MEAT EXHAUSTION DAY 2024

Global Alert!

How meat is eating up the planet

2024 spotlight on the USA

Meat Exhaustion Day around the world, showing regional and country results

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Did you know?

The USA already reaches its Meat Exhaustion Day on March 8, 2024.

This means that the USA has already consumed 100% of its maximum recommended yearly meat intake by the 3rd month of the year!

FOUR PAWS follows up on the 2023 Meat Exhaustion Report: When meat is eating up the planet, with a focus on consumption in countries.

Global meat production and consumption are unsustainable for the planet and human health.

The Planetary Health Diet guideline recommends eating a maximum of 301g of meat per week.
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Meat overconsumption is a particular problem of the Global North.

Global Meat Exhaustion Day is reached in the month of June. This means that globally, by the end of the year, we consume twice as much meat as the planet and our health can withstand. Global meat consumption indeed exceeds our planetary and health boundaries, but the global picture does not reflect reality to the fullest. It is evident that high-income countries not only have a higher meat consumption pattern but also have higher environmental and climate impacts. Australia, for example, consumes as much as five times more meat than what is healthy or sustainable for the planet! Meanwhile, many countries on the African continent consume less meat than the maximum recommended amount and do not have a Meat Exhaustion Day. In the Global North, meat intake needs to be reduced by more than 70%! This recommendation needs to be followed by high-income countries where food costs and access to food are managed by governments and retailers through policies and guidelines.

What is Meat Exhaustion Day?\(^a\)

Meat Exhaustion Day determines the day on which the maximum recommended meat consumption per year has been reached, with respect to the Earth’s limit (planetary boundaries) and considering human health requirements (health boundary). It is comparable to the Earth Overshoot Day (also known as ecological debt day).

The date is calculated by comparing a country’s actual average consumption of meat per person per year with the recommendations of the Planetary Health Diet\(^1\). A diet recommended by the EAT-Lancet commission that can be adopted on the country level as was done by Denmark, as well as on the retail level as was done by LIDL\(^2,3\).

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\(^a\) For further details on the calculation, see pp. 25–28 of the 2023 report Meat Exhaustion Day: How meat is eating up the planet. Data source for the global, regional, and country calculations are based on FAOSTAT, in particular the 'Food Supply Quantity', which is part of FAO’s yearly updated Food Balance Sheets. We used the most recent available data, of the year 2021. Note that South Asia (including countries like India and Bangladesh) and Africa do not have a Meat Exhaustion Day. The data source for the USA was extracted from the USDA’s 2022 dataset. You can also check the Planetary Health Diet webpage for more information on the dietary recommendations and planetary boundaries.
Our food system must change to counter the harmful effects of animal-based foods.

The problem lies in the whole current food system that supplies immense quantities of cheap meat through factory farming\(^4\).

Around 92.2 billion farmed land animals are used for food (meat, dairy, and eggs) every year globally\(^6\). Animals in farms suffer immensely under the current meat production system that commodifies and exploits them\(^7\).

Where animal welfare measures fall short, animals live in harrowing conditions, leading to sickness and disease. This is true for all farmed animals including chickens\(^8,9,10\), pigs\(^11,12\), beef cattle and cows\(^13,14\).

Human health and animal welfare are interconnected\(^5,15\). One of many examples include the negative impacts of farming-induced antimicrobial resistance in humans, which is a top global public health threat\(^17,18,19,20\). Public health is alarmingly affected due to the overconsumption of meat, especially processed red meat which, in 2019, was responsible for 896,000 deaths according to the Global Burden of Disease Study\(^21\).

The current farming system causes environmental damage. Agricultural expansion is responsible for 88% of global deforestation and is the most powerful driver of habitat loss on Earth, as well as water use and pollution\(^22,23\). Greenhouse gas (GHG) emissions from animal agriculture make up around a sixth of all man-made emissions and are the biggest contributor of methane emissions (\(<30\%\)) and nitrous oxide (\(-67\%)\(^24,25,26,27,28\). Whereas, phasing out animal agriculture has the potential to cut GHG emissions by half and stabilize them to reach the goals set by the Paris Agreement – limiting global warming to preferably 1.5 °C\(^29\).

The Food System Economics Commission has proven that the hidden costs of our food system are far greater than its contribution to global prosperity. In fact, the economic value of our current food system’s impact on human suffering and planetary harm is well above USD 10 trillion per year, which is more than it contributes to global GDP\(^10\).

A food system change towards a diverse ecological farming system that prioritises plant-based production and maintains low farm animal densities will essentially adopt higher animal welfare, while protecting planetary and human health. A diet shift that excludes animal products can reduce food’s GHG emissions by 49%, reduce land use for food by 76% and arable land by 19%. Making land available for restoration and forest regrowth will, therefore, help undo the impact deforestation has had, improve global freshwater quality and quantity, halt biodiversity loss, and help mitigate the climate crisis by increasing carbon sequestration\(^31\).
March 8 marks USA Meat Exhaustion Day 2024

FOUR PAWS follows up on the 2023 report Meat Exhaustion Day: When meat is eating up the planet, with a focus on consumption in individual countries.

Average meat consumption in the USA per week.

This graph depicts average meat consumption in the USA using popular food items that are emblematic of respective animal protein sources: hamburgers for beef, hot dogs for pork, and chicken wings for poultry.

Current consumption in the USA

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Planetary Health Diet recommendation

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one hamburger = 4.25 ounces or 120 grams
one hot dog = 1.6 ounces or 45.4 grams
one chicken wing = 3.5 ounces or 99 grams

The USA needs to reduce its meat consumption by to fit within planetary and health boundaries. 82%
Average consumption of meat in the USA reflected in number of hamburgers consumed per week.²

Current consumption in the USA

![Image of hamburgers](https://unsplash.com/photos/Fabio-Alves)

13.6

Planetary Health Diet recommendation

![Image of hamburgers](https://unsplash.com/photos/Fabio-Alves)

2.5

one hamburger = 4.25 ounces or 120 grams

The USA has already reached its Meat Exhaustion Day on March 8, 2024.

What does this mean? The USA has already consumed 100% of its maximum recommended yearly meat intake by the 3rd month of the year!

- On average, a person in the USA consumes almost 3.6 pounds of meat per week – this is the equivalent of a 13.6 quarter pounder beef burger.
- The recommended amount of 0.67 pounds of meat per week is equivalent to no more than 2.5 quarter pounder beef burgers per week.

The data shows that meat consumption in the USA has increased from 186.1 pounds per person in 2021 to 187.4 in 2022. Looking at the longer term trend shows that meat consumption in the USA continues to grow! In particular, the consumption of chicken and other poultry products is increasing, while pork, beef and other types of meat remain relatively stable – this is the opposite of what should happen in these times of climate crisis!³

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² The Planetary Health Diet recommends consumption of 7 grams of beef, 7 grams of pork and 29 grams of poultry per day. For this comparison, we calculated the total average meat consumption per week to its weight in hamburgers. The total consumption of the average American is between 57.5 and 187.4 pounds of beef (incl. veal, horse and other types of meat), 48 pounds of pork and 81.9 pounds of poultry meat (incl. chicken and turkey) per year.

³ The United States Department of Agriculture publishes historic ‘Meat supply and disappearance tables’ every year [USDA, 2024](https://www.usda.gov). These include the ‘Per capita disappearance’ in ‘Boneless retail weight’. It is very common in scientific analyses to use this figure to reflect the average yearly consumption per person. It is, however, important to note that this number does include wasted food. For this analysis, we used the most recent available data of meat consumption in 2022.
Meat production and overconsumption in the USA: bad news for animals, human health, and the environment

- 9.73 billion animals were slaughtered in the USA in 2021\(^3\). These animals not only die for food, but also suffer in factory farming settings that deprive them of high if any animal welfare standards that cause them stress, sickness, and disease. On a single day in April 2023, over 1,000 chickens were deemed inadequate for consumption due to septicaemia, a form of bacterial blood poisoning and toxæmia\(^3\).

- Meat overconsumption leads to obesity, which is a major health issue in the USA as, according to the CDC (Center for Disease Control), 20% of young people aged 2 to 19 years and 42% of the adult population are obese\(^3\). Meat consumption in the USA is associated with increased deaths due to cardiovascular disease, respiratory disease, and neurodegenerative disease. On the other hand, decreasing red meat and simultaneously increasing healthy alternative food choices over time was associated with lower mortality\(^3\).

- There are about 25,000 factory farms in the USA\(^3\). In fact, 37% of all land in the USA is used for animal agriculture, of which land was deforested to produce feed crops and grazing sites\(^3\). Large-scale factory farms and their discharges of manure with phosphorous and nitrogen have become the biggest source of water pollution in the USA and “the single greatest challenge to our nation’s water quality” according to the EPA\(^3\). Not all meat produced is consumed: meat waste is a big problem in the USA and makes up half of total annual meat production, leading to annual costs on water, land and energy and emissions of methane and nitrous oxides of up to USD 32 billion\(^3\).

Reducing the USA’s meat consumption to no more than 1.8 pounds per week as per the Dietary Guidelines for Americans\(^3\) – and therefore reducing meat demand – is foreseen to result in reducing agricultural and land use greenhouse gas emissions by 25–57% (approximately 120–310 MtCO\(_2\)e/y) and pastureland area by 28–38%, making room for land restoration, forest growth, and an improved living environment\(^3\). Therefore, further reductions that follow the Planetary Health Diet will lead to even more climate and land use benefits.

FOUR PAWS recommendations

Governments should phase out factory farming and intensive production, and instead subsidize diverse production systems and plant-based food production systems. Set clear targets across the food chain to reduce meat and dairy production and consumption in line with the EAT-Lancet Diet within planetary boundaries (with indicators and monitoring).

Government-led policy change can increase the share of plant-based options in public procurement, while simultaneously reducing animal-sourced foods. Policymakers should define minimum standards that respect high animal welfare criteria and that specify the serving of a certain portion of plant-based protein per week\(^3\).

Retailers should be engaged to reduce, refine and replace meat options at the retail level. Check out the FOUR PAWS food industry rankings on animal protein reduction.

Consumers can reduce meat consumption, especially cheap and highly processed meat; replace animal-based food with legumes and other plant-based options; and refine choice of retailers, restaurants and products and economically engage with cruelty-free suppliers.
References


33 Food and Agriculture Organization of the United Nations (2023) – processed by Our World in Data. Number of land animals slaughtered for meat per year, 2021. [accessed 2024 Feb 12]. https://ourworldindata.org/explo...animal-welfare?time=latest&facet=none&country=OWID_RL~USA~CHN~IND~BRA~GBR&Metric=Animalsslaughtered&Animals=All+land+animals%20total%20&Per+person=false


