

HOW TO CALCULATE THE CARBON FOOTPRINT

As an extra challenge, you can calculate the carbon footprint of your family's typical beef dinner to evaluate the impact your meatless dinner makes on our planet!

- A. Estimate the lbs of beef your family would have eaten for dinner. Ex. John's family eats 5 quarter pound (4 oz) hamburgers at a typical dinner for a total of 20 oz. (1 lb, 4 oz), or 1.25 lbs of beef.

ENTER HERE _____ TOTAL LBS

- B. Calculate the greenhouse gas emissions of that meal. According to the Environmental Working Group's [Meat Eaters Guide](#), the full lifecycle production of 1 lb of beef releases 26 lbs CO₂e, or carbon dioxide equivalent. Note that beef emissions are measured as "CO₂e" because cows release more methane, a greenhouse gas more powerful than carbon dioxide. Ex. For John's family, 1.25 lbs beef x 26 lbs CO₂e per pound of beef = 32.5 CO₂e

Total # lbs of beef _____ x 26 lbs of CO₂e per pound of beef = **TOTAL CO₂e** _____

- C. Use the EPA's Greenhouse Gas Equivalencies Calculator to translate this measurement into meaningful terms: <https://www.epa.gov/energy/greenhouse-gas-equivalencies-calculator>

Under "Enter Your Data", click on "If You have Emissions Data." Plug in your amount and change the units to pounds for "carbon dioxide or CO₂ equivalent."

[Print Your Results](#)

Amount	Unit	Gas
860	Pounds	CO ₂ - Carbon Dioxide or CO₂ Equivalent*
	Pounds	Carbon or Carbon Equivalent
	Metric Tons	CH ₄ - Methane
	Metric Tons	N ₂ O - Nitrous Oxide
	Metric Tons	HCFC-22 - Hydrofluorocarbon gases
	Metric Tons	CF ₄ - Perfluorocarbon gases
	Metric Tons	SF ₆ - Sulfur Hexafluoride

Calculate

- D. What are the equivalents?



number of smartphones charged



Miles driven by an average passenger vehicle



tree seedlings grown for 10 years