A Short Review on ‘Food Addiction’

Bhardwaj S.1*

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1* Shreya Bhardwaj, Student, Food Technology, Uttaranchal University, Dehradun, Dehradun, Uttarakhand, India.

“Food addiction” has now become a field of research for scientists striving to explain various operations and/or behaviors contributing towards the increasing obesity. Ambivalency related to different foods like chocolate arouses which is highly palatable but must be eaten with control. Attempting to regulate its intake, however, makes it more desirable for the chocolate to become more striking. This experience is then categorized as a craving. Although many researchers have discussed on “food addiction” is in its emerging stage, it has potentially many important suggestions for prevention and treatment strategies. This is to be anticipated, as addictive drugs always spout into the same type of processes & systems evolving to stimulate & control compatible behaviors, that includes eating. Analyzing food addiction symptoms in the nascent stage may help in reducing the probability that neurotic food consumption patterns end up with obesity & weight gain. Methodological considerations are discussed. This mini-review is based on the recent studies on Food addiction and its relation with Food craving & obesity.

Keywords: Food addiction, Ambivalency, Food craving, Emerging state.
Introduction

‘Food addiction is a bearing addiction that is denoted by consuming palatable foods, which is linked activating brain reward circuit in humans as well as animals’ (1). The research-based use of the term addiction in terms of food eg. (chocolate) has been tracked down to 1890, followed by an intermittent interest in the topic from the 1950s, and are many exponential publications in the field recently (2).

Linking certain types of problems possibly with that excessive eating which may be defined as excessive food intake that is needed to regulate BMI might be clear, in part, as food addiction.

Addiction is initially defined in terms of habits towards various activities and different types of substances, together on an account of related perception, emotions & certain experiences. More than bearing tendencies & experiences represented in the brain but moreover drug improves brain chemistry sustain and potentially, rapidly increase the consumption. ((3)

Food cravings and the relatable term food “addiction” are widely been discussed popularly in media, & have also got a substantial proportion of attention in the research publications. Chocolate is the food most connected in an account of food craving & food “addiction,” however many other energy-rich foods, comprising biscuits, cakes, as well as savory and salty foods, are higher in the list of craved foods.

Obesity is one of the public health issues in the US. Every 3rd of Americans are obese having a Body Mass Index (BMI) of 30 or more, and as the rate of obesity keeps on rising, the WHO has pronounced obesity as an “epidemic”

Increasing obesity and associated co-morbidities have restored the development of studies that address the factors involved in its genesis, as well as treatment & its prevention. (4) Although many factors contributing towards the increasing obesity, the greater diversity and access to palatable foods can’t be ignored, since these types of factors contributing to ones eating habits. Easy availability of food needs to inhibiting the desire to eat.

Is food craving relatable to food ‘Addiction’?

There are certain discussions

Done upon the biological bases of food cravings, food ‘addictions, and mood swings of an individual. It was also noticeable that dieting, eating habits, and viewpoints also have a major role in determining relationships between eating & mood, for example during menses and bulimia. Somewhere, it is also best recognized in form of perceptions in eating. Some Biological effects of eating are not unimportant but they include the eating behavior of humans and experiences that comply with eating. Underlying weight control & appetite played a major role in argument.

Is Food addiction real?

Sometimes it seems to be difficult to avoid eating food when you see or smell it. It has been assumed that some foods are addictive in such a manner as alcohol or drugs. Many people find it very tuff to avoid eating when they see or smell the food. Many of the scientific research have put food in the same categories such as alcohol and drug. It has been known that some addictive properties of foods are due to high levels of salt, sugar, & fat add by the makers. These ingredients add taste to the food and make it difficult to stop eating until being full. Sometimes it becomes problematic, as earlier salt was little garnish and fat to be hunted. But in today’s scenario, these ingredients affect our body so dramatically.

Some researchers have also shown that some salty, crunchy things can activate the brain in the same way as tobacco and alcohol does. Dopamine is the brain activates due to the right combination of taste which is highly pleasurable. It motivates the person more to eat. The brain reward system also becomes active. These results suggested that it is a common occurrence and the way to make people eat little and to change the type of food obtained in the market.

Addiction is made up of 5 elements -
- Some psychological causes (2) changes in the behavior;(3) temporary temper;(4) involuntary ; and (5) suffering negative impacts

Rodent models on sugar, fat, and salt addiction -

Obesity has been connected
To dysmetabolism and various factors including genetics, diet, environmental lifestyle environment, and yoga. Some recent findings indicate that sugars, compounds related to sugar like high-sugar-containing beverages, high fructose corn syrup are important for developing metabolic syndrome, obesity, diabetes mellitus(5). Foods that contain sugar & beverages end with increased obesity & dysmetabolism such as B.P, insulin resistance, etc(6)

When there is a significant physiological or physical dependence on high sugar or a given increase in cravings for foods that contain sugar. Sugar addiction has been considered apt.

Increased sugar cravings are directly connected with more and more consumption of sugars & possible addiction eating behavior of a person tend to make the person obese. (7)

Sugar addiction has been examined. Many studies over rodents have been done to find out the role of sugar in food addiction. Some reports were made on eating and craving behavior of rat on 12 hours of sugar accompanied by 12 hours of deprivation. Brain reward system is affected by high sugar diet. Some researchers believed that there is no formula of reducing sugar addiction in humans (8)

Rat’s models have been made to know about the over-eating behavior of and brain reward system been compare to similar drug abuse. 10% sucrose solution of sugar and fat rich diet show neurochemical and behavioral signs of addiction. When rat binge eat palatable food differences that highlights are emerged when the palatable food and body weight are considered. These types of findings and concepts are useful in understanding ‘Food addiction’.

Salted food is also considered as addictive substance that restored dopamine and opiate receptors in brain’s reward system & centre of pleasure more than its taste. Salty food are urged, craving & hunger are opiate withdrawal. Salted food narcotic withdrawal restored appetite, increases calorie consumption, obesity, overweight, overeating. Some related illness like obesity are Salted food and narcotic withdrawal stimulate appetite, incidence of overeating & overweight, increases consumption of calorie. Obesity & some related illnesses are the symptoms of salted food addiction.

Sodium or salt “appetite” has a strong motive to gain, obtain, & consumption of sodium (9). This state has lead to deficiency of sodium. (10) and it may varies depending on the kind of variety studied. Majority of studies have shown that rats with sodium deficiency shows affinity towards the sodium. The extent of salt consumption on the basis of brain reward system in adulterated rats was stronger than direct brain stimulation. Salt craving and appetite of salt are confined in sodium deficient animals. Strong liking for salt is not related to depletion of sodium in humans(4) & 15% of person’s have been suffering from disease called Addison.

**Conclusion**

Several types of research have been done on ‘Food addiction’ concluding with a major role played by sugar, salt, and fat present in food. Relationship between the food craving and obesity shows the important information of behavioral and different aspects of food showing brain reward system through various rat models. Studies have been done on several food-eating behaviors. The most used example of food addiction is ‘eating chocolate’ because there are psychoactive substances present in cocoa products. Most of the examples are linked with the activity of brain functions. Chocolate is the most desirable craved food that most people even can’t avoid. It has the power that it attracts people for having a desire for more. It is believed that in the coming year’s people will get more aware of addiction to food and their eating habits. The
Research will focus more on the types of addictions in humans and that will further help us understand the health problems related to it.

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