



Alton Sustainable Eating

Healthy Food, Healthy Planet



Is it really the time you spend in the shower that causes the worst of the world's water shortages? Maybe not!

By Dee Panes, ACAN's consultant on Sustainable Eating

If you're concerned about the amount of water you use, then it might be time to stop counting the seconds you spend in the shower and turn your attention to what you're eating.

Why?

With more than 83 billion animals reared and slaughtered globally for the food industry every year, industrial scale animal agriculture impacts our environment in enormously detrimental ways. It is not only one of the leading contributors to climate change and deforestation, but it also uses vast quantities of water.

So, how much of an impact?

Well:

- **50%** of the world's land is used for agriculture and more than three-quarters of this is used for livestock.
- **70%** of global freshwater withdrawals are used for agriculture.
- **78%** of global ocean and freshwater eutrophication is caused by agriculture. Eutrophication is the pollution of waterways with nutrient-rich water.
- **33% to 40%** of agriculture's water demands are for meat and dairy.

Yes, of course, almost everything we eat has consumed water somewhere in the process of being made and processed but beef, for example, is credited with one of the biggest water footprints. Simply because every kilogram of beef produced requires around **15,400 litres** of water, according to a report from [UNESCO's Institute for Water Education](#). There are variations of this depending on where on the globe food is produced but it's still high.

And as climate change threatens longer and more severe droughts, it's important to scrutinise just how much water goes into making the food we eat. This includes, feed, crop production, drinking water, cleaning of abattoirs and equipment, and production of the final product.

The United Nations has labelled the livestock industry "a key player in increasing water use" and "probably the largest sectoral source of water pollution".

So, what about plant-based diets, are they any better for the environment?

In comparison, plant-based diets use far less resources to produce plenty of calories and nutritious food for people to eat, especially in western countries like here in the UK.

Without knowing some interesting statistics like those outlined above, it might not seem like what's on our dinner plates could impact the planet's water supply, but a growing amount of evidence suggests that the food we choose to eat can influence these levels. According to Water Calculator the largest portion of an individual's water footprint stems from their diet. In order to lower our water footprints, there's no better place for us to start than taking a closer look at our food choices.

What does the term “water footprint” actually mean and how is it calculated?

The term “water footprint” is used to indicate the amount of fresh water that any given process or activity uses. Growing and processing crops and livestock consumes large quantities of water; therefore, the water footprint of food is high. Animal products, especially, like meat, dairy and eggs (all of which tend to require more water than fruits, vegetables and beans) have an even higher water footprint. It would appear that our diet choices can make up the largest part of our personal water footprint.

Water footprints of food items are made up of three sectors: the amount of rainwater used (green water footprint), the amount of water extracted from surface and groundwater for irrigation (blue water footprint), and the amount of water needed to dilute pollution generated by producing the food (grey water footprint).

What impact can we make if we change to a plant-based diet?

Studies show that a healthy meat-free diet reduces our water footprint by up to 55%. The United Nations Environment Assembly says that plant-based burgers require between 75% – 99% less water; 93% – 95% less land; and generate 87 – 90% fewer emissions than regular beef burgers.

And it is clear that in order to feed a growing global population while remaining within proposed safe environmental boundaries for greenhouse gas emissions, land use, water use, water pollution and biodiversity loss, we will need to change our diets. Interestingly, other means to reduce the environmental impact of the food system (for example, technological advances, closing yield gaps, reducing food waste) will not be enough without major dietary change.

If you would like further information about transitioning your diet to a plant predominant and/or exclusive diet, please contact ACAN by either:

- a) responding to this post
- b) send a DM
- c) email altonclimatenetwork@gmail.com

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