

Positive and negative effects of sugar consumption



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Introduction

In this essay the authors will examine the risks and benefits of sugar and determine whether it is truly toxic. To do this they will be looking at the diverse diseases caused by sugar both metabolic and degenerative and will be exploring the unpredicted benefits that arise from it. Sugar has become an essential part of life in modern day society. Sugar has managed to creep into all areas of people's daily diet. Although its known by many the deadly diseases which stem from sugar, they still live in oblivion and ignore the life-threatening consequences. They are continuing to be attracted and consumed by all the various sweeteners and preservatives broadly available in today's toxic society. Some people are biased in their approach assuming that sugar has no benefits, but this essay will endeavour to unearth some unpredicted benefits and compare these with the numerous risks related to this topic. It is aimed at out-weighing the arguments to truly discover whether it is truly toxic.

Results

Sugar is a natural sweetener obtained from either cane or beets it's a disaccharide composed of one glucose molecule linked through a 1-4 glycoside bond to a fructose molecule. (Tappy et al., 2018) . In most recent times there has been quite a lot of discussion about sugar in the mainstream media and health professional journals. The main outline stated in the media states that we would all be doing better for ourselves if we consumed less sugary foods. Sugar is an empty calorie food devoid of any good nutrients (Alpert, 2012). When doing this analysis, it was clear that there was a lot

more risks and consequences related to sugar than benefits but that's not to say there was none. To start off with the risks, the list is quite endless between diseases and declination of health. It seems sugar is quite deadly. In the last 50 years sugar consumption has tripled worldwide. Its charming taste is fooling all despite the unpleasant risks that go along with it. It's clear that there is nothing empty about these calories. There is evidence stating that fructose can generate processes that lead to liver toxicity and a host of other chronic diseases. Sugar seems to exert similar toxic effects on the liver the same as alcohol does (Robert H. Lustig, 2012). When researching some of sugars more unlikely risks it came to surface that sugar is of strong responsibility to a lot of behavioural and psychiatric problems surprisingly. It is now known and proven that sugar can cause mood swings, anxiety, lower peoples mental health and even cause people to be more violent (Bruckauf, 2018). Researchers conclude that blood sugar swings, neurotransmitter dysregulation and inflammation might all be reasons for sugars destructive impact on mental health. " A study following 8, 000 people for 22 years showed that men who consumed 67 grams or more of sugar per day were 23% more likely to develop depression than men who ate less than 40 grams a day" (Kubala, 2018). Another surprising risk of sugar is its ability to prematurely age people. Wrinkles are a sign of ageing and appear eventually, but bad food choices can worsen these. " Fructose is converted into energy this produces lots of oxygen radicals, dangerously reactive chemicals that attack our bodies and cause ageing" (O'callaghan, 2014). Advanced glycation end products (AGE's) produced by sugar damage proteins in your skin such a collagen and elastin which stretch the skin and give it its youthful appearance (Kubala, 2018 . A more well-known risk of <https://assignbuster.com/positive-and-negative-effects-of-sugar-consumption/>

sugar is its ability to cause weight gain and diseases such as diabetes.

Fructose isn't regulated by insulin, this hormone keeps your blood sugar levels at the right levels and activates the production of leptin the hormone which tells you when you are full (O'callaghan, 2014). Too much fructose in the body can cause resistance to leptin then encouraging overeating. In relation to the benefits of sugar it was quite a challenge to finding any. One major benefit is sugars ability to give quick release of energy. "Once it is hydrolysed, glucose is the body's key source of energy, providing about 3.75 kilocalories or 16 kilojoules of food energy per gram."(Alpert, 2012).

Glucose is the prime source of fuel in the body. It comes from the breakdown of sugars. Sucrose contains a fructose molecule and a glucose molecule and the body splits the molecule apart. Following this insulin helps transport the glucose to cells where it is instantly metabolised and converted into energy. This energy can be immediately used or stored as a reserve for later. This process is called glycogenesis. Glycogenesis is beneficial in that it allows people to go longer periods without eating, however it is important to be conscious that over intake can lead to weight gain as when glucose exceeds storage capacity it is converted into fat. Sugar is also linked to an instant boost in mood. This comes about as sugar activates the pleasure centre in the brain and triggers a rush of dopamine which produces an immediate related effect. Also, natural sugar sources come with added nutrients, when you choose to have natural sources of sugar they normally contain healthy nutrients with their sweet counterparts. Fruits, veg and dairy products all provide natural sugars as well as vitamins, minerals and antioxidants. You can enjoy all the natural sweets without generating unhealthy insulin spikes.

(The ONE Thing, 2018) An interesting discovery found while researching was <https://assignbuster.com/positive-and-negative-effects-of-sugar-consumption/>

that naturally sweet chocolate can improve thinking skills. Every bite of chocolate offers a surge of antioxidants along with cocoa flavanols. It has been realised by researchers that cocoa flavanols can improve cognitive function and studies in Italy have discovered that it can even improve thinking skills irrespective of whether a person has cognitive impairment. Researchers haven't found the exact cause for the sharper thinking skills, but they believe that cocoa flavanols defend against brain cell damage and help create connections with the brain.

Conclusion

In conclusion having looked at the risks and benefits of sugar intake we have discovered that sugar being present in so many foods either directly or indirectly and being of no calorific or nutritional benefit leads to overeating and weight gain. It is also linked to many conditions such as diabetes (which is on the rise in Ireland and worldwide), liver toxicity behavioural and mental health problems and premature ageing. However, there are some benefits such as quick release of energy (if not used immediately can be stored for further energy but in excess can lead to obesity), mood boost and used in natural sources can have nutritional value in view of its mineral and vitamin content. Having researched the literature it is evident that the risks far outweigh the benefits. There are some benefits but it seems advisable to keep sugar intake to a minimum in order to maintain a healthy lifestyle as we have analysed through this essay that sugar is really toxic.

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