Cookies over Cocain: The Dangers of Sugar

Drug addiction is one of the most common mental health disorders. When one describes compulsive drug seeking and use, it is not often that one thinks of sugar addiction. As with many addictions, sugar addiction can lead to numerous health complications.

COMMON HEALTH PROBLRMS

- ✓ Cavities
- ✓ Weight Gain
- ✓ Insulin Resistance
- ✓ Diabetes
- ✓ Obesity
- ✓ Liver Failure
- ✓ High Blood pressure
- ✓ Heart Disease

WHO DOES THIS AFFECT?

500 Million Adults worldwide are obese. **1.4 Billion** are overweight

Since the 1980 obesity rates have **doubled** worldwide.

The **AVERAGE** American consumes **80 Grams of Sugar a day**

65% of the world's population live in areas where obesity kills more people than being underweight.

More than **40 million children** less than the age of 5 are overweight

Research Finding on Sugar Addiction

The Role of Dopamine
Dopamine enhances our willingness to work for sweet rewards.

High Caloric Sugars
Animals are willing to work harder for foods that are high in caloric density.

The Sweetest Treat
Highly palatable foods cause a significant Increase in brain activation. They also cause Animals to eat at a much faster rate.

Sugar, also known as sucrose, is a natural carbohydrate found in plants.

We are currently living in a society where sugar consumption is exponentially increasing.

Scientific Studies on Rats

A 2012 study in the European Journal of Neuroscience showcased the **long-lasting** impact of sugar in the brain as baby rats grew up into adults.

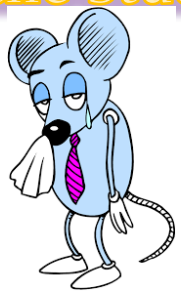
Two experiments were conducted to understand the reward mechanism in the brain.

A Taste Reactivity Test was conducted by looking at a rat's facial response to different amounts of sugar.

In the 2nd experiment a surgical procedure was done on the adult rats to test brain activity in the region responsible for processing rewards.

High activation means **positive** response to sugar. **Low activation** correlates with **negative** response to sugar

Results of the Study



1

Facial Response:

Prior history of sugar over consumption as babies significantly reduced the consumption of sugar into adulthood. This was found by observing the reduction in positive facial responses using the Taste Reactivity Test.

2

Healthy Rats:

Rats who did not consume high levels of sugar during childhood showed a negative response to sugar as adults in both experiment one and two.

3

Mo' Sugar Mo' Problems:

Over consumption of sugar during childhood can cause over sensitization in the brain. Sugar is a dangerous drug and too much of it can bring permanent changes to the brain.

4

Rats to Humans:

This study on rats provides strong implications on overconsumption of sugar on the developing brain. Drug use during childhood can significantly damage our neurobiological circuits.

Word Count: 448

Reference:

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