

# Sugar is it that bad??

What's the truth about sugar, is it bad for you or is it good for you. It all depends on what you read really.

At the end of the second world war, the world's population was reasonably fit. There are hundreds of photos of people in the streets, in all countries, celebrating the end of the war, what is noticeable

though, is there is not an overweight person to be seen. What happened?? Did all of a sudden the entire western world just become a bunch of gluttons and sloths? All at the same time? I mean, get real!!

Today the common consensus is we are eating far too much sugar. It is now thought that excessive added sugar is the single worst ingredient in the modern diet. Sugar can have harmful effects on metabolism and contribute to all sorts of diseases.

Here are 10 disturbing reasons why you should avoid excessive added sugar like the plague.

### 1. Added sugar contains no essential nutrients and is bad for your teeth.

You've probably heard this a million times before... but it's worth repeating. Added sugars (like sucrose and high fructose corn syrup) contain a whole bunch of calories with NO essential nutrients. For this reason, they are called "empty" calories. There are no proteins, essential fats, vitamins or minerals in sugar, just pure energy. When people eat 20% or more calories as sugar, this can become a major problem and contribute to nutrient



deficiencies. Excess sugar is also very bad for the teeth, because it provides easily digestible energy for the bad bacteria in the mouth.

**Bottom Line:** Sugar contains a lot of calories, with no essential nutrients. It also causes tooth decay by feeding the harmful bacteria in the mouth.

#### 2. Added sugar is high in fructose, which can overload your liver.

In order to understand what is so bad about sugar, you need to understand what it is made of. Before sugar enters the bloodstream from the digestive tract, it is broken down into two simple sugars - glucose and fructose. Glucose is found in every living cell on the planet. If we don't get





it from the diet, our bodies produce it. Fructose is different. Our bodies do not produce it in any significant amount and there is no physiological need for it. The thing with fructose is that it can only be metabolized by the liver in any significant amounts.

This is not a problem if we eat a little bit (such as from fruit) or we just finished an exercise session. In this case, the fructose will be turned into glycogen and stored in the liver until we need it. However, if the liver is full of glycogen (much more common), eating a lot of fructose overloads the liver, forcing it to turn the fructose into fat. When repeatedly eating large amounts of sugar, this process can lead to fatty liver and all sorts of serious problems.

Important, this does NOT apply to <u>fruit</u>. It is almost impossible to overeat fructose by eating fruit.

There is also massive individual variability here. People who are healthy and active can tolerate more sugar than people who are inactive and eat a Western, high-carb, high-calorie diet. You can see more info <u>HERE</u>.

**Bottom Line:** For people who are inactive and eat a Western diet, large amounts of fructose from added sugars get turned into fat in the liver.

#### 3. Overloading the liver with fructose can cause non-alcoholic fatty liver disease.

When fructose get turned into fat in the liver, it is shipped out as very low density lipoprotein (<u>VLDL</u>) cholesterol particles, however, not all of the fat gets out, some of it can lodge in the liver. This can lead to <u>Non-Alcoholic Fatty Liver Disease</u> (NAFLD), a growing problem in Western countries that is strongly associated with metabolic diseases. Studies show that individuals with fatty liver consume up to 2-3 times as much fructose as the average person.

**Bottom Line:** Excess fructose gets turned into fat, which can lodge in the liver and cause nonalcoholic fatty liver disease.

# 4. Sugar can cause insulin resistance, a stepping stone towards metabolic syndrome and diabetes

Insulin is a very important hormone in the body. It allows glucose (blood sugar) to enter cells from the bloodstream and tells the cells to start burning glucose instead of fat. Having too much glucose in the blood is highly toxic and one of the reasons for complications of diabetes, like blindness.



One feature of the metabolic dysfunction that is caused by the Western diet, is that insulin stops working as it should. The cells become "resistant" to it. This is also known as <u>insulin resistance</u>, which is believed to be a leading driver of many diseases, including metabolic syndrome, obesity, cardiovascular disease and especially type II diabetes

Many studies show that sugar consumption is associated with insulin resistance, especially when it is consumed in large amounts.

**Bottom Line:** When people eat a lot of sugar, it can cause resistance to the hormone insulin, which can contribute to many diseases.

#### 5. The insulin resistance can progress to type ii diabetes.

When our cells become resistant to the effects of insulin, the beta cells in our pancreas make more of it. This is crucial, because chronically elevated blood sugars can cause severe harm. Eventually, as insulin resistance becomes progressively worse, the pancreas can't keep up with the demand of producing enough insulin to keep blood sugar levels down. At this point, blood sugar levels skyrocket and a diagnosis of <u>type II diabetes</u> is made. Given that sugar can cause insulin resistance, it is not surprising to see that people who drink sugar-sweetened beverages have up to an 83% higher risk of Type II diabetes.

**Bottom Line:** Because of the harmful effects of sugar on the function of insulin, it is a leading driver of type II diabetes.

#### 6. Sugar can give you cancer.

Cancer is one of the leading causes of death worldwide and is characterized by uncontrolled growth and multiplication of cells. Insulin is one of the key hormones in regulating this sort of growth. For this reason, many scientists believe that having constantly elevated insulin levels (a consequence of sugar consumption) can contribute to cancer. In addition, the metabolic problems associated with sugar consumption are a known driver of inflammation, another potential cause of cancer.

**Bottom Line:** There is considerable evidence that sugar, due to its harmful effects on metabolism, can contribute to cancer.



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# 7. Due to its effects on hormones and the brain, sugar has unique fat-promoting effects.

Not all calories are created equal. Different foods can have different effects on our brains and the hormones that control food intake. Studies show that fructose doesn't have the same kind of effect on satiety as glucose. In one study, people drank either a fructose-sweetened drink or a glucose-sweetened drink. Afterwards, the fructose drinkers had much less activity in the satiety centres of the brain and felt hungrier. There is also a study where fructose didn't lower the hunger hormone <u>ghrelin</u> nearly as much as glucose did. Over time, because the calories from sugar aren't as fulfilling, this can translate into an increased calorie intake.

**Bottom Line:** Fructose doesn't cause satiety in the brain or lower the hunger hormone ghrelin nearly as much as glucose.



# 8. Because it causes massive dopamine release in the brain, sugar is highly addictive.

Sugar can be addictive for a lot of people. Like abusive drugs, sugar causes a release of dopamine in the reward centre of the brain. The problem with sugar and many junk foods is that

they can cause a massive dopamine release, much more than we were ever exposed to from foods found in nature. For this reason, people who have a susceptibility to addiction can become strongly addicted to sugar and other junk foods. The "everything in moderation" message may be a bad idea for people who are addicted to junk food because the only thing that works for true addiction is abstinence.

**Bottom Line:** Because sugar causes a large release of dopamine in the brain, it can cause addiction in a lot of people.





#### 9. Sugar is a leading contributor to obesity in both children and adults.

The way sugar affects hormones and the brain is a recipe for fat gain disaster. It leads to decreased satiety and can get people addicted so that they lose control over their consumption. Not surprisingly, people who consume the most sugar are by far the most likely to become overweight or obese. This applies to all age groups. Many studies have examined the link between sugar consumption and obesity and found a strong statistical association. The link is especially strong in children, where each daily serving of sugar-sweetened beverages is associated with a whopping 60% increased risk of obesity. One of the most important things you can do if you need to lose weight is to significantly cut back on sugar consumption.

**Bottom Line:** Because of the effects of sugar on hormones and the brain, sugar dramatically increases the risk of becoming overweight or obese.

### 10. It ain't the fat, it's sugar that raises your cholesterol and gives you heart disease.

For many decades, people have blamed saturated fat for heart disease which is the #1 killer in the world. However, new studies are showing that <u>saturated fat</u> is harmless. The evidence is mounting that sugar, NOT fat, may be one of the leading drivers of heart disease via the harmful effects of fructose on metabolism. Studies show that large amounts of fructose can raise triglycerides, small, dense LDL and oxidized LDL (very, very bad), raise blood glucose and insulin levels and increase abdominal obesity in as little as 10 weeks.

These are all major risk factors for heart disease. Not surprisingly, many observational studies find a strong statistical association between sugar consumption and the risk of heart disease.

## Cardio 101: Benefits and tips.

The term aerobic means "with oxygen." Aerobic exercise and activities are also called cardio, short for "cardiovascular." During aerobic activity, you repeatedly move large muscles in your arms, legs and hips. Your heart rate increases and you breathe faster and more deeply. This maximizes the amount of oxygen in your blood and ultimately helps you use oxygen more efficiently.



How well you use oxygen is called your aerobic capacity. When your aerobic capacity is high, your heart, lungs and blood vessels efficiently deliver large amounts of oxygen throughout your body. As a result, you feel more energized and don't tire as quickly. If you are a beginner to exercise, start with low to moderately intense cardio activities, so you can do them for long periods of time and gain many health benefits. Common examples include walking, bicycling, swimming, dancing and water aerobics, but don't limit yourself: You can choose any activities you enjoy, such as canoeing, in-line skating, golfing or martial arts.



If you haven't got enough aerobic exercise, you may use your entire aerobic capacity while walking up a flight of stairs. You'll realize this when you get to the top and feel out of breath. But if you're fit, you'll have no problem because your aerobic capacity is greater. That's just one example of how you can benefit from cardio exercise.

Cardio exercise and activities can also:

- Strengthen your heart and muscles.
- Burn calories.
- Help control your appetite.
- Boost your mood through the release of endorphins, which are feel-good chemicals released by your brain.
- Help you sleep better at night.
- Reduce arthritis pain and stiffness through joint movement.
- Help prevent or manage high blood pressure, heart disease and diabetes.

No matter what your age, aerobic exercise will help you in your daily activities and increase your stamina and endurance.

If you're a beginner, start slowly. You might walk five minutes in the morning and five minutes in the evening. Gradually add a few



"My doctor told me to start my exercise program very gradually. Today I drove past a store that sells sweat pants."

minutes to each session and then pick up the pace a bit. Soon you could be walking briskly for 30 minutes a day. Also consider hiking, cycling, jogging, rowing, elliptical training — any activity that increases your breathing and heart rate.

Include three elements in your workout:



**Warm-up.** Before each session, warm up for five to 10 minutes to gradually rev up your cardiovascular system and increase blood flow to your muscles. Try a low-intensity version of your planned activity. For example, if you plan to take a brisk walk, warm up by walking slowly. **Conditioning.** At your own pace, work up to at least 30 minutes of cardio a day to develop your aerobic capacity by increasing your heart rate, depth of breathing and muscle endurance.

**Cool-down.** After each session, cool down for five to 10 minutes. Stretch your calf muscles, quadriceps (upper thighs), hamstrings, lower back and chest. This after-workout stretch allows your heart rate and muscles to return to normal.

Moderate activity should cause you to breathe faster and feel like you're working. But if you experience unusual pain or alarming symptoms during exercise, stop immediately and seek medical attention.



# Your wonderful body!

Sometimes you may feel like your body is beginning to creak and fail you on the outside, but do you ever stop to consider the incredible work that is taking place inside of it? There is so much going on and everything fits together so well, that it's almost impossible to comprehend it. The following facts will remind you that there are miracles going on inside your body every single day.

- Your heart pumps approximately 7,500 litres of blood through its chambers every single day! It beats more than 100,000 times a day to achieve this incredible feat.
- You take around 17,000 breaths a day on average and don't have to think about a single one of them. Yet, if you want to stop breathing temporarily, you can voluntarily hold your breath. A typical pair of adult lungs can hold a huge six litres of air.
- Every day your body ensures you don't contact cancer thousands of times over. Cancer is formed when cells are altered in a way which re-programs their DNA and it's estimated that tens of thousands of cells suffer cancer-causing lesions every day. The body sends special enzymes scuttling around to inspect DNA strands for faults and fix them before they turn into tumours.



- Your brain doesn't stop working. It's estimated that about 50,000 thoughts pass through it each day on average, although some scientists put the figure closer to 60,000. That is a whopping 35-48 thoughts every minute.
- The cells in your stomach lining produce an alkaline substance every few milliseconds to neutralize stomach acid. If you didn't do this, your stomach would digest itself because some of the acids are strong enough to dissolve metals.
- You blink about 28,800 times every day with each one lasting just a tenth of a second. This is a voluntary reflex the body uses to keep the eyes clean and moist which is pretty crucial given that 90% of the information you process is visual and you can weigh up any visual scene in just 0.01 seconds. Consider how many people and objects you look at every day it's remarkable.
- Most of the body's energy is expelled via heat. Your body produces the same heat as 25 light bulbs over the course of a single day.
- Red blood cells literally shoot around the body taking less than 60 seconds to complete a full circuit. This means that each of yours makes 1,440 trips around your body every day delivering oxygen and keeping your body energised. Each cell lives for about 40 days before being replaced by a younger model. During their short life span, they make about 60,000 trips around your body.
- You shed more than 1 million skin cells every single day but they are constantly replenished automatically to save you



"My doctor told me to avoid any unnecessary stress, so I didn't open his bill."

from turning transparent and becoming rather exposed. Your skin is actually an organ, in fact it's the largest organ you have with a surface area of 2 square metres.

- Your hair (if you still have any) grows about half a millimetre per day and the average adult with a full scalp has around 100,000 on their head. So, that's a combined 50 metres of hair growth every single day.
- The brain and mouth work together to allow us to speak an average of 5,000 words each day, that's if you're a woman because studies suggest that men only speak 2,000 words each day. Both sexes utter 500-700 words/day of real value (ie, that get a job done or provide useful information).
- Your liver is so busy over the course of a day it is almost impossible to summarize its activities. It manufactures cholesterol, vitamin D and blood plasma, it identifies the nutrients your body needs and stores some away for future use, it filters 1.5 litres of blood every minute and produces a litre of bile every day to help you break down your food. Basically, you have a factory plant running inside of you every day.



- The glands in your mouth produce an incredible 1.5 litres of saliva every day. That's a lot of dribble! If this didn't happen your mouth would dry up and become overrun with bacteria and you wouldn't be able to digest your food.
- The average male's testicles manufacture 10 million new sperm cells every day. Those that aren't used age and are eventually broken down inside the body with any useful nutrients being absorbed and put to use.
- Each of your kidneys contains 1 million tiny filters that work together to filter an average 1.3 litres of blood every minute that's 1,875 litres every single day, despite each kidney

only being the size of a fist. If that wasn't enough, they also expel an average of 1.5 litres of urine from your body every day.

 Your body works over time to digest your food and the process starts before it even hits your mouth. When you smell food, your mouth automatically produces more saliva to prepare the digestive system for work. It takes about 6-8 hours for food to pass through the stomach and two days to complete the full digestion process. The average person will eat over 50 tonnes of food in



his or her lifetime – which seems ridiculous but never-the-less, is true!

• Your body cells are regenerating themselves every single day without any prompting. This means you get an entirely new set of taste buds every ten days, new nails every 6-10 months, new bones every 10 years and even a new heart every 20 years.

So next time you think that your body is starting to creak, just think about all the incredible things that are happening inside it every day because all of us really are a miracle.

## Medical products.

Click <u>HERE</u> for the list of products that are available for Gold Card holders from a Chemist on prescription from your doctor.

## Commercial.

THIS is a very touching commercial – definitely worth a look.



# Is there any link between mobile phones and cancer?

The possible connection between mobiles and cancer is controversial. Many years' worth of studies on mobiles and cancer have yielded conflicting results. Currently, there's no consensus about the degree of cancer risk — if any — posed by a mobile phone use.

The primary concern with mobiles and cancer seems to be the development of brain tumours associated with mobile use. Some research suggests a slight increase in the rate of brain tumours since the 1970s, but mobiles weren't in use during the 1970s. Instead, the subtle increases are more likely related to other factors — such as increased access to medical care and improvements in diagnostic imaging.

So what have researchers learned about mobiles and cancer? Here's an overview of various studies:

In one study that followed more than 420,000 mobile users over a 20-year period, researchers found no evidence of a link between mobiles and brain tumours. Another study found an association between mobiles and cancer of the salivary glands, however, only a small number of study participants had malignant tumours.



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Another study suggested a possible increased risk of glioma, a specific type of brain tumour, for the heaviest mobile users, but no increase in brain tumour risk overall. After evaluating several studies on the possibility of a connection between mobiles and glioma and a noncancerous brain tumour known as acoustic neuroma, members of the International Agency for Research on Cancer, part of the World Health Organization, agreed that there's limited evidence that mobile radiation is a cancer-causing agent (carcinogenic). As a result, the group classified radiofrequency electromagnetic fields as possibly carcinogenic to people.



Still, a series of recent studies can't tell the entire story. It often takes many years between the use of a new cancer-causing agent, such as tobacco, and the observation of an increase in cancer rates. At this point, it's possible that too little time has passed to detect an increase in cancer rates directly attributable to mobile use.

**The bottom line?** For now, no one knows if mobiles are capable of causing cancer. Although long-term studies are ongoing, to date there's no convincing evidence that mobile use increases the risk of cancer. If you're concerned about the possible link between mobiles and cancer, consider limiting your use of mobiles, or use a speaker or hands-free device that places the mobile antenna, which is typically in the mobile itself, away from your head.

# Six Best Doctors in the World

- 1. Sunlight.
- 2. Rest.
- 3. Exercise.
- 4. Diet.
- 5. Self Confidence. and,
- 6. Friends.

Maintain them in all stages of life and enjoy a full and healthy life.

# Self-Harm amongst Military Personnel.



Ian McPhedran National defence writer

There has been a disturbing jump in the number of self-harm incidents and suicides in the military with the Australian Veterans Suicide Register recording more than double the number of deaths between 2012 when there were 10 and the 25 so far this year.

A high-level source has said that top defence brass didn't even know that the self-harm list existed. When an ADF member is identified as being at risk of suicide, self-harm or harm to others, Defence mental health professionals undertake a comprehensive mental health and risk assessment.



A Service Police document entitled 'self-harm and suicide attempts 2008-2014' shows that the army dominates the list with 175 individual incidents followed by navy with 20 and the RAAF with 17.

A total of 174 of the 212 people who committed self-harm were males with 75 of them aged between 26 and 34 years. The next highest age bracket was 17 to 25 years with 62 instances followed by 35 to 43 years with 50 and just 20 in the 44 to 52 years age group.

The highest rank involved was a RAAF Wing Commander followed by an Army Major and several Captains while there were a number of Warrant Officers and Sergeants included in the disturbing statistics.

The number of incidents varies each year with last year's total of 58 a major increase on the 25 in 2013 which was a drop on the 2012 result of 37 and 35 in 2011.

Vice-chief of Defence Vice-Admiral Ray Griggs has said that Defence was very concerned about suicide and self-harm and has devoted resources, personnel and training



to mental health issues. He said while not all self-harm incidents were suicide attempts, all reports were considered serious and appropriately assessed and managed.

Vice Admiral Griggs said the military had a strong commitment to mental health and especially overcoming the stigma attached to issues such as depression and post-traumatic stress. He said that Defence was at the forefront of what is a truly national challenge. Defence research shows that military personnel had a higher rate of suicidal thoughts but a lower rate of suicide than the general community.

Clinical Director at the South Pacific Private Hospital in Sydney Dr Ben Teoh treats damaged veterans and he said he was seeing a growing number from



Afghanistan suffering from chronic Post Traumatic Stress Disorder (PTSD). He said many were not getting the support they needed and if not treated they could develop severe depression and become suicidal particularly if they were disinhibited by drugs or alcohol.



Dr Teoh says they are not getting better so they feel people do not appreciate the severity of their condition and they have a sense of hopelessness and many are very angry and anger is directly related to suicide.

Dr Teoh said the constant worry about being shot by both the enemy and the Afghan soldiers they were training had preyed on the minds of many veterans and made their circumstances very traumatic. He said these poor people can't distinguish between the enemy and peaceful people and he fears they might act on it."



### **SELF-HARM IN DEFENCE:**

2008 (six months) = 7 2009 = 21 2010 = 29 2011 = 35 2012 = 37 2013 = 25 2014 = 58

#### By age group:

17-25 years = 62 26-34 = 75 35-43 = 50 44-52 = 2053 plus = 5

#### By service:

Army = 175 Navy = 20 RAAF= 17



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