Setting the Stage:
Nutrition and Physical Activity Lessons
for Child Development Homes

Fall 2007

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Nutrition, Health, and Transportation Services
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The lessons are intended to provide suggested nutrition activities in the early childhood setting, with special interest for Child Development Homes. The cards were developed to supplement Team Nutrition Early Childhood Card Sets:

- Setting the Stage: Policies and Best Practices for Nutrition and Physical Activity in Early Childhood Settings
- Setting the Stage: Nutrition and Physical Activity Lessons for Early Childhood Settings
- Physical Activities and Healthy Snacks for Young Children

TEAM NUTRITION IOWA
Team Nutrition Messages

- Eat a variety of foods
- Eat more fruits, vegetables, and whole grains
- Eat lower fat foods more often
- Get your calcium-rich foods
- Be physically active

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Lesson Descriptions

The cards in this set include lessons on: Vitamin A, Vitamin C, Whole Grains, Calcium, and Iron. The goal is that children, ages 3-5, will begin to understand the need for eating a diet rich in variety and that eating these nutrients can help lead to a long and healthy life.

These cards include background information for caregivers as well as all activities and recipes needed to carry out the lesson plans. Each group of lessons is color coded with a bar near the top of the card.

Vitamin A
Vitamin C
Calcium
Iron
Whole Grains
Tips for using cards:
- Cards include basic background information about nutrients included.
- Circle (group) activities, physical activities, literacy activities, food activities, art activities, and sensory activities have been included throughout the lessons to offer a variety of learning methods.
- Take home activities, gardening activities, and science activities have been included to enhance learning.

Tips for introducing new foods:
- Adults positively modeling food acceptance and tasting new foods is the strongest influence on children’s food preferences.
- Encourage, but do not force or pressure a child to try something.
- Be patient, it may take 10-15 exposures to a new food before a child will accept it.
- Introduce a small amount of the new food with familiar foods.
- If children help prepare the new foods, they may be more likely to try it.
- Recipes included are designed to provide a taste of foods for young children.
Goals and Background for Vitamin A Lessons

Objectives-The child will:
- Identify fruits and vegetables that contain vitamin A by color
- Taste a variety of vitamin A rich foods
- Sort foods by color
- Share a benefit of eating vitamin A foods

Background Information
Most vitamin A sources come from animals. Some plants supply beta-carotene, which the body converts to vitamin A.

Vitamin A is a fat-soluble vitamin, meaning it needs fat to be absorbed by the body. It is stored in the fatty tissue for a few days to six months. Excess vitamin A, is stored in the liver and can cause health problems. However, a large amount of beta-carotene from food is not harmful.
**Sources of Vitamin A**
Animal sources: liver, egg yolk, cheddar cheese, and fortified milk
Best plant sources of beta-carotene: sweet potatoes, carrots, pumpkin, cantaloupe, broccoli, apricots, spinach, tomatoes, and collard greens

**Functions of Vitamin A**
1. Helps promote normal cell reproduction.
2. Maintains healthy vision.
4. Maintains healthy eyes, skin, and mucous membranes.

**Side Effects of Vitamin A**
Too little: blindness, eye inflammation, and increased risk of infection
Too much vitamin A: nausea, irritability, blurred vision, and liver damage
Too much beta-carotene: palms and bottom of feet turn orange
Vitamin A Know How

Serve 3 or more times a week.

Children between 4-8 years of age need a minimum of 1 ½ c. fruit and 1 ½ c. vegetables each day. Let vitamin A fruits and vegetables help make up this total by including at least 1 ½ c. dark greens or 1 c. orange fruits and vegetables each week.

For additional healthy snack ideas, or to substitute recipes listed here please refer to the Setting the Stage: Nutrition and Physical Activity Lessons for Early Childhood Settings, looking for foods that are a good source of vitamin A.
## Specific Vitamin A Fruits & Vegetables

<table>
<thead>
<tr>
<th>Good Source</th>
<th>Better Source</th>
<th>Best Source</th>
</tr>
</thead>
<tbody>
<tr>
<td>Canned apricots</td>
<td>Dried apricots, cooked</td>
<td>Mango</td>
</tr>
<tr>
<td>Dried apricots, uncooked</td>
<td></td>
<td>Beet greens, cooked</td>
</tr>
<tr>
<td>Cherries, red sour</td>
<td></td>
<td>Bok Choy</td>
</tr>
<tr>
<td>Mandarin Oranges</td>
<td></td>
<td>Carrots, raw or cooked</td>
</tr>
<tr>
<td>Nectarine</td>
<td></td>
<td>Dandelion greens, cooked</td>
</tr>
<tr>
<td>Papaya</td>
<td></td>
<td>Peas &amp; carrots, cooked</td>
</tr>
<tr>
<td>Plums, canned</td>
<td></td>
<td>Red peppers, raw</td>
</tr>
<tr>
<td>Prunes, dried</td>
<td></td>
<td>Spinach, cooked</td>
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<tr>
<td>Watermelon</td>
<td></td>
<td>Winter squash, cooked</td>
</tr>
<tr>
<td>Broccoli, cooked</td>
<td></td>
<td>Sweet potato, cooked</td>
</tr>
<tr>
<td>Collard greens, cooked</td>
<td></td>
<td>Turnip greens, cooked</td>
</tr>
<tr>
<td>Plantain, cooked</td>
<td></td>
<td></td>
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<tr>
<td>Pumpkin, cooked</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Romaine lettuce</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Tomato juice, paste, or puree</td>
<td></td>
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</tr>
</tbody>
</table>
Vitamin A Lesson 1

Activity Description: Children will taste sweet potatoes in a variety of forms.

Materials:
- knife
- cutting board
- peeler
- potato masher
- cookie sheet
- cooking pot
- oven
- zip closure bag
- bowl
- tooth picks
- glass bowl or cup
- book
- olive oil
- orange juice
- water
- nutmeg
- milk
- margarine
- sweet potatoes
- apple juice
- eggs
- milk
- banana
- dip or dressing
- seasoning of choice: i.e. season salt, garlic, seasoning blends, Italian dressing

Activity Goals:
Children will help prepare different forms of sweet potatoes and taste their product when complete.
Food Activity:
Have children help wash 3 sweet potatoes. Adult should peel the potatoes. Cube one potato to boil for mashed sweet potatoes; slice two sweet potatoes into ½ in. thick sticks; one for sweet potato fries and one for raw sweet potato sticks.
Have children toss one pile sweet potato sticks, 1 T. of oil, and 1 t. of seasoning in a sealed zip closure bag. Bake on cookie sheet at 425° for 20-30 minutes, turning twice. Serve raw sweet potato sticks with vegetable dip or ranch dressing, if desired.
Boil cubed sweet potatoes in enough water to cover until tender, about 25 minutes. Drain potatoes, and put in plastic bowl. Let children mash potatoes with potato masher. Add 1-2 T. milk, 1 T. margarine and 1 t. seasoning. Additional milk and seasoning can be added to reach desired flavor and consistency.

Serve as a taste test. ½ c. sweet potatoes provides a serving of vegetable at snack.

Caution: Cutters and peelers have sharp blades. Please supervise closely and warn children of dangers when demonstrating use. It is possible to purchase special knives that will cut food yet be safer for child use.
Circle Activity:
What do the different types of potatoes look like? What color are they? What do they smell like? What is the same? What is different? How do they feel? Which do they like better? What other food is a raw potato stick similar to? Do they like the mashed sweet potatoes better than regular white mashed potatoes? Do they notice the sweet potato fries are sweeter than regular fries? What time of year do people normally eat sweet potatoes? What holidays are sweet potatoes usually served at?

Take Home Activity:
Give recipe to parents to prepare at home.

Circle Activity:
Compare sweet potatoes with other types of potatoes, such as, white, red, and Yukon Gold. Do activities with other vitamin A rich fruits or vegetables. Taste a variety of vitamin A foods.
**Science Activity:**
Sprout a sweet potato and practice counting. Push toothpicks into the four sides of a sweet potato. Place the sweet potato in a clear container of water, resting toothpicks on edge of the container. Water the potato and watch for changes daily. In about 2 weeks the potato will begin to sprout. Count the sprouts as they grow. If activity is done in the spring, plant the sprouted sweet potato in the ground and see how many potatoes grow from the plant.

**Literacy Activity:**
Read *I Like Potatoes* by Jennifer Julius.
Food Activity:  
Sweet Potato Soufflé  
¼ c. apple juice (100% juice)  
2 c. cooked sweet potatoes  
¼ c. unsweetened orange juice  
1 small banana  
½ tsp. cinnamon  
½ tsp. nutmeg  
2 eggs  
Non-stick vegetable spray  
Mix all ingredients together in a blender. Secure lid and blend until smooth. Pour into 8 in. baking pan that has been sprayed with non-stick vegetable spray. Bake at 350° for 40 minutes. Serve warm or cold. Makes 6 servings.  

One ½ c. serving counts as a ½ c. of vegetable for 1-5 year olds.
Vitamin A Lesson 2

**Activity Description:** Students will help pack “A” picnic basket for an imaginary picnic using food models or pictures.

**Materials:**
- basket
- blanket
- bowl
- spoon
- Cup
- coloring pages
- food models or pictures of Vitamin A foods in activity dialogue

**Activity Goals:**
Children will identify fruits and vegetables containing vitamin A from a variety of fruits and vegetables.

**Circle Activity:**
Explain activity on next card to children. Have one child hold the picnic basket. While reading the dialogue about what to pack in the picnic basket, have children take turns selecting the food stated and putting it into the basket. After all the food is in the basket, take a walk to a different location, or room (park); spread out the blanket, pass out the pretend food, and do a physical activity. Clean up the picnic and head back.
Activity Dialogue:
We are going on “A” picnic, and we have to pack our basket.
First we put in the picnic blanket, folded in “A” square.
Next, we need “A” bowl to mix our salad. Don’t forget “A” spoon to serve the salad.
What is in “A” salad that will nourish us?
Pick up “A” head of Romaine lettuce, wash it, and tear into tiny pieces before you toss it in the bowl. To the Romaine lettuce, we will add “A” shredded carrot, “A” handful of spinach leaves, “A” a handful of frozen peas; toss it and top it with “A” stalk of broccoli and a red pepper, a color that I love.
We also better grab “A” healthy snack to finish lunch. “A” papaya would be messy and “A” plum dries into “A” prune, so let’s stick to “A” handful of dried apricots that will make us chew and chew. If that will not do it, “A” slice of cantaloupe may be just right for you.
Now we need to pack “A” drink to wash our meal down, what do you say to “A” cup of tomato juice for something different?
Let’s head to the park for an “A” picnic today. We did “A” great job packing. When we get there we can have “A” salad, “A” piece of fruit, and “A” drink of vegetable juice. After we eat, we can play and run some of our energy away.
Physical Activity:
If children do not recognize the fruit or vegetable, discussion may need to take place before and during the activity. While packing basket do these actions:
1. getting the bowl  
2. making the salad  
3. folding a blanket  
4. washing and tearing lettuce  
5. shredding the carrots  
6. tossing in the spinach and peas  
7. tossing the salad  
8. topping it with a broccoli tree  
9. pouring tomato juice  
10. chewing apricots  

Walking to a different area either inside or out will provide some physical activity. Talk about other physical activities you could do on a real picnic, do any that would be easy to complete in your space.

Food Activity:
Prepare some or all of the picnic foods in the kitchen with the children and serve a picnic lunch with other foods and milk to make a creditable lunch.

Physical Activity:
Play picnic type games such as tag, Do You See What I See?, frisbee, taking a walk or basic stretching exercises.
Activity Description: Children will make a garland to hang, with foods that are rich in vitamin A.

Materials:
- food models
- construction paper
- string
- scissors
- glue
- tape
- food boxes
- paper hole punch
- magazines
- pictures of vitamin A foods
- coloring pictures of vitamin A foods

Activity Goals:
Children will make garland to use as a visual identification of vitamin A rich fruits and vegetables.
**Art Activity:**
Cut various shapes out of construction paper. If using coloring pages, have children color foods, talking about correct colors. Cut out pictures and glue to construction paper shapes. Include a large letter A to remind them these are vitamin A rich foods. Attach pictures to string, either by taping or running string through holes made with paper punch. Hang garland where children can see. Discuss periodically throughout the week.

**Circle Activity:**
Discuss animal sources of vitamin A. Discuss colors of vitamin A rich fruits and vegetables. Which do they like? Why? What have they not tried? What would they like to try? Discuss the benefits of consuming vitamin A rich foods in the diet.

**Literacy Activity:**
Read *Apples and Pumpkins* by Anne Rockwell
**Food Activity:**
Have children do a taste test of various vitamin A foods at snack time. Choose any variety you would like. Include cooked and fresh, leafy and whole fruits, vegetables, and animal sources. Have children identify similarities and differences in the foods they are trying. Possibly spread activities out over the course of a week.

**Physical Activity:**
Use pictures made for garland to make a movement type game. Lay pictures out on the floor, name a food and have the students move to that food. Name a vitamin A food and have children pretend to pick it at the level it grows. Reach up for mandarin orange and down for a cantaloupe.
Vitamin A Lesson 4

**Activity Description:** Children will explore the inside and outside of a pumpkin, as well as taste pumpkin after cooking.

**Materials:**
- pumpkins
- canned pumpkin
- whole wheat flour
- vanilla
- salt
- cinnamon
- baking soda
- quick cooking oats
- knife
- wire rack
- measuring bowls
- mixer
- measuring spoons
- non-stick vegetable spray
- brown sugar
- egg
- orange juice
- oil
- wheat germ
- muffin liners
- applesauce
- mini muffin tins
- spoon
- oven

**Activity Goals:**
Experience raw and cooked pumpkin.
**Sensory Activity:**
Cut open the pumpkins. Spread vinyl tablecloth or newspapers on the floor. Set pumpkins on the floor and let students explore. Encourage children to explore the inside and outside of the pumpkin. Talk about all the descriptor words to describe (cold, smooth, wet, slimy, bumpy, stringy, orange, etc.).

**Circle Activity:**
Discuss what we can do with pumpkins. What ways do we use them? They can be used for jack-o-lanterns, eating (seeds, pumpkin muffins and bread, soup, pies, soufflés, and pudding), decoration, and planting (seeds).

**Food Activity:**
Prepare Pumpkin Bites for children to try. Recipe appears on following card.
**Recipe**  
**Pumpkin Bites**

<table>
<thead>
<tr>
<th>Ingredient</th>
<th>Quantity</th>
</tr>
</thead>
<tbody>
<tr>
<td>brown sugar</td>
<td>1 ½ c.</td>
</tr>
<tr>
<td>egg</td>
<td>1</td>
</tr>
<tr>
<td>oil</td>
<td>¼ c.</td>
</tr>
<tr>
<td>vanilla</td>
<td>1 t.</td>
</tr>
<tr>
<td>canned pumpkin</td>
<td>1 c.</td>
</tr>
<tr>
<td>orange juice</td>
<td>¼ c.</td>
</tr>
<tr>
<td>non-stick vegetable spray</td>
<td></td>
</tr>
<tr>
<td>quick cooking oats</td>
<td>½ c.</td>
</tr>
<tr>
<td>baking soda</td>
<td>1 t.</td>
</tr>
<tr>
<td>unsweetened applesauce</td>
<td>¼ c.</td>
</tr>
<tr>
<td>cinnamon</td>
<td>1 t.</td>
</tr>
<tr>
<td>wheat germ and oatmeal</td>
<td>1 T. each</td>
</tr>
<tr>
<td>whole wheat flour</td>
<td>2 c.</td>
</tr>
<tr>
<td>salt</td>
<td>1 t.</td>
</tr>
</tbody>
</table>

Preheat oven to 350°. Spray a 24 mini-sized muffin pan with nonstick vegetable spray. Blend brown sugar, egg, oil, applesauce and vanilla in mixing bowl. Stir in pumpkin and orange juice. In another bowl, combine whole wheat flour, oats, baking soda, salt, and cinnamon. Add dry ingredients to pumpkin mixture and stir. Batter will be slightly lumpy. Pour batter into muffin cups. Top with a sprinkle of wheat germ and oatmeal. Bake 15-20 minutes. Remove from pan to wire rack to cool. Makes 24 servings.  
One mini-muffin provides one serving of grain/bread for children 1-5 years old.
Physical Activity:
“Here We Go Around the Mulberry Bush.”
Have children stand in a circle. While walking sing the following verse:

Here we go around the mulberry bush, mulberry bush, mulberry bush,
Here we go around the mulberry bush, mulberry bush, mulberry bush,
So early in the morning.

Then recite each verse below doing the action. Repeat the chorus after each verse.
This is the way we__________, ____________, ____________,
This is the way we__________,
So early in the morning.
Use these actions or make up your own.
twist our body       bend our knees       lift our leg       run in place
swing our arms       jump in the air       hop in place       roll our arms

Source: K.T. Thomas, Iowa State University, 2006
Goals and Background for Vitamin C Lessons

Objectives-The child will:
- Identify fruits and vegetables that contain vitamin C
- Taste a variety of vitamin C rich foods
- Share a benefit of eating vitamin C rich foods

Background Information
Vitamin C is a water-soluble vitamin. You need a daily supply of water soluble vitamins. The body does not manufacture or store vitamin C, and it is excreted from the body if not absorbed. Vitamin C is an antioxidant, which can help keep the body healthy.
Sources of Vitamin C
Plant sources: citrus fruits and juices, tomatoes, berries, potatoes with skins, green and red peppers, broccoli, and spinach.

Functions of Vitamin C
1. Helps form cementing substances such as collagen to hold body cells together, strengthens blood vessels, and assists in healing of wounds and bones.
2. Increases resistance to infections.
3. Helps the body absorb iron in the diet.

Side effects of Vitamin C
Too little: scurvy (poor bone structure), dry hair, gingivitis (gum disease), weakened tooth enamel, swollen joints, and possible weight gain because of slowed metabolism.
Too much: flushed (red) face, headache, increased urination, mild diarrhea, nausea and vomiting.
Vitamin C Know How

Serve at least one vitamin C food daily.

Look for juices naturally high in vitamin C or those that are vitamin C fortified.
To retain vitamin C content of food, refrigerate fresh produce.
Keep prepared food and juices tightly covered.
Eat fruit and vegetables with the peel on, if edible.
Use a small amount of cooking water or steam vegetables.

Children between 4-8 years of age need a minimum of 1 ½ c. fruit and 1 ½ c. vegetables each day. Let vitamin C fruits and vegetables help make up this total daily.
## Vitamin C

### Specific Vitamin C Fruits & Vegetables

<table>
<thead>
<tr>
<th>Good Sources</th>
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<tbody>
<tr>
<td><strong>Vegetables</strong></td>
<td></td>
<td></td>
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<tr>
<td>Turnip Greens w/ Turnips</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Turnips</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Watercress</td>
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<td></td>
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<tr>
<td><strong>Fruits</strong></td>
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<td></td>
</tr>
<tr>
<td>Apple</td>
<td></td>
<td></td>
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<tr>
<td>Banana</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Blueberries</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Kumquat</td>
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<td></td>
</tr>
<tr>
<td>Nectarine</td>
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<tr>
<td>Peach, fresh</td>
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<td></td>
</tr>
<tr>
<td>Pear</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Pineapple</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Plum, raw</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Beans, green or yellow</td>
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<td></td>
</tr>
<tr>
<td>Lima Beans</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Chard</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Collards</td>
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<td></td>
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<tr>
<td>Dandelion greens</td>
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</tr>
<tr>
<td>Escarole, raw</td>
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<td>Okra</td>
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<td></td>
</tr>
<tr>
<td>Parsnips</td>
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<td>Peas</td>
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<td></td>
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<tr>
<td>Radishes</td>
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<td></td>
</tr>
<tr>
<td>Romaine Lettuce</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Squash</td>
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</tr>
</tbody>
</table>
## Better Sources contain

**Vegetables**
- Bok Choy
- Cabbage, green
- Chinese Cabbage
- Mustard Greens
- Potato, baked or boiled
- Rutabaga, cooked
- Tomato

**Fruits**
- Blackberries, raw
- Honey Dew Melon
- Papaya
- Pineapple Juice
- Raspberries
- Watermelon
### Vitamin C

**Best Sources**

**Vegetables**
- Asparagus
- Broccoli
- Brussels Sprouts
- Cabbage, red
- Cauliflower
- Chili peppers
- Kale
- Kohlrabi
- Peppers, green and red
- Plantain, green or ripe, boiled
- Poke Greens, cooked
- Snow peas
- Sweet potato

**Fruits**
- Cantaloupe
- Grapefruit

- Grapefruit juice
- Grapefruit-orange juice
- Grapefruit and orange sections
- Guava, raw
- Kiwi
- Mandarin orange sections
- Mango
- Orange
- Orange juice
- Peach, frozen
- Strawberry
- Tangelo
- Tangerine
- Tangerine juice
- Tomato juice
- Tomato vegetable juice
Vitamin C Lesson 1

**Activity Description:** The child will use art to practice “putting” vitamin C foods into their body for good health.

**Materials:**
crayons    glue    scissors
large butcher-block paper    pictures of vitamin C rich foods

**Activity Goal:**
Children will find pictures of vitamin C rich foods to place onto a picture of the body.

**Art Activity:**
Trace the children’s body on paper. Give them pictures of vitamin C rich foods to glue on their body picture.
**Circle Activity:**
Discuss the benefits of vitamin C in the diet. Have children mark their favorite vitamin C rich foods either with a star, circle, or box. Discuss the colors of vitamin C rich foods. Tell children they need vitamin C foods daily. Ask the children for ways to add vitamin C rich foods to the diet.

**Art Activity:**
If space is limited or large sheets of paper are not available, have the children make placemats using the concepts described above. Children could group foods according to which meal they might eat each food (breakfast, lunch, dinner, or snack.)
Vitamin C Lesson 2

**Activity Description:** Children will examine vitamin C fruits.

**Materials:**
- orange
- kiwi
- pineapple
- grapefruit

**Activity Goals:**
Children will see, taste, and feel a variety of vitamin C rich fruits.
**Sensory Activity:**
Have children examine each of the fruits using all senses. Use the fruits to make a vitamin C rich fruit salad for a snack.

**Circle Activity:**
Can children identify what the fruit is by looking at the outside? What shape is it? What color is it? How does it feel? How does it smell? Cut the fruit open, again pass the fruit and have children answer the same questions. Compare similarities and differences between varieties of fruit. Fruit could be served separately, if desired for tasting. While eating fruit, children can discuss the same questions.
**Dramatic Play Activity:**
Have children participate in a dramatic play farmers market. See if they can pick vitamin C rich foods or their favorite fruits and vegetables. Talk with them about different ways they eat their fruits and vegetables. Do they like them cold or hot? With or without other foods? For meals or snacks?

**Circle Activity:**
Have children tell about their favorite vitamin C rich fruit and why they like it best. Having pictures of vitamin C fruits for examples may be helpful.
Vitamin C Lesson 3

Activity Description: Children will plant a vegetable garden in the spring to watch it grow throughout the summer and for garden produce.

Materials:
- pots or containers
- potting soil
- seeds
- garden tools
- water
- watering can

Activity Goals:
Children will see plants grow and eat harvested foods from plants.
Sensory Activity:
Children will help scoop soil into pots, plant seeds, and water. While plants are growing children can help with watering. Children can also draw pictures charting the growth of the plants. After food is produced, children can help prepare and eat the produce. Plant several different types of seeds, examples could include green and yellow beans, peppers, snow peas, lettuce, and cherry tomatoes. While working with the soil and the seeds, discuss the texture or feel of the soil and the seeds. What do children notice about the size and shapes of the different seeds? This project could begin inside in early spring and move outdoors after danger of frost.
**Circle Activity:**
As the plants grow, discuss the difference in growth rate and shape of emerging plants. Which will be the first to bear food? Which will be the tallest, shortest, and widest? What color are the plants? What are the colors of food produced from the plant?
**Gardening Activity:**
Plants can be moved from containers to a garden, if space is available. If space allows outside, squash could be planted. Squash grows on large vines. Children could also plant vegetables such as broccoli, cabbage, and onions, which are typically planted by purchasing starter plants or bulbs, rather than seed. If planting outside, seed potatoes could also be planted. Space will be the limitation with this activity. Root vegetables grow best in the ground and may not fare well in pots.

**Food Activity:**
Have children taste the vegetables they have planted. Buy some of the grown vegetables representing the seeds being planted to help children associate the seed with the vegetable. Children can have a vegetable snack after all the hard work. When meals are being served, using the vegetables planted, point out the plant it was produced from and the changes that have occurred since planting. Serve the vegetables the plant bears, as they become available. Children may be more likely to try the food if they have grown and cared for the plant from the beginning.
Vitamin C Lesson 4

**Activity Description:** Child will associate colors with their favorite foods.

**Materials:**
- String
- Toy foods
- Paper punch
- Orange
- Construction paper
- Food models
- Orange juicers
- Tape/glue
- Pictures of foods
- Toilet paper or paper towel tubes

**Activity Goals:**
Children will name favorite colors of foods they like.
**Take Home Activity:**
Send a letter home to parents early in the week; explaining the activity and requesting the children wear a piece of clothing that is the color of their favorite fruit or vegetable.

**Circle Activity:**
On the activity day, have children tell everyone what color they are wearing and why. Make a chart of favorite fruits and vegetables. Are there more fruits or vegetables? Why? Which are their favorite fruits or vegetables? Why? Show children which foods are a good food source of vitamin C.
Art Activity:
Have children make a pair of binoculars out of toilet paper tubes or cut paper towel rolls. Children can decorate the binoculars so the color of paper they use matches their shirt. Using a paper punch, punch a hole in each side of the binoculars. Tie a string through each hole long enough they can wear around their neck. Using binoculars, search for vitamin C foods and other wonders of nature.

Physical Activity:
Before children arrive or while they are preoccupied, hide a variety of vitamin C foods (using food models, pictures, or plastic foods) in a safe area, inside or outside. Children will take part in an “I Spy” safari, looking for foods the same color as they are wearing, with their binoculars.
**Circle Activity:**
After children take part in a safari to play “I Spy” using their favorite color of foods, discuss the following questions. How many foods did they find the color of their clothing? Did they see other colors? Did they spy other fruits and vegetables they like to eat? Would it be good or boring to eat just one color of food all day long? How many colors of foods do they eat in a day? After completion of spying, have children pick up the foods and place in a basket, either before or after discussion. Discuss all the different colors of food and how we benefit from eating a variety of colors.

**Food Activity:**
Let children wash and dry their own oranges. Have children roll the oranges, pressing down with their hand on the table for 2-3 minutes. They need to press firmly, but not flatten. Rolling the orange will help release juices, while working on large motor skills. Cut the orange in half and use a juicer to squeeze the juice out. Give each child a taste of freshly squeezed juice. Have them describe how it compares to the juice they normally drink?
Goals and Background for Whole Grain Lessons

Objectives-The child will:
- Eat more whole grains
- Become familiar with whole grain foods
- Share written information with parents
- Identify whole grains
- Share the benefits of eating whole grain

Background information:
Whole grains are seeds from certain plants. They are complex carbohydrates that are low in fat and contain no cholesterol. They are high in fiber; provide some protein, and a variety of vitamins and minerals. Whole grains are a source of both soluble and insoluble fibers. The 2005 Dietary Guidelines for Americans recommend at least half of all bread and grain servings should be whole grains.
Sources of Whole Grains:
Check ingredient labels closely when purchasing whole grains. Look for the following words as the first ingredient on the label: whole grain (grain listed), whole wheat, stone-ground whole (grain), brown rice, whole oats or oatmeal, bulgur wheat, and wheat berries.

Use caution when seeing the following words: wheat flour, semolina, durum wheat, organic flour, and multigrain. These may or may not be whole grain products.

These terms are not whole grain: enriched flour, degerminated, bran, and wheat germ. Also, the word stone ground by itself does not indicate whole grain.

Types of foods to look for: Whole grain bagels, bread, pita bread, wraps, tortillas, buns, rolls, crackers, pizza crust, cornbread, pancakes or waffles, pasta, English muffins, oatmeal, whole grain ready to eat or ready to cook cereals, wild rice, brown rice, barley, and bulgur.
Functions of Whole Grains:
Different whole grains have different health and wellness benefits, but the following is a list of overall health benefits provided by whole grains.

1. Provide energy for daily tasks.
2. Reduce risk of major diseases like bowel disorders, cancer, heart disease, stroke, obesity, and Type II diabetes.
3. Help lower cholesterol and blood pressure.

Whole Grain Know How
Introduce whole grains to children by offering the whole grain version of commonly served foods. For example: pancakes made with whole wheat flour, oatmeal muffins, whole wheat French toast sticks, grilled cheese made on whole grain bread, and spaghetti or macaroni and cheese using whole grain pasta.

Make changes slowly over time for increased acceptance. When shopping for products, always read the ingredient labels on food packaging, not just the claim on the front of the package. The words, “Made with Whole Grain” may not necessarily mean whole grains are the predominant ingredient in the product.
Gradually introduce whole grain products by combining whole wheat items with the current products you serve. Mix half whole wheat pasta and half regular pasta in macaroni and cheese or spaghetti. Use white bread and whole wheat bread in sandwiches. Replace half of the white flour with whole wheat flour in pancakes and other baked products, or add oats for part of the flour. Add barley and bulgur to soups, stews, and salads.

Children need 3-5 ounces of grain products per day. Make half of grain products served whole grain.

To serve whole grains at all meals try the following suggestions:
Breakfast: oatmeal, whole wheat pancakes or waffles, whole grain English muffins, whole wheat toast, whole grain breakfast cereal (hot or cold)
Lunch: whole wheat macaroni and cheese or whole wheat spaghetti, whole wheat rolls or bread, brown rice
Snack: whole grain pita breads, brown rice and raisins, whole wheat crackers, whole grain cookies and bars
Whole Grains Lesson 1

**Activity Description:** Explore the art of cooking with whole grains.

**Materials:**
- measuring cups
- measuring spoons
- bread pans
- oven
- vinyl table cloth or large sheet for easy clean up
- book
- whole wheat flour
- white flour
- honey
- water
- oil
- yeast
- powdered milk

**Activity Goals:** Children will help prepare homemade whole grain bread. They will use their senses to experience each of the ingredients added. Large and small motor skills will be used in the kneading process.
Literacy Activity:
Read Bread, Bread, Bread by Ann Morris, or a book of your choice about bread. Book may be read before, during, or after the food activity.

Circle Activity
Discuss what whole grains are and the benefits. Children may not fully grasp the concept now, but repeated exposure will result in increased understanding.

Food Activity:
As a group, prepare the bread, children can participate in all steps of bread making.
   1. Have a sample of each ingredient so children can feel the ingredients and participate in discussion about the ingredients while preparing the dough.
   2. Consider having ingredients measured and allowing children to help dump them in the bowl. Children will enjoy kneading the dough. Give each child a chance to knead a small piece of dough. Provide play dough for them to practice if you want to continue activity longer.
   3. Bake each child’s piece of dough and let them taste their own “loaf”.
   4. Send recipe to parents to prepare with children.
Whole Wheat Honey Bread

4-5 c. whole wheat flour       3 c. warm water
½ c. oil                       2 pkgs. active dry yeast
2 t. salt                      ½ c. honey
2-3 c. white flour             2 c. powdered milk

Dissolve yeast in water. Add oil and honey. In same bowl add salt, powdered milk, 3 cups whole-wheat flour, and beat with wooden spoon at least 200 strokes. Batter should be smooth. Add white flour and most of the wheat flour until the dough consistency is thick enough to knead. Knead the dough on a floured surface, gently at first since it will still be gooey, adding more flour as necessary for about 5 minutes or until the dough becomes smooth and elastic. Wipe out the bowl, coat with oil. Put dough in bowl and cover. Let rise for an hour or so. When the dough has risen about double, it will be time to put in pans. Grease pans. Form dough into a log. Divide into 3 loaves. Put into pans. Let them rise about 30 minutes. Bake at 350 degrees for 30-35 minutes. Cool on wire racks. Cane molasses makes a good substitute for honey, giving bread a darker, stronger flavor. This is a heavy wheat bread. If you would like the bread to be lighter, decrease the whole wheat flour and increase the white flour. Makes 36 slices. One ⅓ slice is equal to a ½ serving of grain/bread which meets the requirement for 1-5 year olds at all meals.
Whole Grains Lesson 2

**Activity Description:** Children will become familiar with popcorn through a variety of activities.

**Materials:**
- heavy cooking pot
- canola or soybean oil
- popcorn
- bag of microwave popcorn

**Activity Goals:**
Children will become familiar with popcorn. Children can eat popcorn.

**Caution:** Use proper supervision and clean up when doing popcorn activities for children participating and other children in your care. Popcorn can be a choking hazard to young children.
Circle Activity:
Discuss with children that popcorn grows on a corn plant. Then the corn is dried and becomes the seeds of popcorn. After the corn is dried, it is removed from the stalk cleaned and packaged. Have children examine popcorn on the cob and in the bag. Let children feel the popcorn before it is cooked.
Popcorn can be prepared in many different ways: plain, buttered, caramel, kettle corn, popcorn balls, and many more creative recipes. Discuss using the five senses: What do I see, smell, hear, feel, taste?

Sensory Activity:
Put popcorn in a sensory table or in a large bowl. Children can run their fingers through it, scoop, measure, and pour it.

Food Activity:
Prepare a batch of popcorn for children to eat, either in an air popper, microwave, or in heavy kitchen cooking pot. Popcorn can be seasoned in a variety of ways. **Popcorn is a non-creditable food. It should not be fed to children under 4 since it is a choking hazard. Provide adequate supervision.**
**Physical Activity:**
Play the Popcorn Game: Have children get in circle and squat down close to the floor, close together. Make the sounds of a microwave: set the time (beep, beep, beep), humming until popping begins, then make popping noises (pop, pop, pop), at last popcorn is done (ding, ding, ding). While making popping noises have children jump or spring to their feet and move around jumping and dancing. When ready for activity to be complete, popcorn is done, ding. This is a good large motor activity and can be done several times in succession.

**Physical Activity:**
Have children crumple pieces of paper. Lay out parachute (or large sheet). Have children place crumpled paper on parachute. Have everyone spread out around parachute and grabs edges with both hands. Wave parachute up and down. Paper will bounce like popcorn pops. See how long it takes to “pop” them all out.

**Art and Music Activity:**
Take two paper plates, coffee can, or toilet paper tube, and fill with enough popcorn seeds to make noise. Tape shut, with strong tape. Turn on music and let children dance making music with their new music makers. Discuss how each piece sounds different.
Art Activity:
Have children use popcorn seeds to create a piece of artwork. Examples could be flowers, clouds, and sheep. Use popcorn (white, yellow or multi-colored), glue seeds on a plate or paper to make an abstract design. Can use coloring sheets and have children glue seeds on the lines. Popped popcorn could be used also.

Popcorn can be a choking hazard. Please use proper supervision when doing activity.

Literacy Activity:
Read The Popcorn Book by Tomie de Paola.
Whole Grains Lesson 3

Activity Description: Introduce children to whole grain pasta products.

Materials:
small digging tools  small plastic tongs
sand                 large square container
whole grain pasta in a variety of shapes

Activity Goals: Children will learn about shapes and textures of whole grain pastas. Children will eat whole grain pastas.
Sensory Activity:
Pour sand into large container. Mix in pieces a variety of different whole wheat pasta. Give children the tongs and digging tools. Have them go on a digging expedition to find pasta shapes. After all children have had a chance to dig and recover some shapes, talk about the different types of pasta. Discuss the similarities and differences of the pasta recovered from the sand and the types they typically eat. Ask what dishes can be prepared with pasta? Discuss the types of foods prepared with pasta that they like?

Food Activities:
Prepare a pasta dish for lunch using whole wheat pasta, such as macaroni and cheese, spaghetti and meat sauce, or spirals tossed and chunked ham or tuna and mozzarella chunks in olive oil and vegetables.
Goals and Background for Calcium Lessons

Objectives-The child will:
- Know that calcium builds strong bones and healthy teeth
- Identify calcium-rich foods
- Taste a variety of calcium-rich foods
- Share the benefits of calcium-rich foods

Background information
The body cannot produce calcium on its own, so you need to supply your body with calcium on a regular basis. Peak bone mass is reached by age 30, but must be maintained throughout the life span.

Sources of Calcium
Sources of calcium are milk, yogurt, cheese, cooked dry beans, fish with edible bones, and green leafy vegetables. Some cereals and orange juice are fortified with calcium.
Functions of Calcium
1. Makes and keeps bones and teeth healthy.
2. Helps muscles relax and contract.
3. Aids in blood clotting.
4. May reduce the risk of osteoporosis, hypertension, and certain cancers.

Calcium Know How
Children between the ages of 2-8 years need 2 c. of milk group foods every day. One cup of milk group foods is equal to 1 c. yogurt, 1 ½ oz. natural cheese (⅓ c. shredded cheese), 2 oz. process cheese, 1 c. fluid milk, 2 c. cottage cheese, 1 c. pudding, 1 c. frozen yogurt, or 1 ½ c. ice cream. Nutrients in milk are very similar in all types of milk, fat, and calories can vary. Children 1 to 3 years of age need 500 mg of calcium; but children 4-8 years of age need 800 mg of calcium daily. One cup of milk provides 30 percent of the daily value for calcium. Besides calcium, milk also provides 9 other vitamins and minerals.
Calcium

People who are lactose intolerant, lack the enzyme lactase which is needed to digest the lactose or milk sugar. Symptoms of lactose intolerance include gas, bloating, abdominal pain, diarrhea, and nausea. If lactose problems are suspected, consult a doctor who may recommend trying reduced-lactose or lactose-free milk products, or eat milk products with a full meal.

**Types of milk products:**
- **Fluid milk:** fat-free (skim), low-fat (1%), reduced-fat (2%), whole, flavored milks (strawberry, vanilla, chocolate); lactose-reduced and lactose-free
- **Milk-based desserts:** puddings, frozen yogurt, ice milk, ice cream, custard
- **Cheese:** hard natural (cheddar, mozzarella, Swiss, parmesan), soft (ricotta and cottage cheese), and processed (American)
- **Yogurt:** fat-free, low-fat, reduced fat, and whole milk yogurt

Note: cream, cream cheese, and butter contain little or no calcium and do not count as a milk group serving.
Ways to get milk:
Drink milk with meals. Include cheese in casseroles, sandwiches, and vegetables. Make lasagna with ricotta and mozzarella cheese. Combine cottage cheese with fruit or vegetables. Cook hot cereals with milk. Top baked potatoes with nonfat yogurt, cheese, or cottage cheese. Replace plain yogurt for mayonnaise in dressings and dips. Use fat free milk to prepare soups. Eat ice milk or frozen yogurt for dessert instead of higher fat desserts. When making fruit parfaits use yogurt, fruit, and granola. Make chocolate ice pops by freezing chocolate milk in ice cube trays or cups with a spoon inserted after milk beings to solidify.

Use dry milk to add calcium to other foods. Dry milk addition recommendations:
- ½ c. per pound for meatloaf-type mixtures
- 2 T. per quart of milk
- 2 T. sifted into flour for cakes, cookies, or bread
- 3 T. per cup of fluid milk in pudding or cocoa
- ¼ c. per cup of hot cereal before cooking

Calcium lesson information was adapted with permission from materials published by Midwest Dairy Council.
Calcium Lesson 1

**Activity Description:** Children will make their own milk smoothie, while using large and fine motor skills.

**Materials:**
- milk
- strawberries
- knife
- cups
- bananas
- spoons
- zip closure bags

**Activity Goals:**
Children will prepare a smoothie by using hands to mash food in bags and stirring into milk.
**Food Activity:**
Wash hands. Wash and stem strawberries. Peel and quarter bananas. Pour ½ c. milk into small glasses, enough for each child. Milk can be put in freezer for short time so it becomes slushy, if desired. Give each child a zip closure bag. Have each child put 2 strawberries and 1 banana piece into bag. Seal bags for children, squeezing air out. Use hands to mash fruit (while dancing around the room). Cut off corner of bag and have child squeeze fruit mixture into milk. Stir with spoon. Enjoy individual smoothies. Talk about how calcium and exercise go hand in hand to build strong bones. One smoothie is equal to a ½ c. serving of milk which meets the requirement for 1-5 year olds at snack.

**Note:**
If children are having a hard time mashing fruit after a few minutes, give them some tools to help. They could mash with rubber mallets, wooden blocks, rolling pins or a soup can. This may be done in small groups, in case children need assistance.

**Literacy Activity:**
Read *Make Me a Peanut Butter Sandwich and a Glass of Milk* by Ken Robbins.
Activity Description: Children will use milk products to create silly pictures.

Materials:
- paper
- bowls
- cups
- milk
- boxes of pudding mix: chocolate, butterscotch, vanilla, etc.
- low-fat vanilla yogurt
- camera
- measuring cups
- spoons
- paint shirts
- low-fat vanilla yogurt

Activity Goals:
- Children will create art pictures.
- Children will have a picture of themselves taken while enjoying calcium-rich foods.
**Art Activity:**
Mix pudding according to package directions. Have children wash hands and put on paint shirts. Give each child a piece of paper and a small cup of pudding. Let them create a work of art using the pudding as finger paint. While children are creating their pudding picture, take their picture one at a time, with a milk mustache.

**Dramatic Play:**
For milk mustache pictures, give each child a small glass of ¼ c. vanilla yogurt, stirred smooth. When they take a drink, the yogurt will stick to the upper lip. Take picture of child with “milk” mustache. Develop pictures and send home with the child as a reminder of milk products are both fun to eat and good for them. With picture send home the recipe for milk smoothies from Lesson 1.

**Circle Activity:**
Discuss the benefits of milk consumption and milk products children like to drink. Talk about how having a milk mustache shows they are getting their milk products and calcium to stay healthy.
Calcium Lesson 3

**Activity Description:** Children will learn where milk comes from and different foods that are made from milk.

**Materials:**
- flavored milks
- cups
- picture of a cow
- books

**Activity Goals:**
Children will understand where milk comes from.

**Circle Activity:**
Play a guessing game with children to see if they know where milk comes from. Use the following clues or some of your own: lives on a farm, eats grass and grain, can be black and white or brown, makes a moo sound.
**Literacy Activity:**
Read *No Milk!* by Jennifer A. Ericsson, *The Milk Makers* by Gail Gibbons, or a similar age appropriate book about milk production. Discuss milk processing and how it can be made into many foods.

**Food Activity:**
Have children sample different flavored milks: plain, chocolate, strawberry, vanilla. Using a chart, discuss and mark which they like the best and why. Let children use milk to make pudding for dessert or milk based soup.
**Food Activities:**
Pour whole milk, reduced-fat (2%), low-fat (1%), and skim milk into glass cups. Can the children see the difference between the milks? Do they know what types they drink at home? You may need to refer to the color of the milk carton or the lid when determining the type of milk they drink at home (red-whole milk; dark/bright blue-reduced-fat; green-low-fat, and light blue-skim). Make another chart showing household milk consumption. Explain that is the amount of fat that makes each type of milk different. The lower fat or fat-free milk is better for children over 2 years of age.
Calcium Lesson 4

**Activity Description:** Chart children’s growth.

**Materials:**
- book
- large sheet of paper
- marker
- tape

**Activity Goals:**
Children will see how tall they are and talk about how calcium helps them grow.

**Art Activity:**
Tape a large piece of paper to an open wall. Have each child stand against paper, measure and mark how tall they are. Write their name next to the measurements. Talk about the variety of heights and ages that were measured. What makes them grow? How does calcium help? (strong bones)
**Literacy Activity:**
Read the book *How Kids Grow* by Jean Marzollo, or another related book on children growth. Discuss why they want to continue to be healthy and grow.

**Circle Activity:**
Have children identify where they have bones in their body (arms, legs, skull, ribs, etc.) Discuss what makes strong healthy bones and why bones are important. Have them feel their rib bones; discuss they protect the lungs and heart behind them. What would happen if they had no bones?

**Physical Activity:**
Turn on music and have the children play musical chairs, the hokey pokey or related dance game. When complete, tell children they would not be able to complete such activities if they did not have strong bones and muscles.
Goals and Background for Iron Lessons

**Objective—The child will:**
- Know that iron is a mineral
- Identify iron-rich foods
- Taste iron-rich foods
- Share benefits of iron-rich foods

**Background Information**
Iron is essential for body function. Iron is in red blood cells that carry oxygen throughout the body. Lack of iron can lead to anemia, the most common nutrition deficiency in the world. Children over 1 year of age need 10 mg of iron daily. Vitamin C increases the absorption of iron.

**Sources of Iron**
Iron-rich foods include lean meats, dry beans, eggs, green leafy vegetables, raisins, whole-grain bread, pasta, oatmeal, spinach and iron-fortified breads and cereals.
Functions of Iron
1. Makes several proteins in the body.
2. Makes red blood cells.
3. Helps body produce energy.

Side Effects of Iron
Too much: An iron overdose can lead to poisoning or death; keep supplements out of children’s reach. It is difficult to get too much iron from eating foods.
Too little: Iron deficiency anemia, which can lead to delay in development and impaired mental function.
Infants and toddlers are at greatest risk for iron deficiency.

Iron Know How
Starting at about 6 months children can be introduced to iron-fortified cereals. Provide two or more sources of iron daily. Vitamin C rich foods should be eaten at the same meal with iron foods to increase iron absorption. Adequate iron in the diet can help reduce the harmful effects of lead if a child is exposed to lead.
Iron Lesson 1

**Activity Description:** Children will use their senses to identify different iron-rich foods.

**Materials:**
- eggs
- dried beans
- tuna
- bandanas
- bowl
- dry cereal
- fresh spinach
- egg noodles
- paper sacks
- raisins
- whole grain bread
- enriched rice-cooked & uncooked
- plastic margarine tubs
- whisk

**Activity Goals:**
Children will use their senses to become more familiar with iron-rich food.
**Sensory Activity:**
Cover children’s eyes with a bandana or towel. Have children identify the sounds of the foods using only their sense of hearing.
Crack an egg  Shake dried beans  Beat eggs in a bowl with whisk

Put samples of foods in small, margarine type containers. Cut a slit in the lid. Have children use their sense of smell to identify the foods.
Tuna  Raisins  Whole-grain bread

Place foods in paper sack. Ask children to reach into the bag and identify the foods by touch only. Talk about how the foods feel: smooth, bumpy, fuzzy, round, long, large or small
Dry beans  Uncooked enriched rice  Cooked enriched rice
Dry cereal  Raisins  Fresh spinach
Egg noodles  Whole grain bread

Pictures of the foods used in the activity can be cut and glued or drawn onto a sheet of paper to assist with the guessing.
Iron Lesson 2

**Activity Description:** Children will learn about iron-rich foods while making a meal.

**Materials:**
- taco shells
- tomato sauce
- fresh spinach
- water
- grated cheese
- cooked and crumbled ground beef
- Iron-Smart Poem

**Activity Goals:**
Children prepare a meal their way with iron-rich foods.
**Food Activity:**

Taco Spinners

- 8 c. fresh spinach, washed and cut to bite size pieces
- 1 lb. ground beef, brown and crumble
- 16 oz. grated Mexican blend cheese
- 4 Roma tomatoes, chopped
- 8 whole wheat soft taco shells, cut in half

Have each child prepare their own taco by filling shell with: ½ c. of spinach, ½ ounce cooked ground beef, 1 ounces of grated cheese, 1 T. tomato chunks. Heat until cheese melts, if desired.

Servings: 16

The taco can count towards a meat, grain/bread, and vegetable serving which meets the requirement for 1-5 year olds at meals.
**Circle Activity:**
Read the Iron-Smart Poem next card, and then use the following discussion questions. What does a siren remind you to do? What foods could you eat to get iron? What do beans, cereal, beef, and spinach give us? Do we need to eat these foods everyday? How does iron help us work and play when we eat these foods? Iron-Smart Poem was taken from Head Start Nutrition Education Curriculum developed as part of contract number 105-85-1527.

**Circle Activity:**
Name each ingredient in Taco Spinners. Describe ingredients using their senses. Discuss which ingredients come from plants and which come from animal sources.
IRON-SMART POEM

Chorus

Hip, hip, hip, hooray I ate those foods today!
Now I can zip, zip, zip, whenever I work or play.

Whenever I hear a siren,
It reminds me to eat some iron.
Beef or beans and spinach, too,
Will help me do all I do.

Chorus

Whenever I hear a siren,
It reminds me to eat some iron,
Taco, beef steak and roast, too
Will help me do all I do.

Chorus

Whenever I hear a siren,
It reminds me to eat some iron,
Oysters, flour and meat, too
Will help me do all I do.

Chorus

Whenever I hear a siren,
It reminds me to eat some iron,
Spaghetti with meat sauce too.
Will help me do all I do.

Chorus

Whenever I hear a siren,
It reminds me to eat some iron,
Whole wheat breads and hamburger, too,
Will help me do all I do.
Iron Lesson 3

**Activity Description:** Children will go on a scavenger hunt to find the ingredients to make lunch.

**Materials:**
- small containers or paper sacks
- food models or pictures of foods
- water
- recipe card
- oven or grill
- pot
- cooking spray
- beef
- chicken
- pineapple
- enriched rice
- teriyaki sauce

**Activity Goal:**
Children will work together to find all the “pieces” of an iron-rich meal.
**Literacy Activity:**
Read *Chicken Soup with Rice* by Maurice Sendak.

**Dramatic Play Activity:**
Have children prepare meals with pretend food in a play kitchen. Encourage use of food combinations for meals including meats, fruits, vegetables, and grains.

**Sensory Activity:**
Let children eat Kabobs (recipe next card) with fingers to feel the different textures of food they are eating.
Food Activity:

Skewer-less Beef and Chicken Kabobs
1 lb. beef flank steak, or other lean steak
1 lb. chicken boneless, skinless breast
1-20 oz. can pineapple chunks
teriyaki sauce
olive oil cooking spray
Slice beef and chicken in chunks, add pineapple and place in 9*13 pan. Onions and green peppers could be added if desired. Sprinkle with Teriyaki sauce. Give a quick spray with olive oil. Put on grill or place in hot oven. Cook 20-25 minutes until chicken juices run clear.
While kabobs are cooking, prepare rice according to package directions.
Servings: 12

One serving is provides 1 ½ ounces meat and ⅛ c. fruit.

Note: Prepare ahead of time, as raw meat is unsafe for small children.
Many of the books can be checked out for loan from the Iowa Department of Education Library in Nutrition, Health and Transportation Services. These books are followed by the Department of Education library book number to make the loaning process easier. Books are loaned out for 2-3 weeks at a time. You may check out no more than 2-3 books a time. Also, check your local library or bookstore to borrow or purchase these books or books of similar content to support the lessons.


*Bread, Bred, Bread* by Ann Morris. USA: Scholastic Books Inc., 1989


**No Milk!** by Jennifer A. Ericsson. USA: Tambourine Books, 1993

**Pancakes for Breakfast** by Tomie de Paola. San Diego: Harcourt and Brace Co., 1978 (library no. B0483)


**Scrambled Eggs Super!** by Dr. Seuss. New York: Random House, Inc., 1953 (library no. B0435)


Another great book resource for children ages 4-8 is the Michigan Book list, which was funded by a donation from the United Dairy Industry of Michigan, USDA, Food and Nutrition Service to Michigan State University Extension, Family and Consumer Science programs-the Michigan Nutrition Network and Team Nutrition. The book list is accessible on line at:
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