Why Plant-Based Eating?

Why are so many people adopting a plant-based diet?

More and more people are going plant-based and it's no surprise! There are lots of good reasons to eat a plant-based diet.

For animals

Most people love animals. In a 2008 survey[1] conducted by the Humane Research Council, almost three out of four Americans surveyed agreed that we should eventually end all forms of animal cruelty and suffering.

However, human consumption of meat and animal products relies on our use of animals. It's not possible to extract meat, eggs, milk or anything else from an animal without harming the animal; even if it were, the animal ends up being slaughtered when they're no longer useful. If you love some animals and use others, you're living a paradox.

In many countries, animals are supposed to be stunned before their throats are slit, usually via a bolt gun to the head or electrocution. It often doesn't work.

Dairy cows are kept perpetually pregnant or lactating and their calves are taken from them within hours of birth causing immense distress to mother and baby. Most of the female calves and all the males are trucked off to slaughter when they are less than a week old, as they are surplus to the industry and their mothers' milk is taken by humans.

Likewise, male chicks are superfluous to the egg industry, so they are suffocated or crushed up in a huge industrial macerator as soon as they're born. Female chickens have the tips of their beaks (which are more sensitive than a human fingertip) cut off without anesthetic to prevent them pecking each other.

These are only a few facts about the reality of the animal exploitation industry.

"We mustn't forget that animal agriculture is an industry. It places profit as a priority and like any other industry it cuts corners and costs, with scant regard for the animals themselves. They are treated like commodities, products, numbers and money."

[Jimmy Pierson, journalist & spokesperson for the Vegan Society UK]

[Vegan] "A philosophy and way of living which seeks to exclude - as far as is possible and practicable - all forms of exploitation of and cruelty to, animals for food, clothing or any other purpose; and by extension, promotes the development and use of animal-free alternatives for the benefit of humans, animals and the environment. In dietary terms it denotes the practice of dispensing with all products derived wholly or partly from animals."

[Definition of 'vegan' by the Vegan Society, first published in their Memorandum and Articles of Association in 1979]

For health

Eating plants rather than animal products can be incredibly beneficial to human health. In a huge study in the United States[2] with almost 100,000 participants, scientists assessed people on five different diets and confirmed that people on a vegan diet

had better health: vegans were less likely to be overweight or have diabetes, high blood pressure or high cholesterol than people who ate even small amounts of animal products.

In 2016, systematic reviews [3,4] of the scientific literature looking at the health effects of plant-based diets found that people on plant-based diets tended to be slimmer, had lower cholesterol and were less likely to get heart disease, diabetes and certain types of cancer than people who eat meat and other animal products.

We've worked out that we don't need to eat animals, so why would we?

"Policies in favour of the global adoption of plant-based diets will simultaneously optimize the food supply, health, environmental and social justice outcomes for the world's population. Implementing such nutrition policies is perhaps one of the most rational and moral paths for a sustainable future of the human race and other living creatures of the biosphere that we share."

['Sustainability of Plant-Based Diets: Back to the Future', Sabate & Soret, American Journal of Clinical Nutrition, 2014][5]

For the environment

When we think about saving the environment, we usually think of recycling, shopping with re-usable bags and having shorter showers. However, did you know that the single most effective thing you can do to reduce your personal carbon footprint and resource use is to stop consuming animal products?

Raising animals for food or their products is an inefficient use of resources, including land, water, fossil fuels and even food itself, when compared to consuming plant foods directly.

Consider these challenging statistics:

- Producing soymilk requires on average 297 litres of water per litre, whereas producing cows' milk requires on average 1050 litres of water per litre of milk produced.[6]
- On average it takes 2350 litres of water to produce a single 150-gram beef burger, compared to 158 liters for a soy burger. The soy burger requires less than 7% of the water that the beef burger requires for production.[6]
- The beef, sheep and dairy industries have a negative impact on land quality. They account for 92% of forest clearance and land degradation in Australia.[7,8] Reducing these industries would free up land for other uses such as food production, forestry and the production of plant-based foods, fuels and fabrics.
- Producing food from animals uses far more energy (often in the form of non-renewable fossil fuels) than producing food from plants.[9,10] Producing animal protein requires *eleven times* as much fossil fuel as producing the same amount of protein from plants.[9]
- The biggest source of food waste in the world is raising animals for food. Most of the edible grain produced globally is used to feed animals for meat, milk and egg production rather than being used directly for humans to eat.[11] This represents a huge waste of food. For example, six kilos of plant protein are consumed by livestock to produce one kilo of meat protein. Approximately five kilos of wild fish are fed to farmed fish to produce one kilo of farmed salmon![12]

Not only is the production of animal products an inefficient use of resources, it is also a major contributor to greenhouse gas emissions.

- Methane produced by animals is much more dangerous than CO2 as a contributor to global warming, having a warming potential at least 72 times that of CO2 over a 20-year period.[8] In Australia the farming of livestock will contribute substantially more to global warming over the next 20 years than all of our coal-fired power stations put together.[13]
- A 2002 Australian Greenhouse Office report found that beef production generated 51.7kg of CO2eq per kg of meat produced, compared with wheat at 0.4kg of CO2eq per kg.[14]
- Ruminant animals raised for meat are a major cause of methane production. Not surprisingly, University of Chicago researchers found that all diets containing animal products generated higher amounts of greenhouse gas emissions than a vegan diet.[15]

A 2014 climate study[16] listed 'human diet changes' as one of three possible approaches to mitigating climate change and concluded that **even if the other measures were taken, 'only by also assuming reduced meat and dairy consumption** do we find agricultural emission levels that do not take more than half of the total emissions space in 2070. We therefore conclude that **dietary changes are crucial** for meeting the 2^{0}C target with high probability'.

"A substantial reduction of impacts would only be possible with a substantial worldwide diet change, away from animal products."[17]

['Assessing the Impacts of Consumption and Production: Priority Products and Materials', United Nations Environmental Program, 2010]

For humanity

Most people in wealthy counties don't realise that what we choose to eat can actually impact the availability of food to poorer, underfed people. The world is producing more than enough food to feed everyone, but not everyone can access it or afford it.

One factor which affects this is that around half the world's agricultural land is devoted to farming livestock, which is much less efficient than if the land was used to produce plant foods for human consumption.

As people of higher economic status continue to demand meat and dairy products, the pressure on the earth's resources goes up, which drives up commodity prices and reduces the affordability of food for the poor.

In a 2016 study[18] which assessed the relationship between land resources, food prices and the UN's Sustainable Development Goals, researchers found that 'in many countries, future demand for meat and animal products will have a major impact on resource availability and food security trends.' A shift away from the consumption of meat and dairy products in developed economies 'would decrease food prices in developing countries, reduce mortality and deforestation and enable progress towards food security for all.'

What would happen if everybody adopted a plant-based diet?

In a study, from the 'Oxford-Martin Programme on the Future of Food' published in

2016,[19] researchers from Oxford University projected the future effects (to the year 2050) of the global adaption of different diets. That is, they modelled what would happen if everybody in the world hypothetically adopted a certain type of diet, projecting outcomes for greenhouse gas emissions, mortality rates and healthcare spending.

They did this with four different diets: what people currently eat, an omnivorous diet that adheres to current recommendations for reducing impact, a vegetarian diet and a purely plant-based (vegan) diet.

Here's what they projected would happen by 2050 if everybody in the world adopted a **vegan (plant-based)** diet:

- Global greenhouse gas emissions would be cut by a projected 70% (compared to 63% for vegetarian and 29% for an omnivorous diet that adheres to current guidelines).
- Healthcare-related costs could be reduced by $1067 billion US dollars per year (compared to $973 billion for vegetarian and $735 billion for the recommended omnivorous diet). Also, economic savings due to reduced greenhouse gas emissions were projected as approximately $570 billion US dollars per year (compared to $511 billion for vegetarian diet and $234 billion for the recommended omnivorous diet).
- Approximately eight million diet-related deaths would be avoided every year (compared to 7.3 million for the vegetarian diet model and 5.4 million for the omnivorous diet). They found that "moving to diets with fewer animal-sourced foods would have major health benefits".

"We project that health and climate change benefits will both be greater the lower the fraction of animal-sourced foods in our diets".[19]

[Springmann et al, 'Analysis and valuation of the health and climate change benefits of dietary change', 2016, page 1]

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