

NUTRITION



NORTH CAROLINA FARMWORKER HEALTH PROGRAM

Office of Research, Demonstrations, and Rural Health Development
Department of Health and Human Services

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NUTRITION

Self-Assessment

(to be completed before reading Nutrition content)

1. How is the energy in food measured?
 - a. in pounds
 - b. in calories
 - c. in grams
 - d. in degrees

 2. Which of the following can be caused by eating too much food?
 - a. obesity
 - b. diabetes
 - c. hypertension
 - d. high cholesterol
 - e. all of the above

 3. True or false: it is a good idea to limit the diet of children under age 3 to a few simple, bland foods such as rice or noodles.
 - a. true
 - b. false

 4. Which of the following does not need to be present in increased amounts in an adolescent's diet?
 - a. fat
 - b. vitamin D
 - c. calcium
 - d. zinc

 5. Which of the following should pregnant women consume before and during pregnancy to help prevent birth defects?
 - a. strawberries
 - b. niacin
 - c. folic acid
 - d. tuna
 - e. chocolate

 6. What is a good way to assess whether a person is eating too much or too little?
 - a. diet history
 - b. food diet
 - c. BMI
 - d. all of the above
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7. Which of the following is a good source of “healthy fats”?
 - a. fish
 - b. butter
 - c. red meat
 - d. whole milk
 - e. all of the above

8. About how many cups of milk (or equivalent dairy products) should a typical adult consume daily?
 - a. less than 1
 - b. 2-3
 - c. more than four

9. In general, how often should newborns be fed (breastfeeding or formula) each day?
 - a. 1-3 times
 - b. 3-5 times
 - c. 6-8 times
 - d. every two hours

Answers: 1(b), 2(e), 3(b), 4(a), 5(c), 6(d), 7(a), 8(b), 9(c)

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Supporting Information for Outreach Workers

Why is good nutrition important?

Eating the right kinds of foods is important for people of all ages, from infants to the elderly. A good diet provides all the necessary nutrients, vitamins, and minerals to help the body function properly. Food and beverages contain energy in the form of calories provided by carbohydrates, fats, or protein, and this energy is used by the body for growth and energy production throughout the day. If minimal requirements for total calories, nutrients, vitamins, or minerals are not met, the body will not be able to function in a normal manner and may start breaking down its own muscle or fat for energy. In children and adolescents, this can result in stunted growth and development as well. There are many diseases that can be caused by deficiencies in one or more nutrients, vitamins, or minerals. Conversely, eating too much food can also lead to chronic medical problems such as obesity, diabetes, hypertension, and high cholesterol. It is therefore important to be aware of the nutritional requirements at various ages and to choose foods that meet these requirements.

How does poor nutrition affect people in various life stages?

Infants and young children are most at risk for nutritional deficiencies including inadequate calcium, iron, vitamin C, and vitamin A intake. Since young infants are often breast-fed or formula-fed, their nutrition depends largely on either the diet of the mother or the content of the formula. Due to cultural or economic factors, young children may often be given a diet that is very limited in variety or in total calories, which can lead to vitamin deficiencies and poor growth. In adolescence, eating a balanced diet is important since almost every body organ doubles in size during this time, and inadequate nutrition during this time can negatively affect future reproduction and adult health. Adolescents have an increased requirement for calories, vitamin D, calcium, zinc, and iron in their diets, and they are most likely to have deficiencies in vitamin A, thiamin, iron, and calcium because of poor eating habits including skipping meals and eating too much “junk food”. Most items referred to as junk food are high in calories in fat but low in other nutritional requirements such as vitamins and minerals. Adults can be at risk for nutritional deficiencies due to the inability to afford or obtain enough of the right kinds of foods. However, in economically “developed” countries such as the U.S., it is more common for individuals to consume more than enough calories but not enough vitamins and minerals, leading to obesity and chronic disease such as hypertension and high cholesterol. In the adult farmworker population, individuals may be in either category or may move from one situation to the opposite extreme, depending on their income level and their adoption of U.S. eating habits. Pregnant women are at increased risk of having low iron due to the increased requirements of pregnancy and generally need to consume greater amounts of protein, iron, folic acid, and vitamin B₁₂. Individuals

who are at the greatest risk of having poor nutrition during their pregnancies include adolescents, women with inadequate weight gain during pregnancy, women who have had many pregnancies, low-income women, women who have previously had low-birth-weight infants, women with chronic diseases or poor eating habits, and women who have a history of substance abuse including tobacco and alcohol.

What are some ways to determine whether an individual's diet or weight is healthy?

One way to get an idea of what someone usually eats is to record all food and drink that the person consumed in the last 24 hours, including snacks, sauces, gravies, condiments, and spices such as salt and pepper. This is often the easiest and quickest way to assess eating habits, although recall may sometimes be inaccurate, and the information may be skewed if food intake on that day was not typical. A diet history records food consumption over a longer period of time and may be more typical of the person's usual diet, although it is usually difficult for someone to recall what he or she ate several days ago. A food diary is a more accurate method in which a person records everything that he or she ate immediately after eating for two weekdays and one weekend day. These records can be used by individuals to see whether they are actually meeting their nutritional goals and by health care providers to assess whether the diet is appropriate for the person's age, sex, and overall health status. The foods eaten can be grouped into various categories, depending on which nutrition guidelines an individual is using, and compared with the recommended daily intake for those foods.

Body Mass Index (BMI)

A general assessment of whether someone is consuming too few or too many calories can be done by calculating the person's Body Mass Index (BMI). The BMI is calculated by dividing height in centimeters by the square of the person's mass in kilograms. Since this calculation is often inconvenient to carry out, many tables and charts have been developed that allow one to look up BMI based on height and weight. For adults, a normal-weight person has a BMI between 18.5 and 24.9. A BMI under 18.5 indicates that an adult is underweight and may not be getting enough calories. An adult with a BMI from 25-29.9 is considered overweight, and a BMI over 30 indicates obesity. For an example of a healthy weight range, an adult who is 5 feet 5 inches tall can weigh between 111 and 149 pounds to have a BMI between 18.5 and 24.9. In children, BMI assessment is based on growth charts which measure the percentile of a child's BMI based on age and sex. A child with a BMI in the 5th to 85th percentile for his/her age and sex is considered healthy, and a BMI lower than the 5th percentile is underweight. A BMI between the 85th and 95th percentile indicates "at risk for overweight", and a BMI over the 95th percentile is considered overweight.

BMI checks can be used to inform individuals about a healthy weight range for their height and age. If someone is overweight or underweight, a discussion of appropriate nutrition recommendations should follow.

What is an appropriate diet for a healthy adult?

The USDA 2005 Dietary Guidelines for Americans provide a general overview of what should be included in a healthy diet for individuals over 2 years of age. The following list is a summary of the recommendations; for more information, see the “Recommended Resources” section.

- Consume a wide variety of foods that contain large amounts of vitamins and minerals while limiting “junk food” (foods high in saturated and *trans* fats, cholesterol, added sugars, salt, and alcohol).
- Eat the appropriate number of calories for activity level; less active people should eat fewer calories. To prevent weight gain over time, make small decreases in the amount of food consumed and increase activity level.
- Engage in at least 30-60 minutes of physical activity, including aerobic exercise, stretching exercises, and weight-lifting/resistance exercises, at least 4-5 days per week.
- Include a sufficient amount and variety of fruits and vegetables (approximately 2 cups of fruit and 2 ½ cups of vegetables per day), selecting different kinds of vegetables over the course of a week (dark green, orange, starchy, legumes, and other vegetables).
- At least half of the grains in a diet should come from whole-grain foods.
- Consume 3 cups of fat-free or low-fat milk or dairy products per day.
- Select low-fat or non-fat foods. Most fats consumed should be from sources of “healthy fats” such as fish, nuts, or vegetable oils.
- Choose foods without added sugars or sweeteners.
- Consume less than 2300 mg salt (approximately one teaspoon) per day.
- Limit alcoholic beverages to less than two drinks per day for men and less than one drink per day for women. Pregnant women should not consume alcohol during their pregnancy.
- To prevent food-related illness, separate raw and cooked foods, wash fruits and vegetables before eating, cook foods to a safe temperature to kill microorganisms, and always refrigerate perishable foods. Avoid foods containing raw or undercooked eggs or meat.

Both the USDA Food Pyramid guidelines and the DASH (Dietary Approaches to Stop Hypertension) guidelines are appropriate starting points for creating a healthy eating plan for adults. The Food Pyramid web site (<http://www.mypyramid.gov>) allows individuals to calculate an appropriate daily caloric intake based on their age, sex, and activity level and provides suggestions for the number of daily servings of fruits, vegetables, grains, meat/protein, and milk that should be consumed. According to the Food Pyramid, an average diet in which a person consumes 2000 calories a day would contain the following amounts from the various food groups:

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- 6 ounces grains
- 2.5 cups vegetables
- 2 cups fruit
- 3 cups milk
- 5-6 ounces meat/beans
- 6 or fewer teaspoons fats/oils

The guidelines for the DASH diet are very similar; for information on recommended foods and serving sizes, see the “Hypertension” health education module. If the dietary recommendations from the Food Pyramid or the DASH diet are followed, additional vitamin or mineral supplements should generally not be necessary for healthy men, although a daily multivitamin may help ensure that these nutrients are being obtained. All women of reproductive age should take a daily multivitamin containing at least 0.4 mg of folic acid to reduce the risk of certain types of birth defects in case they become pregnant. Providing dietary recommendations that are culturally relevant is important as well, since individuals from different backgrounds may have different food preferences. Providing suggestions about which commonly eaten foods are healthy and unhealthy will increase the likelihood that individuals will be able to follow nutrition recommendations. Tables listing recommendations based on foods commonly eaten in the U.S. and Mexico are attached.

What is an appropriate diet for infants and children?

(Information is summarized from the Migrant Farmworker Nutrition Manual and www.nutrition.gov; see “Recommended Resources” for more detailed information.)

Starting in infancy, children need to receive the same nutrients, vitamins, and minerals as adults to promote normal growth and development. For infants, breast milk or formula can meet all nutritional requirements, although exclusive breastfeeding has many additional advantages such as reducing the risk of later obesity or diabetes and passing antibodies from the mother to infant, which helps protect the child from illnesses such as diarrhea or colds. Infants will require 6-8 feedings per day for the first two months of life and 5-6 feedings per day from 2-4 months of age. After six months, parents can start feeding the child 1-2 tablespoons of soft rice cereal (texture like oatmeal, not rice krispies) daily and decreasing the frequency of milk or formula feedings while increasing the amount of pureed foods such as fruits, vegetables, and other grains. Pureed meat products can be given starting at 7-9 months of age. Parents should not feel that they have to purchase specially-made “baby food”; they can also process foods that the rest of the family is eating in a blender. At 10-12 months, infants may be able to start eating small soft finger foods such as green beans, peas, and carrots. When introducing a child to solid foods, it is important to remember to provide a wide variety of items from different food groups to prevent vitamin deficiencies. Since overweight and obesity are becoming problems even in very young children due to overfeeding and giving foods high in fat and calories, parents should avoid candy, sodas, or other “junk food” since these can

contribute to dental problems, weight problems, and a preference for foods high in sugar and fat later in life. Fruit juices should only be provided in small amounts; eating fruit and having unsweetened water to drink is better.

Older children can follow the same nutrition guidelines as adults but need to have smaller serving sizes or fewer servings per day. Again, it is important for children to exercise frequently and avoid sodas, candy, chips or other fried foods, or foods high in fat. Contrary to popular belief, young children do not need extra fat, and whole milk is unnecessary. To determine appropriate serving sizes for children based on age, use the attached tables or the nutrition calculator at www.mypyramid.gov.

How can adults and children who are already overweight or obese reduce their weight to a healthy level?

If a BMI check shows that an individual is overweight or obese, health care providers or outreach workers should ask several questions to determine what factors may be contributing to the weight problem. These questions can then lead to further discussion about exercise and maintaining a healthy diet.

Ask:

- *How much soda or other sweetened beverages do you drink every day?*
(Soda, fruit juices, or sweetened drinks add many extra calories to a person's diet and do not produce a feeling of fullness. These beverages should be eliminated from the diet or consumed as a treat only – drinking water is the best way to stay hydrated.)
 - *How often do you eat sweets, chips, flavored crackers, candy, or other snack foods?*
(These foods are high in calories but low in most other nutrients and should not be consumed on a regular basis. One of the best ways to stop eating these items is to avoid purchasing them or keeping them in the home.)
 - *What type of milk do you drink?*
(Anyone 2 years of age or older should be drinking low-fat (1% or 2%) or preferably non-fat milk.)
 - *How often do you eat fried foods?*
(This method of preparation adds fat and calories to many foods that might otherwise be quite healthy. Baking or broiling foods can help reduce the fat content.)
 - *How often do you exercise or engage in strenuous physical labor? Children: How often do you play outside?*
(Exercise 30-60 minutes daily most days of the week. Limiting time spent in front of the television or computer may encourage activity. Making an exercise plan with a group of friends is also a good motivational tool.)
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Self-Assessment

(to be completed after reading Nutrition content)

1. Why is it important to have a diet with the right amount of calories, nutrients, vitamins, and minerals?
 2. What are some common vitamin or mineral deficiencies at various stages of life?
 3. Describe a 24-hour food history and a food diary.
 4. What is BMI, and what are the various BMI ranges associated with weight status?
 5. List at least four recommendations for what should be included in a healthy diet for a typical adult.
 6. In general, how often should adults exercise?
 7. What are the five food groups in the new USDA Food Pyramid, and about how much should a typical adult consume from each group daily?
 8. Describe the nutrition and feeding recommendations for the first year of life.
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Self-Assessment

(Answers)

1. Why is it important to have a diet with the right amount of calories, nutrients, vitamins, and minerals?
[having these things in the right amounts helps the body function properly, grow, and produce energy; if minimal requirements are not met, the body may start breaking down its own muscle or fat for energy; vitamin/mineral deficiencies can cause stunted growth and development as well as various diseases; eating too much food can lead to chronic medical problems such as obesity, diabetes, hypertension, and high cholesterol]
 2. What are some common nutritional deficiencies at various stages of life?
[infants and young children: calcium, iron, vitamin C, and vitamin A; adolescents: vitamin A, thiamin, iron, and calcium; adults: various vitamin or mineral deficiencies depending on diet; pregnant women: protein, iron, folic acid, and vitamin B₁₂]
 3. Describe a 24-hour food history and a food diary.
[24-hour food history: record all food and drink that the person consumed in the last 24 hours, including snacks, sauces, gravies, condiments, and spices such as salt and pepper; food diary: a person records everything that he or she ate immediately after eating for two weekdays and one weekend day]
 4. What is BMI, and what are the various BMI ranges associated with weight status in adults?
[BMI (Body Mass Index) is a measure of whether weight is appropriate for height and is calculated by dividing height in centimeters by the square of the person's mass in kilograms; <18.5 – underweight, 18.5-24.9 – normal weight, 25-29.9 – overweight, >30 – obese]
 5. List at least four recommendations for what should be included in a healthy diet for a typical adult.
[Recommendations include, but are not limited to, the following:
 - Consume a wide variety of foods that contain large amounts of vitamins and minerals while limiting “junk food” (foods high in saturated and *trans* fats, cholesterol, added sugars, salt, and alcohol.
 - Eat the appropriate number of calories for activity level; less active people should eat fewer calories. To prevent weight gain over time, make small decreases in the amount of food consumed and increase activity level.
 - Include a sufficient amount and variety of fruits and vegetables (approximately 2 cups of fruit and 2 ½ cups of vegetables per day), selecting
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- different kinds of vegetables over the course of a week (dark green, orange, starchy, legumes, and other vegetables).
- At least half of the grains in a diet should come from whole-grain foods.
 - Consume 3 cups of fat-free or low-fat milk or dairy products per day.
 - Select low-fat or non-fat foods. Most fats consumed should be from sources of “healthy fats” such as fish, nuts, or vegetable oils.
 - Choose foods without added sugars or sweeteners.
 - Consume less than 2300 mg salt (approximately one teaspoon) per day.
 - Limit alcoholic beverages to less than two drinks per day for men and less than one drink per day for women. Pregnant women should not consume alcohol during their pregnancy.
 - To prevent food-related illness, separate raw and cooked foods, wash fruits and vegetables before eating, cook foods to a safe temperature to kill microorganisms, and always refrigerate perishable foods. Avoid foods containing raw or undercooked eggs or meat.]
6. In general, how often should adults exercise?
[adults should engage in at least 30-60 minutes of physical activity, including aerobic exercise, stretching exercises, and weight-lifting/resistance exercises, at least 4-5 days per week]
7. What are the five food groups in the new USDA Food Pyramid, and about how much should a typical adult consume from each group daily?
[5 food groups are fruits, vegetables, grains, meat/beans, and dairy; daily recommended servings are 2 cups fruit, 2 ½ cups vegetables, 6 ounces grains, 3 cups milk (or equivalent dairy product), 5-6 ounces meat/beans]
8. Describe the nutrition and feeding recommendations for the first year of life.
- infants need to receive the same nutrients, vitamins, and minerals as adults
 - infants require 6-8 feedings of breast milk or formula per day for the first two months of life and 5-6 feedings per day from 2-4 months of age
 - after six months, parents can start feeding the child 1-2 tablespoons of soft rice cereal daily and later decreasing the frequency of milk or formula feedings while increasing the amount of pureed foods such as fruits, vegetables, and other grains
 - pureed meat products can be given starting at 7-9 months of age
 - at 10-12 months, infants may be able to start eating small soft finger foods such as green beans, peas, and carrots
 - provide a wide variety of items from different food groups to prevent vitamin deficiencies
 - avoid candy, soda, or other “junk food”
 - fruit juices should only be provided in small amounts; eating fruit and having unsweetened water to drink is better
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Teaching Objectives

The facilitator and farmworker participants will discuss:

- 1. Why is good nutrition important?**
 - a. good diet allows the body to function properly, produce energy, and maintain a normal weight
 - b. vitamin/mineral deficiencies can cause various diseases and birth defects
 - c. overeating can lead to chronic medical problems (e.g. obesity, diabetes, hypertension, high cholesterol)

 - 2. What are some common nutrition problems?**
 - a. all ages: diet contains too many calories or too much sugar and fat, leading to obesity
 - b. infants and young children: calcium, iron, vitamin C, and vitamin A
 - c. adolescents: vitamin A, thiamin, iron, and calcium
 - d. adults: various vitamin or mineral deficiencies depending on diet
 - e. pregnant women: protein, iron, folic acid, and vitamin B₁₂

 - 3. How can people find out if their diet or weight is healthy?**
 - a. diet history (24 hours or longer)
 - b. food diary
 - c. BMI measurement

 - 4. What are some healthy diet recommendations for adults?**
 - a. USDA 2005 Dietary Guidelines for Americans
 - b. USDA Food Pyramid/ DASH diet
 - c. multivitamin or other vitamin/mineral supplements if necessary
 - d. regular exercise

 - 5. What are some healthy diet recommendations for children?**
 - a. breastfeeding in infancy
 - b. slowly introducing a variety of healthy adult foods
 - c. avoiding candy, sodas, fruit juices, and “junk food”
 - d. regular exercise

 - 6. How can overweight or obese individuals lose weight?**
 - a. reduce total fat and calories in diet
 - b. avoid soda, sweetened beverages, candy and other sweets, chips, flavored crackers, and other “junk food” or fried foods
 - c. drink low-fat or non-fat milk
 - d. exercise or play outside 30-60 minutes several days a week
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Motivating/Learning Activity

The motivating / learning activity is an opportunity to support knowledge acquisition and comprehension among participants on a given health topic. These activities should be interactive and should begin to engage farmworkers in critical thought about the application of health information.

This is an opportunity to engage the group and to assess the comfort level and knowledge on the subject. You may find that the workers are very familiar with the topic and only require a review, or you may find that this topic is new or that there are misconceptions or mistaken ideas among the group. For this reason, it is a good idea to briefly note comments by the workers for further discussion.

A few suggested activities are:

- Play cabbage game with questions related to healthy diet, consequences of unhealthy eating or overeating, appropriate diet for children, exercise recommendations, etc.
 - Use grab bag/bag of myths activity to dispel food myths and make healthy diet recommendations
 - Work through online tutorial on healthy eating (see Recommended Resources) with farmworkers and their families (requires computer with high-speed Internet connection)
 - Read through breastfeeding fotonovela (see “Recommended Resources” with farmworker families and follow up with infant feeding guide; discuss healthy behaviors that are already present in the family and new behaviors that would improve infant nutrition
 - Use “Jeopardy” game to review specifics about nutrition and healthy eating
 - Invite group members to describe a usual dinner and talk about what they think might be healthy or unhealthy; correct any misconceptions
 - Brainstorm ways to integrate exercise and healthy eating into daily lives; discuss benefits and ways to overcome challenges
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Empowerment Activity

The goal of an empowerment activity is to develop skills, learn a new task, consider action to change one's situation, and / or begin exploring how to help oneself.

This is an important opportunity to identify what the farmworkers can do to reduce the likelihood of malnutrition themselves.

- What are the dietary choices that they make on a daily basis?
- Do they know how much and which kinds of foods to eat?
- Do they have a plan to make healthy changes to their diets?

Ask farmworkers to keep a diet diary and record everything they eat for one week. At the return visit, have volunteers share examples of food intake for one day or commonly eaten foods. Discuss (preferably on an individual basis) what aspects of farmworkers' diets are already healthy, and jointly brainstorm ideas for improvement, giving examples of daily menus or recipes that are healthy and easy to make. Help farmworkers make a plan detailing changes they are going to make in their eating habits in order to have a more healthy diet.

Reality check

- Many dietary choices may be due to cultural preferences or financial limitations. It is important to address these concerns and educate farmworkers about healthy foods that are both affordable, tasty, and culturally acceptable.
 - Changing many aspects of one's diet at the same time is often difficult and discouraging. Once a list of changes is identified, select one change to make first and add others over time.
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Sample Class Plan

Subject: nutrition

Date:

Time:

Topic: What are some healthy diet recommendations for adults?
(teaching objective 2 from diabetes module)

Key points, information, skills, or activities

As a result of this health education session, participants will:

1. Increase their level of knowledge about the USDA dietary recommendations for adults.
2. Realize how and why their own diet may differ from these recommendations.
3. Learn how to make a plan for a healthy diet.

Teaching methods

- Use of visual aids and drawing
- Discussion of handout materials
- Brainstorming
- Personal sharing
- Self-empowerment
- Cabbage game/Jeopardy game

Materials and preparation needed

- large sheet of paper
- writing utensils
- note cards (to make flash cards)
- examples of commonly eaten foods
- sample menus and recipes
- Food Pyramid handouts
- “cabbage” with questions (if using)
- “Jeopardy” question cards (if using)

Supporting media

Brochures or flyers appropriate for language and reading levels to distribute
NCFHP-approved content in case of questions

To begin, invite participants to reflect on their knowledge about healthy eating. What do participants already know? What would they like to learn?

1. Educate farmworkers about the USDA dietary recommendations for adults.

The USDA 2005 Dietary Guidelines for Americans provide a general overview of what should be included in a healthy diet for individuals over 2 years of age. Farmworkers may be unaware of many of these recommendations, especially since everyday eating habits or cultural norms often conflict with the guidelines. A summary of these recommendations is included in the “Content for Nutrition Curriculum”, although outreach workers may wish to use USDA handouts outlining the guidelines (see “Recommended Resources”).

▼ **Learning activities**

- Divide farmworkers into two teams and ask each team to brainstorm healthy eating recommendations. Make a list on a large sheet of paper – the team with the most ideas that are generally correct wins. Reinforce knowledge they may already have and suggest changes or improvements.
- Make “flash cards” with pictures that represent each of the guidelines and use the cards to teach farmworkers about the guidelines.
- Discuss recommendations that farmworkers may find particularly challenging and ways to meet these recommendations while still eating foods that they enjoy.

2. Increase farmworkers’ awareness of how and why their own diet may differ from these recommendations.

There are many reasons why farmworkers’ diets may be unhealthy, including personal preferences, financial limitations, cultural norms, availability of desirable foods, availability of storage space or necessary appliances (e.g. refrigerator, stove, cooking utensils), lack of cooking experience, and lack of knowledge about healthy foods.

▼ **Learning activities**

- Invite farmworkers to talk about why they eat the foods they do. Discuss whether they might choose different foods if these circumstances were different, and brainstorm ways to overcome limitations such as lack of money or cooking experience.
 - Bring examples of foods commonly eaten by farmworkers (or invite farmworkers to bring examples). Talk about why individuals choose to eat these foods and advantages/disadvantages of each food.
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3. Learn how to make a plan for a healthy diet.

Most people have never made a specific eating plan and often have difficulty choosing a variety of foods or selecting menus that provide the appropriate amounts of calories and nutrients. Once they are aware of factors that should be considering when planning a healthy diet, they can begin to change their own eating behaviors or help other family members with healthy eating.

▼ *Learning activities*

- Bring sample menus and recipes tailored to the group's eating preferences (see "Recommended Resources" for Hispanic and African-American dietary recommendations). Identify foods that farmworkers would enjoy eating and help them make their own sample menus that contain a variety of foods and appropriate number of calories.
- Review the "Food Pyramid" and brainstorm healthy foods that would meet the daily recommendations for each group.

Suggested review activities (choose one or two)

- play the cabbage game or "Jeopardy" with a variety of questions to assess learning
 - ask if there were any points that were unclear
 - invite questions from the group
 - distribute written/pictorial information to reinforce the information learned
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Support for Learning Activities

These are a few suggested questions for the cabbage game. Feel free to write your own questions in addition to or instead of these. If the question is true/false, have the worker or another participant restate the sentence so that it will be true.

- Why is eating a healthy diet important?
- What happens when people don't eat enough of the right kind of food?
- What happens when people eat too much food?
- Why do adolescents often need extra vitamins and calories?
- What is a food diary?
- What is the BMI range for "normal" weight?
- Give some examples of "junk" food.
- What are the exercise recommendations for adults?
- How much fruit and vegetables should an average adult consume daily?
- What types of food should young children eat?

Possible "Jeopardy" questions (with suggested point values):

- 100: Name three "junk food" items.
- 100: True or false: fruit juice is a good alternative to water for young children.
- 100: True or false: eating too much food can cause chronic health problems.
- 200: Why should people avoid drinking soda or other sweetened beverages regularly?
- 200: Name three obesity-related health problems.
- 200: True or false: having a very high BMI is healthy.
- 300: What percentage of grains in a diet should come from whole-grain foods?
- 300: How much fruit should an average person consume daily?
- 300: What are the food groups in the USDA Food Pyramid?
- 400: What is the BMI range for normal body weight?
- 400: What are the suggested limits for alcohol consumption?
- 400: Why is breastfeeding the best form of nutrition for newborns?
- 500: Why do pregnant women need extra folic acid?
- 500: How is the energy contained by food measured?
- 500: What is the "overweight" range for BMI in a child?
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Recommended Resources for Outreach Workers

- **Manual The Migrant Farmworker Nutrition Manual**
National Center for Farmworker Health/ Migrant Clinicians Network
1990
Available in English
Health care providers and outreach workers

“The Migrant Farmworker Nutrition Manual is a practical reference for migrant health center staff. Some sections of the manual are more appropriate for medical personnel such as physicians, physician assistants, nurses and nutritionists. Other sections are more suited for paraprofessionals such as outreach workers and health aides. The manual is divided into four sections plus an appendix: Evaluation of Nutritional Status; Eating for Health; Special Concerns; and Maximizing Food Resources.” (NCFH website)

Available online from: <http://www.ncfh.org/item.php?sku=580>

- **Guidelines/Brochures Dietary Guidelines for Americans - 2005**
U.S. Dept. of Health and Human Services and Department of Agriculture
2005
Available in English
Outreach workers, farmworkers and their families

Links on this web site provide detailed information about recommended diets for adults and children. The “Executive Summary” provides a detailed description of the dietary guidelines, and a brochure (“Finding Your Way to a Healthier You: Based on the Dietary Guidelines for Americans”) is available for download or ordering.

Available online from: <http://www.healthierus.gov/dietaryguidelines/>

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- Web Site **USDA Nutrition Information (www.nutrition.gov)**
USDA
2006
Available in English/Spanish
Health care providers, outreach workers, and farmworkers

This Internet site provides links to documents discussing nutrition and health issues, weight management, and government food assistance programs. Outreach workers can easily search for information on topics relevant to the specific groups they are working with.

Available from: <http://www.nutrition.gov>

- Web Site **USDA Food Pyramid**
USDA
2006
Available in English/Spanish
Health care providers, outreach workers, and farmworkers

This site provides nutrition recommendations tailored to an individual's age, sex, and activity level.

Available from: <http://www.mypyramid.gov>

- Flyers:
 - 1) **Eat 5 Fruits and Vegetables Every Day**
 - 2) **Food Guide Pyramid: A Guide to Daily Food Choices**
 - 3) **Health Fact Sheet: Nutrition and Exercise**
 - 4) **Nutrition on Your Own: Food Guide Pyramid**

National Center for Farmworker Health

Available in English and Spanish

Farmworkers

Brief information sheets (1-2 pages) that provide helpful hints for following diet and exercise recommendations.

Information available from: <http://www.ncfh.org/search-results.php?fieldSearch=yes&category=DIABETES%20and%20NUTRITION>

NORTH CAROLINA FARMWORKER HEALTH MODULES

- Fotonovela/Brochure:
1) Breastfeeding Fotonovela: “The Power of Love and Support”
2) Infant Feeding Guide
Hispanic Health Council
Available in English and Spanish
Farmworkers

This fotonovela tells the story of a mother and father who have decided to breastfeed their infant and shows how they teach another family about its benefits. The infant feeding guide provides more information about the subjects discussed in the fotonovela and feeding infants under one year of age.

Available from: <http://www.hispanichealth.com/pana.htm>
 - Online Tutorial: **Eating Healthy**
Patient Education Institute
2006
Available in English and Spanish
Outreach workers, farmworkers and their families

Interactive online tutorial in slide show format with graphics and audio that describes recommendations for a healthy diet.

Tutorial available online: <http://www.x-plain.net> (click on “Eating Healthy” under Health and Wellness topic)
 - Resource List: **Cultural and Ethnic Food and Nutrition Education Materials: A Resource List for Educators**
Food and Nutrition Information Center/USDA
2006
Resources available in English and Spanish
Health care providers, outreach workers, and farmworkers

Extensive list of downloadable brochures, handouts, and other resources for nutrition education in various cultural groups. A brief description of each resource is provided.

Available from: <http://www.nal.usda.gov/fnic/pubs/bibs/gen/ethnic.html#12>
(section: Full-Text Online Items)
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