Hypertension

HYPERTENSION

Self-Assessment/Pre-Test

(to be completed before reading hypertension content)

1. Which of the following affects blood pressure?
   a. how hard the heart pumps
   b. how narrow or wide the blood vessels are
   c. blood volume
   d. all of the above

2. Where is the blood pressure highest?
   a. arteries
   b. capillaries
   c. veins

3. What is the systolic blood pressure?
   a. arterial blood pressure when the heart is actively pumping blood
   b. arterial blood pressure when the heart is in between beats
   c. average sustained capillary blood pressure over one minute
   d. average blood pressure within the brain

4. What category does the blood pressure 145/82 fall in?
   a. normal
   b. prehypertension
   c. Stage 1 hypertension
   d. Stage 2 hypertension

5. Which of the following is not a risk factor for essential hypertension?
   a. family history of hypertension
   b. obesity
   c. cigarette smoking
   d. alcohol use
   e. physical inactivity
   f. dehydration

6. Which of the following is a common symptom of hypertension?
   a. fatigue
   b. sweating
   c. dry mouth
   d. none of the above

7. Hypertension is a risk factor for developing which of the following medical conditions?
   a. cardiovascular disease
   b. stroke
   c. myocardial infarction (heart attack)
   d. all of the above

8. What is the DASH diet?
   a. a program that promotes weight reduction by running ("dashing") and not eating meat
   b. a program that promotes eating very low amounts of carbohydrates, similar to the Atkins diet
   c. a program that promotes eating more fruits, vegetables, and low-fat dairy products while reducing fat intake
   d. a program that promotes decreasing blood pressure by consuming dill, anise seed, safflower oil, and horseradish

9. Which of the following are good ways to treat or prevent hypertension?
   a. maintaining a healthy body weight
   b. increasing salt consumption
   c. decreasing frequency of strenuous physical activity
   d. all of the above

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

HYPERTENSION

Supporting Information for Outreach Workers

Updated Sept 2014

What is blood pressure?

When the heart pumps blood throughout the body, the blood creates pressure on the walls of blood vessels. The actual pressure can be affected by many factors, including how hard the heart is pumping, how much blood is present, and how big and how rigid the blood vessels are. Imagine water being pumped through a pipe into a shower. A stronger pump or smaller pipes will produce greater water pressure coming out the end of the shower. Similarly, increasing the amount of water (turning the faucet on higher) will also increase the water pressure. The same thing occurs in the body when the heart pumps harder, when the blood vessels are constricted or dilated, when the walls of the blood vessels "harden" due to disease, or the blood volume increases or decreases. The heart has to work much harder to constantly pump blood through vessels that are too small, possibly due to cholesterol plaques or deposits, and can eventually become overworked. Blood is carried from the heart to the rest of the body by the arteries. In the body the tiny capillaries are the bridge between the arteries and the veins, which move the blood back to the heart. The oxygen that the body needs is extracted from the blood in the capillaries. Blood pressure is highest in arteries and decreases as the blood moves through capillaries and veins.

How is blood pressure measured?

The pressure that blood produces on the walls of blood vessels can be measured in various ways, but the most common way to measure blood pressure is with a sphygmomanometer (blood pressure cuff) and a stethoscope. The cuff is usually wrapped around the upper arm and measures the blood pressure in the brachial artery. When the blood pressure cuff is inflated to a higher pressure than the blood pressure in the artery, the flow of blood is stopped. As the pressure in the cuff decreases below the person's usual blood pressure, blood starts moving through the artery. However, the blood has some difficulty getting through since the artery is still being compressed by the cuff, so it makes noise against the artery walls which can be heard with a stethoscope (Korsakoff sounds). The highest pressure at which these sounds occur is called the systolic blood pressure and is the peak pressure produced in the artery when the heart is actively pumping blood through it. As the cuff pressure decreases further, the sounds will become softer and eventually disappear when the blood is able to flow freely through the artery. The pressure observed when the sounds disappear is called the diastolic blood pressure and is the pressure produced in the artery when the heart is resting between beats. Both systolic and diastolic blood pressure are measured in mm Hg (millimeters of mercury) and are commonly written as follows:

<u>systolic blood pressure (SBP)</u>
<u>diastolic blood pressure (DBP)</u>

Supporting information for outreach workers: Hypertension – 2

When is blood pressure considered high?

High blood pressure is called hypertension. A non-pregnant adult has hypertension if his or her systolic blood pressure is consistently at least 140 or if diastolic blood pressure is at least 90, regardless of age, height, or weight. The following table shows the ranges of blood pressure considered normal, at risk of being high, or too high:

CATEGORY	**SBP (mm Hg)**		**DBP (mm Hg)**
Normal	less than 120	and	less than 80
Prehypertension	120-139	or	80-89
Hypertension, Stage 1	140-159	or	90-99
Hypertension, Stage 2	at least 160	or	at least 100

Hypertension is classified into two different stages based on treatment recommendations, which will be discussed later.

What are the causes and risk factors for hypertension?

90-95% of people with high blood pressure have primary, or essential, hypertension, which does not have a single cause but may be affected by multiple risk factors. Risk factors for essential hypertension include family history of hypertension, African-American ancestry, high dietary salt intake, stress, obesity, cigarette smoking, alcohol use, and physical inactivity. This type of hypertension is difficult to prevent because it has multiple causes. 5-10% of people with high blood pressure have secondary hypertension, which may be caused by other medical conditions such as hormonal abnormalities, kidney problems, or drug toxicity. Hypertension can be prevented in these individuals by treating the underlying medical condition.

What are common symptoms of hypertension?

There usually are no symptoms! This is why high blood pressure is often called the "silent killer". Most people do not know they have high blood pressure until it is measured by a medical professional, or until they suffer their first heart attack or stroke caused by the high blood pressure. Some people report having headaches when their blood pressure gets very high (SBP greater than 200), but this is not a reliable symptom.

If there are no negative symptoms, why is it important to treat hypertension?

Although hypertension does not usually cause pain and suffering directly, it is very important to diagnose and treat high blood pressure because it is a major risk factor for other serious diseases. Hypertension may lead to cardiovascular disease, heart enlargement or failure, myocardial infarction (heart attack), stroke, intracranial hemorrhage (bleeding in the brain), and kidney disease. If people already have other risk factors for cardiovascular disease, including obesity, high cholesterol, diabetes, chronic kidney disease, tobacco use, physical inactivity, advanced age, or a family history of early heart problems, the effects of high blood pressure may be even greater. It is therefore important to try to prevent hypertension if at all possible or treat it effectively if a person already has high blood pressure.

Supporting information for outreach workers: Hypertension – 3

How is hypertension treated?

Individuals who have been diagnosed with hypertension may be able to reduce their blood pressure through lifestyle modification or by taking certain drugs that have been prescribed by a medical professional. For most people with hypertension, the goal blood pressure is less than 140/90. Recent evidence (JNC 8, 2014) recommends a goal blood pressure of less than 150/90 for patients 60 years old and older. All individuals with prehypertension or hypertension can benefit from lifestyle modifications including weight reduction, decrease in dietary salt intake, frequent aerobic physical activity, moderation of alcohol consumption, and diet modifications. Current recommendations include maintaining a normal body weight (BMI range 18.5 to 24.9), reducing sodium intake to less than 2.4 grams per day, doing aerobic physical activity for at least 30 minutes per day five days per week, and limiting alcohol consumption to less than one drink per day for women or two drinks per day for men. Dietary modifications may include eating a diet rich in fruits, vegetables, and lowfat dairy products and reducing consumption of saturated fat and total fat. The DASH (Dietary Approaches to Stop Hypertension) diet includes all these recommendations and can help individuals maintain a healthy weight as well. This diet focuses on reducing sodium intake and suggests the following daily/weekly portions of various food groups:

7-8 servings daily: grains and grain products
4-5 servings daily: vegetables
4-5 servings daily: fruits
2-3 servings daily: low-fat or fat-free dairy foods
2-3 servings daily: fats and oils
2 or fewer servings daily: meats, poultry, and fish
4-5 servings weekly: nuts, seeds, and dry beans
5 servings weekly: sweets

(For more information about serving sizes, examples of foods in each group, benefits of each food type, and suggested menu plans, see the "Facts about the DASH Eating Plan" handout – Recommended Resources.)

If individuals have stage 1 or 2 hypertension, drugs that lower blood pressure (anti-hypertensive drugs) may be prescribed in addition to lifestyle modification. These drugs generally act by modifying one of the factors that influence blood pressure: the strength of each heartbeat, the size or rigidity of the blood vessels, or the volume of blood flowing through the vessels. It is important to take these medications as prescribed daily. Currently we have no way to cure hypertension, only control it. Certain blood pressure medications can cause "rebound hypertension", or even higher blood pressures when they are suddenly stopped. Taking your blood pressure medicine every other day, or only when you feel you need it defeats the purpose of the medicine, which is to protect your body from the harmful effects of the high blood pressure.

How can an outreach worker best case-manage a farmworker with hypertension?

When blood pressure medicine is first initiated, the medical provider often starts with a low dose to avoid side effects and see how the medicine is tolerated. The patient usually needs to return in a few weeks to recheck the blood pressure, talk about possible side effects, and very likely increase the dose or add another blood pressure medicine. To effectively control blood pressure, it is often necessary to use two or even three blood pressure medicines.

The outreach worker is ideally situated to facilitate the frequent clinic visits needed to titrate up the medications to achieve good control of hypertension. They can make home visits to repeat blood pressures and convey the results to the medical provider. They can explain and support the difficult lifestyle modifications that are needed. They are also needed to explain the difference between curing a disease and controlling it, and the need to take daily, lifelong medications even when the patient feels fine! Finally, enrolling the migrating farmworker in the Migrant Clinician's Health Net case management service can maximize the chances of effective ongoing treatment across state and national lines.

What are good ways to prevent hypertension?
Maintaining a healthy lifestyle is the best way to decrease your chances of developing hypertension. This is especially important for individuals who already have prehypertension, risk factors for developing hypertension, or other diseases that may be worsened by hypertension. The same lifestyle modifications that are recommended for treating hypertension can be used to prevent its development, including weight reduction, decrease in dietary salt intake, frequent aerobic physical activity, moderation of alcohol consumption, and diet modifications.

How can farmworkers monitor their blood pressure and decrease the likelihood of developing high blood pressure?
Free blood pressure screenings occur frequently at community health fairs, drugstores, and local clinics and health centers. Pharmacies may have automated blood pressure machines available for anyone to use in the store free of charge. Outreach workers will also measure blood pressure at least once a year (or more frequently if blood pressure is elevated) and can provide counseling about preventing or treating hypertension. If individuals have ongoing hypertension that is difficult to control, it may be helpful to obtain a low-cost blood pressure cuff for self-monitoring. The recommended lifestyle modifications for preventing or treating hypertension do not require any expense or special equipment, and first-line drugs to treat hypertension are often available at a very low cost.

HYPERTENSION

Self Assessment/Post-Test

(to be completed after reading hypertension content)

1. What is blood pressure?

2. How is blood pressure measured?

3. What are the systolic blood pressure and diastolic blood pressure?

4. Describe the four categories of blood pressure readings.

5. What are some risk factors for primary hypertension?

6. What medical conditions may be caused or worsened by hypertension?

7. Describe some lifestyle modifications that can treat or prevent hypertension.

8. What dietary modifications does the DASH diet recommend?

HYPERTENSION

Self Assessment/Post-Test answers

1. What is blood pressure?
[the pressure created on the walls of blood vessels when the heart pumps blood through the body; may be affected by how hard the heart is pumping, how much blood is present, and how big the blood vessels are]

2. How is blood pressure measured?
[usually with a blood pressure cuff and stethoscope; cuff is inflated and gradually deflated until Korsakoff sounds are heard; systolic and diastolic blood pressure are recorded]

3. What are the systolic blood pressure and diastolic blood pressure?
[systolic blood pressure – the pressure produced in an artery when the heart is actively pumping blood through it; diastolic blood pressure – the pressure produced in an artery when the heart is resting between beats]

4. Describe the four categories of blood pressure readings.

CATEGORY	**SBP (mm Hg)**		**DBP (mm Hg)**
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Prehypertension	120-139	or	80-89
Hypertension, Stage 1	140-159	or	90-99
Hypertension, Stage 2	at least 160	or	at least 100

5. What are some risk factors for primary hypertension?
[family history of hypertension, African-American ancestry, high dietary salt intake, stress, obesity, cigarette smoking, alcohol use, physical inactivity]

6. What medical conditions may be caused or worsened by hypertension?
[cardiovascular disease, heart enlargement or failure, myocardial infarction (heart attack), stroke, intracranial hemorrhage (bleeding in the brain), kidney disease, diabetes]

7. Describe some lifestyle modifications that can treat or prevent hypertension.
[maintaining a normal body weight (BMI range 18.5 to 24.9); reducing sodium intake to less than 2.4 grams per day; doing aerobic physical activity for at least 30 minutes per day several days a week; limiting alcohol consumption to less than one drink per day for women or two drinks per day for men; eating a diet rich in fruits, vegetables, and lowfat dairy products and reducing consumption of saturated fat and total fat (DASH diet)]

8. What dietary modifications does the DASH diet recommend?
[reducing sodium intake; eating a diet rich in fruits, vegetables, and lowfat dairy products and reducing consumption of saturated fat and total fat]

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Teaching objectives

The facilitator and farmworker participants will discuss:

1. **What is hypertension and how is it determined?**
    a. high blood pressure caused by strength of heartbeat, volume of blood, or size of blood vessels
    b. systolic and diastolic blood pressure can be measured with blood pressure cuff
    c. various ranges of blood pressures may have different consequences and requirements for treatment

2. **What are the causes and risk factors for hypertension?**
    a. family history of hypertension
    b. African-American ancestry
    c. high dietary salt intake
    d. stress
    e. obesity
    f. cigarette smoking
    g. alcohol use
    h. physical inactivity
    i. other medical conditions (e.g. diabetes, hormonal abnormalities, kidney problems, drug toxicity)

3. **What are the consequences of not treating hypertension?**
    a. may lead to or worsen serious medical conditions, including cardiovascular disease, heart enlargement or failure, myocardial infarction (heart attack), stroke, intracranial hemorrhage (bleeding in the brain), diabetes, and kidney disease

4. **How can hypertension be treated or prevented?**
    a. weight reduction
    b. decrease in dietary salt intake
    c. frequent aerobic physical activity
    d. moderation of alcohol consumption
    e. dietary modification (e.g. DASH diet)
    f. anti-hypertensive drugs

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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:

- Cabbage game with questions related to hypertension, causes, consequences, prevention, treatment, control, etc.

- Demonstrate the use of an aneroid blood pressure cuff or digital blood pressure monitor and explain what the numbers mean and what the various ranges are for low/normal/high blood pressure

- Work through online tutorial on hypertension (see Recommended Resources) with farmworkers and their families (requires computer with high-speed Internet connection)

- Listen to recordings of "Sí se puede" radio news programs (see Recommended Resources) together and discuss important points

- Use jeopardy game to review specifics about hypertension (especially if the group seems familiar with the topic)

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 prevent hypertension themselves.

- Are they able to purchase foods that are both heart-healthy and appetizing?
- Can they find time to exercise outside work if they are not getting enough exercise while working?
- Do they know how to prepare meals that are low in sodium and are consistent with the DASH diet?

Bring along recipes from the DASH diet cookbook and discuss what farmworkers and their families like and do not like to eat. Develop a list of recipes that would be easy and quick to make, tasty, and appropriate for preventing hypertension. Alternatively, if farmworkers are not able to or do not want to cook themselves, develop a list of pre-made meals that could be purchased at the store or restaurant that would be appropriate (e.g. Healthy Choice frozen dinners).

Reality check

- Talk with farmworkers about the foods they currently enjoy eating and reinforce healthy choices, since many of the things they eat may already be healthy and dietary modifications may not be required.
- Offer to help prepare a meal or have a "potluck" where families can gather to socialize and share healthy dishes and recipes.
- Remind farmworkers to limit the amount of salt and fat used in foods and to increase their intake of fruits and vegetables.

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Sample Class Plan

Subject: hypertension
Date:
Time:
Topic: What are the causes and risk factors for hypertension?
(teaching objective 2 from hypertension module)

Key points, information, skills, or activities

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

1. Identify possible causes of hypertension.
2. Develop an increased awareness of the risk factors for hypertension.
3. Identify personal risk factors that may lead to hypertension.

Teaching methods

- "Si Se Puede" radio news program recordings
- Grab bag/bag of myths activity
- Use of visual aids
- Discussion
- Brainstorming
- "Jeopardy" game
- Family history activity
- Cabbage game

Materials and preparation needed

- "Si Se Puede" recordings
- BMI chart or wheel
- Food labels and/or measuring spoons to show sodium content and appropriate sodium intake
- Paper and writing instruments for brainstorming and creating family history chart
- "Jeopardy" question cards

Supporting media

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

Sample Class Plan: Hypertension - 2

To begin, invite participants to reflect on their experiences with hypertension. What do participants already know? What would they like to learn?

1. Identify possible causes of hypertension.

Most people (90-95%) with high blood pressure have primary (essential) hypertension, which is due to multiple risk factors. Hypertension may be caused in some people by underlying conditions such as hormonal abnormalities, kidney problems, or drug toxicity; this is called secondary hypertension.

▼ ***Learning activities***

- Discuss the difference between causes and risk factors. "Causes" directly cause an event to occur, while "risk factors" simply make it more likely that an event might occur. Example: Drowning is a direct "cause" of suffocation, and leaving one's child unattended near a swimming pool is a "risk factor" for suffocation.
- Have farmworkers brainstorm all chronic health problems that may cause hypertension. Identify which ones are known to potentially cause hypertension and which conditions affect the farmworker or his/her family personally.

2. Develop an increased awareness of the risk factors for hypertension.

Risk factors for developing primary (essential) hypertension include family history of hypertension, African-American ancestry, high dietary salt intake, stress, obesity, cigarette smoking, alcohol use, and physical inactivity. Minimizing an individual's number of risk factors decreases his or her risk of developing hypertension.

▼ ***Learning activities***

- Use the "bag of myths" activity to find out what farmworkers already know about hypertension risk factors and what misconceptions they may have. Discuss which risk factors are actually related to hypertension.
- Listen to "Si Se Puede" excerpts (relevant topics: HBP among Hispanics and what HBP is; Overweight and HBP; Lack of Exercise and HBP; Myths and HBP). Discuss the information presented and answer questions the farmworkers may have.
- Use "Jeopardy" game questions to reinforce new knowledge of hypertension risk factors.

3. Identify personal risk factors that may lead to hypertension.

Farmworkers may be unaware of their personal risk for hypertension. Making the discussion of hypertension risk factors personally relevant will help motivate farmworkers to make lifestyle changes if necessary.

▼ ***Learning activities***

- Make a family tree with the farmworkers, including parents, siblings, grandparents, and aunts/uncles if desired. Identify which individuals are known to have developed hypertension and encourage farmworkers to talk with family if medical history is unknown.
- Use BMI wheels or charts to calculate healthy weights for farmworkers and their families and discuss how managing weight is important to reduce the risk of developing hypertension.
- Look at labels from common food products to see how much sodium is in each and calculate the percentage of the daily sodium intake recommended by the DASH diet (1500 mg = ¾ teaspoon table salt, 2000 mg = 1 teaspoon). Use a measuring spoon to show how much a teaspoon is and remind farmworkers that most of this sodium is already hidden in foods.

Suggested review activities (choose one or two)

- play the cabbage game 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.

- At what level is high blood pressure considered to be hypertension?
- What is a normal blood pressure (give the appropriate numbers)?
- Name five risk factors for developing hypertension.
- True or false: hypertension usually has no symptoms.
- Why is it important to try to lower high blood pressure?
- Name four medical problems that can be caused by having high blood pressure.
- Name five lifestyle changes that people can make to try to lower their blood pressure.
- What is the BMI range for a normal body weight?
- How often and for how long should people do aerobic exercise?
- What are the recommended limits for alcohol consumption?
- Where can farmworkers get their blood pressure checked?

List of suggested items for grab bag/ bag of myths activity on hypertension risk factors:
(some of these are actually risk factors and some are "myths" or actually beneficial in reducing hypertension)

- Diagram of family tree
- Salt shaker
- Picture of "stressed-out" person
- Cigarette (or picture of a pack of cigarettes)
- Baseball or other small sporting equipment
- Beer can/bottle
- Fruit or vegetable
- Bag of unsalted almonds

Support for Learning Activities: Hypertension - 2

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

100: What is hypertension?
100: True or false: everyone eventually gets high blood pressure.
100: True or false: aerobic physical activity can help decrease blood pressure.
200: How is blood pressure usually measured?
200: True or false: people with hypertension usually have no symptoms.
200: Why is it important to treat hypertension?
300: What is the range for a normal blood pressure?
300: Name three risk factors for developing hypertension.
300: What is the name of the suggested diet for lowering blood pressure or preventing hypertension?
400: What is the BMI range for normal body weight?
400: Name three medical conditions that can be caused by hypertension.
400: What are the recommended limits for alcohol consumption?
500: What is the goal blood pressure for people with hypertension?
500: Which is more common: primary or secondary hypertension?
500: How many daily servings of fruits and vegetables does the DASH diet recommend?

HYPERTENSION
Recommended Resources for Outreach Workers

Pamphlet: **Facts About the DASH Eating Plan**
National Heart, Lung, and Blood Institute (NHLBI)
2005
Available in English
Health care providers, outreach workers, English-proficient farmworkers
"Get with the plan that is ***clinically*** proven to significantly reduce blood pressure. It's not enough to tell hypertensive and prehypertensive patients to, "Watch your diet." Give them a week's worth of sample menus, recipes, heart healthy dishes, and an easy-to-read summary of the findings from the "Dietary Approaches to Stop Hypertension" clinical study that showed how elevated blood pressure levels can be reduced with an eating plan low in total fat, saturated fat, and cholesterol, and rich in fruits, vegetables, and lowfat dairy products. It even has a form to track food habits before starting the plan and a chart to help with meal planning and food shopping." (NHLBI website)
Information available from: http://www.nhlbi.nih.gov/health/public/heart/hbp/dash/

Pamphlet: **Your Guide to Lowering Blood Pressure**
National Heart, Lung, and Blood Institute (NHLBI)
2005
Available in English
Outreach workers, English-proficient farmworkers
"'You can do it!' is the message in this action-packed guide. Follow step-by-step instructions on how to achieve and maintain a lower blood pressure through lifestyle and, if prescribed, medication. It's filled with practical advice about how to find your target weight, use herbs and spices to reduce sodium intake, and even how to remember to take your blood pressure medication. The bright, colorful design and upbeat language motivates as it educates hypertensive and prehypertensive patients to take control of their cardiovascular health." (NHLBI website)
Information available from:
http://www.nhlbi.nih.gov/health/public/heart/hbp/hbp_low/index.htm

Clinical Guidelines: **Seventh Report of the Joint National Committee on Prevention, Detection, Evaluation, and Treatment of High Blood Pressure (JNC 7) – Express Report**
National Heart, Lung, and Blood Institute (NHLBI)
2003
Available in English
Health care providers and outreach workers
"*The JNC 7 Express Report* focuses on practical applications of the new evidence, including a revised treatment algorithm, drug tables, and convenient references. Get this for the quick-study health worker who needs to keep abreast of standards of treatment and incorporate the latest evidence into daily practice." (NHLBI website)
Information available from: http://www.nhlbi.nih.gov/guidelines/hypertension/jncintro.htm

Recommended Resources: Hypertension - 2

Online Consumer Resource: **Your Guide to the DASH Diet**
Nutrition Education Services/ Oregon Dairy Council
General Clinical Research Center at Oregon Health Sciences University
2006
Available in English
Outreach workers, farmworkers, and their families.

An online cookbook provides recipes for individual meals where foods and serving sizes are chosen to meet the food group serving recommendations from the DASH diet. The web site also provides tips on snacking and making the diet fit one's lifestyle.

Information available from:
http://www.oregondairycouncil.org/dash_site/