

Children should have access to healthy food and be able to make healthy food choices wherever they are – at home, in school, and in the community. Improving the health of the nation’s children and reversing the childhood obesity epidemic is a shared responsibility and will take the commitment of parents, the foodservice industry, the media, and schools working together. The vision of USDA’s School Meals Initiative for Healthy Children is to improve the health of school children through better nutrition. Implementing the *Dietary Guidelines for Americans* in school meals will have important health benefits for children.

Focus on Food

Farm-to-school partnerships

Growers

The farmers and producers are the heart of the farm-to-school partnership. Research the local producers of fruits, vegetables, eggs, meat, dairy products and honey and develop a relationship with them. Many producers will be willing to grow to your school district’s food specifications. The U.S. agricultural extension system provides an efficient way for school food service personnel to find out about agricultural producers in their local communities. A comprehensive list of farmers markets across the country, along with a list of farmers market program representatives in each State, are available from the USDA Agricultural Marketing Service’s Farmers Market website, accessible at: <http://www.ams.usda.gov/farmersmarkets/map.htm>. Find local growers at:

Local Harvest, Inc., www.localharvest.org
Food Routes Network, www.foodroutes.org
Eat Well Guide, www.eatwellguide.org

Processors

Local processors may be able to take farm fresh produce and process it into ready-to-use items such as carrot coins, celery sticks, tomato sauce, and more.

Distributors

Connect with local distributors and ask them to source foods from local farms. The more demand that local wholesale distributors have for local foods, the greater effort they will make in sourcing this product. In addition, food services personnel can ask local distributors to provide sourcing information about the grower/producer of local foods at the time of purchase/delivery.

Local Food Facilitators or Advocates

Non-profit organizations such as Institute for Agriculture and Trade Policy, Chefs Collaborative, Slow Food, and sustainable agriculture organizations are great places to learn about what other culinary and food service professionals are doing with locally produced foods.

Institute for Agriculture and Trade Policy, www.iatp.org
Chefs Collaborative, www.chefscollaborative.org
Slow Food U.S.A., www.slowfoodusa.org

For more information visit:
<http://www.mn-farmtoschool.umn.edu/>

Resources

National Food Service Management Institute. (2009). *Culinary techniques for healthy school meals*. University, MS: Author.

National Food Service Management Institute. (2005). *Healthy cuisine for kids*. University, MS: Author.

U.S. Department of Agriculture, Food and Nutrition Service. (2007, January). *The road to SMI success-A guide for school food service directors*. Washington, DC: Author.

U.S. Department of Agriculture, Food and Nutrition Service. (2007). *HealthierUS school challenge: Recognizing nutrition excellence in schools*. Washington, DC: Author.

U.S. Department of Agriculture, Food and Nutrition Service. *Be salt savvy - cut back on sodium for healthier school meals*. Washington, DC: Author.

Farm to School, www.farmtoschool.org

Focus on Nutrition: Sodium

Nearly all Americans consume more sodium than they need. Table salt isn’t the only source of sodium. Look at ingredient lists for other sources, such as monosodium glutamate (MSG), baking soda, baking powder, disodium phosphate, sodium alginate, and sodium nitrate or nitrite.

Children’s taste for salt is a learned behavior. By gradually reducing the salt and sodium in school meals, students’ tastes can change. Offer lower sodium versions of popular menu items and recipes at the beginning of a school year. Students may hardly notice the difference. Be “salt savvy” and help students enjoy the taste of the food instead of the salt!

- Too much salt and sodium are linked to high blood pressure. Reducing dietary sodium can lower blood pressure, which reduces the risk of heart disease, stroke and kidney disease.
- The *2005 Dietary Guidelines for Americans* recommend that both adults and children get less than 2,300 mg of sodium (approximately one teaspoon of salt) per day. Many students eat nearly double the daily recommended amount!
- The typical school lunch contains more than 1,000 mg of sodium. Strive to offer school lunches with less than 800 mg of sodium.
- Cutting back on sodium in school meals can help students learn to enjoy foods for their natural tastes. Kicking the salt habit may provide health benefits for a lifetime.
- Serve more fresh foods and fewer processed foods. Most fresh fruits and vegetables are naturally low in sodium.

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Recycling Focus: Composting

Many schools recycle paper, glass, and metal. Organic materials, such as yard trimmings and food scraps make up between 25-30% of the waste stream. Composting is nature's way of recycling.

A school composting program will:

- Help the environment by recycling a natural resource.
- Reduce waste hauling costs and reduce the school's solid waste stream.
- Educate the school community about benefits of composting.
- Create a useful product (finished compost) for landscaping projects.

Getting started

Step One: Determine where the materials will be composted. Compostable materials can be hauled off-site by a commercial composter or can be recycled at an on-site composting facility.

On-site

Determine composting requirements such as how much it will cost to build the system, who will manage the site, and what materials will be composted. Consider the regulatory or permitting requirements to compost in your area. Select a composting system.

Off-site

Locate a composting facility. Contact your local or state solid waste agency (state composting association or the Composting Council) to get a list of composters in your area.

For more information:

School composting: a manual for Connecticut schools, Connecticut Department of Environmental Protection 2002, Paula Coughlin.
http://www.ct.gov/dep/lib/dep/compost/compost_pdf/schmanual.pdf

A school waste reduction, reuse, recycling, composting & buy recycled resource book. New York State Department of Environmental Conservation, Bureau of Solid Waste Reduction & Recycling. 2004. http://www.dec.ny.gov/docs/materials_minerals_pdf/schoolhb.pdf

U.S. Environmental Protection Agency. Wastes - Resource Conservation - Reduce, Reuse, Recycle - Composting. <http://www.epa.gov/osw/conserves/rtr/composting/>

Step Two: Arrange for organics collection – who, when, and how will materials be collected.

Step Three: Determine inside collection procedures. Consider the size, number, and location of inside containers needed for separating compostables. Determine who is responsible for monitoring the program inside.

Step Four: Educate all participants (employees and students) on their responsibilities.

Step Five: Monitor the program.

Step Six: Share your successes with the community.

Seasonality

Fruits and vegetables that may be available during the spring:

Apricots	Mushrooms
Bananas	Mustard greens
Cabbage	Onions and leeks
Collard greens	Peas
Green beans	Pineapple
Honeydew melon	Rhubarb
Kale	Spinach
Lettuce	Strawberries
Mangos	Swiss chard

Ways to celebrate seasonal foods:

March

Go for the GREEN on St. Patrick's Day
National Agriculture Week
National Celery Month
National Flour Month
National Noodle Month
National Nutrition Month
National Peanut Month
National School Breakfast Week

April

Fresh Florida Tomato Month
National Garden Month
National Pecan Month
Soyfoods Month

May

National Asparagus Month
National Barbecue Month
National Beef Month
National Egg Month
National Hamburger Month
National Herb Month
National Salad Month
National Salsa Month
National Strawberry Month

To learn more about using seasonal produce:

U.S. Department of Agriculture, Food and Nutrition Service.
SNAP-Ed Connection, Nutrition through the seasons,
http://snap.nal.usda.gov/foodstamp/nutrition_seasons.php



Student Activity

Whole Wheat Vegetable Pizza

The Little Red Hen is a familiar folk tale and many young students enjoy this story for its strong sense of right and wrong. The plot of this story is simple enough that most students can fully understand the Hen's motivations for acting the way she did.

The Little Red Hen lends itself well to many extension activities such as bread or pizza making. This whole wheat vegetable pizza will be fun for students.

Yield: 1 pound pizza dough

Serves: 4 individual pizzas

Ingredients

Lukewarm water (105-115 °F)	¾ cup plus 2 tablespoons
Active dry yeast	1 package
Sugar	1 teaspoon
Salt	½ teaspoon
Whole wheat flour	1 cup
Bread flour or AP flour, enriched	1 cup, plus more for dusting

1. Stir water, yeast, sugar and salt in a large bowl; let stand until the yeast has dissolved, about 5 minutes. Stir in whole-wheat flour and bread flour (or all-purpose flour) until the dough begins to come together.
2. Turn the dough out onto a lightly floured work surface. Knead until smooth and elastic, about 10 minutes. (Alternatively, mix the dough in a food processor. Process until it forms a ball, then process for 1 minute to knead.)
3. The dough can be turned into 4 or 6 individual-size pizzas. After kneading, divide the dough into 4 or 6 equal balls. Brush with oil and place 3 inches apart on a baking sheet. Cover and set aside until doubled in size, about 1 hour.
4. Roll each portion into a 6-to-8-inch circle. Place desired toppings on pizza. Bake for 15 to 20 minutes at 400 °F until golden brown crust.
5. Let cool 5 minutes before serving.

Favorite pizza toppings:

Apples
Asparagus
Banana peppers
Barbecue chicken breast, diced
Basil leaves
Beets
Black olives
Broccoli
Feta cheese
Goat cheese
Green peppers
Mushrooms
Onions
Parsley
Part skim mozzarella cheese
Pears
Pineapple
Red peppers
Shredded carrots
Spinach
Tomato sauce
Zucchini



Lemon Zest Broccoli

Serving Size: 1/2 cup Number of Portions: 50
One serving credits as 1/2 cup vegetable

To make vegetables more appealing for children do not overcook the vegetable. Serve well-seasoned as they are in this recipe. This seasoning mix will work for many vegetables including asparagus, green beans, and cauliflower.

Ingredients	Weight	Measures	Instructions
Broccoli bunches, fresh	10 pounds 11 ounces	About 10 bunches	<ol style="list-style-type: none"> 1. Wash broccoli thoroughly. Remove broccoli crowns from stems and cut into appropriate sizes. To use stems, remove bottom 1 inch, peel, and slice. 2. Steam broccoli and stems, in a steamer or in a large pot of water just until bright green. 3. Drain thoroughly. 4. Grate the outer yellow lemon skin with a zester or small cheese grater. 5. Mix together broccoli, lemon zest, Parmesan cheese, salt, pepper, and olive oil. 6. Portion with a 1/2 cup spoodle. <p>CCP: Hold for hot service at 135 °F or higher.</p>
Lemons, fresh		2	
Parmesan cheese, grated	2 ounces	3/4 cup	
Salt		1 teaspoon	
Pepper		1 teaspoon	
Oil, olive	6 ounces	3/4 cup	

Nutrients per serving

Calories	68	Saturated Fat	0.8 g	Iron	0.8 mg
Protein	3.3 g	Cholesterol	1 mg	Calcium	63.7 mg
Carbohydrate	6.8 g	Vitamin A	591 IU	Sodium	196 mg
Total Fat	4 g	Vitamin C	86.8 mg	Dietary Fiber	2.7 g

Source: Adapted from Lemon Zest Broccoli, Fresh from the farm: The Massachusetts farm to school cookbook. Cotler, Amy & Massachusetts Department of Agricultural Resources (2007).

For additional recipes:

U.S. Department of Agriculture, Food and Nutrition Services, & National Food Service Management Institute. (2006). *USDA recipes for schools*. University, MS: Author.
 U.S. Department of Agriculture, Food and Nutrition Services, & National Food Service Management Institute. (2006). *USDA recipes for child care*. University, MS: Author.



Strawberry Squares

Serving Size: 1 square Number of Portions: 48
One serving provides 1/2 cup fruit (and 1/2 ounce meat/meat alternate)

This dessert will provide a full 1/2 cup serving of fruit for children. The classic combination of strawberry, banana, and pineapple is a kid favorite. Must use canned pineapple as fresh won't allow the gelatin to set. Nuts are optional if allergies are a concern

Ingredients	Weight	Measures	Instructions
Strawberry gelatin dessert mix	1 pound 14 ounces	5 (6-ounce) packages	1. Dissolve gelatin dessert mix in 7 1/2 cups boiling water. Mix in thawed strawberries, pineapple, bananas and pecans. Pour gelatin mixture into a 24- x 18-inch rectangular pan. Refrigerate until firm.
Water	3 pounds 12 ounces	7 1/2 cups	
Frozen sliced sweetened strawberries, thawed	6 pounds 4 ounces	2 quarts 3 cups	2. Spread with lowfat yogurt. Refrigerate until firm. Cut into 48 (3 inch x 3 inch) squares. Top each square with 1 strawberry half. CCP: Hold for cold service at 41 °F or lower. NOTE: Contains nuts that some students may be allergic to. Nuts and yogurt are both needed to be counted as a meat/meat alternate.
Canned crushed pineapple in unsweetened pineapple juice, drained	6 pounds 4 ounces	1 # 10 can 2 quarts 3 3/4 cups	
Bananas, mashed	3 pounds	4 cups	
Pecans, roughly chopped	1 pound 4 ounces	4 3/4 cups	
Lowfat yogurt	2 pounds 8 ounces	5 cups	
Strawberries, stemmed and halved		24 each	

Nutrients per serving

Calories	268	Saturated Fat	0.9 g	Iron	0.85 mg
Protein	4.87 g	Cholesterol	1.5 mg	Calcium	64.6 mg
Carbohydrate	48.1 g	Vitamin A	75 IU	Sodium	91 mg
Total Fat	8.6 g	Vitamin C	31.4 mg	Dietary Fiber	3.6 g

Source: adapted from California Strawberry Commission, <http://www.calstrawberry.com/market/school.asp>

For additional recipes:

U.S. Department of Agriculture, Food and Nutrition Services, & National Food Service Management Institute. (2006). *USDA recipes for schools*. University, MS: Author.

U.S. Department of Agriculture, Food and Nutrition Services, & National Food Service Management Institute. (2006). *USDA recipes for child care*. University, MS: Author.



Glazed Carrots

Serving Size: 1/2 cup Number of Portions: 50
 One serving provides 1/2 cup vegetable

Fresh from the farm carrots cooked with a little crunch left in will delight students. When vegetables taste this good students will come back for more! Thanks to Wayzata Public Schools in Minnesota for sharing this recipe.

Ingredients	Weight	Measures	Instructions
Carrots, fresh, sliced	8 pounds 14 ounces	1 gallon 3 quarts	<ol style="list-style-type: none"> 1. Cook carrots in a steamer approximately 11 to 15 minutes (depending on steamer) or until tender. 2. For glaze: combine butter, brown sugar, orange juice concentrate, nutmeg, and cinnamon. Mix cold water and cornstarch until dissolved. Add to glaze. Stir to blend. 3. Bring to a boil. Remove from heat. 4. Pour glaze over carrots.
Butter	4 ounces	1/2 cup	
Brown sugar	5 ounces	2/3 cup	
Orange juice concentrate	7 ounces	3/4 cup	
Ground nutmeg		1 teaspoon	CCP: Heat to 140 °F or higher. CCP: Hold for hot service at 135 °F or higher. Portion with No. 6 scoop (2/3 cup). 2/3 cup (No. 6 scoop) provides 1/2 cup of vegetable.
Ground cinnamon		1 teaspoon	
Water, cold		1 cup	
Cornstarch		3 tablespoons	

Nutrients per serving

Calories	65	Saturated Fat	1.2 g	Iron	0.3 mg
Protein	0.7 g	Cholesterol	5 mg	Calcium	26.9 mg
Carbohydrate	11.7 g	Vitamin A	12181 IU	Sodium	51 mg
Total Fat	2 g	Vitamin C	8.6 mg	Dietary Fiber	2 g

Source: Adapted from Orange Glazed Carrots, I-13A, U.S. Department of Agriculture, Food and Nutrition Service & National Food Service Management Institute (2005) and Glazed Carrots, Wayzata Public Schools.

For additional recipes:

U.S. Department of Agriculture, Food and Nutrition Services, & National Food Service Management Institute. (2006). *USDA recipes for schools*. University, MS: Author.

U.S. Department of Agriculture, Food and Nutrition Services, & National Food Service Management Institute. (2006). *USDA recipes for child care*. University, MS: Author.

