



## Trainee Edition

# Arizona WIC Training Basic Nutrition Guidebook



ARIZONA DEPARTMENT  
OF HEALTH SERVICES

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## What Will You Learn?

Understanding nutrition is a powerful way for you make a difference in WIC participants' lives. You will learn to help WIC participants make choices to improve their nutrition and health.

After completing the Basic Nutrition LMS Course and guidebook, you will be able to:

- Identify food sources of saturated, polyunsaturated, monounsaturated, and trans fats
- Identify protein sources
- Identify high-fiber carbohydrate sources
- List food sources of vitamin A, vitamin C, folic acid, calcium, and iron
- Read a food label and be able to communicate what is identified
- Provide dietary recommendations to participants with more restrictive diets, including vegetarians

## Items Needed for This Course

- Pen or pencil
- Access to Basic Nutrition LMS Course
- Local Agency Referral List
- Access to the website: [www.choosemyplate.gov](http://www.choosemyplate.gov)

## Recommended Time

- Approximate time it takes to complete the Basic Nutrition LMS course: Two to three hours
- Approximate time it takes to complete this Basic Nutrition Guidebook and discussion with your trainer: One to two hours

## Things to Remember

- This guidebook is yours to keep.
- You are encouraged to take notes, highlight, and write in this guidebook.
- As your trainer chooses, you may work in a group or as an individual.
- You are encouraged to ask your trainer(s) for help, ask questions about the information in the course, or ask any questions about additional topics related to Basic Nutrition training.

## Basic Nutrition Course Instructions

- ☐ Log onto <https://az.train.org/DesktopShell.aspx>
- ☐ Open and complete the Basic Nutrition LMS Course module and the corresponding Basic Nutrition Activities in this guidebook.
- ☐ At your trainer's direction, complete the Basic Nutrition LMS Course and guidebook, either individually, with other trainees, or with your trainer.
- ☐ Complete the Basic Nutrition Post-Test.
- ☐ Meet with your trainer at their direction to discuss each module of the Basic Nutrition LMS Course and the associated activities in this guidebook, either after each module, or after all modules have been completed.

## Module 1: Introduction to Nutrition

### MODULE 1 COMPETENCIES:

1. Trainees will be able to identify the defining characteristics of each of the six categories of nutrients.
2. Trainees will be able to explain what empty calories are, and discuss healthy options with participants to reduce their "empty calorie" consumption.
3. Trainees will be able to substitute foods that are high in saturated and trans fats with foods high in polyunsaturated and monounsaturated fats.
4. Trainees will be able to recommend food sources that are high in vitamin A, vitamin C, iron, and folic acid to participants.
5. Trainees will be able to describe the relationship between calcium and iron absorption and recommend good food sources of each to participants.

## Module 1: Activity 1 (Lesson: Nutrition Basics)

### Directions:

Match each of the six types of nutrients with the letter of the corresponding description.

___ Carbohydrates	A. Helps to trigger chemical processes in the body
___ Fats	B. Regulates body temperature and helps carry nutrients
___ Protein	C. Supplies energy as calories, essential for the absorption of certain vitamins
___ Vitamins	D. Starches and sugars, the main sources of energy
___ Minerals	E. Part of the body's enzymes, important for many functions in the body
___ Water	F. Provides energy, rebuilds body tissue

## **Module 1: Activity 2 (Lesson: Nutrition Basics)**

Directions:

Read the scenario below about a participant who is describing snack foods she frequently offers to her family, then answer the following questions.

“Well, for snacks, we’re a pretty busy family, it seems like we’re always on the go, so I’m usually just grabbing quick things for my kids like cookies, doughnuts, fruit roll-ups, caramel popcorn, and soda. Stuff like that.”

1. How would you explain what “empty calories” are to a participant without labeling foods as “good” or “bad”?
2. After getting permission from the participant, what might be some ideas you could suggest to help reduce the amount of empty calories the participant offers to her children?

## **Module 1: Activity 3 (Lesson: Carbohydrates, Fats, and Proteins)**

Directions:

Answer the following questions.

1. What are some of the health benefits of consuming a diet high in fiber?

2. Discuss the differences between soluble and insoluble fiber and include examples of each.

3. Provide three tips you could share with a participant about how to increase their fiber intake.

### **Module 1: Activity 4 (Lesson: Carbohydrates, Fats, and Proteins)**

1. When talking to a WIC participant, what are some examples of open-ended questions you could ask to start a conversation about dietary fat intake?

2. What can WIC participants do to keep dietary fat consumption to acceptable levels?

## Module 1: Activity 5 (Lesson: Carbohydrates, Fats, and Proteins)

Directions:

Review each type of food that is high in saturated or trans fats (“Unhealthy Fat Choices”), then complete the chart by thinking of a healthier substitute or alternative preparation method for each type of unhealthy fat choice to contain more monounsaturated or polyunsaturated fats (“Healthier Fat Substitutes”) that you could suggest to a participant, keeping in mind their cultural practices and practicality.

Unhealthy Fat Choices	Healthier Fat Substitute
Tortillas made with lard	
Fatty beef and pork cuts	
Frozen biscuits made with hydrogenated shortening	
Milk chocolate candies	
Deep-fried chicken	

## Module 1: Activity 6 (Lesson: Carbohydrates, Fats, and Proteins)

Directions:

Answer the following question.

1. Additional protein is required during periods of rapid growth, such as pregnancy, infancy, and childhood. What are some examples of foods you might recommend to participants to ensure they are getting enough protein in their diet regularly?

## Module 1: Activity 7 (Lesson: Vitamins)

Directions:

Use the table below, in addition to the information you learned from the Basic Nutrition LMS Course, to answer the following questions.

Vitamin A	Vitamin C	Folic Acid
<p><b>Orange/red vegetables</b></p> <ul style="list-style-type: none"> <li>• Carrot</li> <li>• Yam</li> <li>• Bell pepper</li> <li>• Sweet potato</li> <li>• Winter squash</li> <li>• Vegetable juice, canned</li> </ul> <p><b>Dark green vegetables</b></p> <ul style="list-style-type: none"> <li>• Spinach</li> <li>• Collards</li> <li>• Kale</li> <li>• Broccoli</li> <li>• Spinach</li> <li>• Asparagus</li> <li>• Romaine lettuce</li> <li>• Artichoke</li> </ul> <p><b>Orange fruits</b></p> <ul style="list-style-type: none"> <li>• Mango</li> <li>• Papaya</li> <li>• Apricot</li> <li>• Cantaloupe</li> </ul> <p><b>Dairy</b></p> <ul style="list-style-type: none"> <li>• Butter</li> <li>• Milk</li> <li>• Cheese</li> </ul> <p><b>Protein</b></p> <ul style="list-style-type: none"> <li>• Egg</li> <li>• Liver (beef/lamb)</li> <li>• Fish (salmon, tuna, mackerel)</li> </ul>	<p><b>Fruits</b></p> <ul style="list-style-type: none"> <li>• Orange</li> <li>• Grapefruit</li> <li>• Lemon</li> <li>• Bell Pepper</li> <li>• Guava</li> <li>• Papaya</li> <li>• Strawberry</li> <li>• Kiwi</li> <li>• Mango</li> <li>• Cantaloupe</li> <li>• Tomato</li> </ul> <p><b>Vegetables</b></p> <ul style="list-style-type: none"> <li>• Broccoli</li> <li>• Cabbage</li> <li>• Snow pea</li> <li>• Kale</li> </ul>	<p><b>Beans/Nuts/Seeds</b></p> <ul style="list-style-type: none"> <li>• Lentils</li> <li>• Edamame</li> <li>• Pinto beans</li> <li>• Garbanzo beans</li> <li>• Black beans</li> <li>• Peanuts</li> <li>• Sunflower seeds</li> </ul> <p><b>Fruits</b></p> <ul style="list-style-type: none"> <li>• Avocado</li> <li>• Papaya</li> <li>• Orange juice</li> </ul> <p><b>Enriched Grains</b></p> <ul style="list-style-type: none"> <li>• Pasta</li> <li>• Bread</li> </ul>





## Module 1: Activity 8 (Lesson: Vitamins)

Directions:

Match each of the five questions about vitamin D with the letter of the correct answer.

- |                                                                               |                                                                                         |
|-------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------|
| <p>_____ What are some ways to increase vitamin D intake?</p>                 | <p>A. Fish, liver, and eggs</p>                                                         |
| <p>_____ What are the most common roles of vitamin D in the body?</p>         | <p>B. Sun exposure triggers vitamin D synthesis</p>                                     |
| <p>_____ What are some natural food sources of vitamin D?</p>                 | <p>C. Foods, sun exposure, supplementation</p>                                          |
| <p>_____ What are some fortified food sources of vitamin D?</p>               | <p>D. Maintains bone health, controls inflammation, improves immune system function</p> |
| <p>_____ Through which mechanism does the body produce its own vitamin D?</p> | <p>E. Dairy foods, orange juice, cereal</p>                                             |

## Module 1: Activity 9 (Lesson: Minerals)

Directions:

Use the table below, in addition to the information you learned from the Basic Nutrition LMS Course, to answer the following questions.

Calcium	Iron
<p><b>Dairy</b></p> <ul style="list-style-type: none"> <li>• Yogurt</li> <li>• Cheese</li> <li>• Cow's milk</li> <li>• Goat's milk</li> </ul> <p><b>Fortified Foods</b></p> <ul style="list-style-type: none"> <li>• Orange juice</li> <li>• Cereal</li> <li>• Bread</li> <li>• Soy beverage</li> <li>• Rice beverage</li> <li>• Almond beverage</li> <li>• Tofu</li> </ul> <p><b>Vegetables</b></p> <ul style="list-style-type: none"> <li>• Collard greens</li> <li>• Turnip greens</li> <li>• Spinach</li> <li>• Turnips</li> <li>• Kale</li> </ul> <p><b>Proteins</b></p> <ul style="list-style-type: none"> <li>• Sardines</li> <li>• Salmon (with bones)</li> <li>• Mackerel</li> <li>• Anchovies</li> </ul>	<p><b>Heme Sources</b></p> <ul style="list-style-type: none"> <li>• Beef</li> <li>• Poultry</li> <li>• Seafood</li> <li>• Pork</li> <li>• Liver (pork, beef, poultry)</li> </ul> <p><b>Non-Heme Sources</b></p> <ul style="list-style-type: none"> <li>• Dry beans</li> <li>• Soybeans, cooked</li> <li>• Peas</li> <li>• Nut Butters (peanut, sesame)</li> <li>• Nuts/Seeds (cashews, peanuts/sunflower, sesame, pumpkin, squash)</li> <li>• Dried fruit (apricots, raisins, prunes)</li> <li>• Tofu, firm</li> <li>• Potato, baked with skin</li> <li>• Spinach</li> <li>• Swiss chard</li> <li>• Turnip greens</li> <li>• Cereal</li> <li>• Rice</li> <li>• Pasta</li> </ul>

1. What are some foods you might recommend to a vegan participant who doesn't consume any animal products or products made from animals, to help them ensure that they get enough calcium in their diet?
2. How would you explain to a participant some of the most important functions of iron in the body?
3. What ideas would you offer to a participant to improve their dietary intake of iron?
4. What is the relationship between calcium intake and iron absorption?

**Module 1: Activity 10 (Lesson: Minerals)**

Directions:

Read the following scenario and answer the questions below.

During your conversation with Steven, the father of Kaden, a three-year-old WIC participant, he tells you:

“Kaden is a pretty good eater, but for some reason he hardly eats any protein foods, even really common foods we’re always having like chicken, red meat, beans, and eggs. When his mom and I try to feed him anything like that, he’ll hardly touch it, and whenever we can convince him to take a bite, he just spits it out. He does pretty well when it comes to carbs, and eats stuff like bread, tortillas, and rice, but he doesn’t eat any of the cereal we get from WIC. For fruits and vegetables, he likes watermelon, bananas, grapes, corn, carrots, potatoes, and green peas. For snacks, he eats quite a few things, like chips, cookies, candy, and soda. He also drinks about five cups of milk per day, which I know is a lot, but it seems like he doesn’t usually eat much of the meals we offer, so we have to give him something.”

1. Based on the information Steven provided, what iron-containing foods does Kaden eat?
2. What factors put Kaden at a risk for iron deficiency?
3. What are two possible topics you could discuss with Steven to increase Kaden’s iron intake?

## **Module 1: Activity 11 (Lesson: Water)**

Directions:

Read the following scenario and answer the questions below.

1. List at least three functions of water in the body.
  
  
  
  
  
  
  
  
  
  
2. List some tips to help increase water intake.

## **Module 2: Guidelines and Standards**

MODULE 2 COMPETENCIES:

1. Trainees will be able to read food labels and educate participants on how to use them while shopping.
2. Trainees will be able to provide meal planning and healthy eating recommendations to participants with low food budgets.

## **Module 2: Activity 1**

Directions:

Review the food label below and answer the following questions.

## Pretzels

Nutrition Facts	
10 servings per container	
Serving size	About 8 pretzels (28g)
Amount per serving	
<b>Calories</b>	<b>110</b>
% Daily Value*	
<b>Total Fat</b> 1g	<b>1%</b>
Saturated Fat 0g	<b>0%</b>
Trans Fat 0g	
<b>Cholesterol</b> 0mg	<b>0%</b>
<b>Sodium</b> 220mg	<b>10%</b>
<b>Total Carbohydrate</b> 23g	<b>9%</b>
Dietary Fiber less than 1g	<b>4%</b>
Total Sugars 5g	
Includes 4g Added Sugars	<b>9%</b>
<b>Protein</b> 2g	
Vitamin D 0mcg	0%
Calcium 10mg	0%
Iron 1.1mg	4%
Potassium 40mg	0%
* The % Daily Value (DV) tells you how much a nutrient in a serving of food contributes to a daily diet. 2,000 calories a day is used for general nutrition advice.	

**Ingredients:** Enriched Flour (Wheat Flour, Niacin, Reduced Iron, Thiamin Mononitrate, Riboflavin, Folic Acid), Whole Wheat Flour, Sugar, Honey, Corn Oil, Salt, and Ammonium Bicarbonate.

**CONTAINS WHEAT INGREDIENTS.**

## Potato Chips

Nutrition Facts	
7 servings per container	
Serving size	1 OZ (28g/ about 9 chips)
Amount per serving	
<b>Calories</b>	<b>140</b>
% Daily Value*	
<b>Total Fat</b> 8g	<b>10%</b>
Saturated Fat 0.5g	<b>3%</b>
Trans Fat 0g	
Polyunsaturated Fat 1g	
Monounsaturated Fat 5g	
<b>Cholesterol</b> 0mg	<b>0%</b>
<b>Sodium</b> 150mg	<b>7%</b>
<b>Total Carbohydrate</b> 15g	<b>5%</b>
Dietary Fiber 1g	<b>4%</b>
Total Sugars 1g	
Includes 0g Added Sugars	<b>0%</b>
<b>Protein</b> 3g	
Vit D 0mcg 0% • Calcium 19mg 2%	
Iron 0mg 0% • Potassium 390mg 8%	
*The % Daily Value (DV) tells you how much a nutrient in a serving of food contributes to a daily diet. 2,000 calories a day is used for general nutrition advice.	

**Ingredients:** Potatoes, Vegetable Oil (Contains one or more of the following: Canola Oil, Safflower Oil, and/or Sunflower Oil), Whey, Sea Salt, Sour Cream Powder (Cream, Nonfat Milk, Cultures), Cheddar Cheese (Milk, Salt, Cheese Cultures, Enzymes), Maltodextrin, Buttermilk, Onion Powder, Natural Flavors (Contains Milk), Garlic Powder, Enzyme Modified Cheddar Cheese (Pasteurized Milk, Cultures, Salt, Enzymes), Citric Acid, Whey Protein Concentrate, Cream, Milk Fat, Nonfat Dry Milk, Salt, Yeast Extract.

**Allergy Information:** Contains Milk

1. Which package (pretzels or potato chips) contains more total calories if all the servings in the package were consumed?
2. Which food product would be the better choice for a participant trying to reduce their sodium intake?
3. Which food product is a better choice for someone limiting saturated fat intake?
4. For each food product, what is the second ingredient by weight?



## Module 2: Activity 2

Directions:

Read the following scenario and answer the questions below.

Cynthia, a WIC participant with three children, tells you:

“I want to eat more meals at home, but I just don’t feel like I have the time to cook while working full time and taking care of the kids. Fast food always seems like the easier choice, and grocery store shopping with three small children can be a real hassle.”

1. How could you affirm Cynthia?
2. What benefits of meal planning and family meals could you share with Cynthia?
3. What meal-planning tips could you discuss with this participant?
4. Provide three tips for healthy eating on a budget.

## **Module 3: Special Considerations**

### MODULE 3 COMPETENCY:

1. Trainees will be able to provide physical activity and dietary recommendations to participants, including vegetarians.

## **Module 3: Activity 1**

### Directions:

Read the scenario below, then answer the following questions.

A participant tells you that she wants to lose weight, so she has been following a strict vegetarian diet (no meat/animal products) and limiting herself to two small meals daily. She is excited because she has already lost 10 pounds in two weeks. She also wants to start exercising, which her doctor approved, but she isn't sure where to begin planning a physical activity regimen.

1. Provide some examples of questions (open-ended if possible) you might ask this participant to collect more information about her current diet and dietary goals?
  
  
  
  
  
  
  
  
  
  
2. What guidance would you give for weight loss plans?

