



UC Davis Dining Services Sustainability and Nutrition Department

Love Food, Hate Waste Resident Dining Commons Food Waste Report - Fall, 2012

A team of UC Davis students and Dining Service employees worked together over November 13th, 14th, and 16th, to collect, sort and weigh dining customers' meal waste. These "waste audits" took place in each of our three dining commons, during our three hour lunch period.

As our guests brought their plates to the dish return they were asked to sort their waste into the following categories: "edible food waste" (like coleslaw or a bread stick left on someone's plate), "inedible food waste" (like a corn cob or a banana peel), "liquid waste" (any liquids, not including ice) and lastly "napkin waste".



Food Waste Results, Fall 2012:

Dining Room	Guest Count	Edible Food Waste		Inedible Food Waste		Liquid Waste		Napkins Used	
		Total (lbs)	Per Guest (oz)	Total (lbs)	Per Guest (oz)	Total (quarts)	Per Guest (fl oz)	Total (lbs)	Per Guest (napkin)
Cuarto	483	44	1.46	6.75	.22	16	1.06	2.75	0.68
Segundo	1,539	328	3.41	14	.15	55	1.14	15	1.17
Tercero	1,192	143	1.92	39	.52	52	1.38	35.5	3.54
Total	3,214	515	2.56	59.75	.30	123	1.22	53.25	1.99

In total we collected 515 pounds of edible food waste, which equates to...

- 195 hundred thousand gallons of water
- 12,800 gallons of fossil fuels
- 2,500 pounds of CO₂
- Enough food to feed a family of four for 34 days

Trends in Food Waste Reduction:

Year	Food Waste per Guest (oz)	Inedible Waste per Guest (oz)	Liquid Waste per Guest (fl oz)	Napkins Used per Guest
FALL 2012	2.56	0.30	1.22	1.98
SPRING 2012	1.87	0.35	1.88	1.40
FALL 2011	2.08	0.42	1.66	2.20
SPRING 2011	1.96	0.37	1.39	1.35
FALL 2010	2.22	0.22	1.53	1.47
FALL 2009	3.60	0.37	1.68	No data

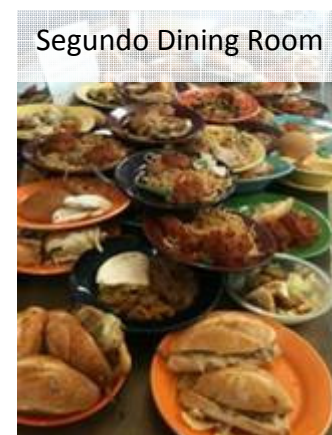
Overall Summary

Comparing Fall 2012 to Fall 2011, guests produced:

- .48 **additional** ounces of edible food waste
- .12 **fewer** ounces of inedible food waste
- .44 **fewer** fluid ounces of liquid waste
- .22 **fewer** napkins

Education

During the meal period, the sustainability team collected particularly wasteful plates, like entire hamburgers, or grilled cheese sandwiches, and displayed the plates on a table to highlight the most obvious food waste.



Once the three hour meal period was finished, we weighed the waste and posted the information in the dining commons to inform the students. We posted graffiti boards and markers on the dish return wall to provide a space for students to write feedback about the activity and their thoughts on food waste.

Student graffiti board responses:

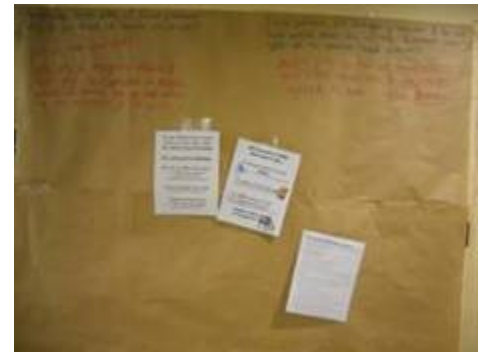
- Producing food uses 10% of the total U.S. energy budget, 50% U.S. land and 80% of all freshwater used in the U.S...and we waste 40% of it!

Why do you waste food?

- Because we believe we're hungrier than we really are.
- Americans are disconnected from the source of their food. Unlike early humans, we do not have to physically hunt or gather the food. Therefore we aren't grateful for the food and try to conserve it.
- Laziness.
- Asking for a hamburger without a bun takes too long.
- Time constraints.

How can the DC help you reduce food waste?

- You don't let us take food out! (5 comments in agreement)
- If we were allowed to take food out, we'd be able to moderate the amount of food we ate and would save the food we couldn't finish, instead of throwing it out because we're full :)
- More information about ingredients on packaged/all food for those with allergies.
- Desire for food to taste as good as it looks.
- Smaller portions.
- Sampling the food before it is served on a full plate.
- Better quality.
- Less sodium.
- Knowing where the food is coming from
- More spicy food.
- Make better food, consistently.
- Have an extra display plate.
- Extra display plate at stations seems like overkill and wasteful.
- Information and overall activity was helpful and cool!
- Thinking about those without food living in hunger before throwing away food.
- Waste audit= very effective.



Observations:

- This year more than ever, we saw student support while we were conducting our audits. Many students came up to us at the dish return and told us they were shocked at the amount of food waste produced and pleased we were facilitating this education.

Recommendations:

- Continue our bi-annual waste audits and potentially increase number of audits conducted throughout the academic year.

- Whole plates of food were being returned to the dining room with little to no food being eaten. In Cuarto we saw full plates of the "Three Chili Pasta with Root Vegetables", in Segundo we saw full plates of the "Little Philly Beef Steak Sandwich" and in Tercero we saw full plates of the "Roasted Tomato Sauce with Pasta".

Recommendations:

- Heavily promote and encourage students to use the 'Try-a-Taste' program if they are unsure about the entrée provided

- Pre-plate entrees in different portions – ½ portions and full portions
 - Do taste-tests for quality control purposes for each entrée served throughout the meal period, not just during one time of the meal
- Students complained that the “Three Chili Pasta and Root Vegetables” was too spicy.

Recommendations:

- Highlight spicy dishes on our menu signage with a chili pepper image or large, colorful font.
- A majority of the waste was created in pre-plated entrees with **sides included** on the plate. There was a high volume of vegetable garnish waste, especially in Tercero. In Tercero we saw lettuce on almost every 10,000 chicken sandwich plate.

Recommendations:

- Pre-plate entrees with and without the sides so guests can choose their preferred plate
 - Educate on portion size at point of service
 - Do taste-tests for quality control purposes for each entrée served throughout the meal period, not just during one time of the meal
 - Ask students at the platform if they want the garnish
- A large amount of napkins were being wasted; some students were taking way more napkins than they needed. We did see a decrease in napkin waste in Cuarto, since implementing fewer napkin dispensers in the unit.

Recommendations:

- Continue education on taking only the number of napkins you need, place education materials on the napkin dispensers themselves
 - Table Tents to remind students that the napkins, although containing some post-consumer recycled content, still come from trees and other natural resources, and require energy and carbon dioxide production to produce
 - Consider implementing the Sodexo Express Nap program; do not have napkins available at the dining room tables, have them available at couple of distinct locations around the dining room
- Novelty ice cream was our main source of landfill waste, with the thin plastic wrapper and the 5 oz. non-recyclable container. In Cuarto, where students have the option of hard scooped ice cream or novelty ice cream we did not see any landfill waste.

Recommendations:

- Try to source a novelty ice cream product that has compostable or recyclable packaging, or remove it from the dining room all together and provide hard scooped ice cream at all units



This report was brought to you by:

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Visit our website for more best practices on waste reduction:

<http://dining.ucdavis.edu/sustainability.html>

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