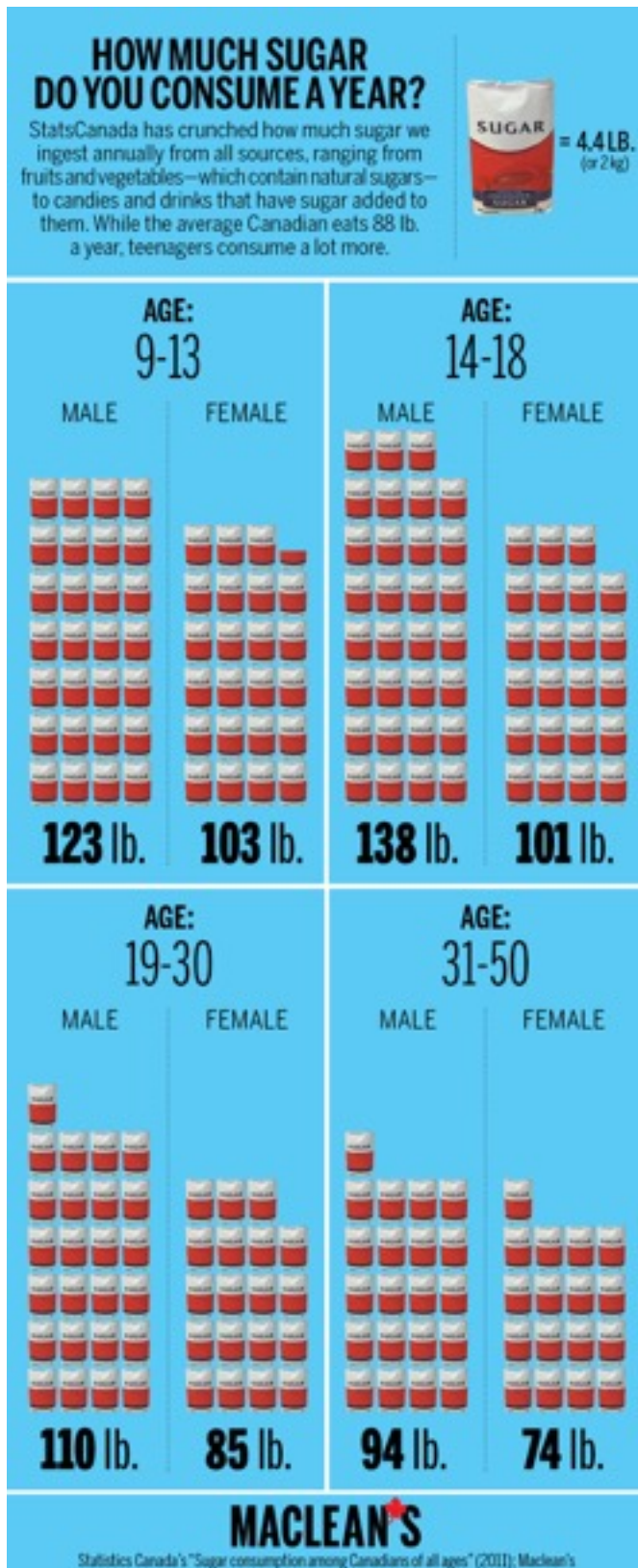

Hidden Sugar

Kelleigh ruins everything

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Introduction



You probably haven't spent a ton of time wondering what happens to your body after you eat something sugary – it goes in there with all the rest of the food you consume and keeps you alive – end of story. Well, sugar is definitely important to staying alive, carbohydrates are an important source of energy, and play a role in the functioning of the internal organs, the nervous system and the muscles, but our systems do not need sugar in the quantity that we have become accustomed to.

Before food processing, when sugar was mainly obtained from fruits and vegetables, and people consumed about 30 grams per day of it in these forms. Today, the average Canadian consumes about 88 pounds of sugar annually, or 109 grams/day.

The World Health Organization recommends we decrease our consumption of added sugar, also referred to as free sugar, to no more than 10% of our total daily calories (5% would actually be better according to the WHO). For the average person, 10% works out to be about 50 grams or about 12 tsp of sugar a day. According to the WHO, 5% would actually be better. This translates to 25 grams a day for both men and women (6 ¼ teaspoons).



So where is all of this sugar coming from? Like me, you probably think “pfft..I don’t eat that much sugar.” Then you read an infographic and get a rude awakening. This stuff goes by over 60 different names and is found in most processed foods.

If your goal is to keep free sugar limited to about 1-12 tsp a day, products like pasta sauce, condiments (ketchup, salsa, salad dressing) breakfast cereals, non-dairy milk, yogurt, as well as, baked beans can pitch that goal out the window in a hurry. But, the biggest source of free sugar intake comes from beverages. Limiting or just permanently removing pop, vitamin water, energy drinks, specialty coffees, tea, and alcohol are where the biggest gains are to be made.

So, we’ve all seen the literature and videos by which explains the impact of excess dietary sugar on our health (there are links in the reference section at the end to watch or learn more on this subject). Why then is reducing this largely unnecessary food item so bloody difficult for many of us?

Biologically, we’re programmed to seek it out, and our brains are wired to crave more. It’s a craving that the food industry understands and anticipates. With the right

approach – and stick-to-it-iveness – you can de-sugar your diet. A study published in the American Journal of Clinical Nutrition, demonstrated that by reducing your sugar intake, over time, your perception of overall sweetness will change. If you know that you are a ‘sugar addict’ going cold turkey may not be the best approach, it could backfire and trigger sweet cravings. Cut back slowly to acclimate your taste buds.

To find added sugars (the kind you want to limit) you have to begin to read ingredient lists and not food labels. It is not uncommon to find more than one type of sugar in a single product. Ingredients are listed in descending order by weight so, the higher up on the list you see an added sugar, the more sugar in each serving. Make note of the serving size as it could be as little as a 1/4 cup =(4 TBSP)= 2 ounces = 60 ml. For foods that do contain added sugars, compare nutrition labels to choose ones with fewer grams of sugar.



When baking, start changing your recipes by reducing the amount of sugar by one-quarter, then one-third and finally by one-half. Over time, you won't notice the difference. Avoid replacing sugar with artificial sweeteners.

Replacing real sugar with fake sugar won't lessen your desire for a sweet taste, it will only continue to fuel it. Artificial sweeteners are synthetic sugar substitutes which may or may not be sourced from naturally occurring herbs, trees or other substances. They are also known as intense sweeteners because they are many many times sweeter than naturally occurring sugar.

The intensely sweet taste can dull your taste buds to the taste of naturally sweet foods like fruit. Artificial sweeteners retrain taste buds to need more sweeter and sweeter foods. Studies have shown that daily consumption of drinks with artificial sweeteners creates a 35% greater risk of metabolic syndrome and a 67% increased risk for type 2 diabetes.(1) and frequent consumption of sweet-tasting, non-caloric foods interferes with metabolic function by altering the gut microbiota.(2)

HIDDEN NAMES OF SUGAR			
Agave syrup	Dehydrated cane juice	Lactose	Artificial Sweeteners
Agave nectar	Demerara sugar	Maltodextrin	Acesulfame-K
Barbados sugar	Dextrin	Maltose	Advantame
Barley malt	Dextrose	Malt sugar	Aspartame
Beet sugar	Diastatic malt	Malt syrup	Erythritol
Brown rice syrup	Ethyl maltol	Maple syrup	Hydrogenated starch
Brown sugar	Evaporated cane juice	Molasses	Hydrolysate
Buttered syrup	Fructose	Muscovado	Isomalt
Cane juice	Fruit juice concentrate	Palm sugar	Lactitol
Caramel	Galactose	Panocha	Malitol
Carob syrup	Golden sugar	Raw sugar	Mannitol
Castor sugar	Golden syrup	Rice syrup	Neotame
Coconut sugar	Glucose	Sorghum syrup	Saccharin
Coconut palm sugar	Glucose solids	Sucrose	Sorbitol
Confectioner's sugar	Grape sugar	Treacle	Stevia extracts
Corn sweetener	High-fructose corn syrup	Turbinado sugar	Sucralose
Corn syrup	Honey	Yellow sugar	Tagatose
Corn syrup solids	Icing sugar		Trehalose
Date sugar	Invert sugar		Xylitol

Here are a few surprising places where artificial sweeteners are used:

toothpaste & mouthwash	chewable vitamins
cough syrup & liquid medicines	chewing gum
no-calorie water & drinks	alcoholic beverages
salad dressings	frozen yogurt & frozen desserts
candies	protein & workout bars
baked goods	yogurt products
breakfast cereals	'lite' or diet fruit juice & beverages
prepared meats & deli items	nicotine gum

Leslie Beck, a registered dietician based at the Medisys Clinic in Toronto, and suggests eating whole foods like a snack of naturally sweet fruit with a source of protein such as nuts, cheese, plain yogurt, or even a hard-boiled egg to keep blood sugar stable between meals.

In order to have stable energy from sunrise to sunset, and be able to sleep through the night, requires us to keep our blood sugar stable and load up on the most nutrient-packed foods.

The secret to eating for fuelling with food is actually very simple: control your blood sugar. But if it really is that simple, why are so many of us having trouble doing this? Instead we go from craving-to-craving, binge-to-binge, nap-to-nap and then have trouble sleeping at night (and can't shake the jiggle from our middle).

Breaking Up with Sugar

1. Stop fluctuating and start balancing: Get your blood sugar levels steady first by eating breakfast within a half hour of waking and then eat smaller meals more often or make sure you are having healthy snacks every couple of hours. Eating a balanced meal while sitting down calmly is very important.

2. Start combining: Eat simple carbohydrates with a fat and protein at each meal and snack. When sugary foods are taken on their own it can quickly satisfy hunger and lift energy, but it leaves room for future cravings when energy begins to slump a few hours later.

3. Plan your day: Meal planning and grocery shopping might seem like an added stress, but really it can be a lifesaver. This way you can control your sugar on a meal to meal, daily or weekly basis. If you have a packed lunch and snacks ready to go, it is a lot harder to fall off the wagon.

4. Make a list: Why do you want to quit sugar? Make a thorough list of why it is important to you and then refer back to it when a craving hits.

5. Address underlying health issues: When sugar addiction is out of control it might be your body's cry for attention. Some issues that manifest as sugar cravings are stress/ adrenal fatigue, yeast overgrowth, hypothyroid, unbalanced hormones or a slow thyroid. A lot of people also link sugar with both positive and negative emotions.

6. Take a multi-vitamin/ mineral supplement: Sometimes it is not just a sugar craving but a craving for missing nutrients, like magnesium in chocolate or chromium in oatmeal cookies. B vitamins are especially critical.

7. Get a good night's sleep: Your cravings for sugar might be a cycle of needing the instant pick-me-up that sugar can give. The cycle is set in motion by not getting enough quality sleep, requiring an artificial energy boost by mid-morning.

8. Avoid triggers: Just like a substance abuse problem, sugar addiction can be perpetuated by constantly following the same patterns, like going to the same coffee shop or watching late night TV.

9. Do something else: Take your mind off sugar by finding a new activity to pursue – knitting, walking, reading, yoga, board games – the sky's the limit.

10. Get support: When things get rough call up a friend to talk things out. Better yet, get a friend, colleague or loved one to do the challenge with you!

*Fun fact: the symptoms of hypoglycaemia are also similar to those of sugar addiction. Sugar is labeled as an addiction because it stimulates the brain in a way that is similar to cocaine and alcohol, causing the release of the feel good chemicals dopamine and serotonin.

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- Constant hunger
 - Nervousness and shakiness
 - Intense sugar/sweet cravings
 - Dizziness or light-headedness
 - Sleepiness
 - Confusion
 - Difficulty speaking
 - Feeling anxious or weak
 - Crying out at night or having nightmares
 - Finding that your pajamas or sheets are damp from perspiration
 - Feeling tired, irritable, or confused when you wake up
 - Being unable to fall asleep
 - Waking up suddenly for no apparent reason with your mind spinning

Clearly, neither end of the spectrum serves our bodies, minds and souls very well. Of course, it doesn't end here. There are long term consequences to swinging from one extreme to the other.

- *Weight gain:* Associated with hormonal imbalance resulting from elevated cortisol and adrenalin levels.
- *Fatigued adrenal gland function:* Anxiety, depression, PMS, headaches, chronic fatigue, emotional swings, leads to suppressed thyroid function.

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- *Impaired mental health and cognitive performance:* Thinking, perceiving, learning, reasoning, remembering, understanding.
 - *Suppressed thyroid function:* Muscle stiffness, chronic exhaustion, morning nausea, hair loss, insomnia, weight gain, diminished sex drive, recurrent infections, depression, multiple food allergies/sensitivities, cystic breasts, menstrual irregularity.
 - *Insulin resistance/Type 2 diabetes (adult onset):* Inability to regulate blood sugar levels.
 - *Osteoporosis:* Decreased bone density.
 - *High blood pressure:* Associated with blood clots, heart attack and strokes.
 - *Lowered immune response:* Chronic infections, poor wound healing.
 - *Increase in inflammatory conditions:* Rheumatoid arthritis, colitis, autoimmune conditions, allergies/asthma, etc.
 - Reduced pain threshold over time.
 - Increased abdominal fat associated with heart attacks and strokes.

References and Further Education

- (1) <http://dx.doi.org/10.2337/dc08-1799> (MESA), Diabetes Care 2009 Apr; 32(4): 688-694. Diet Soda Intake and Risk of Incident Metabolic Syndrome and Type 2 Diabetes in the Multi-Ethnic Study of Atherosclerosis
- (2) <https://www.ncbi.nlm.nih.gov/pubmed/25231862> Nature 2014 Oct 9;514(7521):181-6 Artificial Sweeteners Induce Glucose Intolerance by Altering the Gut Microbiota

Videos

<https://www.youtube.com/watch?v=IEXBxijQREo&feature=em-subscriptions>
How Sugar Affects the Brain

<https://www.youtube.com/watch?v=9KltWbQyGiE>
Stress, Sugar and Healing

<https://www.youtube.com/watch?v=xDaYa0AB8TQ>
The Secrets of Sugar - the Fifth Estate - CBC News

https://www.youtube.com/watch?v=K4LzSH9qU_Q
The Truth About Sugar - BBC Documentary

Reading

<http://www.macleans.ca/society/health/death-by-sugar-the-biggest-health-crisis-of-our-time/>

<http://www.who.int/mediacentre/news/releases/2015/sugar-guideline/en/>

<http://www.cbc.ca/news/health/how-toxic-is-sugar-1.1894262>