

# Iowa RECESS before lunch

Davis County Elementary



Iowa Department of Education Team Nutrition Program partnered with ISU Extension and Outreach and the Midwest Dairy Council to conduct a recess before lunch pilot in three select elementary buildings during the 2013-14 school year. It included an assessment of food and milk waste, photo estimation, and school staff interviews and surveys. Four site visits occurred at each building, providing a snapshot of food consumption in school meals when recess was after lunch and when recess was before lunch.

IOWA STATE UNIVERSITY  
Extension and Outreach



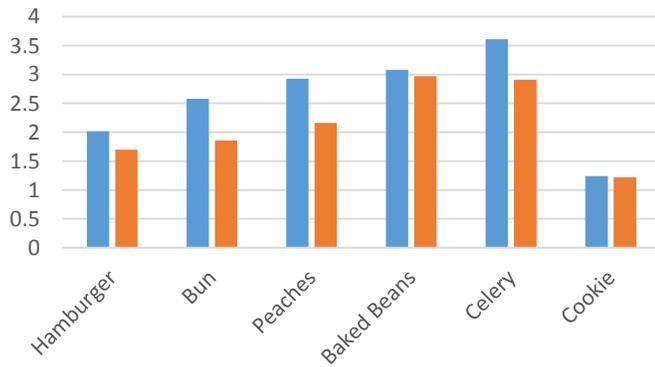
TEAM NUTRITION  IOWA™



■ Recess After Lunch ■ Recess Before Lunch

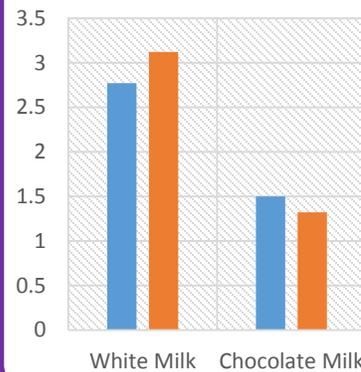
## Photo Estimation

1 = no product remaining 5 = more than 3/4 remaining



## Milk Waste

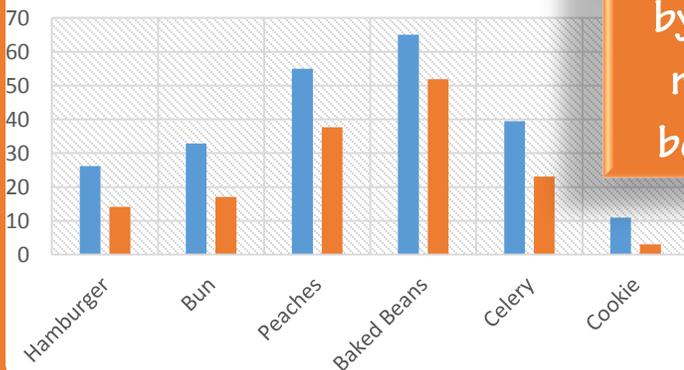
(per 8 ounces)



White milk waste ↑ by 4% and chocolate milk waste ↓ by 2% when recess was before lunch.

## Weight of Food Waste

grams



Food waste ↓ by 21% when recess was before lunch.



## The Data (Average weight of food waste and food remaining observed through estimation of photos)

Recess After Lunch (RAL)								
Food Item	Hamburger	Bun	Peaches	Baked Beans	Celery	Cookie	White Milk	Chocolate Milk
Photo	2.02	2.58	2.93	3.08	3.61	1.24		
Weight of Food Waste	27.03/64g	32.83/57.5g	54.5/108g	61.08/82g	38.86/51g	10.94/29g	2.77/8 oz	1.50/8oz
Recess Before Lunch (RBL)								
Photo	1.7	1.86	2.16	2.97	2.91	1.22		
Weight of Food Waste	13.67/60g	17.03/57.5g	38.07/110g	55/92.5g	23.46/52.5g	3.1/30g	3.12/8 oz	1.32/8oz
Difference of leftover weights RAL - RBL	26.18 – 14.13 = 12.05/62g	32.83 – 17.03 = 15.8/57.5g	55 – 37.7 = 17.3/109g	65 – 51.9 = 13.1/87.2g	39.43 – 23.12 = 16.31/51.7g	10.94 – 3.1 = 7.84/30g	2.77 – 3.12 = -0.35	1.5 -1.32 = 0.18
	<b>19% ↓ waste</b>	<b>27% ↓ waste</b>	<b>16% ↓ waste</b>	<b>15% ↓ waste</b>	<b>32% ↓ waste</b>	<b>26% ↓ waste</b>	<b>4% ↑ waste</b>	<b>2.25% ↓ waste</b>

## Interviews and Surveys

The principal, foodservice personnel, nurse, 3<sup>rd</sup> grade teachers, lunchroom monitors, and recess monitors were interviewed pre and post. Below is the summary of responses:

	Pre-Interview & Survey Responses	Post-Interview & Survey Responses
	Overall, staff anticipated that moving RBL would:	Overall, staff determined that moving RBL:
Impact on Eating	Cause students to be hungrier, some eating more and some eating the same	Caused no change in milk or food consumption
Impact on Physical Activity	Cause no change in physical activity levels	Caused no change, kids tended to line up faster due to hunger or the cold weather
Impact on Behavior in Cafeteria	Cause some students to be more rowdy and others to be calm and quieter	Caused students to be rowdy coming in from recess and hard to settle down
Impact on Behavior in Classroom	Cause no change and slight increase in focus	Caused some students to be calmer while others had no change
Challenges	Create challenges around schedule changes and winter clothing	Created challenges around scheduling, winter gear, and having enough time Overcame challenges by starting a hall monitor system, installed new coat racks in the cafeteria, and developed a plan for students that need medication