Sustainable Food Management: Reducing Wasted Food

Rachel Chaput
NYSAR3 Conference
November 7, 2014
Why Target Food Waste?

Food is simply too good to waste!

• Costs US $165 billion annually.

• Contributes to 14% of domestic GHG emissions.

• 1 in 6 Americans lack a secure supply of food.

(Citations: USDA, EPA; Photo credit: Rose Bowl website)
Globally, in 2007, an area significantly larger than Canada, a collective 3.5 billion acres of land, was plowed to grow food or support livestock, that nobody would eat.
EPA’s Sustainable Food Management Programs

Food Recovery Challenge
Focus: Commercial Food Waste Reduction
www.epa.gov/foodrecoverychallenge

Food: Too Good to Waste
Focus: Residential Food Waste Reduction
Prevention is The Key to Both Cost Savings and Environmental Impacts

Every food item we throw away results in a large amount of invisible embedded energy and other resources being wasted.
Reducing Residential Food Waste

Food: Too Good to Waste (FTGTW) is supported by the West Coast Climate & Materials Management Forum

Designed by a diverse planning team of 25 state, city and county government partners
So, what exactly is food waste?

Total Food and Drink Waste

Avoidable
- Prepared, served or cooked too much
- Not used in time
- Other

Possibly Avoidable (e.g. beet tops, stale bread for croutons)

Unavoidable (e.g. banana peels)

Source: Household Food and Drink Waste in the UK (Quested and Johnson, 2009)
What’s in it for You?

• Cost savings for consumers, businesses, and municipalities

• Support for your local communities

• Helping consumers stretch their food budgets further builds brand loyalty

• Public awareness and expanding the conversation on sustainability and materials management
CBSM: Designing the Pilot

• The FTGTW pilot was designed to reduce wasteful household food consumption by encouraging individuals to consume less by wasting less food.
• The team used a community-based social marketing (CBSM) approach.
• CBSM differs dramatically from a traditional outreach model because materials are designed to address a specific barrier to a desired behavior, rather than relying on information and awareness building alone to transform behavior.
CBSM ≠ Dropping flyers
# Community-Based Social Marketing Pilot Design

<table>
<thead>
<tr>
<th>Top 5 Strategies</th>
<th>Benefits</th>
<th>Barriers</th>
<th>Tools</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Get Smart</strong>: See how much food (and money) you’re throwing away</td>
<td>Waste aversion</td>
<td>Dynamic lifestyle</td>
<td>measurement tool and instructions</td>
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<tr>
<td></td>
<td>Saving money</td>
<td>Time</td>
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<td>Automatic behavior</td>
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<tr>
<td><strong>Smart Shopping</strong>: Buy what you need</td>
<td><strong>Waste aversion</strong></td>
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<td><strong>Automatic behavior</strong></td>
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<tr>
<td><strong>Smart Storage</strong>: Keep Fruits and Vegetables Fresh</td>
<td>Waste aversion</td>
<td><strong>Knowledge</strong></td>
<td>Storage guide</td>
</tr>
<tr>
<td></td>
<td>Health</td>
<td><strong>Time</strong></td>
<td></td>
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<tr>
<td></td>
<td></td>
<td><strong>Not enough room in fridge</strong></td>
<td></td>
</tr>
<tr>
<td><strong>Smart Prep</strong>: Prep now, eat later</td>
<td><strong>Convenience</strong></td>
<td><strong>Skills</strong></td>
<td>Website tips and social media platforms</td>
</tr>
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<td>Saving money</td>
<td><strong>Knowledge</strong></td>
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<td>Health</td>
<td></td>
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</tr>
<tr>
<td><strong>Smart Saving</strong>: Eat what you buy</td>
<td><strong>Waste aversion</strong></td>
<td><strong>Gratification</strong></td>
<td>refrigerator prompt and links to recipes</td>
</tr>
<tr>
<td></td>
<td></td>
<td><strong>Convenience</strong></td>
<td></td>
</tr>
</tbody>
</table>

**Audience**: Families with young children, young full-time workers
"Get Smart"

Measurement raises household awareness!
# FRUIT AND VEGETABLE STORAGE GUIDE

## INSIDE THE FRIDGE
- Apples, berries, and cherries
- Grapes, kiwi, lemons, and oranges
- Melons, nectarines, apricots, peaches, and plums (after ripening at room temperature)
- Avocados, pears, tomatoes (after ripening at room temperature)
- Almost all vegetables and herbs

## OUTSIDE THE FRIDGE
- Bananas, mangos, papayas, and pineapples: store in a cool place
- Potatoes / onions: store in a cool, dark place
- Basil and winter squashes: store at room temperature—once cut, store squashes in fridge

## MORE STORAGE TIPS
- If you like your fruit at room temperature, take what you will eat for the day out of the fridge in the morning.
- Many fruits give off natural gases that hasten the spoilage of other nearby produce. Store bananas, apples, and tomatoes by themselves and store fruits and vegetables in different bins.
- Consider storage bags and containers designed to help extend the life of your produce.
- To prevent mold, wash berries just before eating.

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For more tips visit: [http://makedirtnotwaste.org/prevent-wasted-food](http://makedirtnotwaste.org/prevent-wasted-food)

SMART STRATEGY: Make a Shopping List with Meals in Mind

- Think about how many meals you’ll eat at home this week and how long before your next shopping trip.
- Next to fresh items on the list, note the quantity you need or number of meals you’re buying for.
- Shop your kitchen first and note items you already have.

<table>
<thead>
<tr>
<th>FOOD ITEM</th>
<th>AMOUNT NEEDED</th>
<th>ALREADY HAVE</th>
</tr>
</thead>
<tbody>
<tr>
<td>Salad greens</td>
<td>Lunch for a week</td>
<td>Enough for one lunch</td>
</tr>
<tr>
<td>2% milk</td>
<td>Gallon</td>
<td>None</td>
</tr>
</tbody>
</table>

Food
Too Good To Waste

EPA United States Environmental Protection Agency
“Eat Me First” Prompt
Infographic/Poster and Presentation

**Workshop Purpose**

Examine the problem of food waste including:
- How much goes to waste
- Why waste happens
- Why waste matters
- Strategies to reduce waste

**WHAT’S UP WITH ALL THE FOOD WASTE?**

**CONSIDER THE TOMATO...**
31% of fresh tomatoes bought by U.S. households are thrown out—that’s 21 tomatoes a year per person!

Throwing out that many tomatoes costs us a bundle—over $2.3 billion a year.
If only it was just tomatoes...the cost of all U.S. household food waste = $166 BILLION!

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**WASTED FOOD = WASTED RESOURCES**

U.S. FOOD WASTE ACCOUNTS FOR:

- 25% of all our fresh water uses
- Enough energy to power the country for more than a week
- Enough land to feed the world’s hungry twice over

By making small shifts in how we shop, store, and prepare food, we can keep the valuable resources used to produce and distribute food from going to waste.

www.urlgoeshere.com

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EPA United States Environmental Protection Agency
Main message: *Food is too essential to throw away.*

Implementation guide

Message map

**Behavior change tools**, including:
- fruit and vegetable storage guide
- shopping list template with meals in mind
- refrigerator prompt to “eat what you buy”

**Outreach Tools**, including:
- infographic/poster
- factoids across the supply chain
- workshop presentation for community participants
Implementing Partners

Original Implementing Partners:

- King County (WA)
- San Benito County (CA)
- Boulder County (CO)
- Seattle (WA) – baseline

Results:
Initial data indicates that pilot implementation could influence a 25% decrease in household food waste.

Current Implementing Communities:

- Honolulu (HI)
- Santa Monica (CA)
- Oakland (CA)
- Chula Vista (CA)
- Gresham and OR Metro (OR)
- King County scale-up (WA)
- Thurston County (WA)
- Oak Park (IL)
- Iowa City (IA)
- Minnesota Pollution Control Authority
- Rhode Island Food Policy Council
- University of Denver (CO)
- State of Vermont
- Sustainable Jersey City (NJ)
Preliminary Analysis of Results

- Personal recruitment more effective than email.

- Creating food waste awareness is key to lasting impact in food waste reduction.

- Tools tied to specific behaviors are most effective.

- Initial data indicates that toolkit use and pilot implementation could influence a 25% decrease in household food waste.
Opportunities to Get Involved

Grocers, Restaurants, Haulers and other businesses
• May assist with outreach, measurement, and provide incentives

State, Local, and Tribal Governments
• Implement the *Food: Too Good to Waste* toolkit in your communities after it has been approved through EPA’s product review process.

Colleges and universities
• Integrate information to support sustainability programs aimed at the young adult demographic.

Community groups or non-profits
• Outreach through social networks or with a community challenger
Collaborating with NW Grocers

King County and PCC Natural Markets Videos:

http://your.kingcounty.gov/solidwaste/wasteprevention/too-good-to-waste.asp
Scale-up Next Steps

• Toolkit posted to www.epa.gov/smm by spring

• Program evaluation to be published by January 2015

• Coordination with USDA, and other organizations for scale-up to a national campaign
Questions?

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(212) 637-4116

How to Join EPA’s Food Recovery Challenge:
www.epa.gov/foodrecoverychallenge

West Coast Climate Forum Website
www.westcoastclimateforum.com