



# A New Look at Fruits and Vegetables

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# Think back...

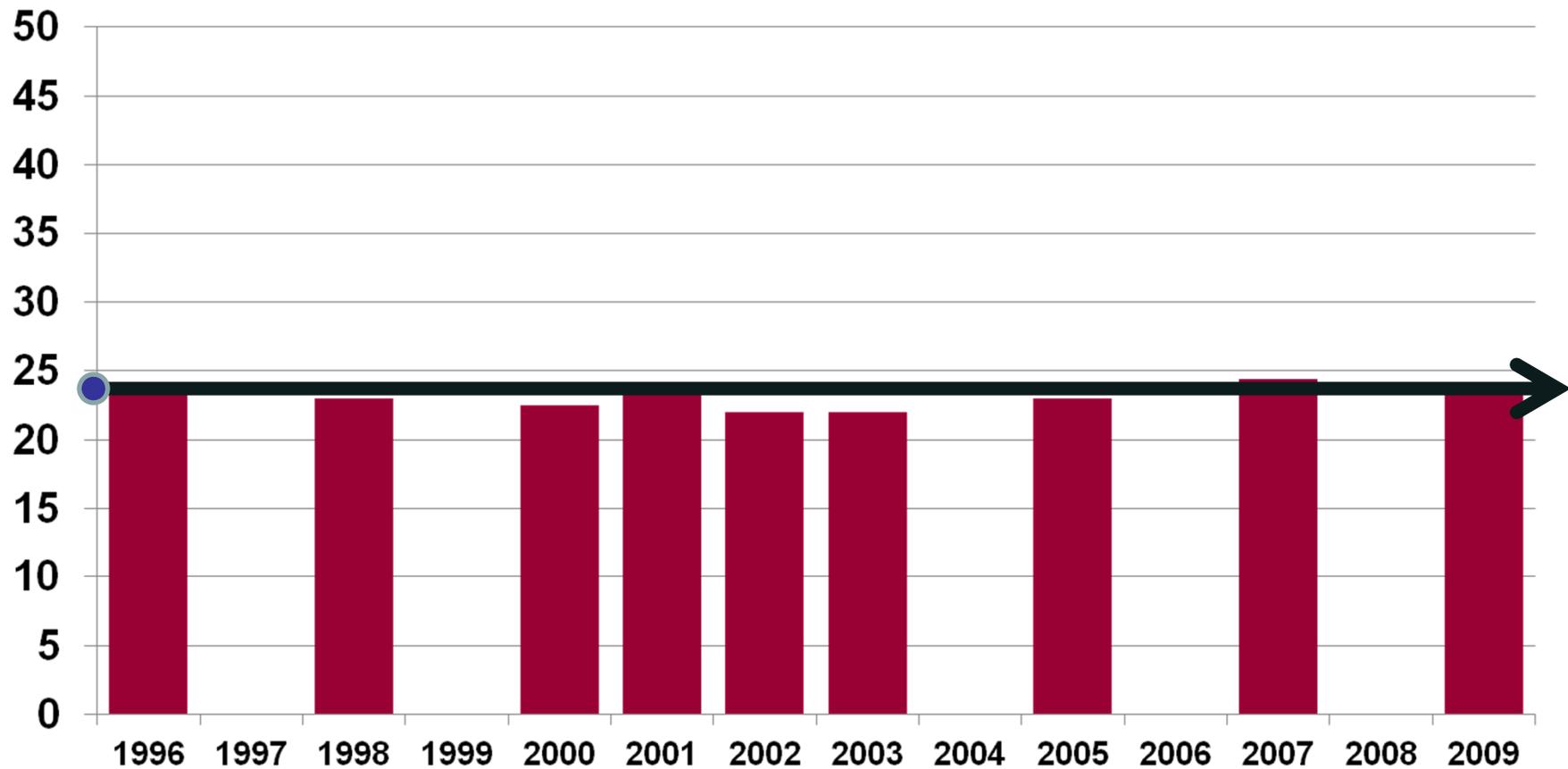


# Why this topic?

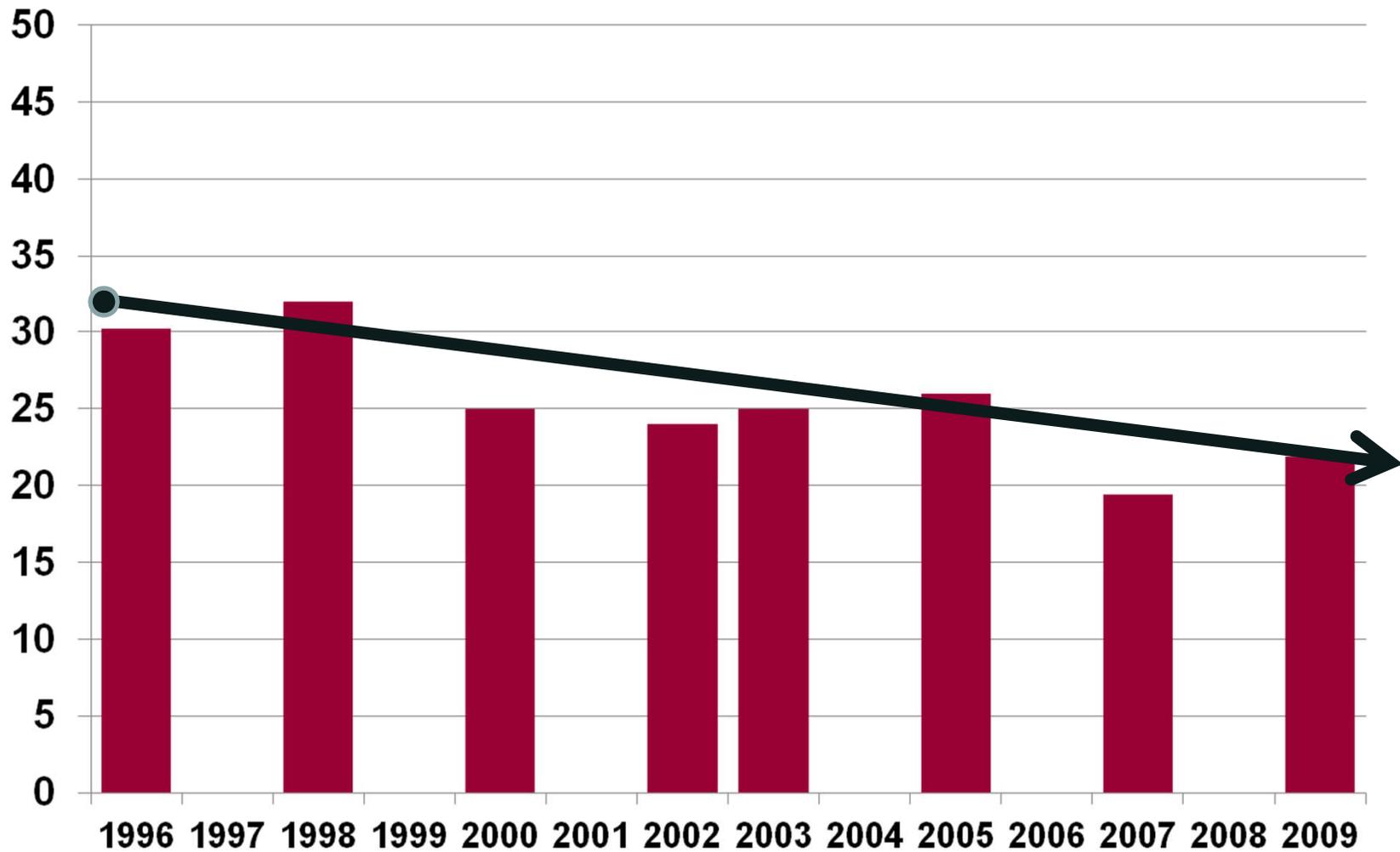
## Why this training?



# 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 6<sup>th</sup>, 9<sup>th</sup>, and 12<sup>th</sup> 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



  
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# 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



USDA National School Lunch Program  
**MN School Nutrition Association**  
“Produce U”

USDA Proposed Guidelines for School Meals  
MDH

# Resources

National Food Service  
Management Institute

U of MN Extension F2S Toolkit IOM

Marla Reicks

Fruits and Vegetables Galore

Suzanne Driessen

MDE

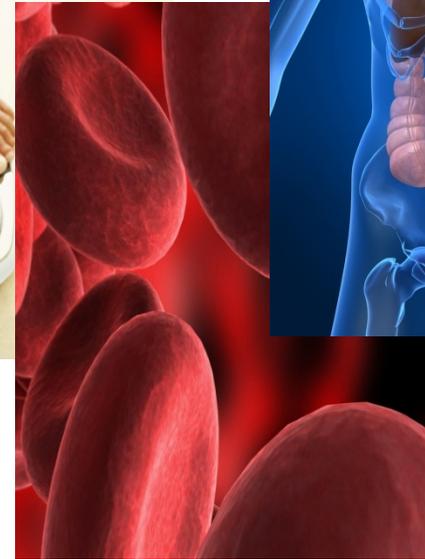
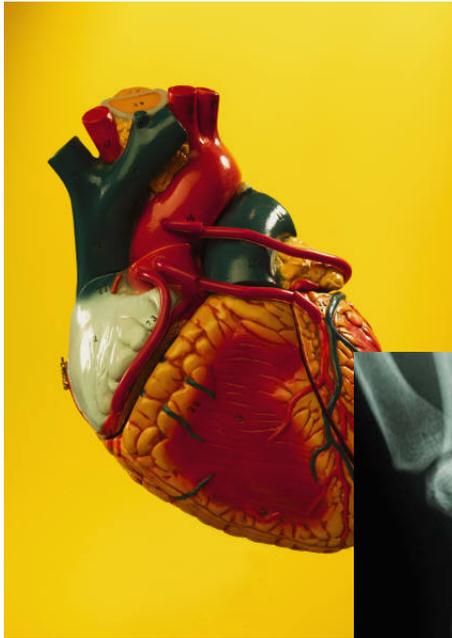
ChooseMyPlate/DGA

# Objectives

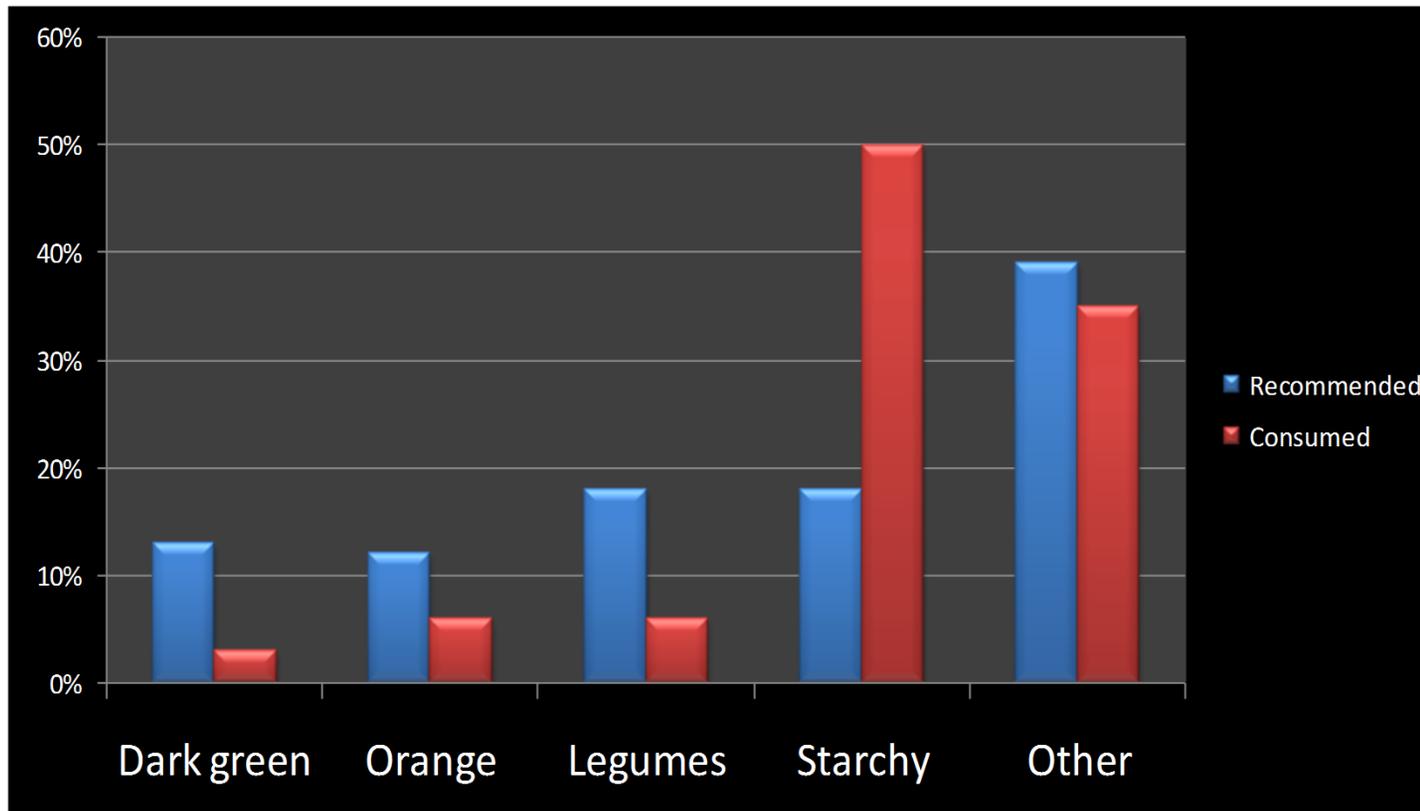
- Understand the health benefits resulting from children meeting the dietary guidelines for fruits and vegetables.
- Review safe food handling practices that ensure the fruits and vegetables offered to students are nutritious and healthy.
- **Leave with a variety of ideas for including more nutrient 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

	Amount Offered	Preferred Standards Required for Meal Reimbursement
<b>Breakfast</b>	<p><b>Fruit:</b></p> <ul style="list-style-type: none"> <li>• 1 cup (2 servings) daily</li> <li>• Juice = no more than ½ of the fruit offerings</li> </ul>	Student must take at least one fruit at breakfast
<b>Lunch</b>	<p><b>Fruit</b></p> <ul style="list-style-type: none"> <li>• ½-1 cup daily</li> </ul> <p><b>Vegetable</b></p> <ul style="list-style-type: none"> <li>• Average ¾-1 cup vegetable</li> <li>• Every week must include:               <ul style="list-style-type: none"> <li>½ cup dark green, starchy, legumes</li> <li>¾ - 1¼ cup orange/red</li> <li>1½ – 2¼ cups other</li> </ul> </li> </ul>	Student must take at least one fruit or vegetable at lunch

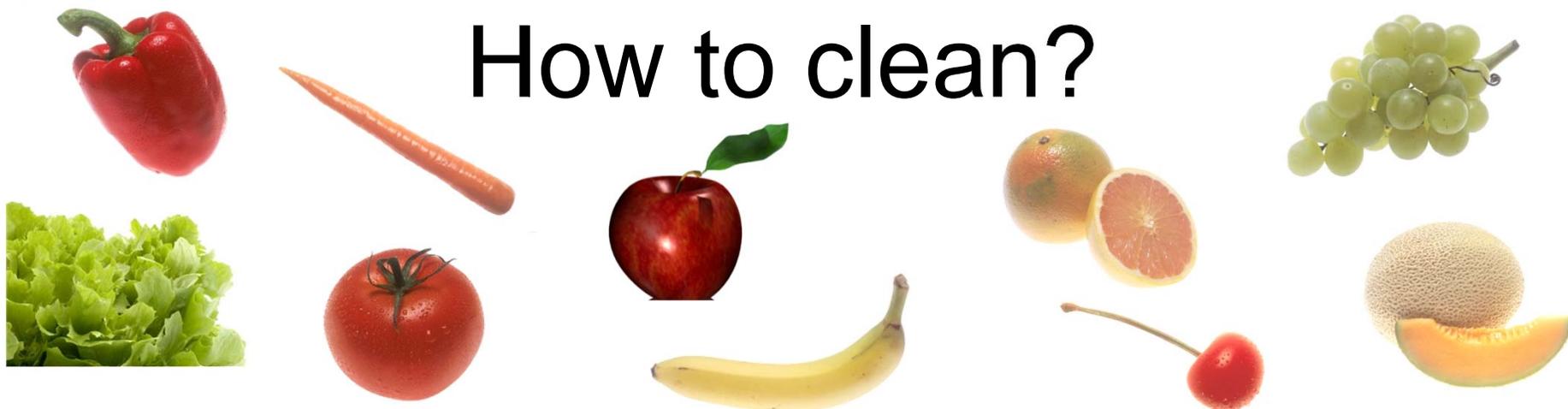
# Six Steps To Safer Fruits and Vegetables



[www.fightbac.org](http://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

[http://www.nfsmi.org/USDA\\_recipes/school\\_recipes/E-10.pdf](http://www.nfsmi.org/USDA_recipes/school_recipes/E-10.pdf)

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



## Monday

Chicken Patty on a Whole Grain Bun  
Seasoned French Fries  
Savory Corn  
Tempting Pears  
Ice Cold Milk

### **Revised Menu:**

Chicken Patty on a Whole Grain Bun with Tomato  
Baked Sweet Potato Fries  
Romaine/Spinach Salad  
Strawberry/Banana Fruit Cup  
Ice Cold Milk





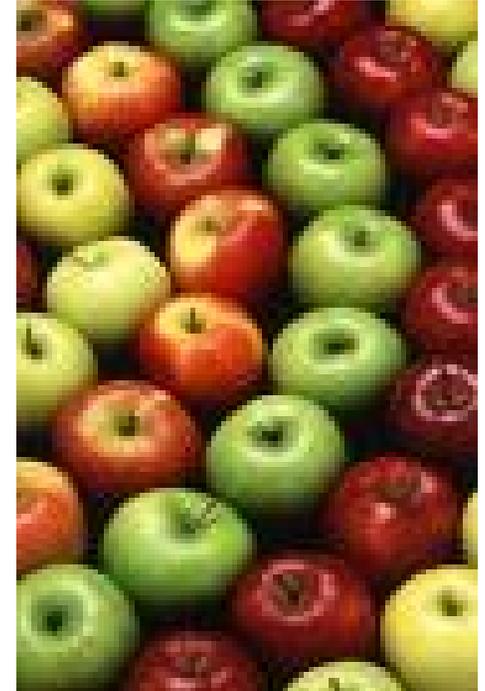
[http://www.freshfromflorida.com/divisions/fnw/training/2010\\_fruit\\_veg.html](http://www.freshfromflorida.com/divisions/fnw/training/2010_fruit_veg.html)



# 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.



## Tuesday

Pork Sandwich

Applesauce

Carrots

Peas

Milk

### **Revised Menu:**

BBQ Pulled Pork in a Whole Grain Pita

Chilled Applesauce

Cool Carrot Sticks/Crunchy Cucumbers with Dip

Sweet Baby Peas

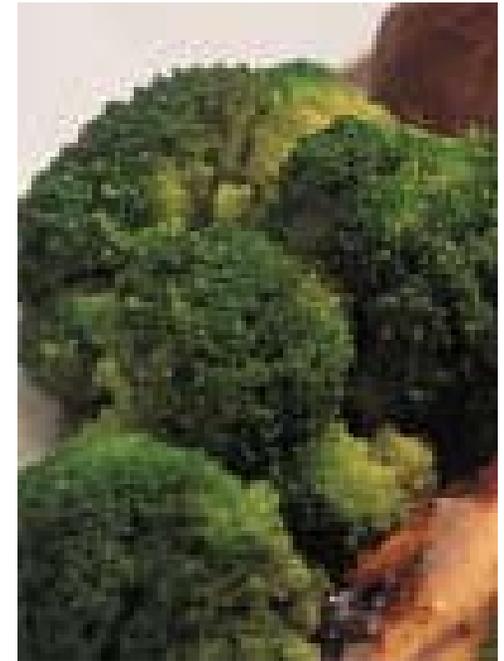
Ice Cold Milk

# Fruits and Vegetables First





# Offer Choices



Make Healthy

=

Fast



# Food Coaching

SHARE with your  
students how AWESOME  
healthy foods are!



# Showcase the good stuff!





Make it fun











# Salad Bar

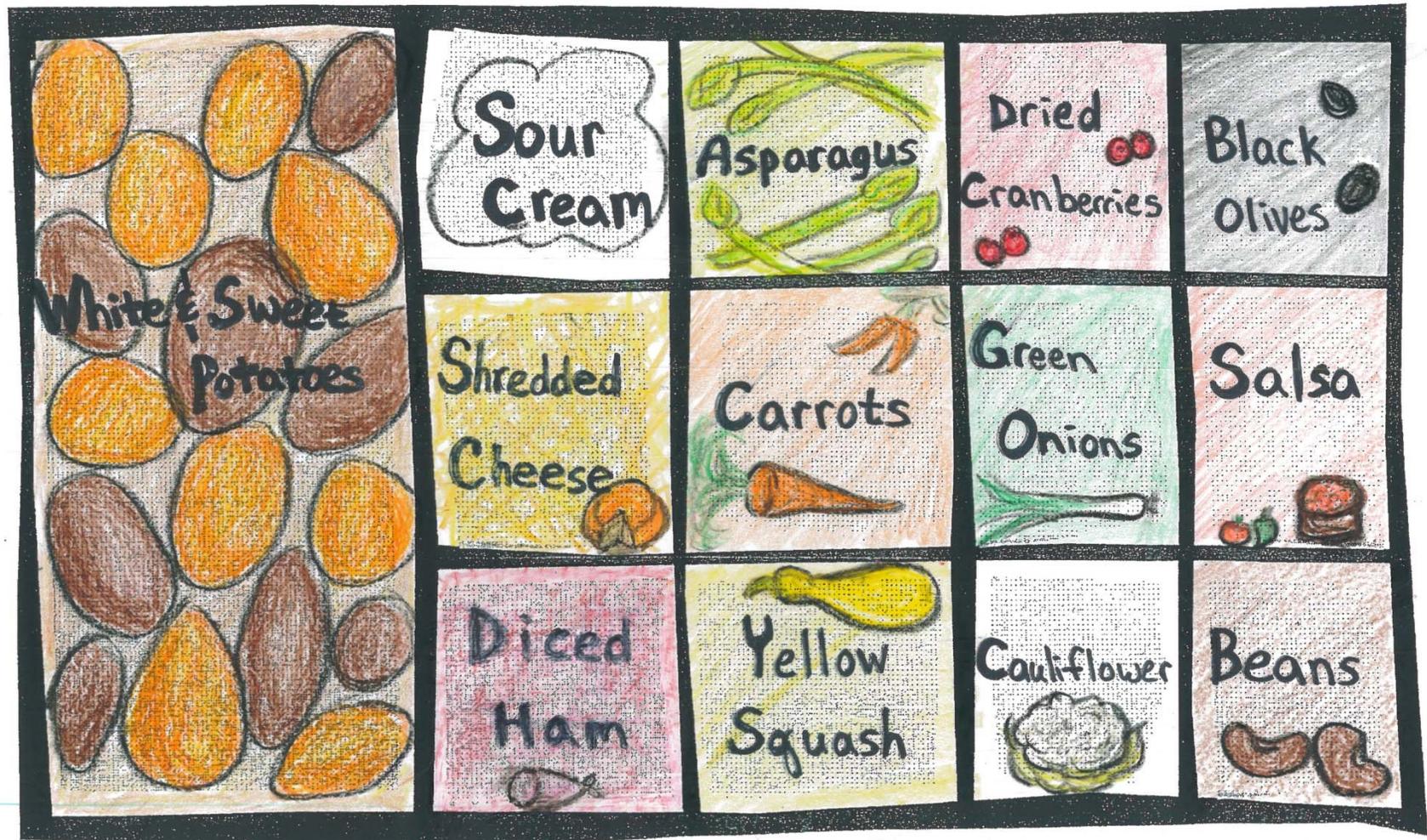




Build  
A  
Better  
Burger

<p>Hamburgers and Buns</p> 	<p>Sliced Cheese</p> 	<p>Avocado</p> 	<p>Red Onion</p> 	<p>Lettuce</p> 
	<p>Ketchup</p> 	<p>Mushrooms</p> 	<p>Orange Bell Peppers</p> 	<p>Tomatoes</p> 
	<p>Mustard</p> 	<p>Sliced Beets</p> 	<p>Coleslaw</p> 	<p>Pickles</p> 

Greater  
Tater



# Farm to School

Extension > Family > Farm to School Print Email Share



## Toolkit for School Foodservice

Ready-to-use resources about using, sourcing and promoting local foods and NEW online trainings for foodservice professionals.

### Farmers

Tools to help farmers get and stay connected to Farm to School efforts.

### 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.

### 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](#)





## Farm to School

Farm to School Home

Documentary - *Farm to School: Growing Our Future*

### Toolkit for School Foodservice

- Getting Started
- Food Safety
- Using Food
- Sourcing Food
- Promoting Food
- Online Trainings

### Farmers

Parents and Community Members

### Educators

School Gardens

Fresh Fruit and Vegetable Program

### Research

[Extension](#) > [Family](#) > [Farm to School](#) > Minnesota Toolkit for School Foodservice

[Print](#) [Email](#) [Share](#)

## 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



#### Food Safety

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



#### Using Food

Kid-tested recipes and menu-planning tools



#### Sourcing Food

Tips to find and purchase local food in season



#### Promoting Food

Fostering a "taste" for local food



#### 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

Categories for Analysis	Significant Change?	
Participant Attitudes		
Knowledge of Key Concepts		
Common Misconceptions		Ceiling Effect
Organizational Barriers		Ceiling Effect
Environmental Barriers		
Intention to Implement Strategies		

# Goal Setting Results



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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/>

The screenshot shows the University of Minnesota Extension website. At the top, there is a navigation bar with links for "U of M Home", "U of M Directories", and "Search U of M". Below this is the "UNIVERSITY OF MINNESOTA EXTENSION" logo and a search bar with the text "Search Extension:" and a "Search" button. A banner with the slogan "Making a Difference" is also visible. The main content area is titled "Nutrition, Food & Health" and includes a breadcrumb trail: "Home > Family > Nutrition, Food & Health". The page features several sections: "Topics" with links for Agriculture, Community, Environment, Family, Garden, and Youth; "Workshops" with a link to "Find convenient educational offerings and e-learning"; "The Extension Store" with a link to "Shop Extension for educational materials"; "Nutrition, Food & Health" text describing programs for families, schools, and communities, accompanied by an image of fresh produce; "Minnesota Food & Nutrition Network" link; "Features" section with a "Great Trays" feature and an image of a woman eating; "Related" section with "Free Materials" (For Families, For Professionals, School Wellness Newsletters) and "In the News" (Holiday cooking on a budget, Congress Approves Child Nutrition Bill, Family dinners are good for you and your kids); and "Our Products" section with a link for "Training for School".





Thank you!

