FINDING YOUR FOODPRINT

9499

An Educated Choices Program Guide



TABLE OF BONTENT

DIET COMPARISON GLOBAL OUTLOOK MEAL INSPIRATION ECO ALTERNATIVES FOLLOW-UP RESOURCES



(i) PROCESSED MEAT IS A CLASS-1 CARCINOGEN THAT CAUSES CANCER

"We have made progress in decreasing our consumption of unprocessed beef, pork, and lamb over the past two decades. But our intake of processed meat remains unchanged: sausage, hot dogs, and ham reign among the nation's most beloved processed meats."



Harvard Health Publishing HARVARD MEDICAL SCHOOL Calculate Your Dietary Footprint



"SWAP BEEF FOR BEANS TO SAVE 68KG OF GHGS!"

FACT: 70.6 KILOGRAMS OF GREENHOUSE GASES ARE EMITTED PER KILOGRAM OF BEEF, WHILE ONE KILOGRAM OF LEGUMES EMITS JUST 2 KILOGRAMS OF GREENHOUSE GASES.

<u> https://www.un.org/en/climatechange/science/climate-issues/food</u>

Greenhouse gas emissions per kilogram of food Emissions are measured in carbon dioxide equivalents (CO2eq). This means non-CO2 gases are weighted by the

INPARK



Data source: Michael Clark et al (2022). Estimating the environmental impacts of 57,000 food products. PNAS. <u>OurWorldInData.org/environmental-impacts-of-food</u> | <u>CC.BY</u>



RUIT &

Find a detailed footprint of your favorite foods: https://ourworldindata.org/environmental-impacts-of-food

Our Worl in Data

THE DIFFERENCE BETWEEN DAIRY AND PLANT MILK IS INCREDIBLE!

Plant milk has a significantly lower environmental footprint, making it an excellent choice for the conscious consumer.

Swipe through to take a look at the greenhouse gas emissions, land use, and water use comparisons on our *Instagram*.

1184

Liparische

WHILE ANIMAL AGRICULTURE IS A TOP USER OF FOOD SYSTEM'S RESOURCES, IT ALSO SUPPLIES LESS THAN A FIFTH OF THE GLOBAL CALORIE SUPPLY. *

"To cut emissions in the food sector and improve health, we must swing the pendulum back in the other direction-reversing the shift towards diets high in animal source foods in higher-income countries and slowing or stopping its progression in lower-income countries while improving access to and affordability of nutritious foods for all, especially the most vulnerable."

HARVARD T.H. CHAN SCHOOL OF PUBLIC HEALTH

MELLONK

and the second sec				
The enviro	nmental impacts of	food and agric	ulture Our World in Data	
	26% of greenhouse gas emissions come from food			
Greenhouse gas emissions	Food 13.7 billion tonnes CO₂eq	Non-food 38.7 billion tonnes CO ₂ eq		
	50% of the world's habitable land is used for agriculture			
Land use	Agriculture 51 million km²	Forests, shrub, urba	Forests, shrub, urban area, freshwater 51 million km²	
Freshwater withdrawals	70% of global freshwater withdrawals are used for agriculture			
	Agriculture 70% of freshwater withdraw	vals	Industry (19%) Households (11%)	
Eutrophication	78% of global ocean and freshwater pollution			
	Agriculture 78% of global eutroph	ication	Other sources	
Mammal biodiversity	94% of global mammal biomass (excl. humans) is livestock			
	Livestock 94% of global mammal biomass (excluding humans)			
	71% of global bird biomass is po	oultry livestock		
Bird	Poultry livestock		Wild birds	

AGRICULTURE USES HALF OF EARTH'S **HABITABLE LAND!***

- 75 percent is used for livestock and their feed.
- 83 percent of the global calorie supply comes from plant-based foods.
 - Such as rice, wheat, corn, nuts, beans, and other fruits and vegetables.



CLIMATE CHANGE*

THE GLOBAL EFFECTS

Anthropogenic GHG Emissions and Natural Climate Forcings

ENVIRONMETNAL EFFECTS

- Changes in
 extreme weather
- Ecosystem effects
- Rising sea levels
- Environmental degradation

EFFECTS ON FOOD

- Altered food choice through changes in prices and availability, low-carbon diet choices
- Changes in food safety and the nutritional content of food

AGRICULTURAL AND FOOD PROCESSING EFFECTS

- Changing livestock, fisheries, and crop yields and distributions
- Altered ecosystems in which food is produced and processed
- Altered use of pesticides, biocides, and fertilizers
- New crop and livestock breeds
- Changing food processing methods



Changing incidence of infectious and noninfectious diseases

*Changes in average climatic conditions and variability.

Arrow indicates cause and effect relationship

Adapted from Figure 1 Main pathways through which climate change affects food security in developed countries (adapted from McMichael et al. 2006). Natural climate forcings are nonanthropogenic mechanisms that affect climate, such as stratospheric volcanic aerosols. The causes and main impacts of climate change are shown on the left. GHG, greenhouse gases.

BREAKFAST DATMEAL WITH WALNUTS. BREAKFAST WHOLE-WHEAT WHOLE-WHEAT ENGLISH WHOLE-WHEAT ENGLISH

PEANUT BUTTER, FLAX SEEDS, BANANA, AND A SPRINKLE OF CINNAMON.

GREEK SALAD

MIXED GREENS WITH LENTILS, TOMATOES, OLIVES, PARSLEY, EVOO, AND BALSAMIC VINEGAR, AND A WHOLE-WHEAT PITA ON THE SIDE.

BAKED TOFU

TORTILLA WITH TOFU

SCRAMBLE, BLACK

BEANS, PEPPERS,

ONIONS, AND A SPLASH OF HOT SAUCE OR SALSA.

TABBOULEH TOPPED WITH GRILLED TOFU. SIDE OF TOMATO SOUP TOPPED WITH BASIL, SPINACH, AND WHOLE-GRAIN CRACKERS. WHOLE-WHEAT ENGLISH MUFFIN TOPPED WITH TEMPEH, FRESH TOMATO, AND AVOCADO SLICES. BLUEBERRIES ON THE SIDE.



HICKPEA FRITTAT. MUFFINS

PIZZA

WHOLE WHEAT FLATBREAD TOPPED WITH CASHEW PESTO, TOMATOES, BROCCOLI, ONIONS, PEPPERS, MUSHROOMS, AND TOFU CRUMBLE.



CHICKPEA SALAD SANDWICH

DINNER

KABOBS

GRILLED VEGETABLE KABOBS WITH GRILLED TOFU, AND A QUINOA AND SPINACH SALAD.

PASTA

WHOLE-WHEAT PASTA WITH SAUCE OF CHOICE, CANNELLINI BEANS, AND A SIDE OF ROASTED BRUSSEL SPROUTS.

CHILI

VEGETARIAN CHILI WITH A VARIETY OF BEANS AND A SPINACH-ORZO SALAD.



MEAT"BALLS



Find more meal inspiration alongside healthful eating and nutrition statistics and recommendations from leading health organizations with ECP's Lunch Packing Guide.

Visit ecprogram.org/shareables

ECO ALTERNATIVES

"THE ADOPTION OF GREEN PACKAGING IS VITAL. THREE TYPES OF GREEN PACKAGING HAVE BEEN IDENTIFIED, NAMELY:

- Reusable packaging, e.g., glass, which can be reused after cleaning.
- Recyclable packaging, e.g., paper which can be reprocessed and reused.
- Biodegradable packaging, e.g., cotton sacks, which can break down into the environment without causing damage."

https://www.ncbi.nlm.nih.gov/pmc/articles/PMC7664184/

"A five-step waste management hierarchy was defined by the European Union (EU) Waste Framework Directive 2008/98/EC as shown in Figure 1. The hierarchy ranks the treatments of waste based on the ability to conserve resources, with the prevention or minimisation of waste being the most preferred route to follow into the future, and the disposal of waste being the worstcase scenario to be avoided at all costs."



National Library of Medicine National Center for Biotechnology Information



Although packaging and transportation account for some of global greenhouse gas emissions, what we eat tends to make a bigger impact than how it's packaged and where it comes from.

MOST EFFECTIVE **1. PREVENTION** 2. RE-USE 3. RECYCI 4. RECOVERY 5. DISPOSAL

NCUBE LK. UDE AU. OGUNMUVIWA EN. ZULKIFLI R. BEAS IN. ENVIRONMENTAL IMPACT OF FOOD PACKAGING MATERIALS: A REVIEW OF CONTEMPORARY DEVILOPMENTAL IMPACT OF FOOD PACKAGING MATERIALS. CONVENTIONAL PLASTICS TO POLYLACTIC ACID BASED MATERIALS, MATERIALS (BASEL), 2020 NOV 6:13(21):4994. DOI: 10.3390/WA13214994. PW/ID: 38174895; PW//ID: 10.3390/WA13214994. PW/ID: 38174895; PW//ID: 10.3390/WA13214994.

LEAST FFFFCTIVF

ECO ALTERNATIVES

WHAT ABOUT FOOD WASTE?

"The Environmental Protection Agency provides the 'Food Recovery Hierarchy' - The most preferred at the top of the pyramid to the least preferred at the bottom to - outline ways to take care of excess food."

- SOURCE REDUCTION: BEST CASE
- FEED HUNGRY PEOPLE
- FEED ANIMALS
- INDUSTRIAL USES
- COMPOSTING
- LANDFILL/INCINERATION: A LAST
 RESORT FOR UNUSED FOOD

SELF-REWARDING BENEFITS :

- SAVE MONEY BY REDUCING OVER-PURCHASING
- REDUCE ENVIRONMENTAL IMPACTS
- SUPPORT EFFORTS TO ELIMINATE HUNGER
- REDUCE HEALTH AND ODOR CONCERNS WITH FOOD DISPOSAL
- SUPPORT COMMUNITY WASTE REDUCTION EFFORTS
- INCREASE TAX BENEFITS BY DONATING FOOD

https://epa.gov/sites/default/files/2015-08/documents/reducing_wasted_food_pkg_tool.pdf



RELATED OFFERINGS



EDUCA





CHOICES PROGRES

ECPROGRAM ORG | ECP IS NOT SPONSORED OR AFFILIATED WITH ANY OF THE BRANDS & EXTERNAL LINKS PRESENTED IN THIS DOCUMENT. WITH THE EXCEPTION OF THE ENVIRONMENTAL WORKING GROUP.