

Science-Based Basics for Transporting Food Safely



THE CENTER FOR FOOD SAFETY IN
CHILD NUTRITION PROGRAMS

Speakers



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Outline



Center Overview

Who we are



2015 Simulation of
field trip sack lunches

Cold Holding &
Transportation



2015 Summer Food
Service Program

Off-site feeding for SFSP



2016 Milk
temperature
simulation

Cold Holding &
Alternative Breakfast
Service

Center for Food Safety in Child Nutrition Programs

Mission

To conduct food safety research that meets the needs of Food and Nutrition Service's nutrition assistance programs using an interdisciplinary team approach and to disseminate results to a variety of targeted audiences.

Vision

The vision of the center is to provide leadership in advancing food safety research and practices within Food & Nutrition Service's nutrition assistance programs.



THE CENTER FOR FOOD SAFETY IN
CHILD NUTRITION PROGRAMS

Center Leadership Team



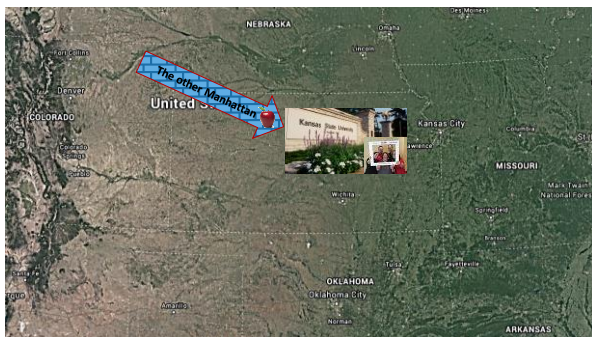
Kevin R. Roberts,
PhD
Co-Director &
Professor



Kevin L. Sauer,
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Dean of the
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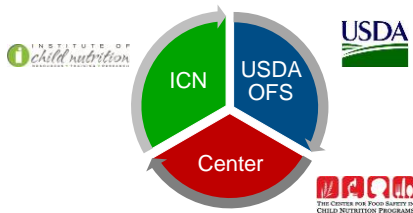


Abbreviated Scope of Work

- 2011 Health Inspections
- 2011 Cooling of School Foods – Phase I
- 2012 Food Safety Plan Guidance Document
- 2012 Food Safety Plan Implementation
- 2013 Produce Wash
- 2014 Allergy Management
- 2014 Field Trip Food Safety
- 2015 Cooling of School Foods – Phase II
- 2015 Exploration of Food Safety and Food Waste
- 2015 Summer Food Service Program with ICN
- 2015 Simulation of Field Trip Sack Lunches
- 2016 Employee Behavior Assessment, I & II
- 2016 Milk Temperatures for Alternative Service Styles
- 2020+ Food Defense, Production Systems, Farm to School, and more



Food Safety Partnership

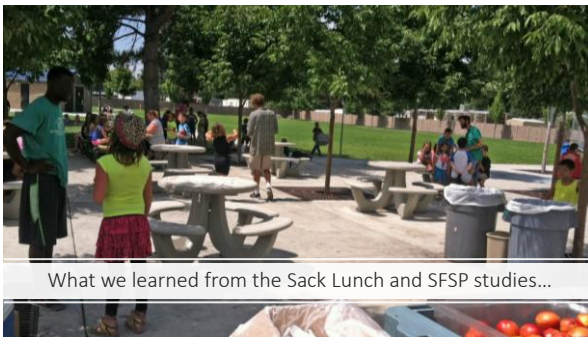




Off-Site Food Safety

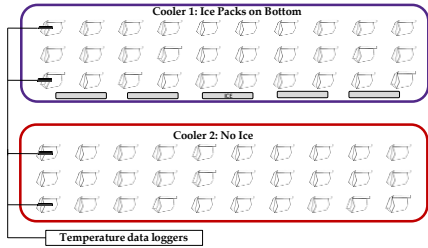
Research Methods

- Identify current food safety practices
 - Collect data on how food was handled directly from operators
 - Observations
 - Survey
- Collect temperatures of foods
 - Simulation
 - On-site collection

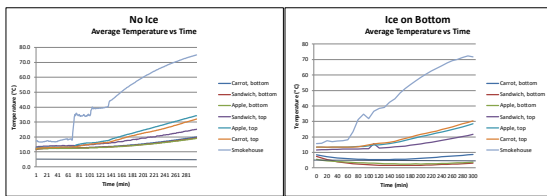


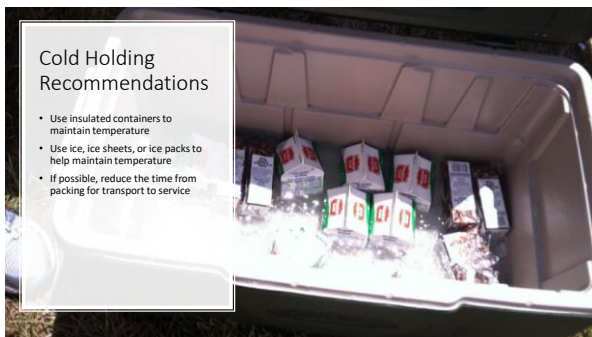
What we learned from the Sack Lunch and SFSP studies...

Sack Lunches: What we did!



Temperature Curves for Sack Lunches







Hot Holding Recommendations

- Use hot holding equipment or insulated containers to maintain temperatures
- Use hot packs as needed
- If possible, reduce the time from end of preparation to service

Transportation of Food Recommendations

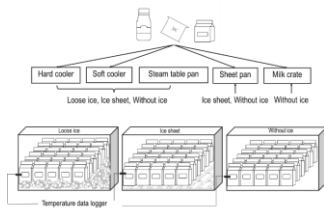
- Check temperatures of food throughout the transportation process to ensure food is out of the danger zone*
- Maintain equipment in good condition for the best possible temperature control
- Adapt methods to ensure food stays out of the danger zone
 - Keep cold foods out of direct sun
 - Use frozen food items (juice) to help maintain temperatures
- If supplementing with non-insulated transportation containers, serve from those first

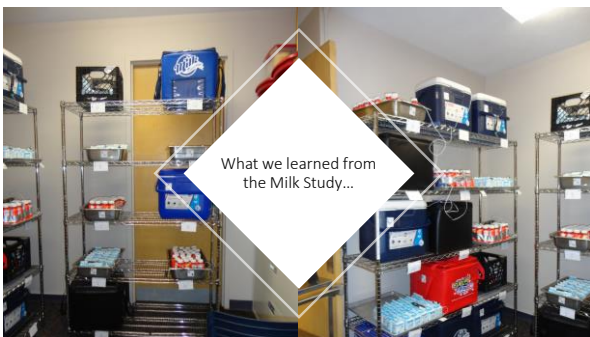


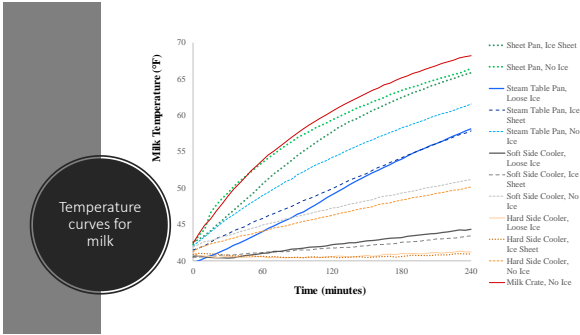


Packing Milk for Alternative Service









What really worked?

Treatments	Ice	Ice Sheet	No Ice
Milk Crate			
Sheet Pan			
Steam Table Pan			
Soft-sided Cooler	✓	✓	
Hard-sided Cooler	✓	✓	

Does **your process** maintain the appropriate temperature?

- Select thermometer or data logger based on the method/budget
- Test your transportation procedures



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