar-sweetened beverages is exactly such a non-solution.

Source: I-Net Bridge

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