

Alternative Explanation for Why People Get Fat

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It has been over seven years since Gary Taubes wrote the landmark article *What if it's All Been a Big Fat Lie?*. This piece was one of the first to hit the mainstream presses (The New York Times) and speak the truth: that fat is not an evil villain that must be banished from the food supply.

If you have a few moments, I highly recommend you watch Gary Taubes video slideshow above, as it further illustrates the problems with conventional medicine's explanations and treatments for obesity.

In countries around the world, waistlines are expanding so rapidly that health experts recently coined a term for the epidemic: globesity. One in three of the world's adults is overweight and one in 10 is obese.

Much of this can be blamed on the simple theory that if you take in more calories than your burn, you will gain weight. But the issue is much more complex than that.

There are several more or less obvious reasons for the dramatic rise in obesity since the 1970s, including:

- Increased consumption of highly processed food, especially fructose
- Increased portion sizes of restaurant food and grocery products
- Increased driving and computer use (sedentary activities)
- Increased modernization
- Certain medications
- Endocrine disorders and genetics
- Changing social perceptions of what is "normal" weight

There are also some not so obvious reasons why people are gaining weight at alarming rates. It may be that far more important than the number of calories you consume in a day may be the *type* of calories you consume.

And if you're eating a lot of fructose (and there's a good chance you are considering it's the number one source of calories in the United States!), it could be programming your body to become fat.

Fructose is Likely Fueling the Obesity Crisis

Too much fructose will pack on the pounds faster than a buffet of French fries and Krispy Kremes.

It isn't that fructose itself is bad -- it is the MASSIVE DOSES you're exposed to that make it dangerous.

If you received your fructose only from vegetables and fruits (where it originates) as most people did a century ago, you'd consume about 15 grams per day -- a far cry from

the 73 grams per day the typical adolescent gets from sweetened drinks alone. In vegetables and fruits, it's mixed in with fiber, vitamins, minerals, enzymes, and beneficial phytonutrients, all which moderate any negative metabolic effects.

Without getting into the very complex biochemistry of carbohydrate metabolism, it is important to understand some differences about how your body handles glucose versus fructose.

I will be publishing a major article about this in the next couple of months, which will get much more into the details, but for our purpose here, I will just summarize the main points.

Dr. Robert Lustig, Professor of Pediatrics in the Division of Endocrinology at the University of California, San Francisco, has been a pioneer in decoding sugar metabolism. His work has highlighted some major differences in how different sugars are broken down and used:

- After eating fructose, 100 percent of the metabolic burden rests on your liver. But with glucose, your liver has to break down only 20 percent.
- Every cell in your body, including your brain, utilizes glucose. Therefore, much of it is "burned up" immediately after you consume it. By contrast, fructose is turned into free fatty acids (FFAs), VLDL (the damaging form of cholesterol), and triglycerides, which get stored as fat.
- The fatty acids created during fructose metabolism accumulate as fat droplets in your liver and skeletal muscle tissues, causing insulin resistance and non-alcoholic fatty liver disease (NAFLD). Insulin resistance progresses to metabolic syndrome and type 2 diabetes.
- Fructose is the most lipophilic carbohydrate. In other words, fructose converts to activated glycerol (g-3-p), which is directly used to turn FFAs into triglycerides. The more g-3-p you have, the more fat you store. Glucose does not do this.
- When you eat 120 calories of glucose, less than one calorie is stored as fat. 120 calories of fructose results in 40 calories being stored as fat. Consuming fructose is essentially consuming fat!
- The metabolism of fructose by your liver creates a long list of waste products and toxins, including a large amount of uric acid, which drives up blood pressure and causes gout.
- Glucose suppresses the hunger hormone ghrelin and stimulates leptin, which suppresses your appetite. Fructose has no effect on ghrelin and interferes with your brain's communication with leptin, resulting in overeating.

So please do not get caught up in the common mainstream thinking that eating fat is what causes you to get fat. Much more so, it is eating an excess of simple carbs, including fructose, that will lead to a cascade of disastrous metabolic effects in your body.

The bottom line is: fructose leads to increased belly fat, insulin resistance and metabolic syndrome -- not to mention the long list of chronic diseases that directly result.

If you want further confirmation, check out this study published in the *Journal of*

Nutrition last year. Researchers found that fructose turned into body fat much more quickly than glucose, and that having it for breakfast changed how the body handled fats at lunch.

Said Dr. Elizabeth Parks, associate professor of clinical nutrition at UT Southwestern Medical Center and lead author of the study in *Science Daily*:

"Our study shows for the first time the surprising speed with which humans make body fat from fructose ... Once you start the process of fat synthesis from fructose, it's hard to slow it down ... It's basically sneaking into the rock concert through the fence. It's a less-controlled movement of fructose through these pathways that causes it to contribute to greater triglyceride [i.e. fat] synthesis."

Ironically, the very products that most people rely on to lose weight -- low-fat diet foods - - are often those that contain the most fructose! Even "natural" diet foods often contain fructose as a sweetener.

Sugar Can Also Interfere With Your Fat Cells' Messages

Contrary to the popular belief that fat cells should be banished, they are an active and intelligent part of your body, producing hormones that impact your brain, liver, immune system and even your ability to reproduce.

What's more, the hormones your fat cells produce impact how much you eat and how much fat you burn.

One of these hormones is leptin, which sends signals that reduce hunger, increase fat burning and reduce fat storage.

That is, if your cells are communicating properly and can "hear" this message.

If you eat a diet that is high in sugar and grains, the sugar gets metabolized to fat (and is stored as fat in your fat cells), which in turn releases surges in leptin. Over time, if your body is exposed to too much leptin, it will become resistant to it (just as your body can become resistant to insulin).

And when you become leptin-resistant, your body can no longer hear the messages telling it to stop eating and burn fat -- so it remains hungry and stores more fat.

Leptin-resistance also causes an increase in visceral fat, sending you on a vicious cycle of hunger, fat storage and an increased risk of heart disease, diabetes, metabolic syndrome and more.

It's Time to Cut Out the Fructose

Ideally I recommend that you avoid sugar, in all forms. This is especially important for people who are overweight or have diabetes, high cholesterol or high blood pressure.

But if you are just starting out and looking to cut out fructose first, the largest contributor is easily soda, for which HFCS is the primary sweetener. But fructose is not only in sugary drinks. It's in the vast majority of processed foods, even those you wouldn't think of as sweet, such as ketchup, soup, salad dressing, bread and crackers.

So even if you don't drink soda, if you eat processed foods you're likely consuming fructose -- and a lot of it.

Even *natural* sweeteners like agave syrup should be avoided, as it is a highly processed sap that is almost all fructose!

If you're looking for the occasional sweet treat, I recommend, in this order:

1. The herb stevia
2. Raw, organic honey
3. Organic cane sugar

Small amounts of whole fruit, which do contain fructose, are not a problem. If you're healthy, you can enjoy fruit in moderation according to your nutritional type.