

America's increasing food waste is laying waste to the environment

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Food waste contributes to excess consumption of freshwater and fossil fuels which, along with methane and carbon dioxide emissions from decomposing food, impacts global climate change. In a new paper published in the open-access, peer-reviewed journal *PLoS ONE*, Kevin Hall and colleagues at the National Institute of Diabetes and Digestive and Kidney Diseases calculate the energy content of nationwide food waste from the difference between the US food supply and the food eaten by the population. The latter was estimated using a validated mathematical model of human metabolism relating body weight to the amount of food eaten.

The researchers found that US per capita [food waste](#) has progressively increased by about 50% since 1974 reaching more than 1400 Calories per person per day or 150 trillion Calories per year. Previous calculations are likely to have underestimated food waste by as much as 25% in recent years.

This calculated progressive increase of food waste suggests that the US obesity epidemic may have been the result of a "push effect" of increased [food availability](#) and marketing with Americans being unable to match their food intake with the increased supply of cheap, readily available food.

Hall and colleagues suggest that addressing the oversupply of food energy in the US could help curb to the obesity epidemic as well as reduce food waste, which would have profound consequences for the

environment and natural resources. For example, food waste is now estimated to account for more than one quarter of the total freshwater consumption and more than 300 million barrels of oil per year representing about 4% of the total US oil consumption.

More information: Hall KD, Guo J, Dore M, Chow CC (2009) The Progressive Increase of Food Waste in America and Its Environmental Impact. *PLoS ONE* 4(11): e7940. [doi:10.1371/journal.pone.0007940](https://doi.org/10.1371/journal.pone.0007940)

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