

Highland County Nutrition Skillathon Kit

Activities and Resources Binder for Kit #1

DEVELOPED BY:
OSU Extension 4-H Professionals from Highland County

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Highland County Nutrition Skillathon Kit

Senior Activities

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Senior Nutrition Skillathon Kit

Nutrition Skillathon Resource and Activity Guide

- This is divided into one section- beginner.
- In this section you will find activities on 9 different topics.
- Complete the activities and then have a family member, friend, or 4-H Advisor use the answer key to check your answers for each activity.
- Feel free to try each activity as many times as you would like. After you complete the activities from the beginner division, you can try the activities for the other age divisions if you would like.

Topics:

- Measuring
- Food Selection/MyPlate
- Table Setting
- Menu Writing
- Cost Comparison
- Reading Food Labels
- Kitchen Gadget Identification
- Nutrients
- Cooking terms and Measuring Equivalents

Nutrition Skillathon Kit Components

- Nutrition Skillathon Resource and Activity Guide Binder
- 1 green plastic plate
- 1 green drinking glass
- 1 clear plastic plate
- Knife, spoon, fork
- Cloth napkin
- Placemat
- Watering pot centerpiece
- 1 set of plastic dry measuring cups and measuring spoons
- 1 2-cup plastic liquid measuring cup
- Metal strainer

Food Selection/MyPlate: Senior

Identify the correct ounce and cup equivalents in each food group. (You may have leftover cards.)

Food Group	What equals a 1-ounce or 1-cup equivalent?
Dairy	
Fruit	
Grains	
Protein	
Vegetables	

Measuring: Senior

Use the Measuring Guide and the measuring equipment (i.e. measuring spoons, dry measuring cups, and liquid measuring cup) to measure the ingredients below.

1. 1 cup un-sifted flour
2. 1 tablespoon un-sifted flour
3. 1 cup water
4. 1 teaspoon water
5. 1 cup sifted flour
6. $\frac{1}{2}$ cup shortening, margarine, butter, or peanut butter
7. 1 teaspoon syrup or honey
8. $\frac{1}{4}$ cup brown sugar

Table Setting: Senior

Use the menu and the serving utensils to correctly set up a place setting. Use the answer key to check that all the utensils are in the correct place.

Menu

Oven-Baked Chicken

Steamed Carrots

Sliced Peaches

Leafy Greens Salad

Hot Dinner Roll

Chilled Milk

Water

Food Selection/MyPlate: Senior Labels

2 slices of cheese

8 ounces of Milk

8 ounces of yogurt

2 cups of frozen yogurt

1 slice of cheese

½ cup of cottage cheese

32 seedless grapes

1 small Apple

8 large strawberries

½ cup of Applesauce

1 large plum

1 small banana

1/2 of an English Muffin

1/2 cup of cooked rice

5 whole wheat crackers

2 regular slices of bread

1 large bagel

10 square crackers

1 egg

1 sandwich slice of turkey

1 Tablespoon of Peanut Butter

1 small lean hamburger

3 egg whites

6 almonds

12 baby carrots

1 large ear of corn

2 cups of raw iceberg lettuce

2 cups of green peas

1 cup of raw spinach

1 large stalk of celery

Menu Writing Mad Libs
Senior Labels

1/2 Cup

1 small

2 ounces

1/2 Cup

3 Cups

Peanut Butter

Popcorn

Carrots

Milk

Sliced Peaches

Menu Writing Mad Libs-Senior

Let's make a menu for a 9-13 year old girl who gets less than 30 minutes per day of moderate physical activity, beyond normal daily activities. Use the cards to identify the correct amounts of food she should have and any missing food groups in each meal.

Breakfast

2 Slices Crispy Whole Wheat Toast
1 Tablespoon Creamy _____

_____ Strawberries

8 Ounces Ice-cold Tomato Juice

8 Ounces _____

Lunch

2 Ounces Savory Roast Beef

½ Cup _____

_____ Orange

1 Small Muffin

8 ounces Yogurt

8 oz. Water

Dinner

_____ Grilled Chicken with Italian

Dressing

½ Cup Green Beans

½ Cup Honey-Glazed _____

_____ Brown Rice

8 oz. Milk

Snack

_____ _____

Reading Food Labels: Senior

Look at the nutrition facts labels for white bread and whole wheat bread. Use the food labels to answer the questions about the two foods below.

1. Which bread is considered a whole grain?

2. What is the best way to determine if a food is a whole grain?

3. Which bread is considered an “excellent” source of dietary fiber?

4. If you were to eat a sandwich that contains 2 slices of bread, which bread would contribute fewer calories to the meal?

5. What are the Percent Daily Values(% DV) are based on?

Reading Food Labels: Senior Labels

White Bread

White Bread

White Bread

Whole Wheat Bread

Whole Wheat Bread

Whole Wheat Bread

2,000 calorie diet

1,800 calorie diet

They are not based on anything

The calorie needs for 50% of Americans

Words on the front of the package saying
it is 100% whole wheat or multigrain

The color of the food

The amount of fiber in the food

Having whole grain listed as the first
ingredient in the ingredient list

Pictures of wheat on the package

Kitchen Gadget Identification-Senior

Use the list of kitchen gadgets below to identify two other common household items that you could use for the same purpose.

Pastry Blender	
Whisk	
Biscuit Cutter	
Lemon Zester	
Potato Masher	

Kitchen Gadget Identification-Senior

Use the list of kitchen gadgets below to identify two other common household kitchen items that you could use for the same purpose.

Sifter

Electric Mixer

Grater

Cookie Cutter

Baster

Kitchen Gadget Identification Senior

Fork

Two knives

Fork

Electric Beater

Large Cup

Canning Jar Ring

Vegetable Peeler

Grater

Pastry Blender

Electric Mixer

Strainer

Wire Whisk

Blender

Whisk

Vegetable Peeler

Zester

Pastry Brush

Ladle

Butter Knife

Lids

Nutrients: Senior

Use the nutrient cards to match each nutrient with its function in the table below.

Vitamin A	
Vitamin B	
Vitamin C	
Vitamin D	
Vitamin E	
Vitamin K	
Iron	

Nutrients: Senior

Use the nutrient cards to match each nutrient with its function in the table below

Calcium

Magnesium

Phosphorus

Potassium

Fat

Protein

Carbohydrates

Nutrients Labels Senior

Needed for new cell growth, healthy skin, hair, & tissues, and vision

Needed for building proteins in the body, red blood cells & normal function of nervous tissue

Needed for the formation of collagen to hold cells together for healthy teeth, gums, & blood vessels; improves iron absorption and resistance to infection

Promotes absorption and use of calcium and phosphate for healthy bones and teeth

Protects red blood cells and helps prevent destruction of vitamins A and C.

Necessary for normal blood clotting and synthesis of proteins found in plasma, bone, & kidneys

Needed for the formation of hemoglobin, which carries oxygen from the lungs to the body cells

Needed for healthy bones and teeth, normal blood clotting, & nervous system functioning

Needed for healthy bones & teeth, proper nervous system functioning, & energy metabolism

Needed for healthy bones & teeth, energy metabolism, & acid/base balance in the body

Needed for maintaining proper fluid balance, nerve impulse function, muscle function, & cardiac function

Supplies energy for the body and aids in forming structural material of cells & tissues

Needed for the structure of red blood cells, proper functioning of antibodies resisting infection, regulation of enzymes & hormones, growth, & repair of body tissues

Provide the body with a source of energy required to carry out daily activities

Acts as an antioxidant to protect cells from damage and boosts the body's immune system so it can fight off bacteria and viruses

Cooking Terms & Measuring Equivalents-Senior

Julienne	
Steep	
Baste	
Cure	
Skim	

2 gallons	
32 Tablespoons	
12 cups	
9 teaspoons	
62 Tablespoons	

Cooking Terms & Measuring Equivalents-Senior Labels

To cut vegetables, fruits, or cheeses
into thin strips

To extract color, flavor, or other qualities
from a substance by leaving it in water just
below the boiling point

To moisten foods during cooking to
add flavor and prevent drying

To preserve meats by drying and
salting and/or smoking

To remove impurities, whether scum or fat, from
a surface of a liquid during cooking, thereby
resulting in a clear, cleaner tasting final product

8 quarts

2 cups

3 quarts

3 Tablespoons

1 quart

Cost Comparison: Senior

You are trying to decide whether to make Apple Pie, Sautéed Apples, or Apple Crisp for dinner. You want to choose the most inexpensive food with the least amount of fat, sodium, and calories. Use the ingredient lists below to calculate the cost per serving for each food and determine which is the least expensive option. Then, use the nutrition information to determine which food is the most nutritious option.

Apple Pie (makes 8 servings)

Ingredient and Amount	Approximate Cost per Amount	Nutrition Information
1 Refrigerated Pie Crust	\$3.39	Serving size: 1/8 of pie Calories: 230 Fat: 6 grams, Saturated fat: 2.5 grams, Trans fat: 0 grams Cholesterol: 0 milligrams, Sodium: 200 milligrams Total Carbohydrate: 43 grams, Dietary Fiber: 1 gram, Sugars 27 grams Protein: 1 gram, Vitamin A: 0 % DV, Vitamin C: 4% DV, Calcium: 0% DV, Iron 0% DV
6 medium peeled apples, sliced	\$5.97	
¾ cup sugar	\$0.24	
2 tablespoons all-purpose flour	\$0.03	
¾ teaspoon ground cinnamon	negligible	
¼ teaspoon salt	negligible	
1/8 teaspoon ground nutmeg	negligible	
1 tablespoon lemon juice	\$0.07	
Cost per Serving:		

Sautéed Apples (makes 9 servings)

Ingredient and Amount	Approximate Cost per Amount	Nutrition Information
3 Tablespoons margarine	\$0.30	Serving Size: ½ cup Calories: 95 Total Fat: 3.9 grams, Saturated fat: 0.5 grams, Trans fat: 0 grams, Cholesterol: 0 milligrams, Sodium: 52 milligrams Total Carbohydrate: 17 grams, Dietary Fiber: 2.4 grams, Sugars: 12 grams Protein: 0 grams Vitamin A: 4 % DV, Vitamin C: 8% DV, Calcium: 1% DV, Iron: 1 % DV
6 medium apples, sliced	\$5.97	
½ cup packed brown sugar	\$0.26	
1/8 teaspoon ground cinnamon	negligible	
Cost per Serving:		

Cost Comparison: Senior

Apple Crisp (makes 8 servings)

Ingredient and Amount	Approximate Cost per Amount	Nutrition Information
5 medium apples, sliced	\$5.97	Serving Size: ½ cup Calories: 132 Total Fat: 3.6 grams, Saturated fat: 0.7 grams, Trans Fat: 0 grams, Cholesterol: 0 grams, Sodium: 34 milligrams Total Carbohydrate: 25 grams, Dietary Fiber: 2.5 grams, Sugars 4 grams Protein: 1 grams Vitamin A: 3% DV, Vitamin C: 5.3% DV, Calcium: 1.4%, Iron: 4.7%
2 ½ teaspoons ground cinnamon	\$0.03	
2 tablespoons sugar	\$0.04	
2 tablespoons flour	\$0.03	
1 cup quick oats	\$0.51	
1 teaspoon vanilla	\$0.04	
¼ cup packed brown sugar	\$0.13	
2 tablespoons margarine	\$0.20	
Cost per Serving:		

Put the foods in order starting with the most nutritious and least expensive option.

1	2	3

Cost Comparison: Senior Labels

\$1.23 per serving

\$1.54 per serving

Sautéed Apples

\$0.73 per serving

\$0.63 per serving

Apple Pie

\$0.87 per serving

Apple Crisp

\$0.95 per serving

Highland County Nutrition Skillathon Kit

Senior

Answer Keys Binder for Kit #1

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Food Selection/MyPlate: Senior
Identify the ounce and cup equivalents.

Food Group	What equals a 1-ounce or 1-cup equivalent?
Dairy	<div>2 slices of cheese</div> <div>8 ounces of Milk</div> <div>8 ounces of yogurt</div>
Fruit	<div>32 seedless grapes</div> <div>1 small Apple</div> <div>8 large strawberries</div>
Grains	<div>1/2 of an English Muffin</div> <div>1/2 cup of cooked rice</div> <div>5 whole wheat crackers</div>
Protein	<div>1 egg</div> <div>1 sandwich slice of turkey</div> <div>1 Tablespoon of Peanut Butter</div>
Vegetables	<div>12 baby carrots</div> <div>1 large ear of corn</div> <div>2 cups of raw iceberg lettuce</div>

Menu Writing Mad Libs-Senior

Let's make a menu for a 9-13 year old girl who gets less than 30 minutes per day of moderate physical activity, beyond normal daily activities.

Breakfast

2 Slices Crispy Whole Wheat Toast

1 Tablespoon Creamy

Strawberries

8 Ounces Ice-cold Tomato Juice

8 Ounces

Dinner

Grilled Chicken with Italian

Dressing

Lunch

2 Ounces Savory Roast Beef

1/2 Cup

Orange

1/2 Cup Green Beans

1/2 Cup Honey-Glazed

Brown Rice

8 oz. Milk

1 Small Muffin

8 ounces Yogurt

8 oz. Water

Snack

Table Setting: Senior

Use the menu and the serving utensils to correctly set up a place setting. Use the answer key to check that all the utensils are in the correct place.

Menu

Oven-Baked Chicken

Steamed Carrots

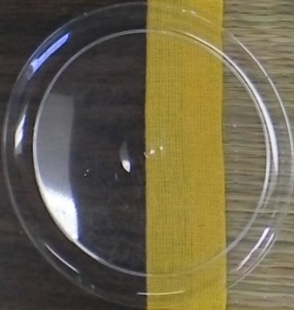
Sliced Peaches

Leafy Greens Salad

Hot Dinner Roll

Chilled Milk

Water



Reading Food Labels: Senior

Look at the nutrition facts labels for white bread and whole wheat bread. Use the food labels to answer the questions about the two foods below.

1. Which bread is considered a whole grain?

Whole Wheat Bread

2. What is the best way to determine if a food is a whole grain?

Having whole grain listed as the first ingredient in the ingredient list

3. Which bread is considered an “excellent” source of dietary fiber?

Whole Wheat Bread

4. If you were to eat a sandwich that contains 2 slices of bread, which bread would contribute fewer calories to the meal?

White Bread

5. What are the Percent Daily Values (% DV) are based on?

2,000 calorie diet

Nutrients: Senior

Use the nutrient cards to match each nutrient with its function in the table below.

Vitamin A	Needed for new cell growth, healthy skin, hair, & tissues, and vision
Vitamin B	Needed for building proteins in the body, red blood cells & normal function of nervous tissue
Vitamin C	Needed for the formation of collagen to hold cells together for healthy teeth, gums, & blood vessels; improves iron absorption and resistance to infection
Vitamin D	Promotes absorption and use of calcium and phosphate for healthy bones and teeth
Vitamin E	Protects red blood cells and helps prevent destruction of vitamins A and C.
Vitamin K	Necessary for normal blood clotting and synthesis of proteins found in plasma, bone, & kidneys
Iron	Needed for the formation of hemoglobin, which carries oxygen from the lungs to the body cells

Nutrients: Senior

Use the nutrient cards to match each nutrient with its function in the table below.

Calcium	Needed for healthy bones and teeth, normal blood clotting, & nervous system functioning
Magnesium	Needed for healthy bones & teeth, proper nervous system functioning, & energy metabolism
Phosphorus	Needed for healthy bones & teeth, energy metabolism, & acid/base balance in the body
Potassium	Needed for maintaining proper fluid balance, nerve impulse function, muscle function, & cardiac function
Fat	Supplies energy for the body and aids in forming structural material of cells & tissues
Protein	Needed for the structure of red blood cells, proper functioning of antibodies resisting infection, regulation of enzymes & hormones, growth, & repair of body tissues
Carbohydrates	Provide the body with a source of energy required to carry out daily activities

Cooking Terms & Measuring Equivalents-Senior

Julienne	To cut vegetables, fruits, or cheeses into thin strips
Steep	To extract color, flavor, or other qualities from a substance by leaving it in water just below the boiling point
Baste	To moisten foods during cooking to add flavor and prevent drying
Cure	To preserve meats by drying and salting and/or smoking
Skim	To remove impurities, whether scum or fat, from a surface of a liquid during cooking, thereby resulting in a clear, cleaner tasting final product

2 gallons	8 quarts
32 Tablespoons	2 cups
12 cups	3 quarts
9 teaspoons	3 Tablespoons
62 Tablespoons	1 quart

Kitchen Gadget Identification-Senior

Pastry Blender	Fork Two knives
Whisk	Fork Electric Beater
Biscuit Cutter	Large Cup Canning Jar Ring
Lemon Zester	Vegetable Peeler Grater
Potato Masher	Pastry Blender Electric Mixer

Kitchen Gadget Identification-Senior

<p>Sifter</p>	<p>Strainer</p> <p>Wire Whisk</p>
<p>Electric Mixer</p>	<p>Blender</p> <p>Whisk</p>
<p>Grater</p>	<p>Vegetable Peeler</p> <p>Zester</p>
<p>Cookie Cutter</p>	<p>Butter Knife</p> <p>Lids</p>
<p>Baster</p>	<p>Pastry Brush</p> <p>Ladle</p>

Cost Comparison: Senior

You are trying to decide whether to make Apple Pie, Sautéed Apples, or Apple Crisp for dinner. You want to choose the most inexpensive food with the least amount of fat, sodium, and calories. Use the ingredient lists below to calculate the cost per serving for each food and determine which is the least expensive option. Then, use the nutrition information to determine which food is the most nutritious option.

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6 medium peeled apples, sliced	\$5.97	
¾ cup sugar	\$0.24	
2 tablespoons all-purpose flour	\$0.03	
¾ teaspoon ground cinnamon	negligible	
¼ teaspoon salt	negligible	
1/8 teaspoon ground nutmeg	negligible	
1 tablespoon lemon juice	\$0.07	
Total Cost for Recipe:	\$9.70	
Cost per Serving:		\$1.23 per serving

Sautéed Apples (makes 9 servings)

Ingredient and Amount	Approximate Cost per Amount	Nutrition Information
3 Tablespoons margarine	\$0.30	Serving Size: ½ cup Calories: 95 Total Fat: 3.9 grams, Saturated fat: 0.5 grams, Trans fat: 0 grams, Cholesterol: 0 milligrams, Sodium: 52 milligrams Total Carbohydrate: 17 grams, Dietary Fiber: 2.4 grams, Sugars: 12 grams Protein: 0 grams Vitamin A: 4 % DV, Vitamin C: 8% DV, Calcium: 1% DV, Iron: 1 % DV
6 medium apples, sliced	\$5.97	
½ cup packed brown sugar	\$0.26	
1/8 teaspoon ground cinnamon	negligible	
Total Cost for Recipe:	\$6.53	
Cost per Serving:		\$0.73 per serving

Cost Comparison: Senior

Apple Crisp (makes 8 servings)

Ingredient and Amount	Approximate Cost per Amount	Nutrition Information
5 medium apples, sliced	\$5.97	Serving Size: ½ cup Calories: 140 Total Fat: 3.6 grams, Saturated fat: 0.7 grams, Trans Fat: 0 grams, Cholesterol: 0 grams, Sodium: 34 milligrams Total Carbohydrate: 25 grams, Dietary Fiber: 2.5 grams, Sugars 4 grams Protein: 1 grams Vitamin A: 3% DV, Vitamin C: 5.3% DV, Calcium: 1.4%, Iron: 4.7%
2 ½ teaspoons ground cinnamon	\$0.03	
2 tablespoons sugar	\$0.04	
2 tablespoons flour	\$0.03	
1 cup quick oats	\$0.51	
1 teaspoon vanilla	\$0.04	
¼ cup packed brown sugar	\$0.13	
2 tablespoons margarine	\$0.20	
Total Cost for Recipe:	\$6.95	
Cost per Serving:		\$0.87 per serving

Put the foods in order starting with the most nutritious and least expensive option.

1	2	3
Sautéed Apples	Apple Crisp	Apple Pie

Highland County Nutrition Skillathon Kit

Resources

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Resources and Links

1. Utah State University Cooperative Extension

<http://extension.usu.edu/files/publications/publication/4-H-HFWF-Lesson1.pdf>

2. Chose My Plate

<http://www.choosemyplate.gov/>

3. How to write Menus, Table Setting, Calculating cost per Serving, under FCS Resource Handbook:

<http://highland.osu.edu/program-areas/4-h-youth-development/project-completion-guidelines-resource-handbooks>

4. Vitamins

<http://www.nestle.com/nutrition-health-wellness/nutrition-basics/fact-sheets/vitamins>

5. Minerals

<http://www.nestle.com/nutrition-health-wellness/nutrition-basics/fact-sheets/minerals>

6. Oregon State University Extension Service

<http://catalog.extension.oregonstate.edu/sites/catalog.extension.oregonstate.edu/files/project/pdf/4-h93111.pdf>

7. Measurement, Equivalents, and Abbreviations

<http://spock.fcs.uga.edu/ext/pubs/fdns/efnep/FDNS-NE-107.pdf>

8. University of Nebraska Lincoln, Extension Lancaster County

<http://food.unl.edu/documents/4089482/4166877/cooks-tools-updated.pdf/f3a9a397-d95c-48ae-8fce-cdf4fa483ff7>

9. Reading Food Labels- Cooking Matters- Pg. 5

<file:///C:/Users/Bruynis.5/Downloads/Shopping%20Matters%20Curriculum.pdf>