Reduce / Reuse / Recycle: Hot Tips for Cutting Food Waste
Speakers/Disclosures

• Sandy Voss
  • Marquardt School District 15, Glendale Heights, IL

• Bertrand Weber
  • Minneapolis Public Schools

• JoAnne Berkenkamp
  • Natural Resources Defense Council

• Jean Ronnei, Moderator
  • ProTeam Foodservice Advisors
Up to 40% of all food goes to waste in the US – enough to feed 164 million people.
BREAKDOWN OF FOOD WASTE GENERATION BY SUPPLY CHAIN STAGE, AS ESTIMATED BY REFED FOR 2015

- HOUSEHOLDS 43%
- FARMS 16%
- MANUFACTURERS 2%
- GROCERY & DISTRIBUTION 13%
- INSTITUTIONAL & FOODSERVICE 8%
- RESTAURANTS (FULL & LIMITED SERVICE) 18%

Environmental impacts

- 21% of water use
- 22% of landfill content
- 19% of cropland
- 18% of fertilizer
- 37M cars/year equivalent GHGS
The water in every bite

<table>
<thead>
<tr>
<th>PRODUCT</th>
<th>QUANTITY</th>
<th>WATER USE EQUIVALENT IN SHOWER MINUTES</th>
</tr>
</thead>
<tbody>
<tr>
<td>Beer</td>
<td>8 oz/240 ml</td>
<td>4</td>
</tr>
<tr>
<td>Tomato</td>
<td>1 lb/455 g</td>
<td>5</td>
</tr>
<tr>
<td>Wine</td>
<td>4 oz/120 ml</td>
<td>6</td>
</tr>
<tr>
<td>Milk</td>
<td>8 oz/240 ml</td>
<td>6</td>
</tr>
<tr>
<td>Potato</td>
<td>1 lb/455 g</td>
<td>7</td>
</tr>
<tr>
<td>Egg</td>
<td>1 egg</td>
<td>11</td>
</tr>
<tr>
<td>Banana</td>
<td>1 lb/455 g</td>
<td>42</td>
</tr>
<tr>
<td>Apple</td>
<td>1 lb/455 g</td>
<td>43</td>
</tr>
<tr>
<td>Pasta, dry</td>
<td>1 lb/455 g</td>
<td>44</td>
</tr>
<tr>
<td>Rice, white</td>
<td>1 lb/455 g</td>
<td>60</td>
</tr>
<tr>
<td>Personal pizza</td>
<td>26 oz/735 g</td>
<td>67</td>
</tr>
<tr>
<td>Chocolate</td>
<td>4 oz/115 g</td>
<td>90</td>
</tr>
<tr>
<td>Chicken</td>
<td>1 lb/455 g</td>
<td>104</td>
</tr>
<tr>
<td>Cheese</td>
<td>1 lb/455 g</td>
<td>122</td>
</tr>
<tr>
<td>Pork</td>
<td>1 lb/455 g</td>
<td>144</td>
</tr>
<tr>
<td>Beef</td>
<td>1 lb/455 g</td>
<td>370</td>
</tr>
</tbody>
</table>
Greenhouse Gas Emissions

• If food waste globally were a country, it would be the third largest GHG emitter after China and the U.S.
At the same time that 40 million people are food insecure, greater than the population of Canada.
Economic Impacts

The average American family of four spends $1,800 on food they throw away each year.

And most believe they don’t waste food…
In K-12, USDA found:

• 21% of calories are not consumed:
  • 31% of vegetables
  • 29% of milk
  • 26% of fruit + fruit juice
  • 23% of breads + grains
And that…. 

- Higher waste in elementary than middle / high school 
- OVS at elementary → “significantly lower plate waste” 
- Lunch service at noon or later means reduced waste
Getting started…

• Start small
• Menu of options
• Prioritize prevention
• Enlist champions to help
• Engage your staff and students
WASTING LESS FOOD IN K-12 SETTINGS: BEST PRACTICES FOR SUCCESS

Schools are a vital link in the food system nourishing America’s kids. When food goes to waste in K-12 settings, scarce food purchasing dollars are lost and disposal fees increase. At the same time, children’s lifelong food habits are informed by their school experiences, and school meal programs are a key avenue for helping children value and enjoy their food.

As much as 40 percent of the U.S. food supply goes uneaten every year. What’s more, nearly one of eight U.S. households is food insecure, including many with children. In addition, each year wasted food generates greenhouse gas emissions equivalent to 87 million vehicles. The United States losses more than $100 billion annually on wasted food.

There are many practical steps that K-12 schools can take to reduce wasted food in both kitchens and cafeterias. Below we highlight best practices for preventing food waste, ensuring that food surpluses reach people in need, and recycling food scraps. It accompanied the recently completed Food Waste Action Plan for the Minneapolis Public Schools, commissioned by the Natural Resources Defense Council.

SETTING THE STAGE

- To maximize the environmental and economic benefits of your efforts, focus first on preventing food surpluses. When surpluses occur, ensure those fruits reach people in need either within your school or in the broader community. Have material like plate waste and banana peels composted or used as animal feed to keep them out of the landfill and put back into productive use.
- Get a handle on how much food is currently being going to waste in school kitchens (i.e., “pre-consumer” losses) and in cafeterias (“post-consumer” losses). Occasional school-level waste audits of discarded food can provide insight on the amount, types, and reasons why food is discarded in the kitchen or by students. Data from your waste hauler may also shed light on overall food waste generation.

For more information, please contact:
Juliana Danko
jdanko@nrdc.org

www.nrdc.org
www.facebook.com/nrdc
www.twitter.com/NRDCC

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Annual National Conference
July 14-16, 2019
St. Louis, Missouri
Quick tips to getting to the bottom of waste

➢ What is the culture of the lunchroom?
➢ What are the students wants/needs?
➢ What are the drivers of waste?
What is causing food to go in the trash?!

✓ Too many offerings being taken
✓ Lacking time to eat
✓ Students not focused on eating
✓ Students don’t like offerings
Share carts – not a one size fits all model

• Create a system that supports your existing model

• School buy in and collaboration is KEY

• Pilot, expand, and market!

TIP!
Create standard format/rules and allow options for buy in
Important - Invest time to develop tools!

• Share Cart Info Guide
• Parent Communication
• Temp and tracking logs
• Picture signs for cart

Churchill Sharing Cart Log
Date:

<table>
<thead>
<tr>
<th>Fruit/Vegetable/Shelf Stable</th>
<th>Leftover</th>
<th>Serve (%)</th>
<th>Discard (%)</th>
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<table>
<thead>
<tr>
<th>Milk</th>
<th>Lunch #1</th>
<th>Lunch #2</th>
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<tbody>
<tr>
<td></td>
<td>Name</td>
<td>Time</td>
</tr>
<tr>
<td></td>
<td>White</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Choc</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Straw</td>
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</tbody>
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<table>
<thead>
<tr>
<th>Misc. Cold Hold</th>
<th>Leftover</th>
<th>Time</th>
<th>Temp</th>
<th>Serve (%)</th>
<th>Discard (%)</th>
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RULES:

1. **School Lunch** Only
2. **NO** Hot Food
Practical strategies for Share Cart

- Create a simple format that can be modeled to different schools
- Control the options for implementation
- Define the use of leftover food clearly
- Use visual ques for students
- Do not start at the beginning of the year, transition once school year starts
- Schedule time to communicate with all stakeholders – student and staff training is key to success!
True Food, No Waste
A Food Waste Prevention Initiative
Bertrand Weber
Why True Food no Waste

Unserved prepared food in school kitchens
- 0.0336 pounds per meal served
- 710 pounds per day
- 127,863 pounds per year

Total waste in school cafeterias that could be composted/recycled
- 0.4533 pounds per student, per day
- 16,613 pounds per day
- 2,990,263 pounds per year

Kitchens + Cafeterias
- 17,323 pounds per day
- 3,118,126 pounds per year
True Food, No Waste

Pre Production/Prevention
- Working on accurate production
- Improved ordering

Post Production
- Serving/taking the correct amount
- Share tables

Repurpose/Recovery
- Repurpose unserved food
- Donate unserved food

Compost/Recycle
- Compost all food waste
- Recycle plastics, glass, non food soiled paper
- Landfill only what cannot be composted or recycled
True Food, No Waste

$50,000 School Recycling Grant.
Hennepin County

Food Waste Action Plan

MN GreenCorps Member
3 Year Action Plan

Year 1

• Internal control of pre production food waste.
• Optimize Share Tables.
• Implement Hennepin County grant.
• Develop a district-wide student committee.
• Cafeteria signage.
• Identify a food rescue partner.
• Develop internal communication and collaboration plan.
• Engage and empower students
Year 2

• Re-affirm OVS and correct portion size.
• Increase food sampling.
• Expand food donation.
• Develop guidelines to take food outside of the cafeteria.
• Utilize the results of food recycling data to gauge progress on prevention of wasted food.
• Continue expanding cafeteria recycling, and organics recycling programs.
Year 3

• Expand food education and extracurricular learning opportunities.
• Expand the reach of garden and composting education.
• Refresh the student and staff engagement campaign and training.
• Increase repurposing of surplus food in school meal programs.
• Install sorting tables at all remaining MPS schools.
True Food no Waste, Why

The Triple Bottom Line

- People
- Planet
- Prosperity
If we all work together we can greatly reduce the amount of food waste!

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