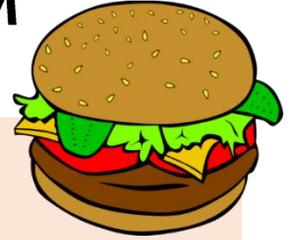


THE DAILY MEAT PROBLEM



WHAT DOES IT TAKE TO MAKE A HAMBURGER?

To produce one quarter-pound of beef uses:

1741.29 litres of water

This consists of the water the cows drink + water required to irrigate the crops that they eat + service water e.g. the water used to wash the animals, clean the waste, dirt and excess milk from the floor in the barn and to constantly clean the slaughterhouses

+ 6.12 kilos of feed

Many cows bred for meat are fed on corn and soy which require an enormous amount of fossil fuel energy in the form of agrochemicals. Vast quantities of chemical fertilizer takes vast quantities of oil. A typical cow will consume 284 gallons of oil in his lifetime.

+ 6 square metres of land

Forests will be cleared or wild land made into pasture land to graze cattle – a large contributor to global deforestation

+ 57.2 grams of methane

Ruminant animals (cows, sheep) produce high levels of methane when they burp and fart – which they do quite regularly!

= 2kg carbon footprint.

The carbon footprint measures all of the greenhouse gases released - all the fossil fuels burned or released to raise the crops that feed the animals and to transport the beef once the cattle have been butchered. This does not include any of the energy required to actually cook the meat or the fossil fuel energy used for packaging, processing and powering factory farm facilities

Producing one hamburger (normally eaten in less than 5 minutes) uses all of the resources above – and uses the same amount of fossil fuels as driving your car for 20 miles. To put into context: the average American consume [209 pounds](#) of meat per year. Multiply that by the population of three billion, and we're easily looking at 627 billion pounds of meat a year.

DID YOU KNOW Eating meat regularly is a fairly new phenomenon in most societies. Still today, in many parts of the world meat and dairy have been (and continue to be) luxury foods as they are unaffordable and unsustainable for many people.

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THE PLASTIC PROBLEM



DID YOU KNOW...

- Throwaway/single use plastic packaging makes up 40% of the demand for plastic
- 40% of plastic packaging waste is disposed of at sanitary landfills, 14% goes to incineration facilities and 14% is collected for recycling. Incineration creates the most CO2 emissions among the plastic waste management methods.
- Usage of single use plastic has increased dramatically in the past decade. By 2050 plastic will be responsible for up to 13% of the total “carbon budget” – equivalent to 615 coal-fired power plants
- According to research by the Ellen MacArthur Foundation, by 2050 the ocean will contain more plastic (by weight) than fish. Studies also found that tiny particles of plastic are already in our food chain and an average person who consumes seafood ingests 11,000 tiny pieces of plastic per year.
- Plastic takes more than 400 years to degrade, so most of it still exists in some form. Only 12 percent has been incinerated.

SINGLE USE PLASTICS GENERATE:

- Huge production and transportation costs yet they are used only once, mostly for a few minutes or seconds, then thrown away
- Long lasting rubbish: Polyethylene terephthalate (PET) (most plastic bottles), which is highly recyclable plastic, but can take about 400 years to degrade naturally.
- Micro-plastics which are almost impossible to clean up
- Many plastics contain chemical additives which can leach back out of the material, getting into our food, our water, and ultimately our bodies.

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THE FLYING PROBLEM



DID YOU KNOW...

Air travel generates large amounts of greenhouse gases – the specific types emitted depend on the type of aircraft in use

- The number of flights globally is expected to reach 39.4 million in 2019. This figure is over one million higher than the prediction for the previous year and represents an increase of over 50 percent from the previous decade
- By 2020, global international aviation emissions are projected to be around 70% higher than in 2005.
- U.S. airlines alone burned about 16.2 billion gallons of fuel during the twelve months between October 2013 and September 2014
- The IPCC has estimated that aviation is responsible for around 3.5 percent of anthropogenic climate change, a figure which includes both CO₂ and non-CO₂ induced effects.

AIR TRAVEL

- Requires fuel for flying and for passengers and staff to arrive and move through the airport. Also land for infrastructure, airport buildings, taxiways and runway. Plus all of the materials included in building aircrafts/airports
- Contributes to the acceleration of global warming and ocean acidification(in the case of CO₂).
- (IPCC) estimated that aviation's total climate impact is two to four times that of its direct CO₂ emissions alone.
- Is seeing significant improvements in fuel efficiency through aircraft technology and operational management. However these improvements are being continually eclipsed by the increase in air traffic volume.

SOURCES

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THE FOOD WASTE PROBLEM



DID YOU KNOW...

- About 1.3 billion tonnes or one third of the food produced in the world for human consumption every year is lost or wasted throughout the supply chain, from production to consumption.
- More people are reported to die from hunger every day than AIDS, malaria and tuberculosis combined. But at the same time, nearly one-third of the food that is produced in the world is lost or wasted due to one reason or the other.
- Food waste has environmental, financial and social impacts
- Food production use energy, fuel and water that let off greenhouse gases contributing to climate change. This energy, fuel and water is wasted if the food is wasted, not only needlessly contributing to climate change, but more so through processes involved in waste.
- The irrigation water used globally to grow food that is wasted would be enough for the domestic needs (at 200 litres per person per day) of 9 billion people

WHAT IS THE COST OF WASTING FOOD?

- We need 100 buckets of water to produce just one loaf of bread, 54 buckets of water to rear one chicken breast, six buckets of water to grow one potato, one bucket of water to grow one tomato.
- Throwing out one kilogram of beef is wasting 50,000 litres of water that were used to produce that meat. Throwing one glass of milk down the drain is wasting 1000 litres of water.
- Food waste uses more water than any country in the world.
- If we stopped throwing good food away it would save the equivalent of at least 17m tonnes of carbon dioxide. That's the environmental equivalent of taking one in five cars off UK roads.
- Food wasted could be used to feed the poor and the nearly one billion malnourished people in the world - if we saved just one-quarter of all the food that's wasted across the world each year, it would be enough to feed all of the people on the planet who are hungry, malnourished, or starving.

SOURCES

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