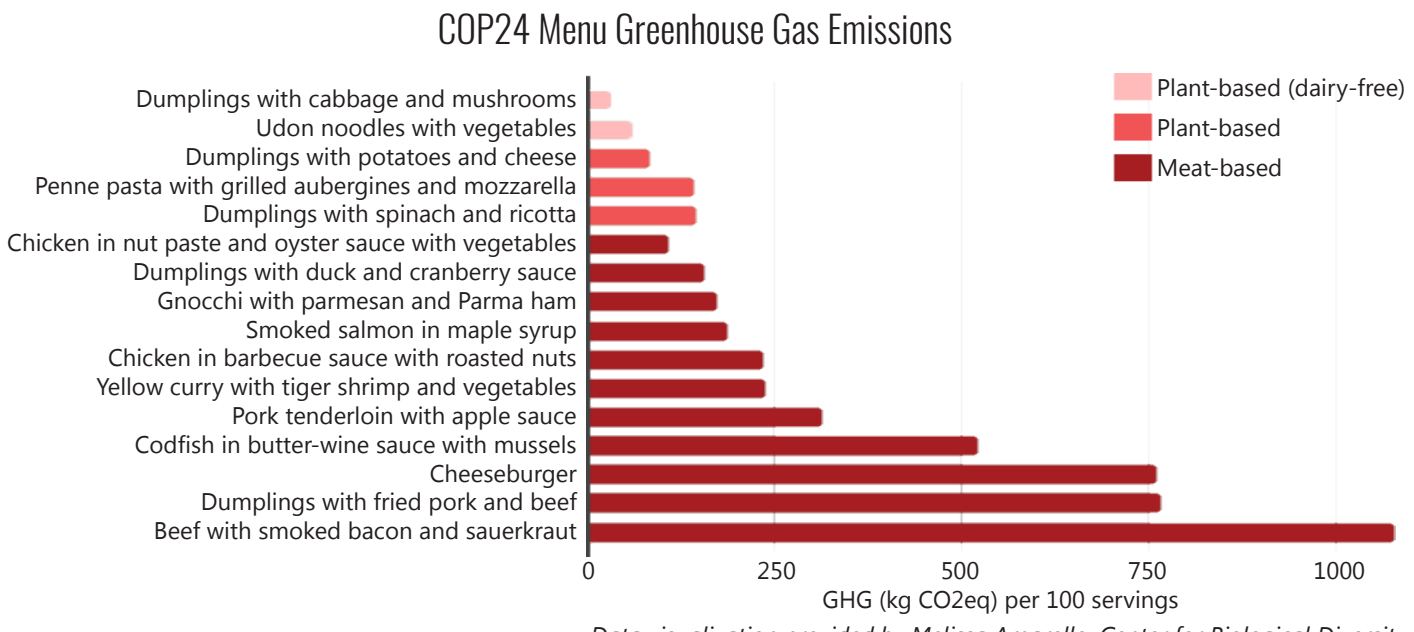
The Climate Cost of Food at COP24

While world leaders gather in Katowice, Poland, for the upcoming United Nations Framework Convention on Climate Change conference (UNFCCC), or COP24, the main food court serving the conference's estimated 30,000 visitors is offering twice as many meat-based entrees as plant-based entrees.[1] This means a menu with an unnecessarily high carbon foodprint. If international climate conferences hope to lead the way in addressing the climate crisis, organizers can't afford to overlook the food offered at their events.

COP24 Food Court Analysis

- The meat-based options offered at the conference (4.1 kg CO2e per serving) generate average greenhouse gas emissions more than four times higher than the plant-based meals offered (0.90 kg CO2e per serving).
- The two dairy-free plant-based options generate one-tenth of the GHG emissions as the meat-based entrees and less than half the emissions of the plant-based options with cheese.
- The food court's pork-and-beef dumplings (7.7 kg CO2e per serving) have more than 24 times the carbon footprint of the cabbage-and-mushroom dumplings (0.31 kg CO2e per serving).
- The most carbon-intensive entrée available (beef with smoked bacon, 11 kg CO2e per serving) contributes 35 times the greenhouse gas emissions of the least carbon-intensive entrée (cabbage-and-mushroom dumplings).
- If the food court replaced the beef patties with plant-based patties on its cheeseburgers with Louisiana sauce, it could cut each burger's carbon footprint by 82 percent, or 6 kg of GHG emissions each.
- Replacing fish or shrimp with tofu could reduce emissions by over 50 percent for those entrees, or about 1 kg CO2e per serving.
- If all the conference attendees choose meat-based dishes during the 12-day event, it would contribute almost 4,500 metric tons of CO2e, the equivalent of burning about 500,000 gallons of gasoline or the GHG emissions attributed to 3,000 people flying from New York to Katowice.
- In addition to resulting in higher greenhouse gas emissions, producing the meat-based dishes requires seven times more land and nearly twice as much water as producing the plant-based dishes.



Data visualization provided by Melissa Amarello, Center for Biological Diversity.

Background

The global food system contributes up to 30 percent of anthropogenic greenhouse gas emissions, with about half of those emissions coming from animal agriculture.[2,3,4] If current trends continue, food production will nearly exhaust the global carbon budget for all sectors by 2050.[5] Meat and dairy consumption and production must be significantly reduced to keep global emissions below 1.5°C to avoid the worst impacts of climate change.[6,7,8]

Despite the clear need to transition away from overconsumption of animal-based foods and toward more plant-centric diets as a key part of addressing climate change, the issue has been largely absent from international climate negotiations and commitments. The majority of food-related efforts focus on improving production practices with few or no significant targets for shifting to less climate-intensive diets.

The lack of attention to food as a way to help solve the climate crisis is reflected in the food options offered at COP24, where the menus are laden with meat- and dairy-heavy entrees rather than emphasizing plant-based options with lower carbon footprints per meal.

Methodology[9]

Greenhouse gas emissions were estimated using common recipes for the entrees listed on the food court menu posted on the UNFCCC website and matching each ingredient to a similar food or category from the lifecycle meta-analysis data by Poore and Nemecek.[10] Gasoline equivalencies were determined using the U.S. EPA's Greenhouse Gas Equivalencies Calculator. Flight comparisons were determined using the Carbon Calculator at carbonfootprint.com.

Sources

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