

Our Hungry Planet

Supplementary Materials



Reducing Food Waste

Globally about one-third of the food produced never gets eaten, and this translates to about 1.3 billion tons¹, or over 140 million garbage trucks full of wasted food per year. In the United States, about 40 percent of the food is wasted!² Most food waste in the United States happens in homes or at restaurants, where food is thrown away because it spoils before it can be used, because it is left uneaten on a plate, or because too much food is made and not eaten. According to the U.S. Department of Agriculture, on average an American family of four throws out about \$1,500 worth of food in a year.³

Food waste not only costs us money, it also takes a huge environmental toll. In the U.S. a lot of resources, including fertilizer, cropland, freshwater, and energy, are used to grow uneaten food.⁴

When food and other organic matter decomposes, it produces methane gas. Methane is a greenhouse gas that is 30 times more potent than carbon dioxide. Since food waste is the biggest component of landfills, landfills are a major source of greenhouse gas emissions. Thus, reducing food waste could reduce methane emissions from landfills.

Reducing food waste would also likely decrease food prices, which would benefit low-income consumers.⁵ If food waste in the U.S. were cut by 30 percent, it would be enough food for 50 million people!

Although reducing food waste would have huge economic and environmental benefits, changing consumer behavior is difficult. Instead of making one big trip to the grocery store a week, better meal planning and more frequent trips to the store could reduce food waste. Also, sell-by and use-by dates on packages don't indicate when food is no longer safe to eat. The confusion around the meaning of these dates leads to lots of still fresh foods being tossed out.

To learn about other solutions to global food issues, read more at [Our Hungry Planet](#).

¹ [Gustavsson, J. et al. \(2011\)](#)

² [Gunders, Dana \(2012\)](#)

³ [USDA \(September, 2015\)](#)

⁴ [Reich, A. H. & Foley, J.A. \(April, 2014\)](#)

⁵ [Buzby, J.C., et al. \(2014\)](#)





Weighing the Benefits and Drawbacks of Reducing Food Waste

For a complex problem, we need to evaluate how a solution fares across multiple dimensions:

Benefits

Drawbacks

**Environmental
Factors**

**Social & Cultural
Factors**

**Economic
Factors**



Our Hungry Planet

Supplementary Materials

Weighing the Benefits and Drawbacks of Reducing Food Waste:



For a complex problem, we need to evaluate how a solution fares across multiple dimensions:	Benefits	Drawbacks
Environmental Factors	<ul style="list-style-type: none">• Reducing food waste would reduce the land, water, and energy required for our diets.• Landfills would emit less methane.• Less deforestation for food production.	
Social & Cultural Factors	<ul style="list-style-type: none">• Meal planning could be a way to get the whole family involved in a fun project together.	<ul style="list-style-type: none">• Changing behaviors around shopping, preparing and storing food may be difficult.• Not everyone has time for better meal planning.
Economic Factors	<ul style="list-style-type: none">• Reducing food waste could save consumers money. A typical American household could save \$1,500 a year.• Could reduce overall food prices, which would benefit lower income families.	

Additional Resources

NPR: [It's Time To Get Serious About Reducing Food Waste, Feds Say](#)

ENSIA: [How one small change could reduce your food waste](#)

ENSIA: [If everybody hates wasting food, why do we do it \(and how can we stop\)?](#)

UMN Food Policy Res. Cen.: [Food Loss and Waste in the US: The Science Behind the Supply Chain](#)

National Geographic: [One-Third of Food Is Lost or Wasted: What Can Be Done](#)

