

Food Is Less Nutritious Than It Used To Be

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✓ Fact Checked

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STORY AT-A-GLANCE

- › Multiple challenges contribute to the declining nutritional value researchers find in plants, grasses and grains, including monocropping, genetically modified crops, high-yield practices, and the destruction of soil health
- › As nutrient density falls so does public health. The U.S. spends \$4.3 trillion on health care each year, which is more than any other nation. Deficiencies are linked to a higher incidence of viral illness, gluten sensitivity, autism, dementia, depression and more
- › The U.S. government admits poor eating has led to nearly half of all Americans living with at least one chronic disease. However, while junk and snack food companies seek to garner consumers interested in organic production, it's essential to note that organic ingredients can't make junk food healthy
- › Biodynamic and regenerative farming choices offer hope after chemical-based agriculture has destroyed rural economies, raised air and water pollution, destroyed pollinators and biodiversity, and increased soil erosion

One of the largest studies¹ to draw attention to the declining nutrient value in fruits and vegetables was published in 2004 in the Journal of the American College of Nutrition. The researchers used data gathered from 1950 to 1999 and found that out of 43 foods evaluated, there were reliable declines in six nutrients. Those nutrients include protein, riboflavin, vitamin C, calcium, iron and phosphorus.

The researchers evaluated data on seven other nutrients for which they found no statistically reliable changes. The team concluded that the declines were easily

explained by changes in cultivated varieties and these declines may be a trade-off between cultivation to raise yield and an impact on nutrient content.

Your body depends on essential nutrients for growth and development, and to maintain optimal health. When you experience deficiencies, it can have a significant impact on immunity, wound healing, bone health and much more. Your body uses protein to build muscles, manufacture hormones and create antibodies. Vitamin C is an integral part of your immune system, and riboflavin, which is one of the eight B vitamins, helps convert food into energy.^{2,3,4}

Deficiencies in any of these nutrients have a fundamental impact on overall health and wellness. Nutrient-dense foods provide your body with more of what it needs to support good health. Nutrient density considers both macronutrients, such as protein, fats, and carbohydrates, and micronutrients, which include vitamins and minerals necessary for normal physiological functioning.

Declining Nutritional Values Affect Produce and Meat

Research within the last five years has also demonstrated a decline in nutrients, including iron content in vegetables grown in Australia.⁵ The researchers looked at the iron content of vegetables and legumes and noted a decrease of 30% to 50% in sweet corn, redskin potatoes, cauliflower and green beans, and pronounced reductions in legumes. The researchers warned that as plant-based diets become more popular, monitoring nutrient composition is "strongly recommended."⁶

Another study noted a 23% decline in protein content in wheat⁷ and notable reductions in manganese, zinc, magnesium and iron. The impact of declining nutrient density in produce and grain affects not only vegetarians but also meat eaters. Livestock are fed less nutritious grasses and grains, which in turn has an impact on many animal-derived products that are not produced on biodynamic or regenerative farms, including meat, dairy and eggs.

These studies demonstrate that it turns out you can simultaneously gain weight and be starved of vital nutrients essential to good health. Donald R. Davis of the University of Texas at Austin was the lead author of the 2004 study and worked on subsequent papers on the same subject. He commented:⁸

"Efforts to breed new varieties of crops that provide greater yield, pest resistance and climate adaptability have allowed crops to grow bigger and more rapidly but their ability to manufacture or uptake nutrients has not kept pace with their rapid growth."

In addition to declining nutrient value, world crises are making a bad problem worse. Ukraine has been called "the breadbasket" of Europe⁹ as the country is responsible for producing and exporting roughly 12% of all food calories traded on the international market. Russia is also a major exporter, and the two countries together account for nearly 30% of global wheat exports, nearly 20% of the world's corn and more than 80% of the sunflower oil.

The U.S. Department of Agriculture projected that wheat exports from Russia and Ukraine would be down by more than 7 million metric tons in 2022. According to a report in January 2023,¹⁰ the exports from Ukraine had reached 23.6 million metric tons of grain, which had fallen from 33.5 million recorded at the same time in the previous season.

Ukraine's government reported that the grain harvest would reach 51 million metric tons, a decline from the record 86 million in 2021 because of a loss of land and lower yields. By July 2022,¹¹ the UN had brokered the Black Sea Grain Initiative between Russia and Ukraine. This allowed Ukraine to export grain through the Black Sea from ports that had been blocked since mid-February.

While the initiative helped facilitate exports from Ukraine, price volatility for wheat had reached its highest level in more than 10 years. International markets adjusted and adapted, resulting in higher-priced foods that nearly everyone has experienced at the grocery store.

According to data from the Inter-American Institute for Cooperation on Agriculture (IICA), the change in wheat exports from 2021 to 2022 dropped by 5.3 million metric tons in Ukraine, 8.5 million metric tons in Argentina and rose by 10.5 million metric tons in Russia.¹²

Perfect Storm Threatens Public Health

As crop nutrient density declines, so does public health. Nutritional deficiencies are linked to a higher incidence of viral illness,¹³ gluten sensitivity,¹⁴ autism,¹⁵ dementia¹⁶ and depression¹⁷ to name a few. Multiple challenges have arisen that appear to be contributing to this issue of food insecurity.

As Davis noted, high-yield plants have resulted in lower nutrient density. National Geographic explains¹⁸ that crops with higher yields are grown in fields with finite resources. This means that the nutrients must be distributed across a greater volume of produce, which in effect, dilutes the nutrient value.

Another challenge to growing nutrient-dense crops is soil damage from high-yield practices, such as tilling, monocropping and GMO seeds. Most crops benefit from partnerships with soil fungi as it improves the plant's ability to absorb nutrients and water.¹⁹ Yet these high-yield practices hurt beneficial fungal growth.

Growing just one crop species, also called monocropping or monocultures, increases the farmers' efficiency in the short-term but it also increases the risk of disease and pests, and leads to soil exhaustion.²⁰ Using genetically modified crops gained widespread commercial use by 1996 and today, most corn, soybean, cotton and canola are genetically modified.²¹

While some continue to promote genetically modified seeds and the subsequent high-dose herbicides and pesticides used to control weeds and pests, further study reveals how this damages soil microbes, and subsequently our food supply. Glyphosate is one of the most widely applied broad-spectrum herbicides in agriculture.

However, as the Soil Association notes,²² glyphosate negatively affects soil bacteria and harms beneficial fungi that live near plant roots. In past years, glyphosate has increased the severity of crop diseases, possibly by altering the balance of soil microbes. It also has had a negative impact on the activity of several earthworm species.

Another factor that plays a role in reducing crop nutrient density is the use of nitrogen fertilizers. These fertilizers consistently favor the growth of pathogenic fungi²³ while harming beneficial fungi necessary for strong plant growth. Yet corporate farmers have grown reliant on nitrogen and phosphorus fertilizers.

The combination of the breakdown in logistics during the pandemic and the later conflict in Russia and Ukraine led experts to predict fertilizer prices could double in the following growing seasons.

Nearly 40% of the global export of potash, a key fertilizer ingredient, and 48% of ammonium nitrate is exported from Russia.²⁴ Prices rose in 2022 but dropped in the first quarter of 2023. However, experts believe this trend may not continue and likely is giving farmers false hope, as experts anticipate price reductions could be temporary.²⁵

Improving Soil Health Can't Make Junk Food Healthy

As more consumers are looking for organic products, more manufacturers of snacks and junk foods are seeking to capitalize on the trend. For example, Annie's, a division of General Mills, advertises "advancing regenerative farming practices"²⁶ in their limited-edition Organic Mac & Cheese and Organic Bunny Grahams.

However, there is a range of practices that could be referred to as regenerative, even though they're only slightly different from conventional, chemical farming. The fact that General Mills is partnering with Ben & Jerry's to promote their brands with regenerative agriculture for highly processed junk food like mac and cheese, cookies and CAFO ice cream is another strange path forward.²⁷

While it will take farmers, businesses and consumers to advance regenerative practices, you have to be skeptical of this odd alliance of junk food products to promote

regenerative agriculture.

The falling nutrient density in produce is especially concerning if consumers follow manufacturers' push for a primarily plant-based diet. Much, but not all, of the fake food promoted by globalists is plant-based. The rest is a combination of lab-grown slurry altered using advanced technology to increase consumer appeal.²⁸

The underlying truth is that improving soil health and raising plants' nutrient density cannot make junk food healthy. Instead, most Americans need to start eating real food to save the planet and improve their health. Eating organically produced foods is important, but when these are processed foods, it doesn't matter if they're organic and regeneratively grown, your health still suffers from nutritional imbalances.

Biodynamic and Regenerative Farming Choices Offer Hope

Chemical-based agriculture has destroyed rural economies, raised air and water pollution, destroyed pollinators and biodiversity, increased soil erosion and lost fertility. The U.S. spends \$4.3 trillion on health care each year,²⁹ which is more than any other nation and yet public health just keeps getting worse.³⁰

It's clear that we live in an increasingly toxic environment, eating cheap junk-filled foods, while nearly half of all Americans live with one or more chronic diseases that even the government admits "many of which are related to poor quality eating patterns."³¹ In 2010,³² over 90% of Americans did not eat the U.S. Food and Drug Administration's recommended intakes of the most important vitamins and minerals necessary for health and the number didn't change in 2020.³³

And it's apparent from mounting evidence that lower nutrient density means it will take more food to achieve the same nutritional goals. Research consistently demonstrates that organically produced foods are significantly higher in antioxidants, especially in no-till regenerative systems.³⁴ While there are separate efforts to create certifications for regenerative agriculture, it's worth noting that the "gold standard" certification already exists.

Biodynamic farming is a holistic approach that focuses on the natural use of the soil. It was first introduced by Austrian scholar Rudolf Steiner,³⁵ and is an approach that provides far superior harvests when compared to conventional chemical-based agriculture. Yet at the same time, it also helps to heal the soil damage caused by conventional growers.

Biodynamic farming provides a higher volume of crops with increased nutrient density and biodynamic farms are completely self-sustaining. For example, most of the feed for the livestock originates on the farm. Organic certifications are not nearly as stringent as biodynamic certification.

For example, a farmer can section off part of the farm for organic goods,³⁶ but 100% of a biodynamic farm must be compliant. The best hope for the future of the world's food supply is for farmers to embrace biodynamic certification in greater numbers rather than trying to invent new regenerative standards to compete with organic certifications.

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