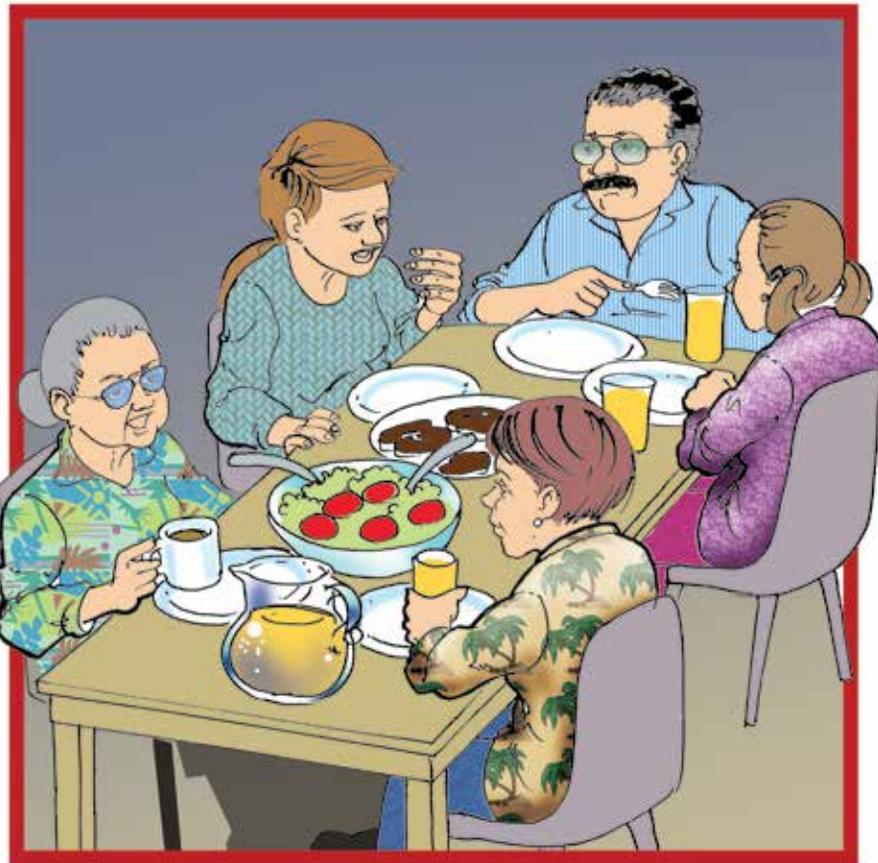


Name of the Project:

**“Community Health Workers
Against Hypertension”**



Dr. Héctor Balcázar

Additional session to “Your Heart, Your Life”

This educational model can be integrated with “Your Heart, Your Life” manual from the “Community Health Workers Against Hypertension” project.

The intervention took 9 weeks, during which the education models were implemented to help reduce blood pressure for 100 persons.

The program also includes a photonovela to practice what was learned in the program.



A handwritten signature in black ink, appearing to read 'H. Balcázar'.

Dr. Héctor Balcázar

A handwritten signature in black ink, appearing to read 'Theresa Byrd'.

Dr. Theresa Byrd

We thank Mónica Chávez for your collaboration on this module.

Additional session to:

A d d i t i o n

“Your Heart, Your Life”

How to Control Your Hypertension

Objectives

On this session the participants will:

- Know the consequences when not taking their medication
- Will understand how to take their medication
- Will get to know that sometimes hypertension presents itself without any symptoms
- Will get to know that the medications have to be taken even if they don't feel any symptoms
- Will understand that stress can increase their blood pressure
- Will learn techniques to reduce stress
- Will list the causes of stress in their lives
- Will understand and will develop virtues that will help them to make necessary changes in their lifestyles to control hypertension
- Will recognize those attitudes having to do with having hypertension and will identify ways to make changes in their lifestyles to control their high blood pressure

Materials and Brochures

To direct this session you will need:

- Reminder notes
- Weekly pillbox
- Brochure: Attitude of the Ramirez Family
- Brochure: Questions you should ask your doctor
- Brochure: It Can Be Done
- Picture story: “How To Control Your Hypertension”



1.- Welcome and introduction.

- Welcome the group members
- In this session you will learn some ways to lower your blood pressure
- Hand out the photonovela “How To Control Your Hypertension” to the participants

The session in action

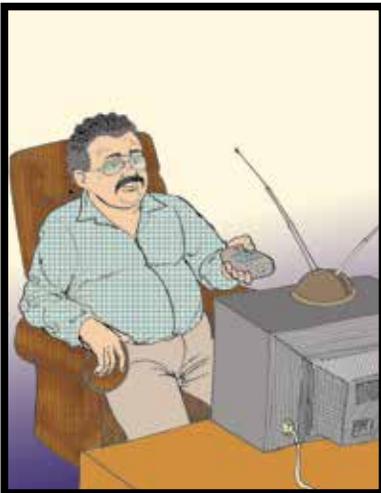
2.- The importance of complying with the high blood pressure treatment.

See photonovela page 1

■ Say:

You have to understand that high blood pressure or hypertension is a disease that will last your whole life, this means it is chronic.

- Knowing this, we have to understand that the treatment is going to be for the rest of your life and that doing it properly is going to help you to control your high blood pressure and to reduce the risk of complications.



- Even when you are taking medicine, it is necessary for you to change your lifestyle. By doing this it will help for the medications to be more effective and it might also help in reducing the amount of medication you take.
- There are a lot of medications used to reduce high blood pressure. Each one acts in a different way.



2

Additional session to “Your Heart, Your Life”

3.- Suggestions when taking your medications.

- When you begin taking your medications, consult your physician so he can instruct you on taking the proper medication for you and what dosage to take. It is very important to follow his instructions.



- Do not exchange medicines with friends, family member, acquaintances, etc., even when they have the same health problems since everybody has a different prescription.



- Note the day you need to renew your prescription so when you get close to the date you can renew it and in this way avoid suspending your treatment.

- Some persons with high blood pressure take natural remedies like garlic, tee, herbs and other spices which have not been scientifically approved. In case you are taking natural remedies tell your doctor since these can interact with your medications.

The best way to treat your high blood pressure is by taking your medicines and following your doctor's instructions.



- Do not stop taking your medications, even if you start feeling better and you think you don't need it anymore. Remember that high blood pressure in the majority of cases does not present any symptoms.

- If you don't have health insurance and you don't get any treatment because it costs too much our advice is that you look for some type of assistance program to purchase your medications, be it through your doctor, pharmacy, laboratory or the state or through a community clinic.

- Before taking your medication read the instructions on the label so you know the possible side effects. If you start experiencing any side effects contact your doctor so he can adjust or change your prescription.



■ Say:

What kind of medicine are you taking? Do you take them regularly? It is very important that you don't stop taking them just like your doctor told you.

Practical suggestions on how to remember to take your medication.

See the photonovela page 6: *Ways to remember to take your medicine*

See each one of the drawings on the picture story and use the pillbox, the calendar, the phone and other materials to instruct them.



Show them how to use them

4.- Stress control.

See the photonovela page 7

■ **Say:**

It is normal for the stress level to go up when you find yourself in difficult situations or when you feel overwhelmed with a great deal of responsibilities on your daily life. But if you don't manage this in an adequate way, the stress can increase your blood pressure. In this session you will learn ways to handle your stress and how to reduce it.



■ **Ask:**

What are the causes of stress in your life? Wait 2 minutes so they can answer.

■ **Say:**

Explain how stress increases your blood pressure. Some type of stress can't be controlled, but there are ways to manage it.

■ **Ask:**

In what way do you manage stress?

■ **Say:**

Smoking, drinking alcohol, drugs are all bad ways to handle stress.



■ **Ask:**

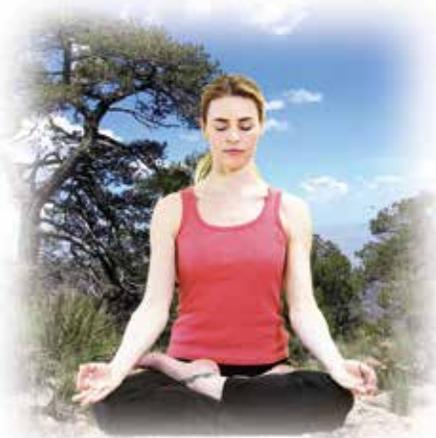
For you, what is the best way to manage stress?

■ **Say:**

There are different techniques to reduce stress.

■ **Meditation and prayer**

Meditation and prayer helps you to focus on positive thoughts.

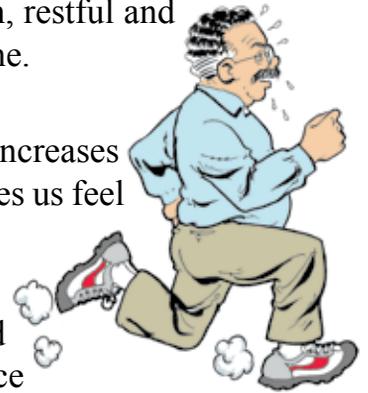


■ Visualization

If you have negative thoughts, this makes you tense. To surpass these emotions try to think positive. Relax, close your eyes and visualize a calm, restful and serene place. As you relax your mind your body does the same.

■ Exercise

Physical activity is the best way to reduce stress. Exercise increases the amount of oxygen to our body and the hormones that makes us feel happy.



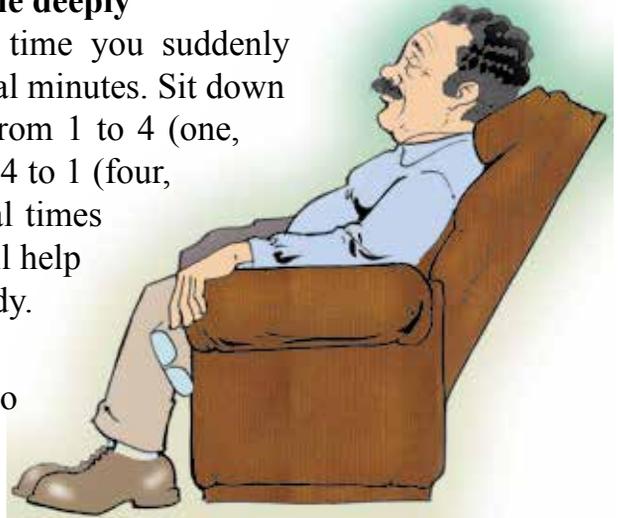
■ Talk with somebody

Sharing your feelings and worries helps you reduce stress. Express your emotions openly, directly and honestly without blaming anybody. Use words like “I think” or “I feel”. Do not be afraid to ask or make observations to other persons.



■ Breathe deeply

The next time you suddenly feel stressed try to breathe deeply for several minutes. Sit down comfortably. Inhale and exhale counting from 1 to 4 (one, two, three, four) and exhale counting from 4 to 1 (four, three, two, one). Repeat these steps several times until you feel relaxed. Breathing deeply will help you relax increasing the oxygen in your body.



■ Say:

Involve your family in the techniques to reduce stress.

■ Say:

Support groups can have a lot of benefits, if you do not know what a support group is permit me to give you an explanation. It is a group of persons that have or are going through the same experiences. This does not mean that you don't receive support from your friends and family.

These groups can be led by health professionals or by persons that have the same disease. These support groups can give you the opportunity to talk about your health problems and to analyze them.

■ Ask:

How many of you have a support group?

(If there are not any support groups, help them organize one)



Review today's most important points.

■ Say:

Let's review what we have done today.

■ Ask:

Q: Does high blood pressure have any symptoms?

A: No, a person can be feeling very well and still have high blood pressure.

Q: Why is it very important to take your medications and to follow the doctor's instructions? What will happen if you don't do it?

A: You have to take your medication exactly how your doctor instructed you to be able to control your blood pressure. The medication reduces your blood pressure gradually. It is very important that you do not stop taking your medication and that you do not increase your dosage. The blood pressure that is not under control can cause a stroke or a heart attack.



Q: What are the other ways of obtaining your medication if you can not afford it?

A: Another way is to look for your medication in less expensive pharmacies that offer them in generic brands that cost less. Ask your doctor, pharmacy or at the clinic you go to if there are programs that offer discounts.

Q: What are the ways to reduce stress?

A: Prayer, meditation, exercise, visualization, talking with somebody, deep breathing. There are other ways to manage stress, the best one is the one you feel most comfortable with even if it is not one of these.

Weekly commitment.



Note: First make your own personal commitment. Encourage the group members to share what they are planning to do to fulfill their commitment. See page 19 of the photonovela: My commitment

■ Say:

In our next session we will talk about how you are doing with your commitment. Remember to keep working on your commitment to take your medication.

Close the session.

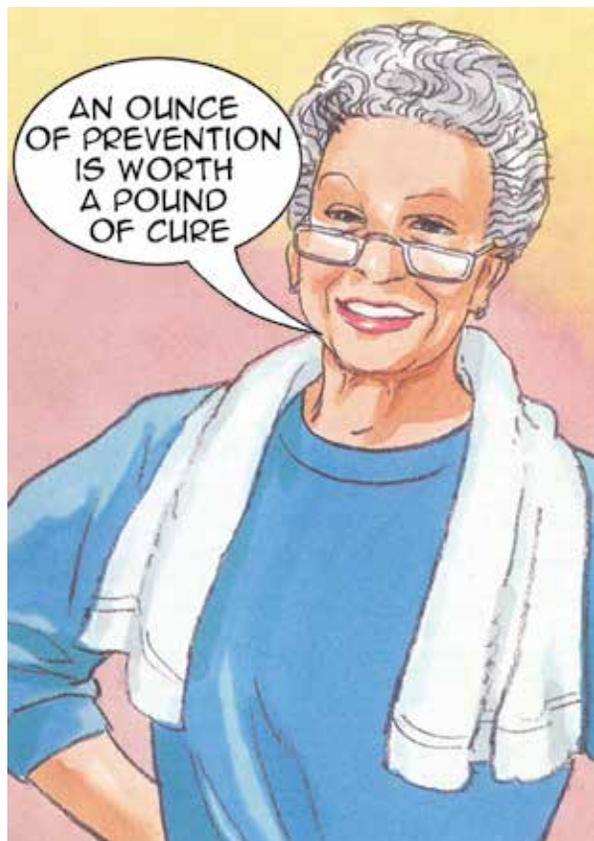
■ Say:

Thank you for coming. I hope to see you on our next meeting. Our next meeting will be about keeping yourselves physically more active and to maintain a healthy weight.

The Ramirez Family Attitudes

To be used with the photonovela “Better safe than sorry”, a guide for your heart’s health.

People act in a different way when they learn that they have to make changes in their lifestyles because they are at risk of getting heart disease. Please review the Ramirez Family attitudes and answer the questions contained at the end of the brochure.



The Active One

Mrs. Fela learned that she is at high risk of getting heart disease and quickly she makes a plan of action. She obtains information and takes classes to learn how to improve her health. She practices what she learns and she feels optimistic and enthusiastic. She makes changes to improve her health, sets reasonable goals and helps others do the same. Mrs. Fela thinks that an ounce of prevention is worth a pound of cure.



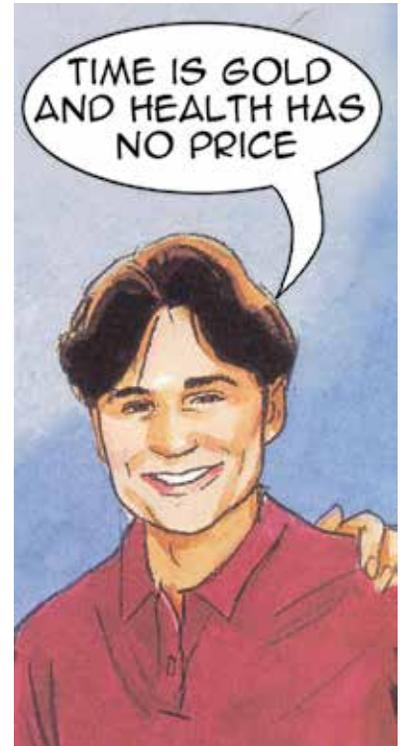
The Worried One

Carmen is worried and depressed because she knows that she has a high risk factor of developing the disease. She doesn't know how to start making changes in her lifestyle. She feels trapped and without motivation to make the changes to her lifestyle that she needs.



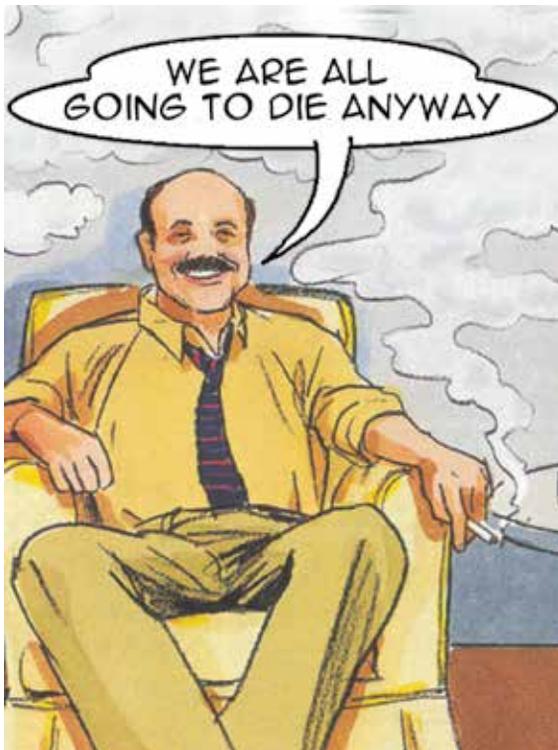
The Well Intentioned

Virginia learns that she is at risk of developing heart disease and thinks she should start taking action. Each day she tells herself “I will start making changes tomorrow.” She feels very guilty and frustrated because she knows she needs to take action to improve her health. Virginia thinks that “Starting to talk is different from starting to walk.”



The Dynamic

Nestor is very motivated to make changes and improve his health. He knows it is very easy to fall back into bad habits. He makes plans to prevent setbacks and to start again if it is necessary. He has a positive attitude on life, asks for help when he needs it and does not give up. Nestor says “Time is gold and health has no price.”



The Indifferent

Mariano finds out that he is at risk of getting heart disease but he is not worried. He gets angry when he has to make changes to his lifestyle and does not intend to change his attitude. Mariano claims “We are all going to die anyway.”

■ Which character best represents you?



The Active One



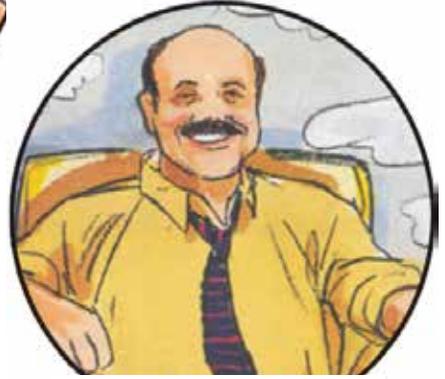
The Worried One



The Well Intentioned



The Dynamic



The Indifferent

■ Who would you choose as your attitude role model to encourage you to make changes in your lifestyle?

■ What holds you back in making changes in your lifestyle?

■ What can you do to overcome these things?

Thank you Matilde Alvarado from the NHLBI-NIH for sharing this brochure with our community.

Questions you should ask your doctor

We recommend you ask these questions to your doctor before you start taking your medication and if you have never done it even if you have already been taking it for some time.

- 1.- Why is my blood pressure taken in numbers? Ask your doctor or nurse to write down for you the results after he/she takes your blood pressure.
- 2.- What is my recommended blood pressure?
- 3.- Is my blood pressure at a normal level?
- 4.- Is my systolic pressure too high (more than 140)?
- 5.- What is a healthy weight for me?
- 6.- Is there a diet to lose weight (in case I need it) that also would help me reduce my blood pressure?
- 7.- Could you recommend a healthy eating plan that I can follow to help me lower my blood pressure (since I do not need to lose weight)?
- 8.- Is it recommended to start doing some kind of exercise or physical activity?
- 9.- What is the name of the medication that I am taking? Is it the brand name or the generic name?
- 10.- What are the possible side effects for my medication? (Be sure your doctor is informed about something you might be allergic to or if you are taking any other medication including prescription medications).
- 11.- At what time of the day should I take my medication?
- 12.- Should I take them at meal time?
- 13.- Are there any foods, beverages or food supplements that I should avoid when I am taking my medication?
- 14.- What should I do if I didn't take my medication at the time of the day that I was told by my doctor? Should I take them when I remember or should I wait until next day?

Yes we can: Prevent and control high blood pressure

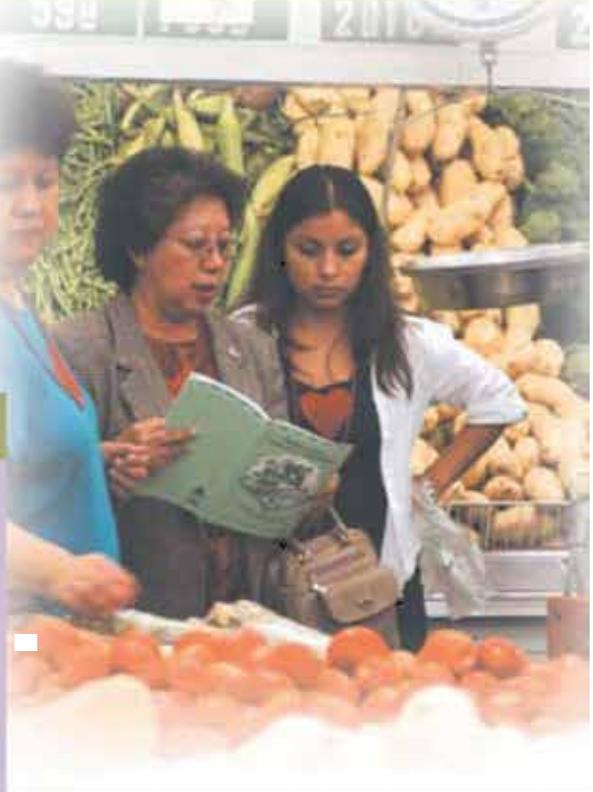
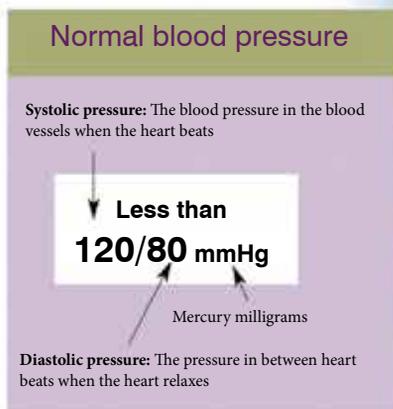
▶ What you should know about the prevention and control of high blood pressure

High blood pressure: A force that requires attention

Blood pressure is defined as the force that the blood creates against the arterial wall. When the pressure is maintained high it is called hypertension or high blood pressure. This condition is dangerous since it can cause strokes, heart attacks, blindness or irreversible damage to the kidneys. No one is exempt from suffering one of these diseases and as one gets older the risks increase.

Know what your blood pressure is

High blood pressure is known as the “silent killer” because, in general, does not present any symptoms. The numbers shown in your blood pressure reading are the only warning sign.



The readings for blood pressure for adults

What the blood pressure number mean (adults 18 years or older)

Level	First Number (Systolic pressure)	Second Number (Diastolic pressure)	Results
Level	Less than 120 mmHg	Less than 80 mmHg	Good news!
Level	120 to 139 mmHg	80 to 89 mmHg	Be careful. Your blood pressure can become a problem. It is time to make changes on what you eat and drink, your weight and your smoking habit. Visit your doctor if you have diabetes.
Level	140 or more mmHg	90 or more mmHg	You have high blood pressure. Your doctor can instruct you how to lower it.

The readings are for persons that are not taking medication for blood pressure and do not have any short lasting illness.



U.S. DEPARTMENT OF HEALTH AND HUMAN SERVICES
National Institutes of Health
National Heart, Lung, and Blood Institute



Medications for High Blood Pressure

If you have high blood pressure, it is possible that the lifestyle and the habits described earlier may not reduce sufficiently your blood pressure. If this happens it will be necessary for you to take medication.

Even if you need to take medication, it is necessary that you change your lifestyle. That will help your medication to act in a more efficient way and it may also help in reducing the amount of medication you may need to take.

There are a lot of medications to reduce high blood pressure. Each one acts in a different way. *Many people have to take two or more different medications for their high blood pressure to come down to a healthy level.*



Medications for High Blood Pressure

Category of Medications	How they work
Diuretics	They are also known as “water pills” because they work on your kidneys and they help you eliminate excessive water and sodium from the body through urine.
Beta blockers	They reduce the nerve impulses send to the heart and to the blood vessels. That reduces the force and the frequency of the heart beats. It reduces the blood pressure and the heart works less.
ACE (Angiotensin converting enzymes) inhibitors	Prevent the formation of the Angiotensin II hormone that normally causes stretching of the blood vessels. The blood vessels relax and the pressure is reduced.
Angiotensin antagonists	Protect the blood vessels from the Angiotensin II. Consequently it widens the blood vessels and reduces the blood pressure.
Calcium channel blockers	Prevent calcium from getting into the heart muscles and the blood vessels. The blood vessels relax and the pressure is reduced.
Alfa blockers	They reduce the nerve impulses to the blood vessels and permit the blood to flow easier.
Alfa beta blockers	Act in the same way the alfa blockers but they also reduce the frequency of the heart beats the same way as the beta blockers.
Nervous system inhibitors	They relax the blood vessels by controlling the nerve impulses
Vessel dilators	They directly open the blood vessels since they relax the muscles in the walls of the vessels.



Practical advice that will help you remember to take your blood pressure medication

When you begin taking a medication, consult with your doctor so he can tell you what the proper medication for you is, and what dosage to take. If adverse effects present themselves, talk it over with your doctor so he can adjust or change your medication. If you are worried because of the cost of the medication consult your doctor or your pharmacist since there could be a more economical medication or a generic type of that same medication that could substitute the one the doctor prescribed.

It is important that you take your medication according to your doctor's prescription. This can prevent heart attacks, strokes, and congestive heart failure disorders that cause the heart to reduce its capacity to pump the blood that the body needs.

It is common for one to forget to take his or her medication. But taking your medication could become one of your daily habits the same as washing your teeth or putting on your socks. Read what is contained in the next table. There you will find some practical advice that will help you to remember to take your blood pressure medication.

- Place the photograph of a loved one or of yourself on the refrigerator door next to a note that says "Remember to take the blood pressure medication."
- Place the blood pressure medication on the nightstand next to your bed.
- Place your blood pressure medication next to your toothbrush so you will remember to take it after you brush your teeth.
- Write on post-it-notes and stick them in places where you can see them and be reminded to take your blood pressure medication. You can place them on your refrigerator door, on your mirror or on your front door.
- Organize a system with a friend that also takes medication were you can remind each other on a daily basis so you can call and remind each other to take your medication.
- Ask your son, daughter, grandson or granddaughter to call you every day to remind you to take your medication. It is an excellent way to keep in touch and besides children love to help their elders.
- Place your medication on a weekly pill case that you can buy at any pharmacy.
- If you own a personal computer, make it that every time you turn it on it will remind you to take your medication or subscribe to a free e-mail service that will send you a daily reminder.
- Remember to refill your prescription. Each time you refill your prescription write yourself a reminder you can see at least a week before your next refill.

It is possible that even taking your medication your blood pressure is not under control. Everybody (specially the elderly) should try to maintain their blood pressure bellow 140/90 mmHg. If your blood pressure is above these numbers consult your doctor about changing your prescription or your lifestyle to help you reduce your high blood pressure.

Some over the counter medications like the ones for arthritis, analgesics and dietetic supplements like Ephedra and Citrus Aurantium can increase your blood pressure. Be sure to tell your doctor if you are taking any over the counter medication and ask him/her if that medication can cause difficulties for your blood pressure to be under control.



6 things you can do to prevent and control high blood pressure

- 1.- Talk with your health professional.** Ask him or her to take your blood pressure and to explain to you what those numbers mean. If it is necessary for you to take medication, make sure you understand what the medication does and when you have to take it and then take them as your doctor instructed you.
- 2.- Maintain a healthy weight.** If you are overweight, try to lose weight. Follow a nutritional plan that emphasizes eating fruits, vegetables and low fat dairy products, foods low in total fat specially saturated fat and low in cholesterol. Reduce the size of the portions you are eating, specially the ones with a high calorie count and try to eat only the amount of calories you burn per day (or less than that if you want to lower your weight).
- 3.- If you drink alcoholic beverages,** drink in moderation. Studies have showed that if women have more than one drink per day and men have more than two drinks per day their blood pressure can go up. It is very important to know that a drink is a can or bottle of beer, a glass of wine or a prepared drink like rum and coke or a margarita. Pregnant women should not drink alcohol.
- 4.- Do more physical activities.** Do moderate physical activity like riding a bicycle or walking at a fast pace at least 30 minutes a day. If you do not have 30 free minutes during the day, try to do two fifteen minute sessions or three 10 minute sessions of physical activity.
- 5.- Reduce your salt and sodium consumption.** Read the content labels of each food in order to select those canned, processed or fast food items that contain low sodium. Reduce your sodium consumption to a maximum of 2,400 mg or to the equivalent of a spoon of salt per day. Try to reduce the consumption of fast foods with a high content of salt or sodium.
- 6.- Stop smoking.** Smoking increases the risk of heart disease, stroke, peripheral arterial disease and various types of cancer.

This translation was not done by the CDC nor by the U.S. Department of Health and Human Services. Dr. Balcázar takes full responsibility for the translation content. This is not an official translation.

Resources to help you stay healthy



The guide to reduce high blood pressure “Your Guide to Lowering High Blood Pressure” includes information about detection, prevention and treatment of high blood pressure. It also shows the DASH diet, effective in the prevention and reduction of high blood pressure and information specific for women. <http://www.nhlbi.nih.gov/hbp/>

“Aim for a Healthy Weight” includes a table to calculate body mass index (BMI), advise on what foods to buy and how to prepare them and a menu planner on how to design and prepare daily meals with the allowed calories per day. http://www.nhlbi.nih.gov/health/public/heart/obesity/lose_wt/

“Heart and Vascular Diseases” includes interactive material for persons with heart disease and for those who want to prevent those types of diseases. <http://www.nhlbi.nih.gov/health/public/heart/index.htm#chol>

General information and publications.

National Heart, Lung and Blood Pressure
P.O. Box 30105
Bethesda, MD 20824-0105
Ph.: 301-592-8573; Fax 301-592-8563
(Monday thru Friday, 9 a.m. to 5 p.m. EST)
TTY 240-629-3255

<https://www.nhlbi.nih.gov/>



U.S. DEPARTMENT OF HEALTH AND HUMAN SERVICES
National Institutes of Health
National Heart, Lung, and Blood Institute
National High Blood Pressure Education Program

NIH Publication No. 04-5261
May 2004