



SUGAR

sickly or sweet?

by Lawrence Mitchell

raw
energy

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SUGAR: SICKLY OR SWEET?

14 Steps To Kick The Addiction

Learn the secret to losing weight, having stronger immunity
and a clearer mind

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The Raw Energy Hot Topic Series

**Good health is our birthright;
a universal goal that we all need to live
our lives and achieve our dreams.**

The Raw Energy series of Hot Topic eBooks has been designed to help you cut through the hype that is so prevalent in our modern times, and give you the context and practical guidance to enable you to become a healthier version of yourself.

Introduction

If you're addicted to sugar, or would like to lessen your cravings, you're in the right place.

Don't worry; I'm not going to recommend that you give up all sweet things. That would be *mean*!

However, I *am* going to help you to really understand:

- How sugar affects our bodies
- Exactly what sugar is, its various aliases and where you can find it
- Whether you *really* can get addicted to sugar
- The 14 steps you could take to permanently reduce your intake and achieve many health benefits





First of all, let me tell you my story.

Like many people, I love sweet things; I always have, right from when I was little. Jam donuts, chocolate biscuits, those French fancy cakes that my grandma always used to buy. And nothing made me happier than going to the Pick n' Mix counter at Woolworths and buying an enormous bag of sweets and eating the lot!

Unfortunately, sugary things don't seem to return my affections. I put on a lot of weight in my late teens and was 210 lbs by the age of 18. I've had to cut further and further back over the years and have experienced huge health benefits as a result, including losing 42lbs in weight and keeping it off for 20 years!

So what's all of this fuss about sugar?

Nowadays, most people in the west consume sugar every day in sweet form such as in cakes and fizzy drinks, or hidden in processed foods, largely unnoticed other than on food labels. It is generally regarded as bad for your teeth and directly responsible for our ever-expanding waistlines. However, increasingly, scientists are beginning to build a more sinister picture of this 'white substance'.

According to Robert Lustig, Professor of Adolescent Obesity:

'Sugar, whether added to food by you or the manufacturer, is the greatest threat to human health, bar none.'



A dramatic claim indeed. But is it justified? This is the topic that we'll explore over the following pages.

Whilst Lustig could be accused of unnecessary scaremongering, the truth is that the quantity of sugar we consume has risen dramatically over the last century. Indeed, many of us cannot survive a single sugar-free day without experiencing terrible cravings.

However, for those people who have managed to crack their 'sugar habit', the health benefits have been considerable – clearer minds, more energy, lower weight and better skin, not to mention the avoidance of disease.

Given how our relationship with sugar appears to impact our quality of life, my goal with 'Sugar: Sickly Or Sweet?' is to permanently change your relationship with this suddenly suspect substance.



The history of sugar

The first sweeteners that our ancestors would have consumed are honey and fruit, although they wouldn't have been eaten very often, as both were seasonal – and one required putting your hand in a beehive!

The early history of sugar production was rocky and tied up in the slave trade. But it wasn't until 1675 that Western Europe experienced its first sugar boom when sugar production achieved a tipping point and the price of sugar fell. From that point, the sugar industry has grown faster than most other markets and the diet of the average Westerner has changed almost beyond recognition. Consider this:

- In 1700 the average Englishman consumed 4 pounds of sugar per year.
- 100 years later, it had increased to 18 pounds per year.
- By 1870 he was eating 47 pounds annually.
- By 1900 the world production of cane and beet sugar had exploded from 2.8 million tons a year to over 13 million!
- Today, the average Brit consumes around 100lbs of added sugar annually, or 238 teaspoonfuls per week – that's 24 teaspoons per day!

To put this into perspective, in the US, The American Heart Association (AHA) recommends that women consume no more than six teaspoons a day (still too much, in my opinion).

A big part of the problem is that in today's world, it has become extremely difficult to avoid sugar.

Indeed, most people are not even aware of how much sugar they're consuming because it is so often hidden in processed foods.

Why is this, I hear you ask?

Well, back in the 1970's, scientists argued quite persuasively that dietary fat was the main cause of heart disease.

This theory quickly became the established truth and fat became the enemy. Food manufacturers of course realised that dishes containing less fat would mean cardboard-tasting food, so they quickly started to innovate and replace the fat with sugar.

As a direct result, today fat makes up a smaller portion of the average western diet than it did 20 years ago – yet the issue of *obesity* has only spread further through the population (see Figure 1). This can be blamed specifically on the

increased amounts of sugar being consumed, much of it hidden in 'low-fat' and 'fat-free' products, and products perceived as savoury.

Of course, 40 years later, scientists are now realizing that certain sugars are converted straight into fat by our bodies, and are causing obesity as well as Type 2 diabetes, hypertension and cardio-vascular diseases.

Figure 1 shows how sugar consumption has increased in the 20th century and the correlation with the sharp increase in obesity levels.

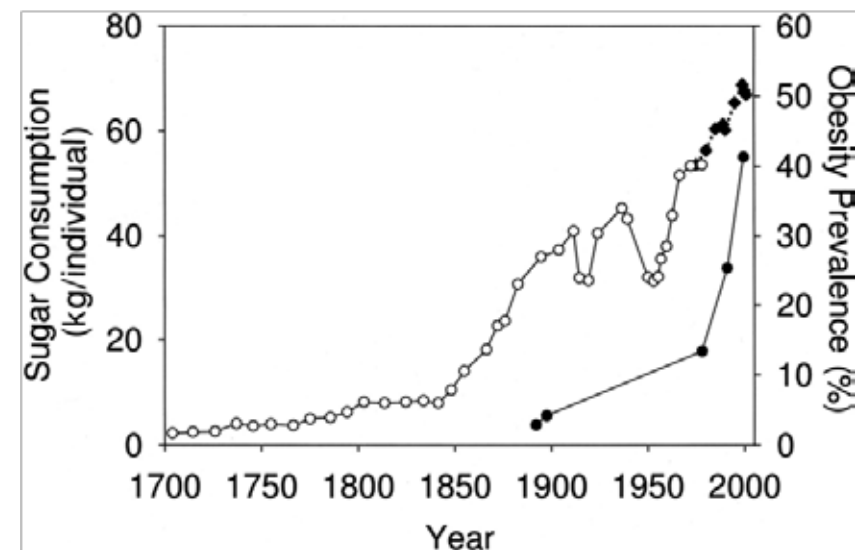


Figure 1

Back in the 1960's, not everyone agreed with the 'fat is evil' hypothesis. British nutrition expert John Yudkin, for example, conducted a series of experiments in the 1960's, feeding sugar and starch to rodents, chickens, rabbits and pigs, as well as college students. He found that the sugar in their diets led to high levels of fat and insulin in the blood – risk factors for heart disease and diabetes – and published his findings in a book entitled: 'Pure, White and Deadly'. Sadly, few in the medical community took Yudkin's ideas seriously as the focus was on cholesterol and saturated fat.

So what exactly is sugar?

Let's start with the basics.

Sugar plays a vital role as a carbohydrate, which is the body's primary source of energy.

Sugar occurs naturally in many plant foods, and we get most natural sweeteners by processing these plants (such as sugar cane, agave cacti, maple tree, sugar beet, coconut palms and corn) to extract and condense the sugar. In the case of honey, bees do the work by extracting and processing flower nectar.

However, not all sugars are the same and different sugars will act differently in the body.

Naturally occurring sugars:

These include sucrose, maltose, lactose, galactose and fructose, however I am going to focus on 3 key ones:

Glucose: This sugar occurs naturally in plants and fruits, as it is a byproduct of photosynthesis. In our bodies, glucose is either burned as energy or converted into glycogen (liver and muscle fuel). Our bodies can even produce glucose when needed from protein, but too much glucose is treated by the body as toxic.

Fructose: This is fruit sugar, occurring naturally in fruit. It also occurs naturally in cane sugar and honey, and is incredibly sweet. The body cannot use fructose in the same way as it uses glucose – in fact it treats it as a toxin and it goes straight to the liver where it is broken down into fats called triglycerides. Over time, this makes the liver fatty and if the triglycerides get into the blood stream, it can lead to chronic illness.

Sucrose (table sugar): This sugar is found in the stems of sugar cane and the roots of sugar beet. It is a combination of glucose and fructose and can be found naturally alongside glucose in certain other fruits and plants.

How does sugar affect our bodies?

All of us are different – we have different genetic blueprints, ages, life-styles and stress levels. However, we're the same in at least one respect – when we consume sugar, our bodies digest it very quickly.

If you need energy at any moment, as a primal 'Flight or Fight' response, your body will burn the sugar for energy. If not, you guessed it – it will be converted into fat and stored in your fat cells for a later date. As a species, this ability to convert even small amounts of sugar to fat was an essential part of our ability to survive the harsh winters, or even a famine.

When your pancreas detects a rush of sugar, it releases a hormone called insulin to deal with all the excess sugar. This keeps your blood sugar under control after you eat, and keeps the body in balance.

The more sugar there is in the blood stream, the more insulin is released. The problem is, if too much insulin is released, it can lead to reduced blood sugar levels, leading to an adrenaline surge, which after a while will result in a lack of energy so guess what, you reach for more sugar to give you that energy boost, causing a vicious cycle. With 24/7 availability of very tempting sugary snacks and drinks, the blood sugar can remain high throughout the day.

This means that the pancreas is overloaded and has to keep working hard, until eventually it can no longer keep up with the demand. Now your blood sugar will rise out of control, and you've got Type 2 diabetes.

Figure 2 shows the normal blood sugar as it should be, as against typical blood sugar spikes as we consume sugary foods and drinks through the day.

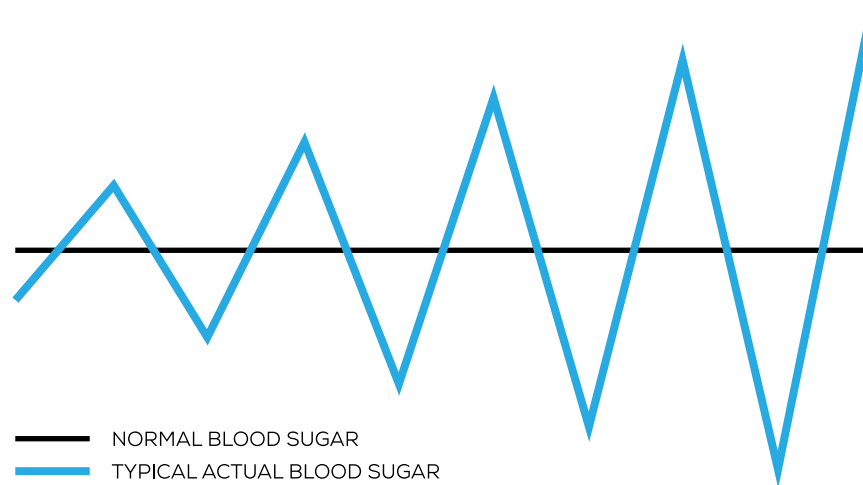


Figure 2

Well, the solution to all of this seems straightforward – stop eating so many sweet things! However, the problem is compounded by the fact that our bodies actually process other types of carbohydrates in a very similar way to processing pure sugar.

You've probably heard of the Glycemic Index, and its associate, the Glycemic Load.

The Glycemic Index (GI) is a measure of how quickly a particular type of food is broken down to glucose in the body and therefore increases one's blood sugar levels on a scale of 1-100 (100 being pure glucose). Even though fruits and vegetables may eventually break down to glucose, they have a low GI. However, scientists have found that foods like white bread, french fries, and other simple carbohydrates have nearly identical effects on our blood sugar as glucose.

The Glycemic Load, made popular by Patrick Holford, is an estimate of the impact of that carbohydrate on our blood sugar levels, taking into account the amount of carbohydrate present in the food.

A food's glycemic load is determined by multiplying its glycemic index by the amount of carbohydrate it contains in grams and dividing the total by 100. (See Appendix 2 for Glycemic Index and Glycemic Load of a number of common foods).

Figure 3

Food Values: Glycemic Index/Glycemic Load			
	Low GI	Med GI	High GI
Low GL	All-bran cereal (8,42) Apples (6,38) Carrots (3,47) Peanuts (1,14) Strawberries (1,40) Sweet Corn (9,54)	Beets (5,64) Cantaloupe (4,65) Pineapple (7,59) Sucrose, i.e. table sugar (7,68)	Popcorn (8,72) Watermelon (4,72) Whole wheat flour bread (9,71)
Med GL	Apple juice (11,40) Bananas (12,52) Fettucine (18,40) Orange juice (12,50) Sourdough wheat bread (15,54)	Life Cereal (16,66) New potatoes (12,57) Wild rice (18,57)	Cheerios (15,74) Shredded wheat (15,75)
High GL	Linguine (23,52) Macaroni (23,47) Spaghetti (20,42)	Couscous (23,65) White rice (23,64)	Baked Russet potatoes (26,85) Cornflakes (21,81)

Source: Revised International Table of Glycemic Index (GI) and Glycemic Load (GL), *The American Journal of Clinical Nutrition*, July 2002

Generally, the more refined (processed) the food, the more likely it is to be quickly converted to sugar in our bodies for processing. Figure 3 shows the Glycemic Index and Glycemic Load of some high-carbohydrate foods.

Different types of sugar:

If sugar was always labeled 'sugar' on food packages, detecting its presence would be much more straightforward. However, as we know, sugar appears under many different names on labels, including:

- Agave nectar
- Brown sugar
- Cane crystals
- Cane sugar
- Corn sweetener
- Corn syrup
- Crystalline fructose
- Dextrose
- Evaporated cane juice
- Organic evaporated cane juice
- Fructose
- Fruit juice concentrates
- Glucose
- High-fructose corn syrup
- Honey
- Invert sugar
- Lactose
- Maltose
- Malt syrup
- Molasses
- Raw sugar
- Sucrose
- Glucose Syrup
- Syrup

If you read the labels on foods that you are about to consume, you will be horrified at just how much sugar is in everything we eat. It's everywhere!



Take a look at

SugarStacks.com

to find out how much sugar you've
eaten today. It provides a simple
visual aid to help you figure out
the amount you're pumping into
your body everyday.

What about fruit?

Fruits obviously contain sugar, so when you eat fruit, you are consuming sugar, although in some cases, tiny amounts. The key difference between sugar in fruit and refined sugars is that the fruit also contains fibre and plenty of vitamins and minerals, which our bodies need. Eaten moderately, fruit generally causes less of a blood sugar spike than nutrient-void table sugar. As you can see from the chart in Figure 4, not all fruits contain the same amounts of sugar and vitamins. As a general rule, berries and cherries are packed full of nutrients and are generally low in sugar, whilst grapes, melons, mangoes and pineapples are very high in sugar. You can find more details on the best and worst fruits in Appendix 3, on page 49.

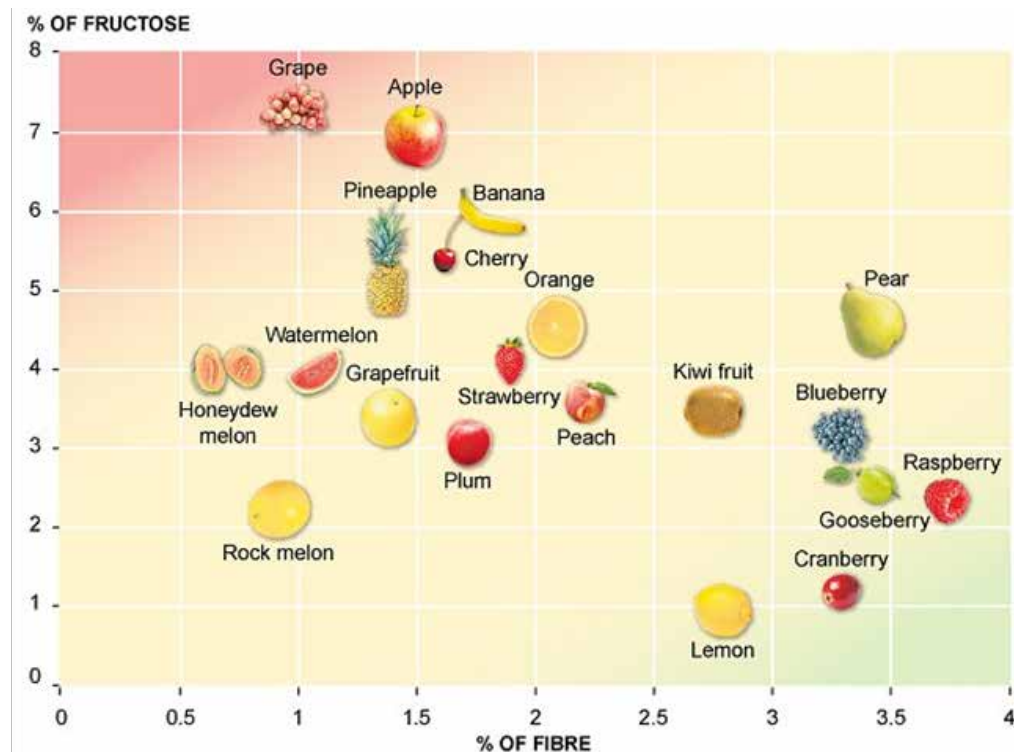


Figure 4

Fibre and fructose content of popular fruit:

The graph plots the fibre content of each (100g) piece of fruit against its average fructose content. Fruits which contain a lower percentage of fructose and a higher percentage of fibre (which reduces the damage fructose causes) are the best choice.

What about fruit juices?

Fruit juices are a different matter, though. The trouble with fruit juices is that they can often lose their fibre and nutrients in the juicing process, but retain a lot of sugar. A glass of apple juice, for example, contains 28g of sugar. Given that there are 4g of sugar in every teaspoon, that's 7 teaspoons of sugar per glass! According to Dailyburn, grape, cranberry and orange juices aren't much better:

Orange juice - 21g of sugar

Apple juice - 28g of sugar

Cranberry juice - 37g of sugar

Grape juice - 31g of sugar

Celery juice - 5.59g of sugar



Please don't take this as a recommendation to drink Coke instead of fruit juice, but just for reference, a can of Coca-Cola has 40g (10 teaspoons) of sugar. If you don't believe me, watch the short chemistry experiment on <http://rawenergy.info/how-much-sugar-is-in-a-can-of-soda/>.

Alternative natural sweeteners

Honey

The main appeal of honey is that it's not just fructose or glucose, but a mixture of all sorts of compounds, minerals, and more and has performed well in some research. For example, a study comparing honey to various other compounds showed it in a favourable light: "Overall, honey improved blood lipids, lowered inflammatory markers, and had minimal effect on blood glucose levels." (Jérôme Busserolles, 2002). Apart from this, honey resulted in a lower blood glucose spike in rats when compared to other types of sugar. Remember that not all honeys are equal. It's better to buy raw, unprocessed honey which may be more expensive, but far more nutritious.

Agave

Unfortunately, despite the fact that it comes from a cactus (which is natural!), agave is highly processed and refined, and contains a huge amount of refined fructose (90% fructose and 10% glucose).



Coconut Palm Sugar

Coconut Sugar is naturally low on the Glycemic Index (GI) and has benefits for weight control and improving glucose and lipid levels in people with diabetes (type 1 and type 2). Coconut Sugar is especially high in Potassium, Magnesium, Zinc and Iron and is a natural source of the vitamins B1, B2, B3, B6 and C.



Stevia

Stevia is a naturally occurring sweetener from the sunflower family. It is approximately 300 times sweeter than table sugar and apparently has a lower effect on blood glucose levels. Stevia has been shown to reduce blood pressure and decrease blood sugar levels in a variety of peer-reviewed scientific studies – so much so that it is being considered as a treatment for diabetes. It originated in South America, where it was used mainly to sweeten bitter teas and medicinal drinks. It has since gained a worldwide market, despite being banned in the USA thanks to lobbying efforts by cane sugar and artificial sweetener manufacturers.

Xylitol

Xylitol is a sweetener that occurs naturally, however, in its supermarket form it is highly processed. It can be found for instance in berries, fruit, vegetables, trees, and mushrooms. If you choose to use it, 1) use it sparingly, and 2) try to find a source that comes from the birch tree, rather than from Chinese corn (which is where most sources come from).

Approved artificial sweeteners

There are a number of low-calorie artificial sweeteners on the market, which are frequently used in diet drinks and sugar-free products.

If you choose to consume these products, remember that they are chemicals

(i.e., created in a lab, rather than refined from plant sources), and especially that there isn't enough knowledge of the long-term effects of these same chemicals on the human body. Keeping this in mind, I would avoid them. Here are three of the more popular artificial sweeteners on the marketplace:

Aspartame (sold under brands: NutraSweet and Equal)

Many people have switched to diet drinks to reduce their calorie intake, which contain aspartame. This has been banned in many countries and has been linked to cancer.

Sucralose (sold under the brand: Splenda)

Sucralose is found in protein powder, Splenda, and other such products.

Saccharin (sold under the brand: Sweet'N Low)

This artificial sweetener was created way back in the late 1890's. Again, it is much sweeter than table sugar and is thus consumed in much smaller quantities.



High-fructose corn syrup (Glucose Fructose Syrup)

About 50 years ago, scientists discovered that by processing and refining corn, it could be turned into a sugar alternative, which they called high-fructose corn syrup (HFCS). It's a combination of fructose and glucose and there are different types of HFCS depending on the proportion of fructose.

The discovery of HFCS was one of the most significant changes to our food supply in the last century. In the early 1980s, high-fructose corn syrup replaced sugar in fizzy drinks and other products, and was widely portrayed by the food industry as a healthy alternative (it was also much cheaper than sugar).

Today, producers of high-fructose corn syrup (and producers of food containing it)

argue that it is no different on a molecular level from regular sugar, and is thus a safe alternative to sugar in food and drinks. However, it turns out that HFCS, despite its molecular similarities to regular sugar, does not affect the body in the same way that table sugar does.

For example, a recent study conducted in Princeton University discovered that rats with access to high-fructose corn syrup *gained significantly more weight* than those with access to table sugar, even when their overall caloric intake was the same.



This goes a long way towards explaining why the low-fat diets that rose in popularity in the 1970's mysteriously coincided with a sharp rise in obesity and related illnesses.

However, despite its poor press, the food industry still loves high-fructose corn syrup as it makes every type of food more palatable – from salad dressings to bread, ketchup to canned fruit. It is used in particular in low-fat foods. Figure 5 shows the degree to which HFCS has replaced other types of sugar in processed foods.

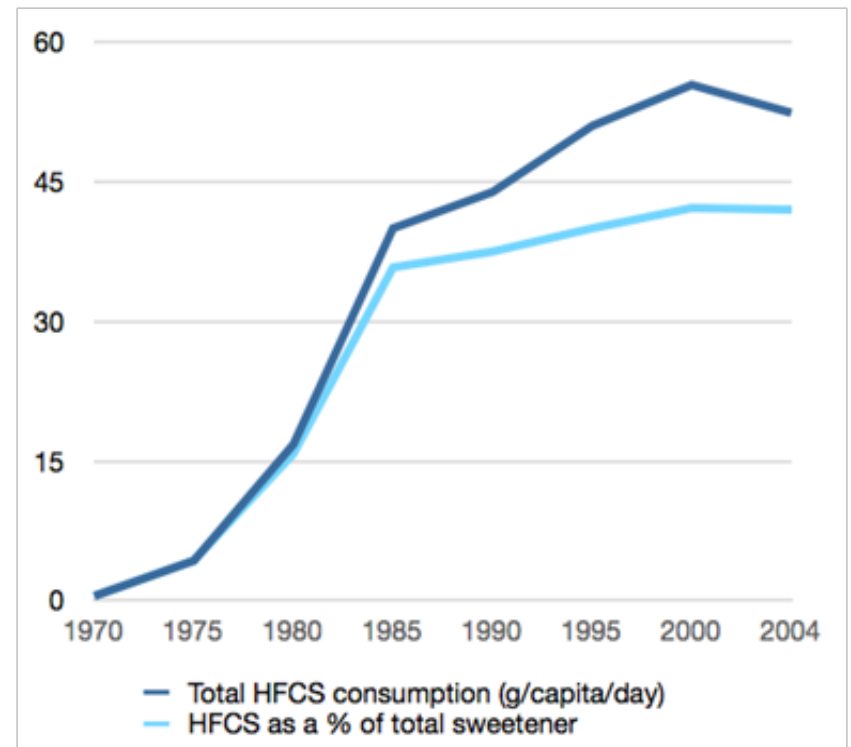


Figure 5

Is sugar addictive?

Increasingly, experts have begun to believe that sugary foods can be as physiologically addictive as many drugs, including heroin! In other words, you can become legitimately addicted to sugar and sugary foods.

Sugar certainly fits the standard definition of an addictive substance. For example, eating just a small amount makes you want more, and if you don't have it, you experience withdrawal symptoms.

Indeed, Paul Van Der Velgen, head of Amsterdam's health service (the city where cannabis is legalised) wants to see sugar tightly regulated:

'Just like alcohol and tobacco, sugar is actually a drug...and users should be made aware of the dangers,' he said.

In one US food addiction study by Princeton University they gave lab rats a 10% sugar



water solution (the same percentage as in most soft drinks), and found that although the rats consuming the solution occasionally experienced no adverse effects, they reacted differently when they were allowed the sugar water every day. The animals experienced severe withdrawal symptoms, anxiety, shakes and tremors when they had the sugar drink taken away - the same reaction that drug addicts experience when they need a hit.

"We consistently found that the changes we were observing in the rats bingeing on sugar were like what we would see if the animals were addicted to drugs," said Professor Nicole Avena, who was part of the study. We are not genetically designed to consume the amount of sugar that we are currently doing. For that reason, it gives our brains that unnatural 'happy feeling', which can override the "I've had enough" mechanism.

This explains why you struggle to concentrate after eating a chocolate biscuit and finding an additional plate of them in front of you.

Suddenly, the biscuits take over; they're all you can think about - until you've eaten them all!

Are you addicted to sugar?

Answer these four questions to find out.

1. Do you struggle to walk past a sugary treat without taking 'just one'?
2. Do you have routines formed around sugar consumption – for example, always having pudding, or needing a piece of chocolate to relax in front of the television?
3. Are there times when you feel as if you cannot go on without a sugar hit?
4. If you are forced to go without sugar for 24 hours, do you develop headaches or mood swings or other cravings?

If you answered 'yes' to one or more of those questions, you are addicted.

For a more detailed questionnaire, visit: <http://rawenergy.info/sugar-addiction-quiz/>

How to kick the addiction – your 14-step action plan

Whilst trying to beat a sugar addiction has been likened to trying to give up smoking while standing in a room full of smokers offering you a cigarette every five minutes, don't despair. With the right support, there are many practical steps you can take to gradually free yourself.

The good news is that whilst getting over any addiction is painful at first, it doesn't take all that long for your palate to adjust.

And keep the end goals in mind. With lower sugar in your diet, you'll suddenly experience a whole range of flavours that were previously muted by the presence of sugar, not to mention a multitude of other health benefits you'll enjoy.

So here are the 14 steps you can take to reduce your sugar intake at a pace that suits you...

1. Start where you are

First of all, work out how much sugar you're actually eating every week by studying food labels. Chances are that you'll be surprised just how much added sugar you're eating without even realising it. Remember that sugar appears in many different guises and in many foods that you wouldn't expect it to appear (like breads and sauces), so you'll need to play 'sugar detective.' Also be very skeptical of food that claims to be 'sugar free' and 'natural' and do your own research, as these advertising claims won't tell you the whole story. If you discover that sweeteners from any source make up more than 5% of your daily calories, that's not good news for your heart, vessels, waistline and insulin sensitivity.



2. Kick your habit - go for 30 days without sugar

This is the 'all or nothing' approach which, depending on how much sugar you're consuming, can create quite severe detox symptoms, so be careful. Most people believe that this approach doesn't work, although I have used it successfully many times in my life with black coffee, alcohol, animal products, cigarettes, dairy and sugar. I've endured some terrible side effects in the process, the worst being the coffee elimination, when I went from drinking 8 cups per day to 0, seven years ago. My body wasn't at all happy at first. However, I stuck with this cold turkey approach, and felt amazing when I emerged out the other side.

By the end of the 30 days you may well find that you don't miss the sugar at all as your taste buds re-calibrate. In other words, the sugar that you've been so attached to becomes a non-issue.

3. Slowly scale it down

It doesn't matter if it takes you a year of slowly changing your habits to kick your sugar addiction. Every change counts, and every little bit adds up. If you drink a case (12 cans) of Diet Coke every day, tomorrow drink only 11. In two weeks, cut back to 10 per day. And then 9. And then eventually, it's 'only one on Friday' and hopefully not even that. My friend Howard managed to kick the Diet Coke habit recently and if he can do it, anyone can!

4. Find a new healthy habit

When I stopped drinking black coffee, I managed to successfully replace the habit with another habit, drinking green tea, which I hated at first, but now prefer. However you choose to reduce your sugar intake, it's important to build a new healthy habit in place of an old unhealthy one, in order to 'drown out' the cravings.



5. Change your mindset

Quieten that annoying little voice inside your head that refuses to help. Stop telling yourself, for instance that 'you have a sweet tooth and love sweet things' or that 'you only live once' and that 'a little bit of what you fancy is ok', when the truth is that 'a little' can easily become 'a lot'. Create a new identity for yourself as someone who is aware of what they are eating and is completely in control of the food that they eat. The more specific and positive and definitive you can make your new identity, the more likely you will be to eventually make it your new reality and not go through the distress of those agonizing internal debates.



6. Identify rules for yourself, and stick with them by minimizing the willpower required

"Today, I will replace one of my Cokes with water." "I drink water with dinner, I don't drink Coke." "I don't eat processed food." It's important to use 'don't' instead of 'can't'. Studies have shown that using 'don't' results in a much stronger dedication to habit-building. Write up the rules and stick with them for 30 days, until they become your new normality.

7. Be aware of your cravings

When you start to crave sugar, don't immediately run to get some. Take a few minutes and analyse why you want it – is it because you are depressed and unhappy? Bored? Hungry? Thirsty? Sugar creates a happy feeling in your brain as it raises serotonin and dopamine levels, and thus you could be craving it for any number of reasons. When the cravings come, try to distract yourself and do something else – talk to a friend or eat fermented or sour foods. And remember that, like everything else, 'it will pass' and you are in control!

8. Exercise

Exercise also raises serotonin and dopamine levels! Try exercising every time you have sugar cravings to get that rush (and build your habits around that). Get addicted to the high you get from exercise. And, if you absolutely have to have sugar, consume it close to a workout. When you consume sugar/carbs before or after a workout, you have a greater chance of burning it as energy or having it stored as glycogen in your muscles and liver rather than it being converted into fat!



9. Make it easier to be good

Don't make life hard for yourself. Don't buy cakes and biscuits and ice cream 'in case somebody comes to visit'. If you're hungry in the evening and open the fridge to see a chocolate cake looking back at you, the chances of you eating that cake are much higher than if it wasn't there at all. In other words, increase the distance between you and sugar to give yourself a better chance.

10. Eat home-cooked foods as much as possible

Whilst it's obvious that cakes, biscuits and fizzy drinks contain sugar, many people don't realise that ready made savoury dishes are often laden with sugar, especially low-fat options. This is true even in restaurants, so try to eat home-cooked food as much as possible so that you know exactly what's in the dishes you prepare.

11. Replace fizzy drinks and juice with water

This 'quick win' could reduce your sugar intake by half if you regularly consume fizzy drinks or fruit juices. Water tastes great and doesn't contain a single gram of sugar. Fruit juice should be avoided, as it contains fructose without the fibre that protects your body from the sugar.

12. Upgrade your sweeteners

If you have an uncontrollable craving for something sweet, aim for natural alternatives that aren't as bad for you or don't trigger the same blood glucose spike. Eat raw dark chocolate – you still get to feed your sweet tooth, but the sugar content is minimal when compared to milk chocolate. Choose better quality sweeteners, like honey, xylitol and coconut palm sugar.

13. If you have children, help them get into healthy habits now!

Sugar addiction is built up over time, and yours might have started way back when you were a child. Instead of creating a reward system with sweets and treats, create a reward system that ultimately rewards your children with a healthier lifestyle. They'll thank you for it one day.



14. Don't do it alone

It helps to have somebody to talk to through the process. Work with a health coach or someone who has successfully kicked their sugar habit and is happy to support you and be there for you along the 'journey of change'. A simple search on Facebook will throw up many sugar addiction groups, which can provide a fantastic support system.

**At the end of the day,
understand that you are
in control.**

If you are going to eat chocolate or something sweet, it's because you make a conscious decision to do so OCCASIONALLY, not because you HAVE to have it. Understand that kicking your addiction will be challenging. Understand that you will experience cravings, but that it will get better with time.

Most importantly, understand that there is now a great deal of evidence that an excess of sugar doesn't just make us fatter, but is linked to many other more serious conditions like Diabetes, Heart Disease, and some even link it to Alzheimer's and Cancer.

Like any form of change, if you are addicted to sugar, the thought of reducing your sugar intake can be awful to consider; but remember that your body has an amazing capacity to heal itself, which means that it's never too late to change your habits, so that they serve you better.

Finally, let me leave you with some real-life, inspiring stories of people who have decided that sugar is more sickly than sweet and have started the journey towards healthier versions of themselves.

You can do it too.

Appendix 1

Success Stories:

'One of the biggest, most surprising changes I've seen having reduced my sugar significantly is that I suffer fewer aches and pains. I'm in my mid-40's and have had a lot of joint and lower back pain in recent years, which I always attributed to getting older and needing to lose 50 pounds. But reducing my sugar has also reduced my joint pain!! I have more sustained energy throughout the day and sleep better because my back doesn't hurt. I've also dropped about 15 pounds and I can't complain about that either!'

'Bit by bit, I've drastically reduced my sugar consumption. I still can't resist a bit of chocolate now and again but I stopped having sugar on breakfast cereal and in tea/coffee long ago. I quit soft drinks (with very occasional exceptions). I probably still have far too much sugar - but I've easily halved my intake, if not more.'

'I found that I have to trick myself into making new habits by committing to short time periods. I used to have about 3 heaped teaspoons of sugar in my tea. Last year I challenged myself to cut down to 1 teaspoon and I was on that for a year. About a month ago I said to myself: "I'm not going to have ANY sugar in my tea for 2 weeks!" Well, it's a month later and still no sugar! It's hard to kick, but once you do, you no longer want it!'

'Kicked a sugar addiction in April by going cold turkey. It was one of the hardest things I've ever done--including a full-on, screaming-swear-words-and-sobbing-for-30-mins breakdown on day 3 (no joke)--but I gritted my teeth, and after five days I didn't even miss it.'

Like many women, I have a history of rewarding myself with food for jobs well done or challenges mastered, and the food tends to be in the "hot fudge sundae" category rather than the "spinach salad" category. To the extent that if I have any working strategies, they include: 1) Don't keep snacks (of the type sold in plastic bags or tubs) around the house. I have a tin of nuts on hand at any given time and some high-quality chocolate in the refrigerator, but there are no biscuits or crisps in our home as a general rule, and no crackers unless we are planning a cheese night. 2) Don't drink fizzy drinks or juices. 3) Limit alcohol to one drink per day. 4) No sugar in the coffee. 5) Organic raw honey in the tea. 6) Use spices that read as "sweet" to fool the palate. These include, but are not limited to, cinnamon, cardamom, tarragon, chervil, paprika, and ancho chili. 7) I use a cup of mint tea to stave off sweet cravings in that long stretch of afternoon. Mint also reads as "sweet," plus it's refreshing.

'The first 30 days were the hardest! Best decision ever. I have less issues with my anxiety (which went through the roof after slowly adding it in (Starbucks drink) after the first 30 days was up...after that feeling of being out of control mentally, and feeling super irritable, among other reactions...I cut it out again immediately. I have no desire to feel so out of control. Ever. Again!'

'I found a trick that works for me, since I really love sugar. My trick is not buying sweets, cakes and other sweet stuff for a pretty long period of time (like a month or so). Once every 1-2 months I give in to my desire and bake my own sweets, like cake, brownies or whatever, using only the stuff I pick myself. At least then I know exactly what's in them. After that, I keep it low for another month or so.'

'Family and I moved from USA to Taiwan. At first we found birthday cakes, donuts, fancy coffee, etc. tasted so bland. Now when we visit family back in the US, and I am given some treat like a piece of cake, I cannot eat more than a bite or two.'

"I stopped eating sugar and immediately started losing weight – without adjusting anything else about how I lived. At the two-four week mark I noticed I was no longer craving food and in particular I could leave things, which I would have found difficult to bypass before. But I wasn't feeling deprived. I ate what I wanted and as long as it didn't contain sugar, the weight kept coming off. I had stumbled upon a way of fixing what had obviously been a broken appetite control system up to that point in my life."

'I started to notice how I felt and acted around sugar, and I didn't like it. Sugar changed my physical and mental state. Whenever I ate dessert my energy tanked, I got really thirsty, and I felt bloated. When I ate dessert, I wanted more dessert (thanks to dopamine). And this led to more internal dialogue (e.g.: Should I have another piece? Life is short – maybe I should? Blah-blah-blah...). I think I spent at least 2 hours each week just debating whether or not I should eat dessert. Not exactly productive.'

'I can avoid sugar, and stay on track well if I cut it off cold turkey. But if I relent and have even one cookie or piece of chocolate, it releases a devouring, feasting beast inside me. My eyes convert into a demonic, sugar-obsessive, bloodshot red. Doesn't matter if I'm painfully stuffed. I will go on a rampage hunt for all things sugar. Bread, chocolate, candy, peanut butter, Nutella... and I won't be able to stop. No matter what the pain. I've tried it gradually, but everytime I had any sort of refined sugar (a pastry, a cupcake, a biscuit), I go absolutely berserk.'

Appendix 2

Glycemic index and glycemic load of some common foods

Please note the serving sizes. Most people serve themselves far too much and restaurants do the same.

FOOD	Glycemic Index (glucose = 100)	Serving Size (in grams)	Glycemic Load (per serving)
BAKERY PRODUCTS AND BREADS			
Banana cake, made with sugar	47	60	14
Banana cake, made without sugar	55	60	12
Sponge cake, plain	46	63	17
Vanilla cake made from packet mix with vanilla frosting (Betty Crocker)	42	111	24
Apple, made with sugar	44	60	13
Apple, made without sugar	48	60	9
Waffles, Aunt Jemima (Quaker Oats)	76	35	10
Bagel, white, frozen	72	70	25
Baguette, white, plain	95	30	15
Coarse barley bread, 75-80% kernels, average	34	30	7
Hamburger bun	61	30	9
Kaiser roll	73	30	12
Pumpernickel bread	56	30	7
50% cracked wheat kernel bread	58	30	12
White wheat flour bread	71	30	10
Wonder™ bread, average	73	30	10

FOOD	Glycemic Index (glucose = 100)	Serving Size (in grams)	Glycemic Load (per serving)
BAKERY PRODUCTS AND BREADS			
Whole wheat bread, average	71	30	9
100% Whole Grain™ bread (Natural Ovens)	51	30	7
Pita bread, white	68	30	10
Corn tortilla	52	50	12
Wheat tortilla	30	50	8
BEVERAGES			
Coca Cola®, average	63	250 mL	16
Fanta®, orange soft drink	68	250 mL	23
Lucozade®, original (sparkling glucose drink)	95±10	250 mL	40
Apple juice, unsweetened, average	44	250 mL	30
Cranberry juice cocktail (Ocean Spray®)	68	250 mL	24
Gatorade	78	250 mL	12
Orange juice, unsweetened	50	250 mL	12
Tomato juice, canned	38	250 mL	4
BREAKFAST CEREALS AND RELATED PRODUCTS			
All-Bran™, average	55	30	30
Coco Pops™, average	77	30	30
Cornflakes™, average	93	30	30
Cream of Wheat™ (Nabisco)	66	250	250
Cream of Wheat™, Instant (Nabisco)	74	250	250
Grapenuts™, average	75	30	30
Muesli, average	66	30	30
Oatmeal, average	55	250	250

FOOD	Glycemic Index (glucose = 100)	Serving Size (in grams)	Glycemic Load (per serving)
BREAKFAST CEREALS AND RELATED PRODUCTS			
Instant oatmeal, average	83	250	250
Puffed wheat, average	80	30	30
Raisin Bran™ (Kellogg's)	61	30	30
Special K™ (Kellogg's)	69	30	30
GRAINS			
			12
Pearled barley, average	28	150	20
Sweet corn on the cob, average	60	150	9
Couscous, average	65	150	13
Quinoa	53	150	43
White rice, average	89	150	28
Quick cooking white basmati	67	150	16
Brown rice, average	50	150	14
Converted, white rice (Uncle Ben's®)	38	150	11
Whole wheat kernels, average	30	50	12
Bulgur, average	48	150	
COOKIES AND CRACKERS			
			14
Graham crackers	74	25	14
Vanilla wafers	77	25	10
Shortbread	64	25	17
Rice cakes, average	82	25	11
Rye crisps, average	64	25	12
Soda crackers	74	25	

FOOD	Glycemic Index (glucose = 100)	Serving Size (in grams)	Glycemic Load (per serving)
DAIRY PRODUCTS AND ALTERNATIVES			
Ice cream, regular	57	50	6
Ice cream, premium	38	50	3
Milk, full fat	41	250mL	5
Milk, skimmed	32	250 mL	4
Reduced-fat yogurt with fruit, average	33	200	11
FRUITS			
Apple, average	39	120	6
Banana, ripe	62	120	16
Dates, dried	42	60	18
Grapefruit	25	120	3
Grapes, average	59	120	11
Orange, average	40	120	4
Peach, average	42	120	5
Peach, canned in light syrup	40	120	5
Pear, average	38	120	4
Pear, canned in pear juice	43	120	5
Prunes, pitted	29	60	10
Raisins	64	60	28
Watermelon	72	120	4
BEANS AND NUTS			
Baked beans, average	40	150	6
Blackeye peas, average	33	150	10

FOOD	Glycemic Index (glucose = 100)	Serving Size (in grams)	Glycemic Load (per serving)
BEANS AND NUTS			
Black beans	30	150	7
Chickpeas, average	10	150	3
Chickpeas, canned in brine	38	150	9
Navy beans, average	31	150	9
Kidney beans, average	29	150	7
Lentils, average	29	150	5
Soy beans, average	15	150	1
Cashews, salted	27	50	3
Peanuts, average	7	50	0
PASTA AND NOODLES			
Fettucini, average	32	180	15
Macaroni, average	47	180	23
Macaroni and Cheese (Kraft)	64	180	32
Spaghetti, white, boiled, average	46	180	22
Spaghetti, white, boiled 20 min, average	58	180	26
Spaghetti, wholemeal, boiled, average	42	180	17
SNACK FOODS			
Corn chips, plain, salted, average	42	50	11
Fruit Roll-Ups®	99	30	24
M & M's®, peanut	33	30	6
Microwave popcorn, plain, average	55	20	6

FOOD	Glycemic Index (glucose = 100)	Serving Size (in grams)	Glycemic Load (per serving)
SNACK FOODS			
Potato chips, average	51	50	12
Pretzels, oven-baked	83	30	16
Snickers Bar®	51	60	18
VEGETABLES			
Green peas, average	51	80	4
Carrots, average	35	80	2
Parsnips	52	80	4
Baked russet potato, average	111	150	33
Boiled white potato, average	82	150	21
Instant mashed potato, average	87	150	17
Sweet potato, average	70	150	22
Yam, average	54	150	20
MISCELLANEOUS			
Hummus (chickpea salad dip)	6	30	0
Chicken nuggets, frozen, reheated in microwave oven 5 min	46	100	7
Pizza, plain baked dough, served with parmesan cheese and tomato sauce	80	100	22
Pizza, Super Supreme (Pizza Hut)	36	100	9
Honey, average	61	25	12

The complete list of the glycemic index and glycemic load for more than 1,000 foods can be found in the article “International tables of glycemic index and glycemic load values: 2008” by Fiona S. Atkinson, Kaye Foster-Powell, and Jennie C. Brand-Miller in the December 2008 issue of Diabetes Care, Vol. 31, number 12, pages 2281-2283.

Source: http://www.health.harvard.edu/newsweek/Glycemic_index_and_glycemic_load_for_100_foods.htm

Appendix 3

The best and worst fruits to eat (from a sugar perspective)

Here's a quick guide to the best and worst fruits according to their sugar content and nutritional value.

The Best:



Berries

Blueberries, strawberries, raspberries, blackberries and gooseberries – all packed with antioxidants and vitamins. *Glycemic Index: generally low to mid-20s)*



Cherries

Cherries are similar to berries in terms of their antioxidant value. They have a slightly higher natural sugar content, but they're still very low-carb and are an excellent source of important fibre. (*GI: 22*)



Apples and Pears

These northern fruits are low in sugar, contain a respectable amount of fibre and are still a great way to satisfy a craving for sweetness without overloading your pancreas. (GI: 38)



Apricots and Peaches

With similar nutritional value to apples and pears, these stone fruits are a smart way to get a good dose of vitamin C and fibre. Avoid nectarines, which are much higher in sugar and are more akin to mangoes and papayas. (GI: 30s)



Grapefruit

Most citrus fruits are quite high in sugar, but grapefruits are not. In fact, their effect on blood sugar is less than apples and pears, at only GI: 25. Just don't add sugar!



Figs

Often confused with dates, figs are just as low in sugar as strawberries, and are packed with fibre.

The Worst:



Melons

Not all melons are equal, for instance, both cantaloupes and watermelons are very high in sugar (GI: 65, 100 respectively).



Mangoes and Papayas

Though not as sugary as pineapples, these fruits are best enjoyed infrequently. A better choice is the banana, which – although starchy and a 55 on the glycemic index – is a better energy source.



Pineapples

Pineapples are the best source of bromelain, an enzyme that can help with joint health and inflammation. Pineapple is very high in sugar, but it's full of valuable nutrients in addition to bromelain, so good to have occasionally.

Final Word

I hope you enjoyed this eBook as much as I have enjoyed researching and writing it.

I appreciate your taking the time to read it and I'd really love to hear about your personal relationship with sugar.

Would you call yourself addicted? Have you kicked an addiction?

If so, how did you do it? Do visit www.facebook.com/rawenergy.info and let me know.

Thanks again, and good luck!

Lawrence Mitchell

Founder, Raw Energy
www.rawenergy.info

Disclaimer:

This guide is for informational purposes only.

I am not a doctor, lawyer or accountant, and any advice I give is my personal opinion based on my experience and previous studies and is only for educational purposes. You should always seek the advice of your doctor before acting on something that I have published or recommended.

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<http://rawenergy.info/about/>.

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