

# Should sugar be considered a drug argumentative essay example

[Law](#), [Evidence](#)



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## **Introduction**

A drug can be defined in a myriad of ways depending on the context. From a chemistry perspective, a drug is defined as a chemical substance, with medicinal, intoxicating or performance enhancing effects on the body of an animal or a human being when ingested, injected or applied topically. From this perspective, food substances are not classified as drugs. However, the perspective acknowledges that certain active ingredients found in food items can be purified and used as drugs. The debate on whether sugar should be considered can be argued on very many levels, borrowing knowledge from different subjects and perspectives. As the paper will show, sugar meets the four criteria of addictive substances. Additionally, the paper will adduce psychological and physiological evidence that sugar affects the brain like licit and illicit drugs, and conclude that sugar should be considered as a drug. Sugar has many drug-like properties that ought to be considered when reclassifying sugar.

## Criteria for addictive substances

From a neuroscience perspective, addictive substances have various elements.

These elements form a criterion against which potential substances are judged against before they can be considered addictive. This criterion is used in animal models to test whether various substances are addictive. The elements include: -

- Bingeing: When a certain substance is ingested, it causes one a good feeling and they consequently ingest a lot more of the substance.
- Withdrawal: After discontinuing the intake of an addictive substance, one becomes physically ill.
- Craving: This increases the motivation to get an addictive substance in the sense that one wants more of the substance when they do not have it.
- Sensitization: After one is already addicted to a substance, they are increasingly sensitive to its effects. This implies a lesser amount of the addictive substance causes greater effects than before (Appleton & Jacobs, 2009, pg. 100).

There is a myriad of cultural evidence that suggests sugar is implicated in drug use. For instance, street heroin in India is commonly called brown sugar. Other euphemisms include the use of sugar to generally refer to powdered drugs. Lysergic acid diethylamide, a hallucinogenic drug is commonly referred to as sugar cube. Doctors who sell drugs to those addicted are referred to euphemistically as sugar daddies. On the same level, the act of diluting powdered drugs using sugar is referred to as sugar down. A slight drug addiction is known as a sugar habit and cubes of morphine that are the size of sugar lumps are called sugar lump cubes.

Sometimes, marijuana is compressed into bricks using sugar, a product called sugar weed. Although this cocktail of cultural evidence associating sugar with drugs may not tilt the balance, it points to the social perceptions in certain communities.

Even more compelling is the psychological and physiological evidence that shows sugar to have similar properties with licit and illicit drugs. Like alcoholics and other drug addicts, individuals addicted to sugar consume more sugar than the average person so as to satisfy their cravings.

Additionally, addiction to sugar is characterized by uncontrollable and compulsive behaviors that intensify when cycles are repeated, and take the place of other activities. Through tests involving mice, scientists have found that when mice are expecting something sweet, their brains produce orexin, a chemical that triggers the uptake of sugars in circulation by the muscles. This is the body's way of adapting to the increase sugar intake. In cases where this happens and the mouse does not get the sweet treat, it is characterized by cravings to consume and decreased energy to resist a sweet thing (Lyle, 2006, pg. 360).

Sugar is one of the substances that release dopamine and opioids and as such might have addictive potential. The argument that sugar might be addictive is compounded by the fact that the neural systems that reinforce and motivate food intake also underlie self-administration and drug seeking. In an animal model used to investigate why some individuals find it problematic to resist sweet foods, rats are feed intermittently for a month. It involves a daily food deprivation of twelve hours and a four hour delay into their circadian-motivated active period. They are then allowed a twelve hour

access to chow and sugar solution. Consequently, the rats learn to ingest the sugar solution in copious amounts. After a month, the rats show behavior changes like bingeing, craving, withdrawal and cross-sensitization. These behaviors are consistent with the effects of addictive substances (Avena, Rada & Hoebel, 2008. Pg. 25).

## **Political, Social and Economic Implications**

For a long time, drugs have been classified as either 'good' or 'bad'. It is my opinion that a drug falls on either side of this classification depending on the purpose for which it is used. Of course there are drags that feature prominently on the bad side of the classification because they are associated with pleasure seeking. Social perceptions about sugar are very strong. For instance, the emotion that is love is expressed by giving sugary things like candy and chocolate (Avena, Rada & Hoebel, 2009, pg. 625). The society goes as far as to use sugar and other forms of the words as pet names for their loved ones. Classifying sugar as a drug and consequently regulating it would be a daunting task. Part of this process would have to involve public education of the potentially harmful effects of sugar.

Any move to regulate the intake of sugar is bound to have political and economic ramifications. Models that have been used to regulate alcohol and tobacco intake have been suggested as avenues to use in regulating sugar intake. Such models include increased taxation, a firmer grip on licensing and increased requirements for vending machines. However, the sanctioning of such a move would require close consideration in terms of economic effects of such a move. Firstly, sugar is a component in many processed

foods. It is also a naturally occurring substance that is present in many carbohydrates that form a big part of the diet. The will of the people to abide by such policies would also be severely tested (Jain, 2008, pg. 58).

## **Conclusion**

There is a myriad of evidence that sugar has properties similar to those of common drugs. Additionally, the paper has also adduced biochemical evidence showing that sugar affects the brain's reward systems in a similar fashion with drugs like cocaine. However, there is little literature on the relative potential of sugar to cause addiction when compared to other drugs. Additionally, there are fundamental differences between drugs and sugar. I think that it is fallacious to consider sugar a drug (Avena, 2009, pg. 385). In as much as it satisfies the criteria for addictive substances. However, the evidence suggesting that sugar is addictive is too compelling to be ignored. As such, more research should be done on the subject to come up with exhaustive results and better models.

## **References**

- Appleton, N., & Jacobs, G. N. 2009. Suicide by sugar: a startling look at our #1 national addiction. Garden City Park, NY, Square One Publishers.
- Avena, N. M., Rada, P., & Hoebel, B. G. 2008. Evidence for sugar addiction: Behavioral and neurochemical effects of intermittent, excessive sugar intake. *Neuroscience Biobehavior Review*. 32(1): 20-39.
- Avena, N. M., Rada, P., & Hoebel, B. G. 2009. Sugar and Fat Bingeing Have Notable Differences in Addictive-like Behavior. *Journal of Nutrition*. 139 (3) 623-628

Avena, N. M. 2009. Examining the addictive-like properties of binge eating using an animal model of sugar dependence. *Experimental and Clinical Psychopharmacology* 15(5), 481-491.

Jain, K. K. 2008. *Drug Delivery Systems*. Totowa, NJ: Humana,

Lyle, M. 2006. The Reclassification of Sugar as a Drug. *Lethbridge Undergraduate Research Journal*. 1(1). 355-361.