Reducing Food Waste in our Cafeterias
Why Measure Plate Waste?

Excessive amounts may indicate
Inefficiency
Unnecessary costs
Lack of meal satisfaction
Environmental constraints

New standards, regulations may affect selection and waste in new ways

*From Plate Waste in School Nutrition Programs, Final Report by Economic Research Service to Congress, March 2002*
We serve 90,000 meals a day…are 30,000 wasted?

<table>
<thead>
<tr>
<th></th>
<th>SY 14/15</th>
<th>SY 15/16</th>
<th>SY 16/17</th>
<th>SY 17/18</th>
<th>SY 18/19</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Breakfast</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Average Daily Participation</td>
<td>30,473</td>
<td>31,048</td>
<td>28,002</td>
<td>25,009</td>
<td>23,861</td>
</tr>
<tr>
<td>% of Enrollment</td>
<td>36%</td>
<td>37%</td>
<td>34%</td>
<td>31%</td>
<td>33%</td>
</tr>
<tr>
<td><strong>Lunch</strong></td>
<td></td>
<td></td>
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<td></td>
<td></td>
</tr>
<tr>
<td>Average Daily Participation</td>
<td>49,488</td>
<td>59,665</td>
<td>58,630</td>
<td>55,941</td>
<td>53,476</td>
</tr>
<tr>
<td>% of Enrollment</td>
<td>58%</td>
<td>71%</td>
<td>71%</td>
<td>69%</td>
<td>67%</td>
</tr>
<tr>
<td><strong>Snack</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Average Daily Participation</td>
<td>2,007</td>
<td>1,953</td>
<td>870</td>
<td>5,643</td>
<td>6,290</td>
</tr>
<tr>
<td>% of Enrollment</td>
<td>2%</td>
<td>2%</td>
<td>1%</td>
<td>7%</td>
<td>13%</td>
</tr>
<tr>
<td><strong>Supper</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Average Daily Participation</td>
<td>0</td>
<td>329</td>
<td>0</td>
<td>4,988</td>
<td>5,524</td>
</tr>
<tr>
<td>% of Enrollment</td>
<td>0.40%</td>
<td></td>
<td></td>
<td>6%</td>
<td>12%</td>
</tr>
</tbody>
</table>
2014 Plate Waste Audit

**Objective:** Develop and pilot a baseline assessment of student selection and waste in schools.

**Questions of Interest:**
- What types foods are being selected?
- Are certain types wasted more than others? Salad or fresh produce waste?
- What factors appear to be influencing food waste?

**Observed:**
- Two Elementary Schools
- Two High Schools
Elementary School Milk Waste
Elementary School Produce Waste
Elementary Mean Waste By Food Item

- **Main Meal**
  - % Consumed: 80.1%
  - % Wasted: 19.0%

- **Produce**
  - % Consumed: 45.2%
  - % Wasted: 54.8%

- **Milk**
  - % Consumed: 48.7%
  - % Wasted: 51.3%
75% of students selected milk.

60% of students selected milk.
2014 Waste Audit Summary

Overall produce waste similar to other districts, while entrée waste near gold standard (15% or less)

Opportunities for Improvement
• Elementary FV waste near 55%
• Similar to Boston figures (41-55%)
• Elementary Milk waste notably high ~50%
• Wider range of FV waste for High Schools (24-59%)
# 2019 Waste Audit Summary

Table 1: Waste Summaries By Component

<table>
<thead>
<tr>
<th>Component</th>
<th>Total waste (per lunch period)</th>
<th>Waste (per tray)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Fruit</td>
<td>5 pounds</td>
<td>2.5 ounces per tray</td>
</tr>
<tr>
<td>Vegetable</td>
<td>2.5 pounds</td>
<td>2.2 ounces per tray</td>
</tr>
<tr>
<td>Grain</td>
<td>3 pounds</td>
<td>1.5 ounces per tray</td>
</tr>
<tr>
<td>Protein</td>
<td>1 pound</td>
<td>0.4 ounces per tray</td>
</tr>
<tr>
<td>Dairy (Milk)</td>
<td>10 pounds (160 fluid ounces)</td>
<td>5.5 fluid ounces per tray</td>
</tr>
</tbody>
</table>
Food Waste Reduction in City Schools

Food Recovery Hierarchy

United States Environmental Protection Agency.
https://www.epa.gov/sustainable-management-food/food-recovery-hierarchy
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https://www.epa.gov/sustainable-management-food/food-recovery-hierarchy
Pre-consumer waste occurs before the point of purchase and includes food discarded because of spoilage, contamination, trim waste (ie, food scraps removed during the preparation process), food recalls, product expiration, over-ordering, overproduction, and production mistakes (eg, burning or other quality-control issues).
Post-consumer waste, often called plate waste, occurs after the point of purchase.
PRE-CONSUMER WASTE

REDUCE PRE-CONSUMER WASTE IN THE KITCHEN, STOREROOM AND ON THE LINE:

- Ensure recipe adherence.
- Complete production records daily. Track waste and item selection to improve forecasting. Coming soon - electronic production records!
- Update inventory daily and ensure FIFO is being used to prior to expiration.
- Reduce over-ordering with accurate forecasting and inventory.
- Use Smarter Lunchrooms Techniques (i.e., slicing oranges) to increase food attractiveness, ease of consumption.
- Utilize Offer V Serve correctly to allow students to select preferred items/reject undesired items.
POST-CONSUMER WASTE

REDUCE POST-CONSUMER WASTE IN THE CAFETERIA BY:

- Use Smarter Lunchrooms Techniques (ie slicing oranges) to increase food attractiveness, ease of consumption.
- Promote use of Share Tables, allowing students to take items that are unopened/at safe temps.
- Coming soon - pilot composting programs at select schools.
NEXT STEPS

• Ensure existing SOPs are being correctly implemented
• Expanding electronic ordering, receiving and invoicing
• Electronic production records
• School-based training on Offer V Serve
• Revised Share Table SOPs
• Composting pilot
• Continue monitoring waste levels