Climate Change Causing Less Nutrition, More Sugar In Our food

How Excess Carbon Dioxide Diminishes Nutrients in Plants

Our food system has become a game of Jenga, and we're running out of blocks to pull from the bottom. Disease and challenging growing conditions threaten popular foods like coffee, chocolate, bananas, and wheat. Bees, nature's perfect pollinator, are stressed and disappearing rapidly. Plants are also less nutritious, thanks to climate change.

Climate change leads to more carbon dioxide in the environment. Plants enjoy the extra food, growing more quickly, but they are unable to sustain that growth. Too much carbon dioxide affects the amount of macro and micronutrients that in plants. What we eat contain fewer nutrients than ever before due to their "junk food" diet. Do we need to put plants on a low-carb diet?

The Deets

Scientists know that foods are less nutritious than they used to be but previously attributed that discrepancy to modern agriculture's preference for higher yield crop varieties. Irakli Loladze, a mathematician studying the effect of CO2 on pants for 15 years, finds that climate change has an equal or greater effect on plant health and nutrition content.

> *Every leaf and every grass blade on earth makes more and more sugars as CO2 levels keep rising…We are witnessing the greatest injection of carbohydrates into the biosphere in*

> *human history—[an] injection that dilutes other nutrients in our food supply."*

How diluted are we talking here? A 2017 research paper estimated that by 2050, many of the staple crops we rely on like rice, wheat, barley, and potatoes will lose 7.6%, 7.8%, 14.1%, and 6.4%, of their protein, respectively. This is devastating news for countries that rely on those crops for protein. Eighteen countries could lose more than five percent of their dietary protein, and 148.4 million people will also be at risk.

Plants are also losing many of the essential micronutrients we need. One in three people is deficient in zinc. The concentration of calcium, magnesium, potassium, zinc, iron, and other minerals in the food we eat has by 8% because of rising carbon dioxide. Scientists and climate deniers alike agree the amount of CO2 in the atmosphere is still growing. Will we be able to counter the effects that has on the food we eat?

https://www.youtube.com/watch?v=igLaQ4Gi_0Y

No Easy Solutions, No Quick Fixes

Farming takes time, and results from changes are not always apparent. A new crop takes 15 to 20 years to arrive in stores. Other potential fixes like mass scale composting or reducing carbon dioxide in the air are also time-consuming processes. The well-being of the food we eat and our food system are deteriorating in a world where fewer people have the resources to produce their own food. Are we at the point where we are unable to stay healthy through food alone? Only time will tell…yet it's the biggest unknown in this entire equation.

Recommended:

- Healthy Sugar Alternatives & More

- *Start Eating Like That and Start Eating Like This – Your Guide to Homeostasis Through Diet*

Sources:

- *The Great Nutrient Collapse* – Politico
- *Climate Change is Making Plants More Nutritious* – Grubstreet
- *Estimated Effects of Future Atmospheric CO2 Concentrations on Protein Intake and the Risk of Protein Deficiency by Country and Region* – Environ Health Aspects
- *Hidden shift of the ionome of plants exposed to elevated CO2 depletes minerals at the base of human nutrition* – ELife