

This resource includes the lowa Recess Before Lunch pilot protocol, results, tools and best practices to assist in the determination of making the change to recess before lunch.



IOWA STATE UNIVERSITY Extension and Outreach



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Davis County Elementary – Davis County School District Principal Jennie Donels and Operations Director Dan Roberts

Neil Armstrong Elementary – Bettendorf Community School District Principal Lisa Stevenson and Food Service Director Kayla Leu

#### East Elementary – Ankeny Community School District

Principal Julianne Taylor and Food Service Director Scott Litchfield

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### Developed by

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lowa Department of Education Team Nutrition Program partnered with lowa State University 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. The pilot 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.



Davis County Elementary Davis County CSD District Enrollment: 1,288 School Building Enrollment: 558 Principal: Jennie Donels jennifer.donels@dcmustrangs.com Operations Director: Dan Roberts dan.roberts@dcmustangs.com



Neil Armstrong Elementary Bettendorf CSD District Enrollment: 4,700 School Building Enrollment: 289 Principal: Lisa Stevenson Istevenson@bettendorf.k12.ia.us Food Service: Kayla Leu kleu@bettendorf.k12.ia.us



East Elementary Ankeny CSD District Enrollment: 9,486 School Building Enrollment: 391 Principal: Julianne Taylor julianne.taylor@ankenyschools.org Food Service: Scott Litchfield scott.litchfield@ankenyschools.org

Several studies have found scheduling recess before lunch has many benefits for growing children. While it sounds simple in theory, schools often find that this policy change required careful planning and efficient communication as well a strong commitment from school administrators, educators, and food service staff to make the change successful. This resource includes the lowa Recess Before Lunch pilot protocol, results, tools and best practices to assist in the determination of making the change to recess before lunch.

# Iowa Recess and Lunch Practices Principal Survey

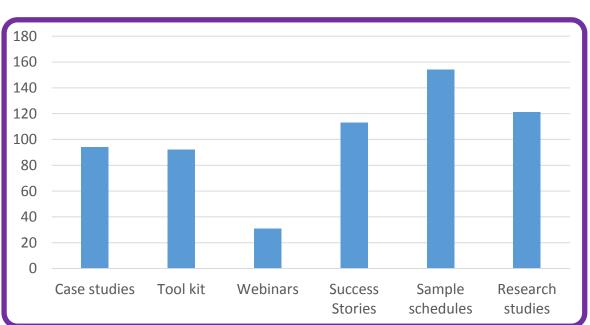
An electronic survey was sent to 907 lowa elementary principals to determine the options of lowa school facilitators on their opinions of recess before lunch and the potential benefits and challenges.

251 principals completed the survey resulting in a 28% response rate.

School enrollment range of principals that completed the survey: 100-700

The survey found:

- On average, lunch periods are from 25-30 minutes
- Recess is generally held outside as active free play supervised by teachers and other staff/volunteers
- Perceived benefits of moving recess before lunch:
  - o Learning readiness after lunch
  - o Improved efficiency between class, cafeteria and recess
  - o Improved behavior at lunch and recess
- Perceived challenges of moving recess before lunch:
  - Modifying schedules
  - o Cafeteria and recess supervision availability



## Making the Change to Recess Before Lunch

Tools Needed to Assist in the Determination of

# Iowa Recess Before Lunch Pilot Protocol

#### **Recess After Lunch: RAL**

**Recess Before Lunch: RBL** 

#### **School Recruitment**

lowa elementary school principals were notified of the opportunity to participate in the pilot. Interested principals were requested to complete a short questionnaire to learn more about their school building and readiness to move recess before lunch. Schools were selected based on school size, location in the state, readiness to move recess before lunch, and willingness to make the change at the middle of the school year.

#### Incentives

After completion of the pilot, the Midwest Dairy Council provided \$1,500 to each participating school, with \$1,000 to go towards a new milk cooler and \$500 to go towards new recess equipment.

#### Interviews and Surveys

School staff (teachers, custodians, principals, nurse, food service, recess monitors) interviews and surveys were completed during the first (RAL) and third (RBL) site visits

#### **Plate Waste Protocol:**

Site visits occurred at each of the three elementary school buildings two times in the fall (RAL) and two times in the spring (RBL).

Plate waste was only collected and assessed for the 3<sup>rd</sup> graders in each of the three buildings.

The trays of all the third graders were numbered with a small piece of masking tape in the corner of the tray. As students went through the line a picture was taken of their tray, making sure that the number was visible.



When it was time for students to be finished eating, their trays were collected on empty tables or carts so photos could be taken and weights could be collected. Plate waste was measure by ounces by food item. For example: remaining hamburger was weighed and then recorded, remaining bun was weighted and then recorded, etc. All unconsumed milk was measured as a total and not by tray. Dietetic students reviewed the photos to determine estimation of each food item remaining on each tray.

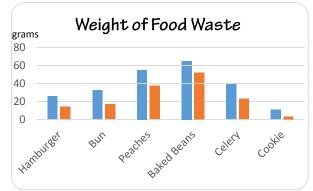
Photo comparison was measured using a grid to determine how much food was remaining on the tray.

- 1 = no product remaining
- $2 = less than \frac{1}{4}$  of product remaining
- $3 = \frac{1}{4}$  to  $\frac{1}{2}$  of product remaining
- 4 = more than  $\frac{1}{2}$  to  $\frac{3}{4}$  of product remaining
- 5 = more than <sup>3</sup>⁄<sub>4</sub> product remaining

## Iowa Recess Before Lunch Pilot Results Recess After Lunch Recess Before Lunch

The charts include the assessment of food and milk waste during the four site visits that occurred at each building. This assessment provides a snapshot of school meal consumption when recess was after lunch and recess was before lunch. The results vary by each school due to scheduling, menu items served, variations of standard serving weights, number of options available, influence of school staff, and other interventions such as milk promotions or school event

### Davis County Elementary - Davis County CSD





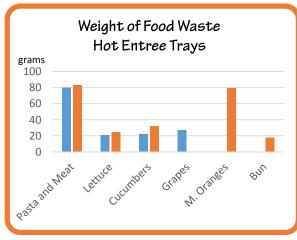
Food waste ↓ by 21% when recess was before lunch.

## Neil Armstrong Elementary – Bettendorf CSD



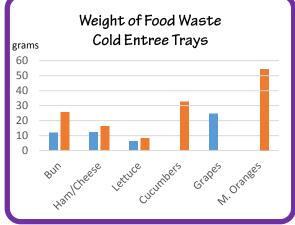
Food waste 1 by 6% when recess was before lunch, however additional fruit and vegetable options were available, which allowed students to take more food.

#### East Elementary - Ankeny CSD



9%  $\operatorname{\widehat{}}$  in food waste when recess was before lunch





22% 🏦 in food waste when recess was before lunch





# Use this checklist to assist in the consideration of moving recess before lunch (RBL) to identify actions needed to ensure success.

	Yes	No	Maybe	What needs to happen?
Are school administrators supportive?				
Are school nutrition staff supportive?				
Are teachers supportive?				
Have other schools that implemented RBL				
been contacted for best practices, sample				
schedules, etc.?				
Will students and parents have opportunities				
to provide input on RBL?				
Will all staff affected by the schedule change				
(teachers, janitors, aids, food service) be a				
part of the schedule discussion?				
Is there a plan to assess meal consumption				
pre and post (production records, waste, etc.)				
to measure success? (See Appendix A)				
Will students have at least 20 minutes of				
seated time to eat lunch?				
Would current school nutrition staff work				
schedules remain the same?				
Will there be adequate coverage of school				
staff during recess time and transition to				
lunch?				
Is there an area that is convenient to hang				
jackets/outdoor gear in or near the cafeteria?				
Are hand washing sinks convenient to make				
washing hands an easy option? (See				
Appendix B)				
Is there a plan for the distribution of lunch				
payment cards (if used)?				
Is there a plan for the management of				
lunches brought from home?				
Is there a plan in place for students with				
medical needs?				

## How to Conduct a Plate Waste Assessment



Tracking plate waste is easier said than done – but there are a variety of ways to measure plate waste either informally on a daily basis or more formally using photos and actual weights/measures. Please note weather, special events or other factors that might influence students' eating when analyzing data collected.

- 1. Review production records daily. Look at amounts prepared of each menu item and amounts left over this is your total amount served.
- 2. Most districts already have students dispose of unconsumed milk into a container. You can take the total number of milks sold and calculate total volume (number x 8 oz.) Then subtract unconsumed volume to determine amount of milk consumed. If multiple flavors are offered, try to keep a separate container for each. The number sold and the waste percent by flavor will provide feedback regarding student preferences.
- 3. Visual assessments of food plate waste can be conducted by one or two persons by assigning a numerical score to amount of waste remaining using photos of trays before and after consumption. This can be done for each item or by the entire tray.
- 4. Actual plate waste would involve weighing or measuring of foods not eaten by either a whole tray or by item.
  - a. Students can go to tray return as usual and remove paper waste
  - b. For whole tray measurements, all plate waste can be dumped into a pre-weighed container; this weight is then subtracted from weight of filled container. Note need for larger scale (at least 10 lb. capacity) and sturdy containers.
  - c. For by item measurement, students can place trays on cart for weighing or measuring when space and help is available.
    Predetermine how "bundled menu items" such as sandwiches or pasta/protein entrees will be handled. A combined approach is most effective. Weighed amounts are subtracted from calculated served amounts.

# The Importance of Hand Washing

Whether recess is scheduled before lunch or after, implementing a hand washing practice is an important food safety issue that should not be overlooked. A best practice includes a hand washing routine that allows the students to wash their hands before eating, especially during the cold and flu season. Hand washing is one of the best ways to remove germs, avoid getting sick, and prevent the spread of germs to others. Washing hands with soap and water is the preferred method; use of hand sanitizer is not as effective in cleaning hands. Hand sanitizers are designed to work in addition to hand washing when applied to already clean hands. When it comes to the prevention of the spread of Norovirus, hand sanitizers may be a helpful addition to hand washing, but not a substitute.

#### Excerpt from the Iowa Department of Public Health EPI Manual

Using an alcohol-based hand sanitizer is okay, except when hands look dirty; then washing hands with soap and water is a must. Alcohol is not as effective at killing germs when dirt is present.







# Existing Resources and Tools:

### Recess Before Lunch: A Guide to Success - Montana Team Nutrition

Sample schedules, informational handouts, sample parent letters, Power Point presentations, and sample press releases.

#### http://healthymeals.nal.usda.gov/state-resources/recess-lunch-guide-success

Recess Before Lunch Programs in Elementary Schools: Perceptions and Practices of School Professionals – Wendy Bounds, PhD, RD; Mary Frances Nettles, PhD, RD; James T. Johnson, PhD

Survey results of school districts across the United States to address issues to consider when implementing a recess before lunch program.

### http://www.schoolnutrition.org/Content.aspx?id=12502

## NFSMI Best Practice Checklist for School Nutrition Professionals Implementing or Assessing Recess Before Lunch in Elementary Schools

Best practice statements related to support for recess before lunch from school administrators, school nutrition staff, and school staff in the following categories: personnel support and workload, logistics, and scheduling.

http://www.nfsmi.org/documentlibraryfiles/PDF/20090508013951.pdf

### Food Waste Reduction in School Meals

Schools have a special role in providing nutritious, well-balanced meals for students and to educate the next generation about environmental stewardship through reduction and recycling of waste. This resource provides ideas on how to increase consumption and reduce food waste in schools.

https://www.educateiowa.gov/pk-12/nutrition-programs/quick-linksnutrition/learning-tools-nutrition/food-waste-reduction-school