By the Numbers: Improve Your Program with USDA Research

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AGENDA

• The Who/What/Why of Child Nutrition Research
• Improvements in Communication
• Study Updates: What’s New and What’s Next
• We want to hear from YOU!
First things First...

THANK YOU
for your partnership!
We need YOU!

- **Solving for X: What are the key Program successes and challenges?**
  - We depend on YOU to help get the most accurate information possible

- **Using new and existing data and literature to reduce need for new data collection**
  - School breakfast analyses
  - Teens and participation in NSLP
The key question...

Why is USDA always bugging me for data??
First Things First: Why We Do Studies

- **Measure things in a systematic, nationally representative way**
  - Supports feedback we receive in other ways
  - Ensures all voices/perspectives heard

- **Examples:**
  - School Nutrition and Meal Cost Study (formerly known as SNDA)
  - APEC
First Things First: Why We Do Studies

• Take a snapshot/evaluate program operations

• Sometimes, case studies are enough

• Examples:
  • CN Program Operations study (annual)
  • Procurement practices
  • Technology use
  • SAE Study
  • Independent review of applications
First Things First: Why We Do Studies

- Respond to congressional requirements and/or audit recommendations

- Examples:
  - Direct certification Report to Congress (annual)
  - CN Burden study
  - CEP evaluation
  - Study of Nutrition and Wellness Quality in Child Care Settings (SNAQCS)
First Things First: Why We Do Studies

- Using existing data to build evidence to support programs
  - The importance of breakfast eating

- Learn more about our populations of interest
  - Teen students and the NSLP
But What Do We Do With That Data?

- Inform policy decisions
  - Create new policies
  - Did the policy work? Unintended consequences?

- Estimate impacts of proposed changes

- Evidence for requesting more $$$

- Products/tools/processes and effectiveness

- Educate stakeholders
Why do some SFAs always get selected for FNS studies?

• **Sampling by size**
  • Number of schools
  • Meals served
  • Single or multi-district SFAs

• **Big SFAs = big impact on national results**

• **Case studies are different**
Didn’t I Just Tell You That?

- Sometimes we do need to ask similar questions for different studies
  - We can’t link what you report in one study to another

- Let us know!
Do I Have To?

• Technically...

• But we are working to reduce burden where we can

• Please continue to provide input!
Why Do Studies Take So Long to Publish?

• At least two years for large studies for data to be collected, checked, analyzed and written up

• Many levels of clearance before publication

• FNS looking for ways to do more small, fast turn-around studies

• Also exploring new ways of packaging results into shorter documents
Improving our Communications

• You asked...and we are responding

• Releasing study findings in new/innovative ways

• Directly sharing these results with you and other participants
Sample Products

For more information...
Suggestions, Please!

• Come see us in USDA Lane (Booth 2551)
USDA Study Updates
Child Nutrition Reducing Burden Study
What Was the Purpose?

Legislative requirement to identify the best means of efficiently consolidating program reporting requirements for State agencies and School food authorities to improve administrative burden associated with the Child Nutrition Programs.
What Topics were Discussed?

- USDA guidance documents and policy memos
- Program standards and requirements
- Management evaluations, financial management reviews, and administrative reviews
What Topics were Discussed?

- Procurement standards and requirements
- Reporting requirements
- Research and evaluation studies
Who Provided Information and Input?

✓ All State Agencies
✓ Representative sample of 1000 SFA Directors
✓ Workgroups with State-level and SFA-level stakeholders

Thank you!!

United States Department of Agriculture
What Did We Learn?

✓ Identified needs for more tailored guidance and templates, particularly for SFA procurement activities
✓ Provided suggestions for areas to streamline operations and reduce administrative burden in program review
✓ Established a strong desire to utilize technology to improve the process for retrieving and reporting program information
Successful Strategies to Reduce Sodium in School Meals
What Was Evaluated?

✓ Availability of foods that meet sodium standards
✓ Strategies used by schools to meet sodium targets
✓ Technical assistance needs of schools and districts to develop lower sodium menus
Who Provided the Information?

✓ 16 food industry representatives from 13 companies
✓ 118 SFA directors, school employees, local food suppliers, and community-based stakeholders from 36 SFAs that:
  ✓ *met sodium target 1*
  ✓ *met or were close to meeting sodium target 2*

Thank you!!
Key Findings
Variety of products available to meet Target 1

Adequate lead time supported successful development and reformulation of foods to meet Target 1

Food industry representatives reported it would be challenging to achieve levels beyond Target 2
Top Five Strategies Used by SFAs to Achieve Sodium Target 2

- Effective menu planning
- Food procurement
- Changes in food preparation methods
- Involvement of stakeholders to gain acceptance
- Interactions with food suppliers
Training and technical assistance from USDA, State agencies, and other organizations helpful in lowering sodium in meals.

Food suppliers also a major source of technical assistance.
✓ Districts seek additional guidance on:
  ✓ safety, functionality and health benefits of lower sodium
  ✓ planning and communication with stakeholders
  ✓ communication materials for diverse audiences
  ✓ lower sodium recipes and modification
  ✓ funding for equipment and skilled labor.
School Nutrition and Meal Cost Study
Merging of School Nutrition Dietary Assessment and Cost Studies

- SNDA-I: SY 1991-1992
- SNDA-II: SY 1998-1999
- SNDA-III: SY 2004-2005
- SNDA-IV: SY 2009-2010

- SLBCS-I: SY 1992-1993
- SLBCS-II: SY 2005-2006

School Nutrition and Meal Cost Study (SNMCS)-I (SY 2014-2015)

SNMCS-II (SY 2019-2020)
What Was Evaluated?

- Progress with updated nutrition standards
- Challenges encountered with implementation
- Cost of meals prepared
- Nutritional quality of school meals
- Student satisfaction with school meals
- Dietary intake of students
Who Provided the Information?

- 518 School Food Authorities
- 1207 Public Schools
  - School Nutrition Managers completed 5701 National School Lunch Program (NSLP) menu surveys!
- 2165 Students
- 1850 Parents
- Representative of 48 Contiguous States plus Washington DC

Thank you for your participation and patience!!
Key Findings
Percentage of NSLP Lunch Menus that Met Daily Meal Pattern Requirements

- Milk Quantity: 100%
- Fruits Quantity: 95%
- Allowed Milk Types: 91%
- Meats/Meat Alternates Quantity: 91%
- Vegetables Quantity: 81%
- Grains Quantity: 80%

Source: SNMCS Final Report Volume 1
Percentage of NSLP Lunch Menus that Met Weekly Meal Pattern Requirements

Source: SNMCS Final Report Volume 1
Percent of Menus Meeting Minimum and Maximum Calorie Standards

Source: SNMCS Final Report Volume 1
SFA Director Reported Challenges Implementing or Maintaining Updated Standards

- Cost of Foods: 3.8
- Availability of Appropriate Foods: 3.1
- Staff Training: 3.0
- Need for Additional Staff Hours: 3.0
- Offering Different Portion Sizes by Grade: 3.0
- Needing Additional Equipment: 2.7
- Need for Kitchen Remodel/Upgrade: 2.7
- Understanding Updated Standards: 2.5

Source: SNMCS Final Report Volume 1
Inflation Adjusted Cost per NSLP Lunch in 2014-2015 Compared to Prior Years

Average Cost per NSLP Lunch

- SY 1992–1993: $2.93*
- SY 2005–2006: $3.03*
- SY 2014–2015: $3.81

Source: SNMCS Final Report Volume 3
School Food Authority Revenues as a Percentage of Costs

Source: SNMCS Final Report Volume 3, Tables 4.10, 4.11, 4.12, and 4.15.

Note: Differences were not tested for statistical significance.
Nutritional Quality of School Meals Increased Between 2009-2010 and 2014-2015

Source: SNMCS Final Report Volume 2

*Difference between SY 2009–2010 and SY 2014–2015 significant
Mean Scores for Lunches Increased for Adequacy and Moderation Components


*Difference between SY 2009–2010 and SY 2014–2015 is significantly different.
Satisfaction with School Meals among Students Who Have Eaten a School Meal

Source: SNMCS Final Report Volume 4
Levels of Plate Waste in NSLP Lunches Were Highest for Vegetables and Milk

Source: SNMCS Final Report Volume 4
Offer-versus-Serve in Elementary Schools Associated with Less Plate Waste

Source: SNMCS Final Report Volume 4

*Difference between schools that used and did not use OVS is significant

Elementary schools

<table>
<thead>
<tr>
<th>Calories</th>
<th>Fruits and Vegetables</th>
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</thead>
<tbody>
<tr>
<td>School uses OVS at lunch</td>
<td>26</td>
</tr>
<tr>
<td>School does not use OVS at lunch</td>
<td>32*</td>
</tr>
</tbody>
</table>

*Difference between schools that used and did not use OVS is significant
Lunches Consumed by NSLP Participants Were More Nutritious

Mean Total Scores on the HEI-2010

Source: SNMCS Final Report Volume 4

*Difference between participants and the matched comparison group of nonparticipants is significantly different
Types of Food Consumed at Lunch

Source: SNMCS Final Report Volume 4

*Difference between participants and the matched comparison group of nonparticipants is significant
Summary of Key Findings, School Year 2014-2015

✓ Most daily and weekly lunch menus met updated quantity requirements.
  ✓ Challenges with specific weekly requirements (100% whole grains, calories)

✓ SFA Directors reported food costs, availability of certain foods; staff training, and varying portion sizes as greatest challenges to meeting standards.

✓ Meal costs higher and average SFA operated at small financial deficit
Nutritional quality of school meals significantly higher than prior years.

Students who ate school lunch did not always eat all of the foods.
  - Waste highest for vegetables, milk, fruit, and lowest for desserts and entrees.

Despite food waste, students who ate a school lunch consumed a more nutritious lunch than other students.
  - More likely to consume milk, fruit, and vegetables
  - Consumed significantly less sodium and saturated fat, fewer calories, and fewer empty calories.
Questions?
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