

Is This Why Strawberries Don't Taste Good Anymore?

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✓ Fact Checked

March 25, 2023

STORY AT-A-GLANCE

- › Farming practices on conventional farms are highly reliant on pesticides, fungicides and herbicides to protect commonly planted monocrops. A 2023 study offers insight into why you may have noticed a difference in the flavor and sweetness of your store-bought strawberries
- › Data revealed two commonly used fungicides dramatically reduced the fruit's soluble sugars, nutrients, flavor and aroma. As the paper demonstrated, organically grown heirloom varieties have better flavor and greater nutrition
- › Traditional farming practices are under threat. While globalists are buying premium farmland that is not being used for organic, biodynamic or regenerative farming practices, the federal government has been keeping under a microscope since 2015 Amos Miller's organic farm, where produce is grown without pesticides, GMOs, gasoline or fertilizer
- › Regenerative farming practices help protect the land and human health but do not support the financial gain of the food industry. As more people recognize the need to steer clear of pesticides, the demand for organic seeds has grown. Take care to purchase organic seeds harvested from organically grown plants

Farming practices on conventional farms are highly reliant on pesticides, fungicides and herbicides to protect commonly planted monocrops. A 2023 study¹ offers insight into why you may have noticed a difference in the flavor and sweetness of your store-bought strawberries.

According to polls, the No. 1 reason people choose organic food is to avoid pesticide exposure.² Not only do these chemicals threaten the environment, but they also pose a very clear and direct risk to human health.

Glyphosate, the active ingredient in Monsanto/Bayer's Roundup herbicide, has made headlines because it's the most used agricultural chemical in history and because the International Agency for Research on Cancer (IARC) has identified it as a probable human carcinogen.³

The IARC also reached the conclusion that there was strong evidence for genotoxicity and based these conclusions on a review of roughly 1,000 studies, including those done on people exposed to glyphosate through their jobs and other experimental animal models and lab studies.

Since the IARC identified glyphosate as a probable carcinogen in 2015,⁴ additional significant health concerns have been raised including linking glyphosate to fatty liver disease⁵ and kidney disease.⁶ Increased usage is well correlated⁷ with a concurrent increase in the incidence of multiple cancers including breast, pancreatic, kidney, thyroid, liver, bladder cancers and myeloid leukemia.

The ubiquitous nature of glyphosate use in farming practices has led to a rising number of studies demonstrating the adverse effects it has on human health. According to data from the CDC,^{8,9} more than 80% of children and adults in the U.S. have detectable levels of glyphosate in their urine. As damaging and dangerous as glyphosate has been to the soil¹⁰ and human health, it is not the only chemical used in conventional farming.

The researchers in the featured study¹¹ sought to determine the mechanism fungicides use to change the flavor and nutrient value of strawberries. Interestingly, a 2003 study¹² evaluating the effect of glyphosate on microbial activity in the soil discovered that after several years of use, the level of actinomycetes and fungi increased.

Pesticides Produce Bland Strawberries

The flavor and nutritional value of fruit are the result of their unique composition and essential nutrients. As ZME Science reports,¹³ fungicides are designed to interrupt cell processes to control fungi that damage crops. However, these same mechanisms can also damage the fruit crop, which interferes with the production of the volatile compounds and nutrients that are essential to strawberry flavor.

The researchers noted that consumers have complained about the change in flavor and while pesticides had a likely impact, the mechanism was unclear. The study began by growing three groups of strawberries under identical conditions. The researchers then applied fungicides to two groups of berries while they were still young and green, while the control group did not receive an application.

The researchers applied the two most commonly used fungicides on strawberries, boscalid (BOS) and difenoconazole (DIF). At the end of the growing season, all three groups were identical in size and color. The researchers then analyzed the chemical makeup and found a striking pattern between those that were treated with fungicide and those that were not.

The strawberries sprayed with the pesticide had a dramatic reduction in soluble sugars and nutrients, such as Vitamin C. Some of the sugars in the mature fruit were also converted to acid, which made the fruit less sweet. Additionally, oxidative damage from the pesticide also muted the scent and flavor.

The researchers found that boscalid also directly impacted the genes involved in producing sugars, nutrients, amino acids and volatile compounds. When blind taste tests were used, untreated strawberries were consistently preferred.

Flavor and Nutritional Value Are Linked

As ZME Science notes,¹⁴ the flavor profile of fruits and berries is linked to their nutritional value. For example, the sweetness arises from glucose or fructose that's present in the fruit. The scent or aroma is linked to esters and terpenes, which are aromatic compounds known for their pleasant smell.

These compounds play an important role in the scent and flavor developed during winemaking.¹⁵ Terpenes are found mostly in plants and are the major constituents of essential oils.¹⁶ Some common sources include tea, citrus fruit and cannabis. They have a long history in traditional medicine for antiplasmodial and antiviral properties. One terpene widely used in natural folk medicine is curcumin, which has anti-inflammatory, anticancer, antioxidant and diuretic properties.

A 2022 paper¹⁷ published in PNAS notes that consumers often find heirloom varieties grown in the garden more flavorful than those same fruits purchased at the store. Commercial breeders often focus on traits that are important to producers, such as yield. In this paper, researchers suggest that by helping breeders improve flavor, it can also improve customer satisfaction and sales.

However, as this paper and the featured paper demonstrate, heirloom varieties may have better flavor and greater nutrition because they are organically grown without pesticides, herbicides and fungicides to impede their growth and nutritional content.

Traditional Farming Practices Under Threat

Traditional farming practices, including crop rotation and natural pest control without pesticides, have been **under threat by globalists** and the federal government. For example, tech billionaire Bill Gates, cofounder and former CEO of Microsoft, may seem like a strange fit for the role of America's top farmer, but he has been quietly amassing massive tracts of land under the cover of investment firm Cascade Investment LLC.

He now owns a minimum of 242,000 acres of prime U.S. farmland.¹⁸ It was the 2020 purchase of 14,500 acres in Washington state that caught the attention of Eric O'Keefe. In his magazine "The Land Report,"¹⁹ he calls any sale of more than 1,000 acres "blue moon events."

Digging deeper, he found the purchase was recorded as a small Louisiana company. "That immediately set off alarm bells," O'Keefe told the New York Post.²⁰ It was 14,500 acres in the heart of some of the most expensive acreage in America. It turned out the

small company was acting on behalf of Cascade Investment for Gates, who owns land in Washington, Illinois, Iowa, California, Louisiana and multiple other states.

Gates has a big vision for all that land but, unfortunately, it does not involve organic, biodynamic or regenerative farming practices, which are essential to healing the ecosystem and producing truly sustainable, nourishing food for future generations. Instead, the acreage may be earmarked to produce more genetically engineered corn and soy crops which are the foundation for what Gates hopes will become an increasingly synthetic, ultraprocessed food supply.

The federal government has also gotten involved in the fight to protect GMO seed crops when they brought Amos Miller's organic farm under the microscope from officials at the USDA. The Food Safety Network has repeatedly headlined Miller's plight to the point he has his own blog tag²¹ and pages of content covering the government's issues with a farm that produces organic products, free of pesticides, herbicides and GMO seed.

In 2016, the U.S. court allowed armed law enforcement officers to accompany the USDA Food Safety and Inspection Service investigators to the home and farm of the known Amish pacifist Miller. David Gumpert reported²² that during these inspections the USDA demanded the names of Miller's customers going back to 2012.²³ Miller refused, citing contractual requirements for keeping the information private.

Seven years later, in 2022,²⁴ Miller found himself consistently under the USDA microscope. In one foray reported in Rebel News, armed federal employees again paid a visit to the farm. Not only does Miller not use pesticides and herbicides, but the farm also does not rely on gasoline or fertilizer.

As Rebel News notes, Miller's bottom line is not affected by external forces such as the war between Ukraine and Russia, which has not been the experience of others who do not farm like Miller. Federal agencies have resorted to using force and steep fines to make Miller compliant. The farm's private food club members pay a premium to get food from an independent farmer who does not use GMO products and does not process meat and dairy at USDA facilities.

Regenerative Farming Protects the Land and Your Health

Will Harris is a regenerative farming pioneer who runs White Oak Pastures in Bluffton, Georgia. He produces high-quality grass fed products, including beef and other animal products, and is an inspirational example of how to convert from conventional to regenerative agriculture and thrive financially.

Before the mid-1990s, Harris ran his farm the way his father and most every other farmer in the country had – “as a very linear, monocultural cattle operation,” he said during an episode of The Joe Rogan Experience.²⁵

While it’s an imperfect emulation, it helps to restore the natural cycles that have been broken by industrial farming. As noted on the White Oak Pastures webpage, “Regenerative agriculture is a system of farming principles and practices that seeks to rehabilitate and enhance the entire ecosystem of the farm by placing a heavy focus on soil health with attention also paid to water management, fertilizer use, and more.”²⁶

Before switching to regenerative farming, Harris spent 20 years operating the farm industrially, including using antibiotics and hormone implants to make cows grow faster. But the technologies that industrial agriculture relies on to “improve” food production are destructive.

“Pesticides, chemical fertilizers, GMOs, subtherapeutic antibiotics and hormone implants ... These technologies result in horrible, unintended consequences that adversely affect our land, water, climate and livestock,” Harris wrote on his blog.²⁷

Further, they’ve allowed agriculture to become scalable to the point that a limited number of multinational corporations control most of the food supply. A centralized food system benefits no one but those who control it, and it puts consumers at risk.

Choose Heirloom Organic Seeds for Organic Crops

As more people recognize the need to steer clear of pesticides, they are growing their own produce in potted gardens and their backyards. Although the demand for organic

seeds has grown, [High Mowing Organic Seeds](#) is one of the only companies that produces organic seeds from organically grown plants. Most seed companies do not grow their own seeds, and while you may grow the plants organically, the seeds may not have organic roots.

Tom Stearns is the owner and founder of High Mowing Organic Seeds, which he started as a hobby in 1996. By the third year, he had sold \$18,000 worth of seeds and \$34,000 in the fourth year. The growing demand required that Stearns turn his hobby into a business that quickly became a half-million-dollar company.

Stearns was interviewed by Growing a Greener World in 2018,²⁸ during which he talked about how important choosing organic seeds is to create a healthy dietary plan. While there are rules regarding chemical usage for commercial food crops, the rules are more relaxed when it comes to growing conventional seeds, which technically aren't a food product:²⁹

“When you’re growing food conventionally, there are rules about all the different chemicals you can use and not use. When you’re growing seeds conventionally, there’s also rules, but there are a lot more chemicals that are allowed.

So, seed crops get sprayed with a lot of things, because it’s not a food crop, so it’s not going to translate into that risk for people, but of course it’s still poisons in the environment. So, when you grow seeds organically, you don’t have those poisons, and it’s a major reduction of them compared to the conventional comparison.”

Another eye-opening fact revealed by Stearns is that 95% of the acreage of organic vegetable farms is planted with conventional seeds. This isn't necessarily by choice, as the organic seed industry is still in its infancy, which means there isn't always enough to go around, or the correct varieties aren't always available.

In fact, half the vegetables grown today have no commercial sources — you have to get them through seed trades.³⁰ High Mowing Organic Seeds is trying to bring more organic

seed varieties to organic farmers, which they say makes a major difference compared to using conventional seeds.

If you garden, seeking out high-quality organic seeds will help you produce the most robust plants and healthiest food. Another alternative, however, is to save seeds from your own plants. When you save seed from your own best-performing plants, on your land and in your own ecosystem, you gradually develop varieties better adapted to your own soil, climate and growing conditions.

Large seed suppliers rarely "rogue" the fields to pull out inferior or off-type plants, so the open-pollinated seeds they sell have inferior specimens in the mix. High Mowing is one of the rare seed companies that do this, but you can also select your own seed for uniformity and quality.

You can control the gene pool for optimal germination, ripening time, flavor, storage, disease resistance and color. After a few seasons, more and more of your plants will have all your personally selected traits.

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