

# Effects of sugars on body weight and body composition.

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## Introduction

Sugar is a ubiquitous ingredient in the modern diet, and it has been linked to numerous health problems. One area of concern is its effect on body weight and body composition. In this article, we will explore the effects of sugar on the body and its impact on body weight and body composition.

## *Sugar and the Body*

Sugar, in its various forms, is found in many foods and drinks. It is commonly added to processed foods and is also present in natural foods such as fruits and vegetables. The most commonly consumed form of sugar is sucrose, which is made up of glucose and fructose molecules. When consumed, the body breaks down sucrose into these individual molecules for energy.

However, excess sugar consumption can lead to several health problems. The body can only handle a limited amount of sugar at a time. When consumed in excess, sugar is converted into fat and stored in the body, leading to weight gain and obesity. High sugar consumption can also increase the risk of developing type 2 diabetes, cardiovascular disease, and other chronic illnesses [1].

## *Effects of Sugar on Body Weight*

The consumption of sugar has been linked to weight gain and obesity. This is because sugar is a high-calorie food that provides little nutritional value. Consuming too much sugar can lead to an excess of calories, which can be stored as fat in the body. Additionally, high sugar consumption can cause insulin resistance, which can lead to an increase in body fat.

Studies have shown that individuals who consume high amounts of sugar are more likely to be overweight or obese. For example, a study published in the American Journal of Clinical Nutrition found that children who consumed high amounts of sugary drinks were more likely to be overweight or obese than those who did not consume these drinks [2].

## *Effects of Sugar on Body Composition*

Sugar can also have a negative impact on body composition. Consuming too much sugar can lead to an increase in body fat and a decrease in muscle mass. This is because excess sugar consumption can lead to insulin resistance, which can cause the body to store more fat and break down muscle tissue for energy.

Additionally, sugar can cause inflammation in the body, which can contribute to muscle breakdown and hinder muscle growth. This can lead to a decrease in muscle mass and an increase in body fat, which can negatively impact body composition.

Sugar is a high-calorie food that provides little nutritional value. Excess sugar consumption can lead to weight gain and obesity, as well as an increase in body fat and a decrease in muscle mass. This can negatively impact body composition and increase the risk of developing chronic illnesses [3].

Reducing sugar consumption can have a positive impact on body weight and body composition. Choosing whole foods that are low in added sugars, such as fruits and vegetables, can provide the body with the nutrients it needs without the excess calories. Additionally, limiting or avoiding sugary drinks and processed foods can help reduce sugar intake and promote overall health.

Furthermore, there are several strategies that can be implemented to reduce sugar consumption. Reading food labels is one important step, as added sugars can be hidden in many processed foods. Choosing unsweetened or low-sugar alternatives, such as water or tea instead of sugary drinks, can also help reduce sugar intake. Additionally, incorporating regular physical activity into daily routines can help improve body composition and support overall health. Resistance training, in particular, can help build muscle mass and improve body composition. This can help counteract the negative effects of excess sugar consumption and promote a healthy body weight.

It is worth noting that not all types of sugars are created equal. Natural sugars, such as those found in fruits and vegetables, can provide important nutrients and fiber that the body needs. These types of sugars are not typically associated with negative health effects when consumed in moderation [4].

On the other hand, added sugars, such as those found in processed foods and sugary drinks, should be limited as much as possible. The American Heart Association recommends that men consume no more than 9 teaspoons (36 grams) of added sugar per day, while women should aim for no more than 6 teaspoons (25 grams) per day.

The effects of sugars on body weight and body composition can be significant, and it is important to be mindful of sugar intake in order to maintain a healthy body weight and support optimal health. Reducing added sugar intake and choosing

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whole foods that are low in added sugars can help promote a healthy body weight and improve body composition, while also reducing the risk of chronic diseases [5].

## Conclusion

Excessive sugar consumption can have negative effects on body weight and body composition, increasing the risk of chronic diseases such as type 2 diabetes and cardiovascular disease. Reducing sugar intake and incorporating healthy dietary and lifestyle habits can promote a healthy body weight and support optimal body composition.

## References

1. InterAct consortium d. romaguera-bosch@ imperial. ac. uk. Consumption of sweet beverages and type 2 diabetes incidence in European adults: results from EPIC-InterAct. *Diabetologia*. 2013 ;56:1520-30.
2. Janket SJ, Manson JE, Sesso H, et al. A prospective study of sugar intake and risk of type 2 diabetes in women. *Diabetes care*. 2003 ;26(4):1008-15.
3. Hodge AM, English DR, O’Dea K, et al. Glycemic index and dietary fiber and the risk of type 2 diabetes. *Diabetes care*. 2004 ;27(11):2701-6.
4. Meyer KA, Kushi LH, Jacobs Jr DR, et al. Carbohydrates, dietary fiber, and incident type 2 diabetes in older women. *Am J Clin Nutr*. 2000 ;71(4):921-30.
5. Colditz GA, Manson JE, Stampfer MJ, et al. Diet and risk of clinical diabetes in women. *Am J Clin Nutr*. 1992 ;55(5):1018-23.