Total average weekly meat consumption in Germany compared to the Planetary Health Diet recommendation

Current consumption in Germany

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<tr>
<td>5.4</td>
<td>1.5</td>
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Planetary Health Diet recommendation

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<td>0.5</td>
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1 beef roulade = 150 g beef
1 currywurst = 100 g pork
1 chicken schnitzel = 120 g poultry

This graph depicts the total weekly average meat consumption per capita in Germany for 2022 using popular food items of respective animal sources that are iconic in Germany: beef rouladen (German beef rolls known as Rinderroulade) for beef, currywurst for pork, and schnitzel for chicken; and compares it with the weekly Planetary Health Diet recommendation of total meat consumption per animal protein source.

April 21 marks Germany’s Meat Exhaustion Day 2024.

FOUR PAWS follows up on the year 2023’s Meat Exhaustion Report: When meat is eating up the planet, with a focus on consumption in individual countries. The USA already reached its meat consumption day on March 8, 2024, and Austria was the first EU country - according to the FOUR PAWS’ analysis - to reach it on 7 April 2024.

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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a The Bundesinformationszentrum Landwirtschaft [BZL] publishes the supply balance for meat (including poultry meat) every year. The data for 2022 was retrieved from BLE - Pressemitteilungen - Fleisch und Geflügel

b The Planetary Health Diet recommends consuming 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 into a portion of currywurst. The total consumption of the average German for 2022 was 52.2 kilos per year. Based on this reference, the weekly consumption is: 223 grams of beef (incl. cattle, sheep, goat, and horse), 542 grams of pork, and 238 grams of poultry meat (incl. Chicken and turkey).

*Meat weight was considered only, and ingredients were excluded from the calculation.
Germany needs to reduce its meat consumption by up to 70% to get in line with the Planetary Health Diet\(^1\).

**What is Meat Exhaustion Day?\(^1\)**

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 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 which provides a scientific framework for determining a diet that is both healthy for humans and the planet\(^1\). 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 the grocery store chain, LIDL Germany\(^2,3\).
Germany’s meat consumption decline is a promising step, but it should further decrease over time to fit within planetary and health boundaries.

By the fourth month of the year, Germans have already consumed 100% of what they should ideally consume within 12 months! The average German eats up to 51.6 kg of meat per year, as of 2023 preliminary data, which is a slight decrease from 2022 (52.2 kg), but is still more than 3 times the recommended amount for what is healthy or sustainable for our planet.

- On average a person in Germany consumes 1 kilo of meat per week, the equivalent of 10 currywursts a week. Meanwhile, the PHD’s recommended amount of 301 grams per week equates to no more than 3 currywurst per week.
- Overall, in Germany, meat consumption – 51.6g per capita per year as of 2023 data - is more than 1.5 times the average total global meat intake of 33 Kg per capita.
- Meat consumption in Germany has been decreasing over the last 9 years (since 2014) and has reached an all-time low in 2023 since data recording started in 1989.

German Society for Nutrition e.V. (Deutsche Gesellschaft für Ernährung or DGE) recommends consuming a total maximum of 300 grams of meat per week. The DGE recommendations match with the science-based recommendations from the EAT-Lancets’ PHD which provides clear guidance and specifies eating no more than 98 grams of red meat and a maximum of 203 grams of poultry meat each week.

Average consumption of meat per capita per week in Germany compared to the Planetary Health Diet recommendation.

Current consumption in Germany per person

Planetary Health Diet recommendation

1 currywurst = 100 g meat

This graph uses currywurst to represent the total meat consumption using a typical meat product of Germany.

*Meat weight was considered only, other ingredients were excluded from the calculation.
Factory farming sustains a high amount of meat consumption.

To supply the required amounts of meat for consumption, hundreds of millions of animals are slaughtered each year in Germany.

In 2023 the number of animals slaughtered amounted to: 3 million cattle cows, 43.8 million pigs, 1 million sheep and lambs, 22,000 goats, 3,300 horses. In addition to 702,2 million chickens, turkeys and ducks.

Factory farming or intensive farming has systematically failed to operate within conditions that maintain animal welfare. Animals in factory farms live in poor conditions, endure cruel breeding practices and excessively long transports among other sufferings that cause the animals stress and can make them sick.

- In Germany, 8.6 million piglets (16% of the births) die every year because of poor husbandry conditions and genetic high-performance breeding.

- In February 2023, 71% of samples from 51 chicken meat products’ lab analysis showed to be contaminated with antibiotic-resistant Escherichia coli (E-coli) along with other dangerous germs, giving one example of how intensive farming that harms animals can also harm humans.

- 163 animal cruelty violations have been documented from 2016 until 2023 in farms in Germany.

However, this only seems to be the tip of the iceberg if one considers that farm inspections happen on average only ONCE every 17 years in Germany, meanwhile, animal cruelty happens daily. In Bavaria, where most cattle are kept across the country, inspections are carried out on average every 48 years.

- Tierschutz-Skandale website shows a map that reveals cruel practices happening in German animal agriculture across Germany.
German households produce high amounts of animal food waste. In 2021 animal-based food that was thrown away amounts to 640,000 pigs, 50,000 cattle, 52,000 sheep and goats, 8.9 million chickens, and a sum of 881,000 turkeys, ducks, and geese.

- Around 100 million animals are killed without their meat being consumed every year because their bodies cannot cope with the breed-induced rapid growth or the fattening conditions or they are disposed of for economic reasons.

- Only 60% of a slaughtered pig ends up on German plates as meat and sausage. The rest is either shipped to Asia or Africa for consumption, used for pet and fish feed, as biofuel, or in the chemical and fertilizer industry.

According to The Meat Atlas 2021, meat losses in industrialized countries like Germany are caused by the throwing away of meat (whereas in the Global South losses happen due to insufficiency in the cold chains). Reducing meat waste at the retail and consumer level, by for example using more of the animal and serving offal, can reduce greenhouse gas emissions from meat production by 5%.
As long as animals are kept in factory farms, farming in Germany will not be sustainable for the climate, the planet, and human health.

Germany’s greenhouse gas (GHG) emissions, including agricultural emissions, have been decreasing over time\(^{17}\). However, Germany remains the biggest polluter and highest GHG emitter of the EU\(^{27}\).

- According to the Umweltbundesamt agriculture is responsible for 60 M\( t\) \(\text{CO}_2\) \(_e\), which is equivalent to roughly 9% of Germany’s total GHG emissions\(^{17}\).
- Methane emissions from cattle are responsible for over 70% of agricultural emissions in Germany\(^{17}\). In 2021 agriculture emitted 56.33 million tons of \(\text{CO}_2\) equivalent of methane\(^{20}\).

In addition to impacting the climate, cheap meat production (and the production of other animal products) is threatening biodiversity, causing air, water, and soil pollution, and fuels deforestation.

- More than half of Germany is used for agriculture, amounting to around 17 million hectares of land\(^{19,21}\).
- More than 60% of crops grown in Germany are being fed to animals\(^{19}\).

The application of pesticides, herbicides, and nitrate from agricultural practices are the biggest threats to groundwater quality in Germany. This is crucial because 70% of Germany’s drinking water comes from groundwater sources\(^{12}\). The German groundwater in general still shows high levels of nitrate\(^{21}\). The highest concentrations of nitrate are found on agriculturally used land\(^{23}\).

- Nitrate pollution in many German groundwater bodies has exceeded the EU limit (50 milligrams per liter) for years, in some cases by more than 700% - especially in agricultural areas\(^{23,24}\).
- Due to agricultural intensification, the use of pesticides and fertilizers, and the resulting pollution, insect and bird populations in Europe have drastically declined\(^{25}\). It is estimated that 12.7 million pairs of breeding birds have disappeared between the years 2005 and 2017 (15% of the total bird population)\(^{24}\).
- In Germany, 23% of the native plants and animals are currently endangered\(^{27}\).

High levels of meat consumption lead to major human health impacts.

Over-consumption of meat products can lead to many health problems, including overweight and obesity, cardiovascular disease, type 2 diabetes\(^{28}\). The World Health Organisation (WHO) has classified processed meats (which include sausages or wurst) as carcinogenic and red meat as a probable human carcinogen. Colorectal cancer - which has been directly linked to meat and especially processed meat intake - is the third most common cancer in Germany, and its risk would significantly be reduced if meat consumption is reduced (to a maximum of 44 grams per day)\(^{29}\).

The DGE acknowledges the dietary habits of eating sausage and its health risks and actively recommends eating no more than 2 servings of 30 grams each week\(^7\).
It is urgent to maintain and catalyse further reduction in meat consumption.

The German Federal Ministry of Food and Agriculture (BMEL) has already identified the reduction of numbers of farmed animals as a key measure to reduce agricultural GHG emissions\(^\text{30,31}\). There also needs to be a switch to more environmentally friendly land use and a drastic reduction in German meat production. Germany currently produces 21% meat surplus\(^\text{32}\) although the nationwide demand for animal products is already falling every year\(^\text{4}\).

As a strategy to reduce methane emissions in farms, the BMEL relies on turning waste into energy (ie biogas), using subsidies\(^\text{31,33}\). However, this should not be used to create a new financial incentive for manure. Such a perverse incentive would further increase the number of farmed animals instead of reducing them. In particular, farms would be incentivised to keep animals on slatted floors to easily collect the manure needed for energy production. This would not only dramatically worsen the welfare of the animals, but the nitrate inputs would also cause considerable damage to soils and water bodies\(^\text{34}\).

Reducing the demand for animal products remains central to reducing agricultural greenhouse gas emissions. The BMEL, counselled by the German Nutrition Society (DGE), calls for more plant-focussed diets as they are healthier and more resource-efficient\(^\text{35}\). The German civil council “Nutrition in transition” (Bürgerrat “Ernährung im Wandel”) released an action catalogue in January 2024 with the following recommendations\(^\text{36}\):

- The animal husbandry conditions and the origin of animals should be shown transparently
- A consumption tax for animal products
- The implementation of an obligatory state label (e.g. Eco Score) to make conscious shopping easier
- The setting of sustainable and healthy plant-based menus in public procurement and catering for hospitals, care centers, and other similar institutions\(^\text{36}\)

As trends show a decrease in the demand for animal products in Germany\(^\text{4}\), national policies must accompany farmers in the transition away from animal farming and prevent an increased export of animals and animal products.
Conclusions of the 2023 report: Over-consumption of meat is a particular problem of the Global North.

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

Global Meat Exhaustion Day is reached this year in June. This date is close to Earth Overshoot Day 2023. To stay within health and planetary boundaries, global meat consumption should be reduced by at least 50%. However, since not everyone on the planet consumes the same amount of meat (because of cultural, social, or economic reasons or lack of just access), regional and country-specific data help better determine where meat reduction should occur.

In the Global North (high-income countries), meat intake needs to be reduced by more than 70%!

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, which treats animals as mere objects and a commodity, and that carries hidden costs that exceed its contribution to global prosperity.

FOUR PAWS RECOMMENDATIONS

- Governments should end factory farming and intensive production, and instead promote diverse production systems, agroecological systems, and plant-based food production systems. Governments should catalyse the food system transition by setting clear targets across the food chain to reduce meat and dairy production and consumption in line with the EAT-Lancet Commission and within global limits (with indicators and monitoring). Breeders should be supported by giving them access to the resources necessary for the transition (financial and training).

- Government-led policy change can increase the share of plant-based options in public procurement, whilst 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.

- Retailers and other food actors 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 in English.

- Consumers can reduce meat consumption, especially cheap and highly processed meat; and replace animal-based food with legumes and other plant-based options. Consumers can support the needed change in farming with their daily decisions about their diet and demand retailers, restaurants, and others to engage with cruelty-free suppliers.

FOUR PAWS Germany is pushing for an improved reform of the German Animal Welfare Law. Find the petition and further information at #TierischUngerecht

FOUR PAWS Germany is also campaigning for a national and EU-wide ban on animal transportation to third countries. Further information and petitions can be found on the following website: Tiertransporte - Jede Stunde quält
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