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What is “Green” Nutrition?

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What does it really mean to eat “green”? It comes down to four main points: eat organic, eat local, limit processed foods, and choose a plant-based diet.

Eat organic:

Organic production methods have less impact on the environment than conventional farming methods. Organic farming improves soil fertility and decreases groundwater pollution from nitrogen and phosphorous fertilizers.¹ Crop rotation, a core concept in organic farming, provides many environmental benefits: enhances soil conservation and builds organic matter, provides weed, disease, and insect control, and enhances water quality and conservation.² Organic farming also uses less energy. One study found that organic farming methods used 26–53% less energy than conventional farming.³

Eat local:

Purchasing as many foods as possible from local growers can help reduce greenhouse gas emissions. The reason is simple—the further away the food you eat is produced, the more resources are used to transport that food to your local grocery store. If the typical American household buys local foods, greenhouse gas emissions related to producing and transporting that food could be decreased by 4–5%.⁴ This is a relatively small impact compared to some of the other choices you can make, but it certainly is still a factor in choosing a greener diet. So, go to those farmers markets, buy local produce from your grocery store, or look into joining a CSA.

Limit processed foods:

This one just makes sense, when you think about it. Taking a potato, transporting it to a factory, processing it to turn it into a potato chip (or instant mashed potatoes or frozen French fries), packaging it, then transporting it to a grocery store is much more energy- and resource-intensive than just buying a potato. So, this is just another reason to buy more whole foods rather than processed and packaged foods. As an added bonus, your waistline and pocketbook may thank you!

Choose a plant-based diet:

Hands down, a vegetarian diet is easiest on the planet. Producing animal foods, especially red meat and dairy products, causes ecological harm.

We'll start with the problems with livestock production. Livestock production negatively impacts the environment through many means: the animals themselves, their waste, the use of pasture land, the production of animal feed, and product processing.

- Livestock production accounts for 18% of greenhouse gas emissions, which is more than transportation's contribution. It also emits 37% of the world's methane, 65% of nitrous oxide, and 64% of ammonia.⁵
- Livestock production accounts for 8% of global human water use, most of that for feed production.⁵ Looking at it another way, over 5,000 gallons of water are required to produce 1 pound of beef. In comparison, it only takes about 120 gallons of water to produce 1 pound of cereal grain.⁶ Livestock production contributes to water pollution through erosion, pesticides and heavy metals used in feed production, and antibiotics given to animals, all of which work their way into the water supply. 37% of pesticides used and 50% of the antibiotics consumed in the U.S. are attributed to livestock production.⁵
- Livestock production greatly damages soil as well. Traditional farming methods commonly used to grow the immense amount of animal feed needed in this country erode the soil and uses fertilizers and pesticides that disrupt the soil ecosystem and poison local wildlife. Overgrazing of grasses and soil compaction by livestock is also detrimental.⁷

On average, red meat is about 150% more greenhouse gas-intensive than chicken or fish (all of which are worse than a vegetarian diet in this aspect).⁴ However, the productions of poultry and fish cause other environmental problems.

Large scale chicken farming contributes to air and water pollution through the large amount of animal waste it produces (mainly manure). Manure contains nitrogen and phosphorous as well as hormones, antibiotics, and heavy metals which are part of the chicken feed. These substances can result in emission of ammonia and other gases into the air and pose a risk of water contamination.⁸ As an example, the Delmarva Peninsula is one of the top chicken producing regions in the nation, and the excess manure this makes damages local streams and rivers and delivers large amounts of nitrogen and phosphorous to the Chesapeake Bay.⁹

Fish have been highly affected by pollutants in the environment already—mainly methylmercury and PCBs (polychlorinated biphenyls). If that doesn't make you think twice about eating fish, then we'll look at the fishing industry's impact on the environment itself. Overfishing has caused a steep decline in the world's natural population of fish. Most of the world's fishing zones are considered to be unsustainable.¹⁰ If you prefer to avoid wild-caught fish, the other option is farmed fish. However, farmed fish are generally produced in a way that makes

them even higher in PCBs. Fish farming also may also cause ecological harm, such as polluting surrounding water, depleting wild fish stocks to make feed, introducing risks to wild fish species when farmed fish escape, and endangering sea animals.¹¹

So again, there are four main changes you can make to “green” your diet: eat organic, eat local, cut back on processed foods, and aim for plant-based or vegetarian diet. For many people, making all of these changes at once is not realistic. However, if you start with a couple of small changes, such as starting to shop at your local farmers market, and switching to a vegetarian diet one day per week, you’ll already be working your way towards a diet that is friendlier to the planet.

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