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America's food waste laying "waste" to environment

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and World Science staff

America's food waste contributes to excess consumption of fresh water and fossil fuels which—along with emissions from decomposing food—can worsen global climate change, scientists say.

In a paper published in online scientific journal *PLoS One*, Kevin Hall and colleagues at the U.S. National Institute of Diabetes and Digestive and Kidney Diseases calculated the energy content of nationwide food waste from the difference between the U.S. food supply and the food eaten by the population.



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The latter was estimated using a mathematical model of human metabolism relating body weight to amount of food eaten.

The researchers found that per-capita food waste has progressively increased by about 50 percent since 1974, reaching more than 150 trillion Calories yearly. Previous calculations are likely to have underestimated the waste by as much as 25 percent, the group said.

This calculated increase of food waste suggests that the U.S. obesity epidemic may have been the result of a “push effect” of increased food availability and marketing with Americans unable to match their food intake with the increased supply of cheap food, the scientists continued.

Hall and colleagues suggest that addressing the oversupply of food energy in the country could help curb 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 percent of the total U.S. oil consumption.

This, along with related emissions of methane and carbon dioxide, “impacts global climate change,” Hall and colleagues wrote. “Surprisingly little discussion has been devoted to the issue of food waste,” they added.