

"Garbology" 201

Calling food waste scientists, let's get messy!

Food Waste Audit

Time: 1 hour

No one promised that research would be clean and tidy! Food waste audits help us measure how much food is wasted so we can make plans to reduce our food waste.



You'll Need:

- Tables, tarps or washable plastic sheeting
- Rubber gloves
- 4-9 large buckets or bins (depending on the number of waste categories)
- Plastic waste bags
- Portable or bathroom scale
- Clean-up materials
- A log sheet for writing down the weight of various categories of food waste



Making it Happen:

There are many ways to conduct a food waste audit. For a simple version, see Activity #5. Here we'll go a little more in depth.

1. Discuss your food waste audit plans with your school or community custodial team.
2. After at least one meal break, take all the waste, recycling and organic bins outside or to a large, open and well-ventilated space.
3. One at a time, weigh the full bins, noting the weight and what type of waste they were meant to contain. Dump one onto the tarp. Weigh the empty bin and note the weight. Subtract this from your full bin measurement to find the weight of its contents.

4. For a simple audit, use four categories: avoidable food waste, unavoidable food waste, recycling and other waste.
5. Optional: You can subdivide categories into bread, fruit, vegetables, beverages or any other categories that you want to measure.
6. Sort the waste into the clean bins based on your chosen categories. Weigh each category.



Analyze the Data:

1.

Calculate waste per person by dividing the weight of a category by the number of people eating.

For example,

20 KILOGRAMS (KG)

of fruit waste

and **40** students

= 20/40

= 0.5 KG

of food waste per student

2.

Tally the weight of all the waste categories.

For example:

10 KG (avoidable food waste)

+ 5 KG (unavoidable food waste)

+ 2 KG (beverage waste)

+ 3 KG (other waste)

= 20 KG TOTAL WASTE.

So, from the example above

(10KG / 20 KG) x 100

= 50% of the total waste is avoidable food waste.

3.

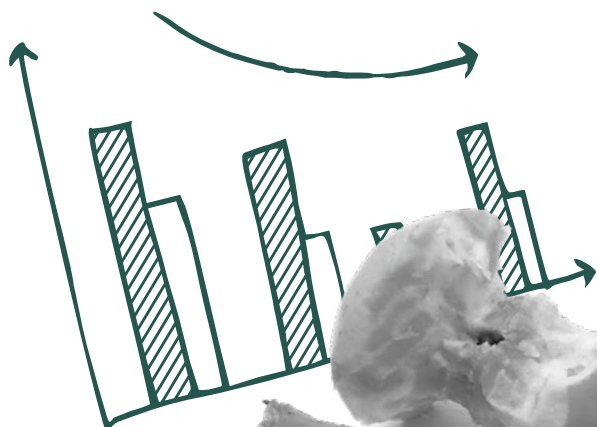
Calculate the percentage wasted for each item compared to the total waste.

Avoidable Food Waste

% =

(avoidable food waste amount / total waste amount)

x 100.



Want to do More?

- Round two! Set a goal for how much food waste you could prevent. Make posters, tip sheets or a manifesto (Activity #14).
- Try the Diversion Design Activity # 9 to see if you can help reduce contamination.
- Perform a second waste audit, ideally on the same type of day to allow for equivalent comparison. Calculate the per person waste and compare it to the first. Did you reach your waste reduction goal? Share your progress through posters and social media: [#FoodMattersActionKit](#).
- Use a [greenhouse gas calculator](#) to estimate the impact you've had reducing climate change.⁷⁴

CLAIM
5 Influencer points

CLAIM
5 Systems Thinker points

CLAIM
10 Influencer or Systems Thinker points

CLAIM
5 Systems Thinker points



Food scraps and other organic matter break down quickly but, in a landfill, food waste takes a very long time to break down and while it is just sitting there, it creates methane gas the entire time. How long do you think a head of iceberg lettuce takes to decompose in a landfill? William L. Rathje, the founder of garbology, discovered a perfectly preserved head of iceberg lettuce in a landfill that was proven to be 25 years old!



⁷⁴Watch My Waste (2018). Food Waste Greenhouse Gas Calculator: <<https://watchmywaste.com.au/food-waste-greenhouse-gas-calculator/>>