

PATIENT SELF-CARE GUIDE: High Blood Pressure

Visiting Nurse Service Of New York[•] HOMECARE We Bring The Caring Home[•]

PATIENT SELF-CARE GUIDE:

HIGH BLOOD PRESSURE

VisitingNurseServiceOf NewYork[®] HOME CARE[®] We Bring The Caring Home[®]

Design by Mariscal Design, Illustrations by Lysa Hawke.

©2008 by the Visiting Nurse Service of New York. All rights reserved. No part of this publication may be reproduced, stored in a retrieval system or transmitted in any form or by any means, electronic, mechanical, photocopying, recording, or otherwise without the written permission of the publisher.

Table of Contents

| High Blood Pressure |
|--|
| Complications |
| Risk factors |
| What You Can Do to Control High Blood Pressure |
| Using a Home Blood Pressure Monitoring Device is Easy |
| Blood Pressure Levels |
| Lifestyle Changes Help Control Blood Pressure9 |
| Body Mass Index (BMI) Chart10 |
| What is a DASH Diet? 12 |
| Reading Food Labels 16 |
| Diet Tips |
| Salt and Sodium Tips 26 |
| Exercise to Control Blood Pressure Tips |
| Calories and Exercise |
| Medications Used to Treat High Blood Pressure 30 |
| Medication Tips |
| What is a Hypertension Action Plan? |
| Stress Reduction |
| Relaxing Your Mind and Body 44 |
| Blood Pressure Log |
| It's a Partnership! 49 |
| Additional Resources |

HIGH BLOOD PRESSURE

Know the facts and take control

BLOOD PRESSURE is a measure of the force of your blood against the walls of your arteries – the blood vessels that carry blood from your heart to other parts of the body. The medical term for high blood pressure is *hypertension*.

Blood Pressure readings that are usually higher than 120/80 are considered too high and unhealthy. When blood pressure is too high, the heart has to work harder than normal to get blood to all parts of the body. There is also increased pressure on all of the blood vessels.

Complications

High Blood Pressure (Hypertension) is Dangerous

Uncontrolled high blood pressure can cause:

- Heart disease
- Stroke
- Kidney disease
- Problems with blood vessels



| ~ | _ |
|---------------|--------|
| . F | |
| | 1 |
| F P | 2 |
| • T O Z | 3 |
| * L P E D | 4 |
| * PECFD | 5 |
| ≝ E D F C Z P | 6 |
| * FELOPZD | 7 8 |
| DEFPOTEC | 8 |
| | |

- Eye problems
- Sexual problems
- Confusion or memory loss
- Early death

Who has high blood pressure?

- About 3 out of 10 New Yorkers have a diagnosis of high blood pressure
- More than 50% of those over 65 years of age have high blood pressure
- African-Americans are more likely to have high blood pressure than others
- Many people have high blood pressure and don't know it because they have no symptoms
- Since there usually are no early symptoms, the only way to know you have high blood pressure is to check for it regularly

AN IMPORTANT STEP IN CARING FOR YOURSELF IS TO HAVE YOUR HEALTHCARE PROFESSIONAL CHECK YOUR BLOOD PRESSURE

Risk Factors

Some Factors Associated With High Blood Pressure *Can* Be Controlled:

- Excessive weight/obesity
- Eating too much salt
- Lack of physical activity
- Smoking
- Stress
- Oral contraceptive hormones
- Use of alcohol and drugs

Other Factors Associated With High Blood Pressure *Cannot* Be Controlled:

- Heredity (family history of hypertension)
- Gender
- Race (African American heritage)
- Age

What You Can Do to Control High Blood Pressure

Check Your Own Blood Pressure

- A home blood pressure monitor is inexpensive, accurate and easy to use
- It can be purchased at most pharmacies or department stores
- Discuss with your health care provider how often to check your blood pressure
- Write your blood pressure readings, in a log, with the date and time, and bring it to your appointments with your health care provider

Using a Home Blood Pressure Monitor is Easy

Checking your blood pressure on a regular schedule:

- Enables you to partner with your doctor to control high blood pressure
- Reduces the need for frequent doctor appointments
- Improves your self-care by identifying out-of-range blood pressure readings

If you have one high blood pressure reading it does not mean you have a diagnosis of high blood pressure. Blood pressure may vary during the day and sometimes during visits to the doctor. A diagnosis of high blood pressure is based on more than one blood pressure reading taken on more than one occasion. Your doctor may ask you to record your blood pressure at home or at work to provide additional information.



BLOOD PRESSURE LEVELS

| | OPTIMAL GOAL FOR MOST PEOPLE* | PRE-HYPERTENSION ON THE WAY TO DEVELOPING HYPERTENSION | HYPERTENSION HIGH BLOOD PRESSURE |
|--------------------------------------|--|---|--|
| Systolic Top Number | Below 120 | 120-139 | 140 or higher |
| | AND | OR | AND |
| Diastolic Bottom Number | Below 80 | 80 to 89 | 90 or higher |

Both systolic (top) and diastolic (bottom) numbers are important. When either number is too high, the level changes. For example: if your blood pressure is 119/92, you have high blood pressure because the bottom number is too high (even if the top number is OK).

* If you have diabetes or chronic kidney disease, your blood pressure goal should be below 130/80

Source: JNC7 Report, Executive Summary: HFSA 2006 Comprehensive Heart Failure Practice Guidelines

Lifestyle Changes Help Control Blood Pressure

Your health care provider might recommend that you change your behavior in the following ways to reduce your blood pressure:

- Maintain a healthy weight
- Exercise in moderation Get at least 30 minutes of moderate physical activity (for example: brisk walking) at least 5 times per week*
- Manage stress
- Cut back on salt/sodium
- Cut back or stop smoking
- Limit or stop drinking alcohol
 Limit: Men 2 drinks per day
 Women 1 drink per day**
- Adjust your diet

* Check with your health care provider before starting an exercise program

```
** 1 drink = \frac{1}{2} oz or 15 ml ethanol (e.g. 12 oz beer,
5 oz wine or 1.5 oz whiskey)
```

If your blood pressure remains high after you make these changes you may be started on medication.



Body Mass Index (BMI)

Excess body weight promotes high blood pressure, increases the risk of a heart attack, and increases the risk of diabetes.

WHAT DOES BMI MEAN?

| CATEGORY | BMI | RESULT |
|---------------|---------------|---|
| Normal Weight | 18.5 – 24.9 | Good for you. Try not to gain weight. |
| Overweight | 25 – 29.9 | Do not gain weight, especially if your waist measurement is high. |
| Obese | 30 or greater | You need to lose weight. Lose weight slowly-about ½ pound to 2 pounds per week. See your healthcare provider or registered dietitian if you need help. |



| BMI | 21 | 22 | 23 | 24 | 25 | 26 | 27 | 28 | 29 | 30 | 31 |
|-------|-----|-----|-----|-----|-----|--------|-----|-----|-----|-----|-----|
| HT | | | | | | WT (LB |) | | | | |
| 4'10" | 100 | 105 | 110 | 115 | 119 | 124 | 129 | 134 | 138 | 143 | 148 |
| 5'0" | 107 | 112 | 118 | 123 | 128 | 133 | 138 | 143 | 148 | 153 | 158 |
| 5'2" | 115 | 120 | 126 | 131 | 136 | 142 | 147 | 153 | 158 | 164 | 169 |
| 5'4" | 122 | 128 | 134 | 140 | 145 | 151 | 157 | 163 | 169 | 174 | 180 |
| 5'6" | 130 | 136 | 142 | 148 | 155 | 161 | 167 | 173 | 179 | 186 | 192 |
| 5'8" | 138 | 144 | 151 | 158 | 164 | 171 | 177 | 184 | 190 | 197 | 203 |
| 5'10" | 146 | 153 | 160 | 167 | 174 | 181 | 188 | 195 | 202 | 209 | 216 |
| 6'0" | 154 | 162 | 169 | 177 | 184 | 191 | 199 | 206 | 213 | 221 | 228 |
| 6'2" | 163 | 171 | 179 | 186 | 194 | 202 | 210 | 218 | 225 | 233 | 241 |
| 6'4" | 172 | 180 | 189 | 197 | 205 | 213 | 221 | 230 | 238 | 246 | 254 |

BODY MASS INDEX (BMI) CHART

Source: Clinical Guidelines on the Identification, Evaluation and Treatment of Overweight and Obesity in Adults: The Evidence Report; NIH Publication No. 984083, National Heart, Lung, and Blood Institute, in cooperation with the National Institute of Diabetes and Digestive and Kidney Diseases, National Institutes of Health, June 1998.

What is the **DASH** diet?

Dietary **A**pproaches to **S**top **H**ypertension (or Control Blood Pressure)

- The DASH diet is designed to prevent high blood pressure.
- It is a diet rich in fruits, vegetables, and low fat dairy with reduced saturated fat.
- The number of daily servings in a food group will vary based upon on your energy needs.
- Check with your healthcare provider about whether the DASH diet is the right diet for you.



THE EXAMPLE OF THE DASH DIET THAT FOLLOWS IS BASED ON A 2,000 CALORIE PER DAY MEAL PLAN

| FOOD GROUP | SERVING PER WEEK/DAY | SERVING SIZE | EXAMPLES AND NOTES | SIGNIFICANCE |
|---------------------------|-------------------------|---|---|--|
| Grain & Grain Products | 7-8 per day | 1 slice bread 1 cup dry cereal* 1∕2 cup cooked rice, pasta or cereal | Whole wheat bread, English muffin, pita bread, bagel, cereals, grits, oatmeal, crackers, unsalted pretzels and popcorn | Major source of energy and fiber |
| Vegetables | 4-5 per day | 1 cup raw leafy vegetable ¹/₂ cup cooked vegetable 6 oz vegetable juice | Tomatoes, potatoes, carrots, green peas, squash, broccoli, turnip greens, collards, kale, spinach, artichokes, green beans, lima beans, sweet potatoes | Rich sources of potassium, magnesium, and fiber |

| FOOD GROUP | SERVING PER WEEK/DAY | SERVING SIZE | EXAMPLES AND NOTES | SIGNIFICANCE |
|------------------------------------|-------------------------|---|---|--|
| Fruits | 4-5 per day | 6 oz fruit juice 1 medium fruit ¼ cup dried fruit ½ cup fresh, frozen or canned fruit | Apricots, bananas, dates, grapes, oranges, orange juice, grapefruit, grapefruit juice, mangoes, melons, peaches, pineapples, prunes, raisins, strawberries, tangerines | Important sources of potassium, magnesium, and fiber |
| Low fat or fat free dairy foods | 2-3 per day | 8 oz milk 1 cup yogurt 1 ½ oz cheese juice | Fat free (skim) or low fat (1%) milk, fat free or low fat buttermilk, fat free or low fat regular or frozen yogurt, low fat and fat free cheese | Major sources of calcium and protein |
| Meats, poultry, and fish | 2 or less per day | 3 oz cooked meats, poultry, or fish | Select lean, with visible fat trimmed Broil or roast Remove skin from poultry | Rich sources of protein and magnesium |

| FOOD GROUP | SERVING PER WEEK/DAY | SERVING SIZE | EXAMPLES AND NOTES | SIGNIFICANCE |
|-------------------------------|-------------------------|---|---|---|
| Nuts, seeds, and dry beans | 4-5 per week | ⅓ or ½ cup nuts 2 Tbsp or ½ oz seeds ½ cup cooked dry beans | Almonds, filberts, mixed nuts, peanuts, walnuts, sunflower seeds, kidney beans, lentils and peas | Rich sources of energy magnesium potassium, protein, and fiber |
| Fats & oils** | 2-3 per day | 1 tsp soft margarine 1 Tbsp low fat mayonnaise 2 Tbsp light salad dressing 1 tsp vegetable oil | Soft margarine, low fat mayonnaise, light salad dressing, vegetable oil (such as olive, corn, canola, or safflower) | Besides fats added to foods, remember to choose foods that contain less fats |
| Sweets | 5 per week | 1 Tbsp sugar 1 Tbsp jelly or jam ½ oz jelly beans 8 oz lemonade | Maple syrup, sugar, jelly, jam, fruit-flavored gelatin, jelly beans, hard candy, fruit punch, sorbet, ices | Sweets should be low in fat |

* Serving sizes vary between $\frac{1}{2}$ to 1 $\frac{1}{4}$ cup. Check the products nutrition label.

** Fat content changes serving counts for fats and oils: For example, 1 Tbsp of regular salad dressing equals 1 serving, but 1 Tbsp of a low fat dressing equals ½ serving and 1 Tbsp of fat free dressing equals 0 servings.

Reading Food Labels

Here's an example of a Nutrition Facts label. It lists the serving size and the number of servings per container. In other words, if you eat twice the serving listed on the label, you would need to double all the numbers in the Nutrition Facts section.

CHILI WITH BEANS

Nutrition Facts

| Serving Size: 1 cup (253 g) Serving per container: 2 | |
|---|----------------------|
| Amounts per Serving | |
| Calories 260 | Calories from Fat 72 |
| | % Daily Value |
| Total Fat 8g | 13% |
| Saturated Fat 3g | 17% |
| Cholesterol 130mg | 44% |
| Sodium 1010mg | 42% |
| Total Carbohydrate 22g | 7% |
| Dietary Fiber 9g | 36% |
| Sugars 4g | |
| Protein 25g | |

Using the Information

Compare labels of similar foods. For example, choose the product with a smaller amount of saturated fat, cholesterol, and sodium and try to select foods with more fiber.

Calories

If you are trying to lose or maintain your weight, the number of calories you take in is very important. To lose weight you need to eat fewer calories than your body burns. Use the labels to compare similar products and determine which contains fewer calories.

Total Fat

This tells you how much fat is in each serving. It includes fats that are good such as mono and polyunsaturated fats, and fats that are not so good such as saturated and trans fats. Mono and polyunsaturated fats can help to lower your blood cholesterol and protect your heart. Saturated and trans fat can raise your blood cholesterol and increase your risk of heart disease.



Peanut Butter

Examples of monounsaturated "good" fats include:

- Avocado
- Canola oil
- Almonds, cashews, pecans, and peanuts
- Olive oil and olives
- Peanut butter and peanut oil
- Sesame seeds

Examples of polyunsaturated "good" fats include:

- Corn oil
- Cottonseed oil
- Safflower oil
- Sunflower oil
- Walnuts
- Pumpkin or sunflower seeds
- Soft (tub) margarine
- Mayonnaise
- Salad dressings

Examples of saturated "bad" fats include:

- High-fat dairy products such as full-fat cheese, cream, ice cream, whole milk, 2% milk and sour cream
- High-fat meats like regular ground beef, bologna, hot dogs, sausage, bacon and spare ribs
- Lard
- Butter
- Fatback or salt pork
- Cream sauces
- Chocolate
- Palm oil or palm kernel oil
- Coconut or coconut oil
- Poultry (chicken or turkey) skin

Examples of trans "bad" fats include:

- Processed foods like snacks (crackers and chips) and baked goods (muffins, cookies and cakes) with hydrogenated oil or partially hydrogenated oil
- Stick margarines
- Shortening
- Some fast food items such as french fries

Sodium

If you have high blood pressure it is important to eat less sodium. Foods high in sodium cause the body to retain fluid. Retaining fluid in the body increases the blood pressure. Some foods with a high sodium content such as pickles and soy sauce taste salty. However, there is sodium in many foods that don't always taste salty like salad dressings, cheeses, canned soups and other packaged goods. Reading labels can help you compare the sodium in different foods. Adults should aim for less than 2400mg per day.

Total Carbohydrate

Look at the grams of total carbohydrate, rather than the grams of sugar. Total carbohydrate on the label includes sugar, complex carbohydrate, and fiber. If you only look at the sugar number, you might avoid nutritious foods such as fruits and milks thinking they are too high in sugar. Remember the grams of sugar and fiber are counted as part of the grams of total carbohydrate.

Fiber

Fiber is the part of plant foods that is not digested. Dried beans such as kidney or pinto beans, fruits, vegetables and grains are all good sources of fiber.

List of Ingredients

Ingredients are listed in descending order by weight, meaning the first ingredient makes up the largest proportion of the food. Check the ingredient list to find things you would like to avoid like coconut oil or palm oil, which are high in saturated fat. Avoid hydrogenated oils that are high in trans fats. Identify heart-healthy items such as monounsaturated fats and whole grains on the ingredients list.

Diet Tips

Change gradually

- If you now eat one or two vegetables per day, add a serving at lunch and another at dinner.
- If you don't eat fruit now or have only juice at breakfast, add a serving to your meals or have it as a snack.
- Gradually increase your use of fat free and low fat dairy products to three servings per day. For example, drink milk with lunch or dinner instead of soda, sugar-sweetened tea, or alcohol. Choose low fat (1%) or fat free (skim) dairy products to reduce your intake of saturated fat, total fat, cholesterol, and calories.
- Read food labels on margarines and salad dressings to choose those lowest in unsaturated fat. Many items are now trans-fat free.



Diet Tips

Treat meat as one part of the whole meal, instead of the main focus.

- Limit meat to 6 oz per day three to four oz is about the size of a deck of cards.
- If you now eat large portions of meat, cut back gradually by about 1/2 to 1/3 per meal.
- Include 2 or more vegetarian-style (meatless) meals per week.
- Increase servings of vegetables, rice, pasta, and dry beans in meals. Try casseroles and pasta, and stirfry dishes, which have less meat and more vegetables, grains, and dry beans.
- Eat fish that is low in saturated fat and cholesterol.



| FISH | % TOTAL FAT | SATURATED FAT | OMEGA-3 | CHOLESTEROL |
|--------------------|-------------|---------------|---------|-------------|
| Haddock | 0.7 | 0.1 | 0.2 | 57 |
| Cod or Scrod | 0.7 | 0.1 | 0.2 | 43 |
| Orange Roughy | 0.7 | 0.1 | n/a | 23 |
| Perch | 0.9 | 0.2 | 0.3 | 90 |
| Pollock | 1.0 | 0.1 | 0.4 | 71 |
| Grouper | 1.0 | 0.2 | 0.2 | 37 |
| Yellowfin Tuna | 1.0 | 0.2 | 0.2 | 45 |
| Snapper | 1.3 | 0.3 | 0.3 | 37 |
| Monkfish | 1.5 | n/a | n/a | 25 |
| Ocean Perch | 1.6 | 0.2 | 0.3 | 42 |
| Mackerel (King) | 2.0 | 0.4 | 0.3 | 53 |
| Halibut | 2.3 | 0.3 | 0.4 | 32 |
| Striped Bass | 2.3 | 0.5 | 0.8 | 80 |
| Smelt | 2.4 | 0.5 | 0.7 | 70 |
| Rainbow Trout | 3.4 | 0.6 | 0.6 | 57 |
| Swordfish | 4.0 | 1.1 | 0.6 | 39 |
| Bluefish | 4.2 | 0.9 | 0.8 | 59 |
| Freshwater Catfish | 4.3 | 1.0 | 0.4 | 58 |
| Bluefin Tuna | 4.9 | 1.3 | 1.2 | 32 |
| Salmon (Atlantic) | 6.3 | 1.0 | 1.4 | 66 |
| Albacore Tuna | 7.2 | 1.9 | 2.1 | 38 |
| Lake Trout | 9.4 | 1.2 | 1.4 | 36 |
| Chinook Salmon | 10.4 | 2.5 | 1.4 | 66 |
| Mackerel(Atlantic) | 13.9 | 3.3 | 2.3 | 70 |
| Herring (Atlantic) | 18.0 | 2.0 | 1.6 | 60 |

Diet Tips

Use fruits or other foods low in saturated fat, cholesterol, and calories as desserts and snacks.

- Fruits and other low fat foods offer great taste and variety. Use fruits canned in fruit juice. Fresh fruits require little or no preparation. Dried fruits are a good choice to carry with you or to have ready in the car.
- Try these snack ideas:
 - unsalted pretzels or nuts mixed with raisins
 - low fat graham crackers
 - low fat and fat free yogurt and frozen yogurt
 - popcorn with no salt or butter added
 - raw vegetables
- Additional tips
 - Choose whole grain foods for added nutrients
 - Include fresh, frozen, or no-salt added canned fruits and vegetables



Don't get discouraged

The DASH diet plan is a new way of eating-for a lifetime.

If you slip from the eating plan for a few days, don't let it keep you from reaching your health goals.

Get back on track and take control.

Salt and Sodium

Tips

- Use reduced sodium or no-salt-added products. For example, choose low or reduced sodium, or no-salt-added foods and condiments when available.
- Buy fresh, plain frozen, or canned with "no-salt-added" vegetables.
- Use fresh poultry, fish, and lean meat, rather than canned, smoked, or processed types.
- Choose ready-to-eat breakfast cereals that are lower in sodium.



- Limit cured foods (such as bacon and ham), foods packed in brine (such as pickles, pickled vegetables, olives, and sauerkraut), and condiments (such as MSG, mustard, horseradish, catsup, and barbecue sauce). Limit even low sodium soy sauce and teriyaki sauce.
- Use spices instead of salt. In cooking and at the table, flavor foods with herbs, spices, lemon, lime, vinegar, or salt-free seasoning blends. Start by cutting salt in half.
- Cook rice, pasta, and hot cereals without salt. Cut back on instant or flavored rice, pasta, and cereal mixes, which usually have added salt.
- Choose "convenience" foods that are lower in sodium. Cut back on frozen dinners, mixed dishes such as pizza, packaged mixes, canned soups or broths, and salad dressings – these often have a lot of sodium.
- Rinse canned foods, such as tuna, to remove some sodium.



Exercise to Control Blood Pressure

Tips

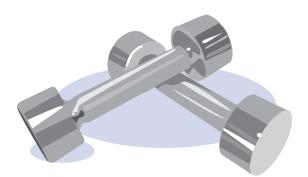
Exercising is important in controlling blood pressure and preventing complications

- Increase the time spent exercising: play with your kids, do some gardening, bicycle around the neighborhood, join a health club, walk, dance, play tennis, soccer, basketball, etc. Pick an activity you enjoy and make it part of your daily routine
- Decrease the time spent sitting: watching television, on the computer

Calories and Exercise

The following table estimates the number of calories burned for a 150 lb. person performing an activity for 60 minutes. The numbers will vary depending on weight, body composition, and level of intensity.

| Bicycling | 441 | Jumping rope | 720 |
|-------------------------|-----|--------------------------|-----|
| Dancing | 370 | Mowing lawn (non-riding) | 324 |
| Gardening | 324 | Rollerblading | 504 |
| Golf – using cart | 252 | Shoveling snow: by hand | 432 |
| Golf – carrying clubs | 396 | Sitting | 81 |
| Hiking: cross country | 432 | Skiing: downhill | 432 |
| Horseback riding | 288 | Sleeping | 45 |
| Housecleaning – general | 252 | Softball | 360 |
| Ice skating | 504 | Swimming | 603 |
| Jogging | 675 | Tennis | 549 |
| | | 1 | |





Medications Used to Treat High Blood Pressure

Taking the medications prescribed by your health care provider is essential to improving your health and to maintain the quality of your life. It's important to know the purpose, dose and side effects of your medications.

This section is intended to give you the basics of some blood pressure medications. It is not intended to be a complete list or to replace the full instructions given to you by your health care provider and/or pharmacist.

DIURETICS are also called water pills. They reduce the amount of salt and water in your body. There are many different types of diuretics. They are often used along with other high blood pressure medicines and may be combined with another medicine in one pill. You can take this medication in the morning or early evening to minimize having to urinate during the night.

SIDE EFFECTS may include tiredness and an increase in the amount or frequency of urination. These side effects should lessen with time. You may also notice lightheadedness when you get up from a sitting or lying position; getting up slowly can help.

Common Diuretics

| GENERIC NAME | BRAND NAME |
|---------------------|------------|
| Bumetanide | Bumex |
| Furosemide | Lasix |
| Hydrochlorothiazide | Esidrix |
| Metolazone | Zaroxolyn |
| Torsemide | Demadex |

Call your doctor immediately if you have any of these symptoms:

- weight gain of ≥ 3lbs over night or ≥ 5 lbs or more in 7 or fewer days
- symptoms of potassium loss, such as dryness of your mouth, excess thirst, muscle cramps, irregular heartbeat, mood changes, nausea or vomiting, unusual tiredness or weak pulse

Medications Used to Treat High Blood Pressure (continued)

BETA-BLOCKERS help your heart beat slower and with less force. When your heart pumps less blood through the vessels, your blood pressure goes down.

SIDE EFFECTS may include dizziness, light-headedness, fatigue, trouble sleeping and sexual dysfunction. Communicating with your doctor while you begin or adjust beta-blocker treatment is important. Adjustments in the doses of your medications may diminish or eliminate many of the side effects.

Common Beta-Blockers

| GENERIC NAME | BRAND NAME |
|----------------------|------------|
| Atenolol | Tenormin |
| Bisoprolol | Zebeta |
| Carvedilol | Coreg |
| Metoprolol | Lopressor |
| Metoprolol Succinate | Toprol XL |

Call your doctor immediately if you have any of these symptoms:

- Wheezing
- Difficulty breathing
- Cold hands and feet
- Depression
- Slow heart beat
- Swelling of your feet, ankles or lower legs

Medications Used to Treat High Blood Pressure (continued)

ANGIOTENSIN-CONVERTING ENZYME (ACE)

INHIBITORS prevent your body from making a hormone called angiotension II, which causes blood vessels to become narrow. With ACE inhibitors your blood vessels remain open and your blood pressure goes down.

SIDE EFFECTS may include light-headedness, headache, low blood pressure, rash, dry cough, altered sense of taste or kidney problems. Some of these side effects may occur early in your treatment, but they should go away once your body gets used to the medication. It may take several weeks or months for your symptoms to improve.

Common Ace Inhibitors

| GENERIC NAME | BRAND NAME |
|--------------|-------------------|
| Captopril | Capoten |
| Enalapril | Vasotec |
| Fosinopril | Monopril |
| Lisinopril | Prinivil, Zestril |
| Quinapril | Accupril |
| Ramipril | Altace |
| Trandolapril | Mavik |

Call your doctor immediately if you have any of these symptoms:

- swelling of the face, mouth, hands or feet; fever and chills; trouble swallowing or breathing; stomach pain; itching; yellow eyes or skin
- extended periods of light-headedness or dizziness

Medications Used to Treat High Blood Pressure (continued)

ANGIOTENSIN II RECEPTOR BLOCKERS (ARBS)

block the hormone angiotensin II, therefore blood vessels remain wide open and your blood pressure goes down.

SIDE EFFECTS may include depression, stomach pain, cough, respiratory infection, sore throat, muscle aches, or runny nose. Communicate with your health care provider if these symptoms do not go away or are severe.

Common Angiotnesin II Receptor Blockers (ARBS)

| GENERIC NAME | BRAND NAME |
|--------------|------------|
| Candesartan | Atacand |
| Eprosartan | Teveten |
| Irbesartan | Avapro |
| Losartan | Cozaar |
| Telmisartan | Micardis |
| Valsartan | Diovan |

Call your doctor immediately if you have any of these symptoms:

• swelling of the face, eyes, lips, tongue, arms or legs

Medications to Control Blood Pressure

Tips

- If you have been instructed to take prescribed medications, ask your health care provider about the name and purpose of the medication
- Ask any questions you might have about your treatment or medications
- Know how and when to take the medications, possible side effects and what to do if they occur
- Know what foods to avoid while taking the medications
- Keep an up to date list of all the medications you are taking, including over-the-counter or non-prescription medications or supplements, and take it to your appointments
- Try to take the medication at the same time every day
- Medication containers or pillboxes are available for you to prepare all your medications up to one week in advance-most pharmacies carry these boxes
- Don't stop taking or skip doses of your medications
 high blood pressure cannot be cured, only controlled

What is a Blood Pressure Action Plan?*

- A Blood Pressure Action Plan will help you to take the proper action based upon your blood pressure readings
- Your action plan will have three "zones"
- Each "zone" is in a different color: green, yellow or red (like the colors of a traffic light)
- Based upon your blood pressure readings, you will learn to identify which zone you are in and what actions to take
- Ask your health care provider at what blood pressure reading he/ she wants to be notified

*These guidelines are intended for the general population. If you have a condition such as Diabetes or Kidney Disease, your doctor may want your blood pressure targeted at a different range. ALWAYS follow the advice of your medical professional.

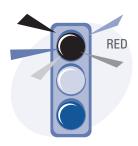
| <section-header><section-header></section-header></section-header> | BP READING Systolic BP 120 - 139 Diastolic BP 80 - 89 | ACTION PLAN If you are on medication, continue as ordered by your doctor Follow your treatment plan Do your usual activities Continue all behavior modification activities |
|--|---|--|
| Yellow Zone Means Caution This means your blood pressure is not well controlled Follow the Yellow Zone Action Plan | Systolic BP 140 –159 Diastolic BP 90 –99 | Notify your healthcare provider of these readings Continue medications as ordered Recheck blood pressure at various intervals |

ZONE

BP READING

Red Zone Means Stop

• This means your blood pressure is too high



Systolic BP ≥160 Diastolic BP >100

Remember high blood pressure often has no symptoms. However, some patients do experience headaches, shortness of breath, anxiety, and nosebleeds **ACTION PLAN**

Telephone your healthcare provider, go to the nearest emergency room or call 911 if you experience these more serious symptoms. They may be early signs of a stroke:

- Sudden numbness or weakness of the face, arm or leg, especially on one side of the body
- Sudden confusion, trouble speaking or understanding
- Sudden trouble seeing in one or both eyes
- Sudden trouble walking, dizziness, loss of balance or coordination
- Sudden, severe headache

Stress Reduction

- Stress can contribute to developing unhealthy behaviors, such as smoking, overeating, drinking too much alcohol or misusing drugs
- When you are stressed your body releases hormones that can overwork your heart.
- When you are stressed you are at a greater risk for high blood pressure, heart attack, stroke, irregular heart rhythm, blood clots and hardening of the arteries.

KNOW THE EFFECTS OF STRESS

| ON YOUR BODY | ON YOUR THOUGHTS & FEELINGS | ON YOUR BEHAVIOR |
|--|--------------------------------|---|
| Headache Chest pain Pounding heart High blood pressure Shortness of breath Muscle aches Back pain Clenched jaws Tooth grinding Stomach upset Constipation Diarrhea Increased sweating Tiredness Sleep problems Weight gain or loss Sexual problems | | Overeating Undereating Angry outbursts Drug abuse Excessive drinking Increased smoking Social withdrawal Crying spells Relationship conflicts Decreased productivity Blaming others |
| • Skin outbreaks | | |

Relaxing Your Mind and Body

- There are many relaxation techniques that you can learn to cope with stress.
- You may need to try a few to find the best relaxation techniques for you.
- Audiotapes are available for most of these techniques. You can usually find them in bookstores or health food stores.
- Begin by sitting or lying comfortably in a quiet place.

Relaxation Techniques:

PROGRESSIVE MUSCLE RELAXATION

This involves tensing and relaxing muscle groups one at a time. Begin with your facial muscles. Feel the difference between a tense and relaxed muscle. Move to all your muscles, from head to toe, until you have tensed and relaxed your whole body.

GUIDED IMAGERY

This technique uses your imagination. Close your eyes and imagine a relaxing scene. It may be a beautiful beach or a mountain top.

Picture yourself in this setting. What do you see, hear and smell? Focus on the scene for 10 - 15 minutes.

MEDITATION

Close your eyes. Breathe deeply into your abdomen, and concentrate on a single calming thought, word or object. If you are having difficulty staying focused, try repeating a word or sound over and over or focus on your breath – in through your nose and out through your mouth.



Blood Pressure Log

Use the following BP Log to record your blood pressure.Take it with you when you visit your healthcare provider.

Remember:

- Know what your BP goal should be.
- Take your BP around the same time.
- Avoid caffeine, nicotine and food for at least 30 minutes prior to a reading.



BLOOD PRESSURE LOG

| | | WEEK 1 | | |
|------|------|--------|----------|--------|
| DATE | TIME | B/P | ACTIVITY | WEIGHT |
| | | | | |
| | | | | |
| | | | | |
| | | | | |
| | | | | |
| | | | | |
| | | | | |
| | | | | |

| | | WEEK 2 | | |
|------|------|--------|----------|--------|
| DATE | TIME | B/P | ACTIVITY | WEIGHT |
| | | | | |
| | | | | |
| | | | | |
| | | | | |
| | | | | |
| | | | | |
| | | | | |
| | | | | |

| | | WEEK 3 | | |
|------|------|--------|----------|--------|
| DATE | TIME | B/P | ACTIVITY | WEIGHT |
| | | | | |
| | | | | |
| | | | | |
| | | | | |
| | | | | |
| | | | | |
| | | | | |
| | | | | |

| | | WEEK 4 | | |
|------|------|--------|----------|--------|
| DATE | TIME | B/P | ACTIVITY | WEIGHT |
| | | | | |
| | | | | |
| | | | | |
| | | | | |
| | | | | |
| | | | | |
| | | | | |
| | | | | |

It's a Partnership!

You and your healthcare provider should perform as a team. It is a good idea to ask any questions that need clarification.

THE FOLLOWING ARE SOME SUGGESTIONS:

What is my current blood pressure?

What should my blood pressure goal be?

How often should I check my blood pressure?

If my blood pressure is outside of the target range, at what point do I notify my healthcare provider?



Are there certain foods I need to avoid?

Are there any over-the-counter medications I need to avoid?

Can I drink alcohol? If yes, how much?

Can I eat salt? If yes, how much?

In addition to smoking cessation, increasing physical activity, and altering my diet, are there other lifestyle modifications I should consider?

Are there other resources in the community that could support me in my efforts?

What are some of the possible side effects of my medication(s)?

| ther quest | ions: | | | |
|------------|-------|------|------|--|
| | | | | |
| | | | | |
| | | | | |
| | | | | |
| | | | | |
| | | | | |
| | | | | |
| | | | | |
| | | | | |
| | | | | |
| | | | | |
| | | | | |
| | | | | |
| | | | | |
| | | | | |
| | | | | |
| | | | | |
| | | | | |

Additional Resources

www.americanheart.org/

www.cdc.gov/bloodpressure/

www.nhlbi.nih.gov/

www.surgeongeneral.gov/

www.thecommunityguide.org/tobacco/

Visiting Nurse Service Of New York^{*} HOMECARE We Bring The Caring Home^{*}

VISITING NURSE SERVICE OF NEW YORK

1250 Broadway, New York, NY 10001 www.vnsny.org