

All Natural 12 Day Detox



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This program cannot be construed as a recommendation of medical treatment or medication. It is not professed to be physical or medical treatment nor is any such claim made.

There are no medical recommendations or claims for the 12 Day Detox program or for any of the vitamin or mineral regimens described in this program.

No individual should undertake the 12 Day Detox program or any of its regimens without first consulting and obtaining the informed approval of a licensed medical practitioner. The author makes no warranties or representation as to the effectiveness of the 12 Day Detox.

Sugar Addiction



WE ARE ALL PROGRAMMED TO LIKE

SUGAR. New research shows some are genetically much more prone to sugar and food addiction than others. I have observed this in my patients, but now it is becoming clear why some have more trouble kicking the sugar habit than others.

The science demonstrating that people can be biologically addicted to sugar in the same way we can be addicted to heroin, cocaine or nicotine is clear. Bingeing and addictive behaviors are eerily similar in alcoholics and sugar addicts. In fact, most recovering alcoholics often switch to another easily available drug: **Sugar**.



Adapted from Blood Sugar Solution, Dr. Mark Hyman

Sugar Addiction



It seems that we all vary a bit in our capacity for pleasure. Some of us need a lot more stimulation to feel pleasure, thus driving us to a range of addictive pleasures that stimulate our reward center in the brain – drug and alcohol addictions, compulsive gambling, sex addiction and, of course, sugar, food addiction, and compulsive eating.

We often see these as moral failures or results of character defects. In fact, it may be that addicts of all stripes are simply unlucky and born with unfortunate genetic variations in our reward and pleasure mechanisms.

Despite being stuck with the sugar addiction low pleasure gene, you may be able to modify its activity by modulating your brain chemistry and receptor function with the use of specific nutrients ...

Adapted from Blood Sugar Solution, Dr. Mark Hyman

Sugar Addiction



The Genetics of Pleasure

In our brain, a little receptor, the dopamine receptor D2 (or DRD2 for short), must be activated or switched on for us to feel pleasure. The amino acid dopamine triggers this response. Sugar and other stimulating addictions increase dopamine in the short term.

The only problem is it appears that those with sugar addictions, compulsive eating, and obesity have DRD2 systems that need much more stimulation to feel pleasure. It seems that those who have sugar addiction have fewer D2 dopamine receptors and need extra stimulation to make them “turn on”.⁽ⁱ⁾

Functional MRI studies of teenagers, both lean and obese, found that the obese teenagers whose brains didn't light up as much in the dopamine reward centers were more likely to be obese and gain weight later.⁽ⁱⁱ⁾ They also were more likely to have the DRD2 gene that coded for fewer receptors.

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Sugar Addiction



Some studies have pointed to drugs or nutrients that can modulate this defective dopamine reward response. In one study, naltrexone, an opioid blocker (blocks the effects of heroin and morphine on the brain) was used in sugar addicts. When they took this drug, which prevented them from getting the temporary high from sugar, they craved less and ate less.

We also know that amphetamines are natural appetite suppressants and reduce cravings. That is why children who take stimulant ADHD drugs (which are actually just fancy amphetamines that stimulate dopamine receptors) have trouble gaining enough weight as they grow.

There are also some promising studies of nutraceuticals that can modulate dopamine receptor function and appetite regulation. Bruce Ames, PhD found that high levels nutrients can reduce disease in people with 50 different gene variants; nutrients may modulate the function of our genes, improve their function, or affect the activity of enzymes that genes produce. In fact, one third of our entire DNA has one simple job: To code for and produce enzymes controlled by nutrient co-factors. This means that nutrients have a powerful ability to modify the expression of your genes.

Adapted from Blood Sugar Solution, Dr. Mark Hyman

Sugar Addiction



Overcoming Your Addiction to Sugar

Despite being stuck with the sugar addiction low pleasure gene, you may be able to modify its activity by modulating your brain chemistry and receptor function with the use of specific nutrients that either improve gene expression or modify the activity, the enzymes, or the receptors, even if they are somewhat impaired.

Regulation of hormones and neurotransmitters that affect appetite and cravings is complex and involves many factors including how quickly food spikes our blood sugar, stress, getting enough sleep, nutritional deficiencies, chemicals such as artificial sweeteners, food sensitivities which drive inflammation, and more.

For those with personal struggles with food addiction, remember it is not a moral failing or lack of willpower.

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Sugar Addiction



- 1. Balance your blood sugar:** Research studies say that low blood sugar levels are associated with LOWER overall blood flow to the brain, which means more BAD decisions.

To keep your blood sugar stable:

Eat a nutritious breakfast with some protein like eggs, protein shakes, or nut butters. Studies repeatedly show that eating a healthy breakfast helps people maintain weight loss.

Also, have smaller meals throughout the day. Eat every 3-4 hours and have some protein with each snack or meal (lean animal protein, nuts, seeds, beans). Avoid eating 3 hours before bedtime.

- 2. Eliminate sugar and artificial sweeteners and your cravings will go away:** Go cold turkey. If you are addicted to narcotics or alcohol you can't simply just cut down. You have to stop for your brain to reset. Eliminate refined sugars, sodas, fruit juices, and artificial sweeteners from your diet. These are all drugs that will fuel cravings.

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Sugar Addiction



3. Determine if hidden food allergies are triggering your cravings. We often crave the very foods that we have a hidden allergy to.

4. Get 7-8 hours of sleep. Research shows that lack of sleep increases cravings.

5. Optimize your nutrient status. Optimize your vitamin D level: According to one study, when Vitamin D levels are low, the hormone that helps turn off your appetite doesn't work and people feel hungry all the time, no matter how much they eat. Optimize omega-3s. Low levels of omega three fatty acids are involved in normal brain cell function, insulin control and inflammation.

Consider taking natural supplements for cravings control. Glutamine, tyrosine, 5-HTP are amino acids that help reduce cravings. Stress reducing herbs such as Rhodiola can help. Chromium balances blood sugar and can help take the edge off cravings. Glucomannan fiber is very helpful to reduce the spikes in sugar and insulin that drive cravings and hunger.

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Hidden Sugar



Look for any of the following ingredients to find the common hidden sugar or artificial sweeteners in your food.

“Natural” Sugars

- Agave Syrup
- Brown sugar
- Corn sweetener
- Corn syrup
- Dextrose
- Fructose
- Fruit juice concentrates
- Glucose
- High-fructose corn syrup
- Honey
- Invert sugar
- Lactose
- Maltose
- Malt sugar
- Molasses
- Raw sugar
- Stevia
- Sucrose
- Sugar
- Syrup



Common Artificial Sweeteners

- Acesulfame potassium (Sunett, Sweet One)
- Aspartame (Equal, NutraSweet)
- Erythritol
- Hydrogenated starch hydrolysate
- Isomalt
- Lactitol
- Maltitol
- Mannitol
- Neotame
- Saccharin (SugarTwin, Sweet ‘n Low)
- Sorbitol
- Sucralose (Splenda)
- Tagatose
- Trehalose
- Xylitol

12 Day

Natural

Detox