

Can Eating Refined Carbs Make You Appear Less Attractive?

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STORY AT-A-GLANCE

- › Eating a meal rich in refined carbohydrates, like high-fructose corn syrup, may make you less attractive
- › Eating a high-glycemic breakfast decreased facial attractiveness in both men and women
- › Chronic consumption of refined carbs was also linked to reduced attractiveness
- › Chronic consumption of refined carbs leads to hyperglycemia and related hyperinsulinemia that influences growth factors and sex hormones, which in turn could affect attractiveness
- › Hyperglycemia caused by chronic consumption of refined carbohydrates may also accelerate glycation processes that influence skin aging

Eating a meal rich in refined carbohydrates, like high-fructose corn syrup, may make you less attractive, according to researchers with the University of Montpellier in France.¹ The physical repercussions of eating a diet high in refined carbs are well-known and include obesity, insulin resistance, Type 2 diabetes, cardiovascular diseases, Alzheimer's disease, high blood pressure and myopia.²

Chronic high blood sugar (hyperglycemia) and hyperinsulinemia, along with insulin resistance, are also associated with excess consumption of refined carbs. However, the researchers explored how eating meals high in refined carbs affects non-medical traits, namely facial attractiveness, revealing a significant connection.

Meals High in Refined Carbs May Make You Less Attractive

The study, which involved 104 adults, found eating a high-glycemic breakfast decreased facial attractiveness in both men and women. Chronic consumption of refined carbs was also linked to reduced attractiveness.

As for how refined carbohydrates affect facial attractiveness, two hours after the high-glycemic breakfast, when the facial photos were taken, subjects had hypoglycemia, or low blood sugar. "Hypoglycemia is known to have visible symptoms, as it affects blood flow and skin, which could be detectable on photos and thus affect attractiveness perception," the researchers explained.³

Chronic consumption, meanwhile, leads to hyperglycemia and related hyperinsulinemia, which influences growth factors and sex hormones. "Chronic hyperinsulinemia influences the synthesis of androgens, which are the precursors of male and female sex hormones. It has been shown that facial femininity/masculinity can be influenced by sex hormones, which in turn could affect attractiveness," according to the study.⁴

Hyperglycemia caused by chronic consumption of refined carbohydrates may also accelerate glycation processes that influence skin aging. "As skin aging directly impacts age appearance, hyperglycemia could affect age perception. Moreover, age is known to influence attractiveness," the researchers noted.⁵

Diets rich in hyperglycemic carbohydrates are also known to promote acne,⁶ while the researchers added that diet's influence of facial attractiveness could be linked to evolution:⁷

"In general, traditional foods (pre-industrial or non-refined) do not generate hyperglycemia, with the exception of ripe fruits or honey which are energetically rewarding but are traditionally seasonal or scarce. In fact, humans did not evolve with constant access to food provoking a high glycemic response, even after the rise of agriculture in the Neolithic era.

It has been previously proposed that in the current industrial dietary environment, consumption of food that generates hyperglycemia is no longer a signal of quality, because this type of food is now not limited. Its massive consumption generates phenotypic and physiological changes in the body, such as obesity and Type 2 diabetes, which are attracting medical attention due to their life-threatening effects.

It is thus not surprising that other negative effects not directly affecting health are also generated, such as reduced facial attractiveness."

What Are Refined Carbohydrates?

Refined carbohydrates or sugars, which are also sometimes referred to as free sugars, include those that are added to ultraprocessed foods and drinks. High-fructose corn syrup is an example of a refined sugar. These sugars are linked to health problems such as dental decay and heart disease, as well as cancer.⁸ Many health organizations and governments, including in the U.K., recommend limiting intake of free sugars, but not intrinsic sugars.⁹

Intrinsic sugars, also known as naturally occurring sugars, are those found within the cellular structure of foods, including whole fruits and vegetables. These sugars are part of the food's natural composition, not added during processing, and come with the beneficial nutrients and fiber found in whole foods, which can slow down sugar absorption and mitigate its impact on blood sugar levels.

One of the primary differences between these two types of sugars is that refined sugars, as well as many starches, are a common cause of endotoxin production in your gut, which destroys mitochondrial function and results in cancer metabolism.

The fructose present in whole foods does not typically result in the production of endotoxin. This is one of the primary differences between refined sugar and fructose from ripe fruit and helps explain [why refined sugars fuel cancer](#).

Ultraprocessed Foods Are the No. 1 Source of Refined Sugars in US Diet

In the U.S., 57.9% of energy intake comes from ultraprocessed foods, which not only tend to be high in refined carbohydrates but also **linoleic acid** from seed oils. Further, ultraprocessed foods contribute 89.7% of the energy intake from added sugars to Americans' diets.¹⁰

Consuming heavily processed junk food takes a toll on your whole body, including your brain. Research published in JAMA Neurology demonstrated that consuming ultraprocessed foods, such as breakfast cereal and soda, could lead to cognitive decline and increase your risk of Alzheimer's disease.¹¹

However, instead of using 50% or 60% of the daily caloric intake of ultraprocessed food as high consumption, this study defined high consumption as "more than 20%." The study didn't identify whether there was a dose-dependent effect. In other words, they only looked at whether eating more than 20% of the daily caloric intake in ultraprocessed foods would affect cognitive decline. If a person ate double or triple that amount, would the rate of cognitive decline be greater?

In a comprehensive assessment of the link between ultraprocessed food consumption and cancers, researchers from Imperial College London's School of Public Health also found these cheap convenience foods are linked to an increased risk of developing and dying from cancer.¹²

Overall, consuming more ultraprocessed foods was linked with a greater risk of developing any cancer, as well as ovarian and brain cancers specifically. It was also associated with an increased risk of dying from cancer, including ovarian and breast cancers.¹³

Why Refined Sugars Fuel Cancer

All dietary carbohydrates are digested into sugars called glucose. Glucose, in turn, can be metabolized (burned) for fuel using two different pathways. First, the glucose is metabolized into pyruvate. The pyruvate can then either enter the glycolysis pathway in the cytoplasm of the cell and produce lactate (this is an inefficient backup pathway), or it can be converted into acetyl-CoA and shuttled to the mitochondrial electron transport chain, which results in optimal energy production.

The glycolysis pathway is great for quick fuel when you are activating your Type 2 muscle fibers, such as during high-intensity exercise. But if this is the primary way you burn glucose, then you are in a catastrophic metabolic state because you're promoting insulin resistance and diabetes and creating loads of lactate as a waste product instead of healthy CO₂ and metabolic water.

Lactate increases reductive stress, which causes reverse electron flow in the mitochondria and increases the ROS to 3% to 4%, which is 30 to 40 times more than when glucose is burned in the mitochondria. What's more, glycolysis generates only two ATP for every molecule of glucose, which is 95% less energy than would be generated if the glucose were metabolized in your mitochondria.

You're also promoting cancer, because cancer cells preferentially use glycolysis. But it's not sugar that is driving the cancer process per se. It's really rooted in mitochondrial dysfunction, and fatty acid oxidation (metabolism of fats instead of glucose) is part of what causes that dysfunction.

Nearly everyone believes that cancer feeds on sugar, but that is simply inaccurate. The truth is the polar opposite. Cancer cells have such seriously damaged mitochondria they are simply incapable of burning sugar in the mitochondria and must rely on the backup system to survive.

This is why the most effective strategy is to not jump to low-carb keto to avoid feeding the cancer, but rather to use metabolic therapies that fundamentally address why the cells are unable to oxidize sugar in the mitochondria.

Once you fix the mitochondria and allow the cancer cells to metabolize glucose in the mitochondria, the cancer regresses back to normal healthy cells because the mitochondria work again and they don't require to use the emergency backup system.

Refined sugars and many starches are more likely to cause gut dysbiosis that leads to the production of endotoxin. This endotoxin is one of the factors that destroys mitochondrial function, resulting in cancer metabolism (the Warburg Effect), where glucose is burned through glycolysis.

Your Body Needs Carbohydrates

There's a common misconception that all sugar, i.e., carbohydrates in general, will act as fuel for cancer, but nothing could be further from reality. I've been following the work of the late Ray Peat through his student Georgi Dinkov. Peat was a biologist and thyroid expert; Dinkov is a bioenergetic researcher.

One of the foundational concepts of health that I've had to radically revise my thinking on as a result is the idea that eating a low-carb diet long-term is the best way to optimize your metabolic and mitochondrial health.

I now realize that this was misguided, and the reason for that has to do with the fact that your body requires glucose, and if you aren't eating it you will go into a hypoglycemic coma and die. Your body has safeguards to prevent that, and the major one is the hormone cortisol. Cortisol's primary purpose is to raise your blood sugar when it is too low and you don't have enough glycogen reserves in your liver.

Cortisol increase your blood sugar by breaking down your muscles, bones and brain. It sacrifices your lean muscle mass to release amino acids that your liver converts to glucose in a process called gluconeogenesis. So, ultimately, cortisol also is going to increase inflammation and impair your immune function. And it increases food cravings. So, you do not want your cortisol to be elevated.

For the past few months, I've increased that to 425 grams of carbs per day, mostly in the form of ripe fruit. I've noticed dramatic beneficial changes in my blood work as a result.

Increasing my carbs by 400% resulted in a highly counterintuitive 10% decrease in my fasting blood sugar. I also lost 10 pounds despite increasing the number of calories I was consuming – the opposite outcome of what most "experts" would predict.

In short, a low-carb diet is best implemented as a temporary strategy to restore metabolic flexibility. Further, when you're in a low-carb state, lipolysis is elevated, which releases inflammatory polyunsaturated fatty acids (PUFAs) such as LA from your cells that are then converted into dangerous oxidative linoleic acid metabolites (OXLAMs) that will damage your tissues.

But once metabolic flexibility is regained, adding more carbs back in will help to lower cortisol, which is highly inflammatory. Ultimately, glucose is the ideal fuel for your mitochondria and the one that will create the most energy with the least amount of "exhaust" in the form of free radicals causing oxidative stress that damages your mitochondria, cell membranes and proteins.

It will also create the most carbon dioxide in your body which is highly beneficial for your health. But you don't want to consume refined sugars to increase your carbohydrates. Instead:¹⁴

- Keep PUFA intake below 10 grams; below 5 grams would be even better
- Avoid high-fructose corn syrup when adding carbs to your diet
- Stick with sugars from ripe fruit, raw honey (make sure it's not adulterated with high-fructose corn syrup, as many are) and/or pure organic cane sugar

Sources and References

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