A New Look at Fruits and Vegetables

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Think back…
Why this topic?
Why this training?
Percent U.S. Adults Who Have Consumed Fruits and Vegetables Five or More Times Per Day
Percent Minnesota Adults Who Have Consumed Fruits and Vegetables Five or More Times Per Day
Minnesota Student Survey:

Less than 22% of 6th, 9th, and 12th graders in Minnesota report eating at least 5 servings of fruits and vegetables a day.
Keeping Kids from Falling Short

Introducing Whole Grain Foods in the School Cafeteria

University of Minnesota Extension
Development

• Health benefits
• Safe food handling
• Appealing fruits and vegetables
• Target all members of school foodservice
• Applicable, relevant
• Benefits outweigh the costs

Keller’s ARCS Model of Motivational Design:

Attention
Relevance
Confidence
Satisfaction
Objectives

• Understand the health benefits resulting from children meeting the dietary guidelines for fruits and vegetables.

• Review safe food handling practices that ensure the fruits and vegetables offered to students are nutritious and healthy.

• Leave with a variety of ideas for including more nutrient dense, tasty and appealing fruits and vegetables in your school menus.
Health Benefits from Eating Fruits and Vegetables
Vegetable Recommendations Compared to Consumption

2001-02 NHANES Data, females 9-13 yrs.
# USDA Final NSLP Guidelines

<table>
<thead>
<tr>
<th></th>
<th>Amount Offered</th>
<th>Preferred Standards Required for Meal Reimbursement</th>
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<tbody>
<tr>
<td><strong>Breakfast</strong></td>
<td><strong>Fruit:</strong></td>
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<tr>
<td></td>
<td>• 1 cup (2 servings) daily</td>
<td>Student must take at least one fruit at breakfast</td>
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<tr>
<td></td>
<td>• Juice = no more than ½ of the fruit offerings</td>
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<tr>
<td><strong>Lunch</strong></td>
<td><strong>Fruit</strong></td>
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<tr>
<td></td>
<td>• ½-1 cup daily</td>
<td>Student must take at least one fruit or vegetable at lunch</td>
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<td></td>
<td><strong>Vegetable</strong></td>
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<td></td>
<td>• Average ¾-1 cup vegetable</td>
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<td>• Every week must include:</td>
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<td></td>
<td>• ½ cup dark green, starchy, legumes</td>
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<td>• ¾ - 1¼ cup orange/red</td>
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<td>• 1½ – 2¼ cups other</td>
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Six Steps To Safer Fruits and Vegetables

www.fightbac.org
How to clean?

Rinse under running tap water (no brush)

Scrub with brush under running tap water
The challenge is to ensure that students actually consume the fruits and vegetables they are offered.
Let’s Prepare Some Fruits and Veggies!
How can we help our children eat more fruits and vegetables through creative preparation techniques?

• Add more fruits and vegetables to standard recipes
• Use a wider variety of fruits and vegetables
• Prepare fruits and vegetables in new ways
Taco Salad


Ground beef
**Fresh or dehydrated onions**
Salt
Granulated garlic
Black or white pepper
Tomato paste
Water
Chili powder
Ground cumin
Paprika
Onion powder
**Fresh lettuce, shredded**
**Fresh tomatoes, diced**
Taco shell pieces or tortilla chips
Shredded cheddar cheese, reduced fat
<table>
<thead>
<tr>
<th>Day</th>
<th>Menu</th>
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<tbody>
<tr>
<td>Monday</td>
<td>Chicken Patty on a Whole Grain Bun</td>
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<tr>
<td></td>
<td>Seasoned French Fries</td>
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<tr>
<td></td>
<td>Savory Corn</td>
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<td></td>
<td>Tempting Pears</td>
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<td></td>
<td>Ice Cold Milk</td>
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<tr>
<td>Revised</td>
<td>Chicken Patty on a Whole Grain Bun with</td>
</tr>
<tr>
<td>Menu</td>
<td>Tomato Baked Sweet Potato Fries</td>
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<tr>
<td></td>
<td>Romaine/Spinach Salad</td>
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<tr>
<td></td>
<td>Strawberry/Banana Fruit Cup</td>
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<td></td>
<td>Ice Cold Milk</td>
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</table>
Why do children take the fruit and vegetables offered in the serving line? Why don’t they?
Eat with All Your Senses
Tray

- Presentation
  - Color
  - Texture
  - Temperature
- Eye appeal
- Proper cooking
Three R's for cooking vegetables for best nutrition:

• Reduce the amount of water used
• Reduce the cooking time
• Reduce the holding time.
<table>
<thead>
<tr>
<th>Tuesday</th>
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<tbody>
<tr>
<td>Pork Sandwich</td>
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<tr>
<td>Applesauce</td>
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<tr>
<td>Carrots</td>
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<tr>
<td>Peas</td>
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<tr>
<td>Milk</td>
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**Revised Menu:**

- BBQ Pulled Pork in a Whole Grain Pita
- Chilled Applesauce
- Cool Carrot Sticks/Crunchy Cucumbers with Dip
- Sweet Baby Peas
- Ice Cold Milk
Fruits and Vegetables First
Offer Choices
Make Healthy = Fast
Food Coaching

SHARE with your students how AWESOME healthy foods are!
Showcase the good stuff!
Salad Bar
Theme Salad Bars

• Top a Taco
• Build a Better Burger
• Build a Bowl of Chili
• Greater Tater
• Pile a Pizza
• Plenty of Pasta
• Stuff a Submarine
Build A Better Burger

Hamburgers and Buns

Sliced Cheese
Avocado
Red Onion
Lettuce

Ketchup
Mushrooms
Orange Bell Peppers
Tomatoes

Mustard
Sliced Beets
Coleslaw
Pickles
Farm to School

Toolkit for School Foodservice

Growing healthy kids...

Improving the health of children and local family farms is vital to Minnesota communities. Farm to School connects schools with fresh, local food grown or raised by family farmers for the mutual benefit of our youth, farmers, and communities. We build partnerships, coordinate trainings, and provide hands-on nutrition education to children.

Learn more about Farm to School in Minnesota and the Benefits of Farm to School.

Research
Funding Opportunities
Farm to School News

Program Areas

Parents and Community Members

Support your schools' Farm to School efforts. Learn more about school food, help improve school wellness policies, or organize a healthy fundraiser.

Educators

Find curricula and lesson plans to bring Farm to School to the classroom. Plus resources for farm field trips, fundraisers and wellness policies.

Discussion Leaders

Resources to screen the documentary and lead a group discussion.
Minnesota Toolkit for School Foodservice

Getting food grown by farmers in your community onto your students’ lunch trays

Farm to School connects schools with local farms. As a result, kids eat more fresh fruits and vegetables and learn where their food comes from. There are many Farm to School initiatives in Minnesota and they come in all shapes and sizes. These initiatives use local foods in school meals, cooking classes, school gardens, and provide nutrition and agriculture education in their classrooms, farm field trips, fundraisers, and much more! This toolkit helps school foodservice start, build, and sustain their Farm to School efforts.

Getting Started
Resources for building your Farm to School efforts

Using Food
Kid-tested recipes and menu-planning tools

Promoting Food
Fostering a “taste” for local food

Food Safety
Resources and fact sheets on how to buy and keep food safe

Sourcing Food
Tips to find and purchase local food in season

Online Trainings
Short video sessions to help implement Farm to School in your school
The Numbers

- 3-hour training
- 2 pilots
- ~ 30 trainings across the state
- ~ 500 participants
- 70+ school districts
Evaluation

What we did… …what we learned
## Results

<table>
<thead>
<tr>
<th>Categories for Analysis</th>
<th>Significant Change?</th>
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<tbody>
<tr>
<td>Participant Attitudes</td>
<td>![Star]</td>
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<tr>
<td>Knowledge of Key Concepts</td>
<td>![Star]</td>
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<tr>
<td>Common Misconceptions</td>
<td>Ceiling Effect</td>
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<tr>
<td>Organizational Barriers</td>
<td>Ceiling Effect</td>
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<tr>
<td>Environmental Barriers</td>
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<tr>
<td>Intention to Implement Strategies</td>
<td>![Star]</td>
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Goal Setting Results

Based on today’s training, what 1-3 steps do you plan to take to improve the fruit and vegetable consumption of your students?

1.

2.

3.
Available Resources through U of M Extension

• Health & Nutrition website
  – http://www.extension.umn.edu/Health/
Thank you!