

# Understanding Hypertension

## Prevent and Control High Blood Pressure

### *Table of Contents*

- Blood Pressure: Do You Know Your Numbers?
- What you need to know for your blood pressure check
- My High Blood Pressure Action Plan
- Dangers of Not Controlling Your Blood Pressure
- DASH Eating Plan
- Sodium Restricted Diet Guidelines
- Understanding Food Labels
- Are You at Risk for Kidney Disease?
- Checking Your Blood Pressure at Home
- Staying Active to Prevent High Blood Pressure
- Test Your Knowledge – Blood Pressure Quiz

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## Blood Pressure: Do You Know Your Numbers?

### The main points

- High blood pressure often has no symptoms. Many people do not know they have it.
- If not treated, high blood pressure can lead to stroke, heart disease, kidney disease and many other health problems.
- You can take steps to keep your blood pressure in control, such as losing extra pounds, staying active, and limiting salt (sodium) and alcohol.

### What do the numbers mean?

Blood pressure is the pressure inside the arteries (blood vessels). It is measured in two numbers, such as 110/70 (110 over 70).

- The first or top number (systolic pressure) is the highest pressure in the arteries when the heart pumps blood into them.
- The second or bottom number (diastolic pressure) is the lowest pressure when the heart rests to refill between beats.

### When is blood pressure too high?

Look at the chart below. If your blood pressure stays below 120/80 at rest, you are in a healthy range. If your numbers are higher at rest, you'll want to discuss this with your health care provider.

### What causes high blood pressure?

In most cases, we don't know the cause. But we do know that some risk factors are linked to high blood pressure.

### Why it is important to know my risk factors?

Some risk factors can be controlled with lifestyle changes. Knowing your risk factors is the first step in preventing and controlling high blood pressure. Risk factors include:

- **Age** – The older you are, the greater your chance of getting high blood pressure.
- **Heredity** – High blood pressure can run in the family.
- **Race** – African Americans, for example, are more likely to have high blood pressure.
- **Overweight** – People who are overweight or obese are more likely to get high blood pressure.
- **Salt intake** – Too much sodium (salt) in the diet can increase blood pressure in some people.
- **Alcohol intake** – Too much alcohol can increase blood pressure.
- **Little exercise** – Lack of exercise can lead to being overweight and increase your risk for high blood pressure.
- **Tobacco use** – Smoking increases your blood pressure within the first few minutes of use.
- **Diabetes or other medical conditions** – Seven out of 10 people with diabetes have high blood pressure. High cholesterol, kidney disease and sleep apnea also make you more likely to have high blood pressure.
- **Stress** – Stress is hard to measure, but increased stress can lead to high blood pressure.

### Adults 18 years and older: What do your numbers mean?

When your blood pressure stays <b>below 120/80</b> at rest ...	You have a healthy blood pressure. A healthy lifestyle will help you keep it this way.
When your blood pressure stays <b>between 120/80 and 139/89</b> at rest ...	You are at increased risk for health effects from high blood pressure. Your health care provider may ask you to make changes in your diet, activity or other lifestyle habits.
When your blood pressure stays <b>over 140/90</b> at rest (or stays <b>over 130/80</b> if you have diabetes, heart failure or kidney disease) ...	This is more serious and may require additional treatment (including medications) in addition to lifestyle changes. The higher your blood pressure, the greater your risk for wear and tear on your arteries, heart disease and other health problems.

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## Can high blood pressure be cured?

In most cases, no. High blood pressure must be watched and treated for your whole life. Knowing your risk factors is the first step in preventing and controlling high blood pressure. With routine checks, high blood pressure can be found and treated early. Early treatment can reduce or prevent the problems high blood pressure can cause (stroke, heart or kidney disease).

## How is it treated?

To help control your blood pressure, your health care provider may prescribe one or more of the following:

- **Weight control** – A new meal plan may be the first step to control your blood pressure. Losing weight can also help you control cholesterol and diabetes.
- **Limit sodium (salt)** – Most of us eat much more salt than we need. You may be advised to avoid salty foods and cut down on salt in cooking and at the table.
- **Limit alcohol** – Ask your provider how much alcohol you can safely have.
- **Activity** – Even a moderate amount of activity can help you control blood pressure, weight, cholesterol, diabetes and stress. Ask your health care provider to help you get started.
- **Medication** – If you are given a medication to help control your blood pressure, be sure to take it as prescribed. Don't stop taking it on your own, even if you feel great. If you have side effects or concerns about taking it, talk with your health care provider.
- **Stop smoking** – Cigarette smoking can increase blood pressure. It is also a major risk factor for heart disease.
- **Manage your stress** – High levels of stress can help lead to high blood pressure. If your blood pressure is already high, too much stress can make it worse.

## What you can do to help prevent or control high blood pressure:

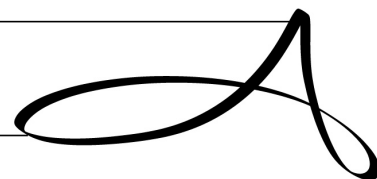
- Your blood pressure should be checked at every office visit. For healthy men and women, these checks should be done at least every two years. More frequent checks are needed for people at risk or who have had high blood pressure in the past. Ask your provider if you should check your blood pressure at home between visits.
- Work with your provider on a plan for making the lifestyle changes that can help control your blood pressure (control weight, stop smoking, use less salt and alcohol, exercise, manage stress).
- Take medications exactly as prescribed and tell your provider if you have problems taking your medicine (side effects, trouble affording prescriptions).
- Make sure your blood pressure reading is accurate. Don't smoke, use caffeine, or exercise for 30 minutes before your blood pressure is taken. Go to the bathroom and empty your bladder before your blood pressure is taken. Sit quietly for 5 minutes before your blood pressure is taken. For the blood pressure reading, sit in a chair with your back supported, feet flat on the floor, legs uncrossed, and arm supported at the level of your heart.

## Discuss any questions you have with your provider. Write your questions down and take them to your next visit. Here are some questions you might want to ask:

- How often should my blood pressure be checked?
- Should I check my blood pressure at home?  
Is it okay to use walk-up blood pressure machines in stores?
- What do I need to know about my medication?  
What if I forget to take it? How long will I need to take it?
- How much salt is OK for me?
- How much alcohol is OK for me?
- How much exercise is safe for me?

## More information on the Internet

The American Heart Association ([www.americanheart.org](http://www.americanheart.org)) is a good source of blood pressure information, including a "Blood Pressure Risk Calculator" that can help you estimate your risk.



## What you need to know for your blood pressure check

Your blood pressure reading is an important part of your overall health. By following a few simple steps you can help make sure the blood pressure taken at your visit is correct.

### Before you come in for your blood pressure check:

- Wear clothing that makes it easy to put the blood pressure cuff on (sleeves not tight and make sure it is easy to take your arm out of your sleeve).
- Don't smoke, use caffeine, or exercise for 30 minutes before your blood pressure is taken.
- Go to the bathroom and empty your bladder before your blood pressure is taken.

### At the blood pressure check:

- Sit quietly and rest for 5 minutes before your blood pressure is taken.
- While your blood pressure is being checked, sit in a chair with your back supported, feet flat on the floor, and legs uncrossed.
- Make sure the cuff is placed on your bare arm and does not feel loose. Speak up if your sleeve is pushed up and it feels tight.
- Your arm should be supported at heart level during the blood pressure check.
- Don't talk during the blood pressure reading.
- If the cuff pops open during the blood pressure check, it is probably too small. Make sure your blood pressure is retaken – a larger cuff may be needed.

Adults 18 years and older: What do your numbers mean?	
When your blood pressure stays below 120/80 at rest this is a normal blood pressure...	You have a healthy blood pressure. A healthy lifestyle will help you keep it that way.
When your blood pressure stays between 120/80 and 139/89 at rest this is called pre-hypertension...	You are at increased risk for health effects from high blood pressure. Your health care provider may ask you to make changes in your diet, activity, or other lifestyle habits.
When your blood pressure stays at or over 140/90 at rest you have hypertension (high blood pressure)...	This is more serious. The higher your blood pressure, the greater your risk for wear and tear on your arteries, heart disease, and other health problems. Your health care provider may ask you to make changes in your diet, activity, or other lifestyle habits. You may also require additional treatment, including medication.



## My High Blood Pressure Action Plan

### Today's measurements at my visit:

Blood pressure \_\_\_\_\_ Weight \_\_\_\_\_

### My goals are:

Blood pressure less than \_\_\_\_\_ Weight \_\_\_\_\_

### How am I doing? *Which category applies to me today?*

**Green means Go – I am meeting my goals for blood pressure and weight.**

#### *Keep up the good work!*

- Check your blood pressure as often as your health care provider recommends and make sure to see the doctor at least once a year.
- Continue to eat a healthy diet and stay physically active more than 3 times per week.
- If you are on blood pressure medication, continue to take it exactly as ordered.

**Yellow means Caution. More changes are needed.**

*Making the changes needed to reduce your blood pressure and weight are not easy! Talk with your health care provider about what you can do to reach your goals.*

- Learn more about how to make the lifestyle changes you need to get your blood pressure in control such as: your diet, activity level, and stopping or reducing tobacco and alcohol use.
- Tell your doctor if you are not able to get your blood pressure medicines and/or take them exactly as prescribed every day.
- Check your blood pressure as often as your health care provider recommends.
- Try to see your health care provider at least every 1-2 months to check your progress.

**Red means I need to Stop and get help. I should call and talk with my health care provider immediately.**

- High blood pressure can be dangerous and can cause heart attack, stroke or kidney problems. If you are in the red zone, call your provider today. Your provider may want to see you and/or adjust or change your medication or discuss other things that may help.

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### Green

- My blood pressure is at or below my goal
- My weight is at my goal
- If I am on blood pressure medication, I am able to get my medicines and take them exactly as prescribed every day

### Yellow

- I am working on my goals and am improving, but I'm not at goal yet.
- I might need to make more changes to my lifestyle or to my blood pressure medicine.

### Red

- My blood pressure is not getting any better or it is getting worse.
- My blood pressure is higher than \_\_\_\_\_
- I can't get my blood pressure medicines and/or am not taking them exactly as prescribed.

## My High Blood Pressure Action Plan for Every Day

***My health care provider and I have developed this Action Plan to help me meet my blood pressure goals and live a healthier lifestyle.***

**My goals are:** Blood pressure less than \_\_\_\_\_  
Weight \_\_\_\_\_

**Θ I will use the green/yellow/red chart at home.**

The chart will help me see how I am doing, decide whether I need to make more changes and decide when I need to call my provider.

**Θ Check my blood pressure at home.** My provider has asked me to take my blood pressure at home. I have a card or form to write my blood pressures on and I will bring these readings to my appointments. I will not smoke, use caffeine or exercise for 30 minutes before and I will sit and rest for 5 minutes before taking it. During the blood pressure reading, I will sit in a chair with my feet flat on the floor, legs uncrossed, and arm supported at heart level, and I will not talk. My instructions are to take my blood pressure:

How often: \_\_\_\_\_

Time of day: \_\_\_\_\_

Which arm: \_\_\_\_\_

**Θ I will come in to the clinic and have my blood pressure checked by the staff.**

How often: \_\_\_\_\_

When: \_\_\_\_\_

**Θ At this time, I do not take medicine for my blood pressure.** I will try to control my blood pressure with lifestyle changes.

**Θ I will take my blood pressure medicine every day.** It is important to take my blood pressure medicines exactly as prescribed so my blood pressure stays in control. I will let my health care provider know if I am not able to get my medicine or am not taking it as prescribed. These are the names of my blood pressure medications:

\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

**Θ I will work on these lifestyle changes:**

μ Lose weight. My goal is to lose: \_\_\_\_\_

μ Eat a healthy diet. Changes I should make:

\_\_\_\_ Cut back on salt (sodium) in my diet.  
Amount per day: \_\_\_\_\_

\_\_\_\_ Cut back on saturated fats and cholesterol in my diet.

\_\_\_\_ Follow the DASH diet.

\_\_\_\_ Increase fiber in my diet. Grams of fiber per day: \_\_\_\_\_

\_\_\_\_ Cut back or stop using alcohol.

Drinks per day: \_\_\_\_\_

μ Stop using tobacco products.

μ Cut down my tobacco use to: \_\_\_\_\_

μ Increase activity. I will try these activities/exercises: \_\_\_\_\_

μ Other: \_\_\_\_\_

**Θ How sure am I that I can do this?**

(1 is not sure, 10 is very sure)

1 2 3 4 5 6 7 8 9 10

**Θ I will learn more about high blood pressure.**

My doctor has given me the *Understanding Hypertension* education packet. I will read these materials and use what I learn to help control my blood pressure. The packet contains the basic information I need to plan my goals and make lifestyle changes.

**Θ I will let my provider know if I have any questions or problems with making my lifestyle changes or taking my medications.** Making changes can be hard and I can get help in other ways, such as meeting with a dietician, finding ways to pay for medications I cannot afford, using quit smoking programs and attending community programs or classes. The health care team can help me find the help I need to make changes.

## Dangers of Not Controlling Your Blood Pressure

### What could happen if my blood pressure is high?

High blood pressure can lead to serious health problems. The most common illnesses caused by high blood pressure are strokes or heart attacks. High blood pressure causes many other illnesses such as heart failure, kidney failure and blindness. High blood pressure has also been linked to poor mental function and to erectile dysfunction in men.

People with normal blood pressure live an average of five healthier years longer than those with high blood pressure.

### How often does high blood pressure cause a heart attack?

- Two of every three first-time heart attack patients have high blood pressure.
- Taking blood pressure medicine can reduce your chances of having a heart attack by 25 percent.
- Lowering your blood pressure by just five points can reduce your chance of death caused by a heart attack by 9 percent.

### How can high blood pressure cause a heart attack?

Heart attacks happen when the heart does not get oxygen. Our blood vessels that carry oxygen around the body get clogged with plaque. Plaque is a buildup of fat and cholesterol on the inside lining of the arteries. High blood pressure causes the plaque to break off. This free plaque leads to a clot, which clogs the blood vessels that supply oxygen to the heart. A clogged blood vessel cannot bring blood and oxygen to the heart. This can cause death of your heart muscle or a heart attack.

### How often does high blood pressure cause a stroke?

- Three of every four first-time stroke patients have high blood pressure.
- People with high blood pressure have double the chance of having a stroke than those people who do not have high blood pressure.
- Taking blood pressure medicine can reduce your chances of having a stroke by 40 percent.
- Lowering your blood pressure by just five points can reduce your chance of death caused from a stroke by 14 percent.

### How can high blood pressure cause a stroke?

Strokes happen when blood flow to certain parts of the brain is stopped. Blood flow to parts of the brain can be stopped in two ways:

**Blood vessel blockage:** Like in a heart attack, the plaque breaks off, travels to the blood vessels in the brain and clogs the blood vessel. The clogging blocks blood from flowing to part of the brain, causing this part of the brain to die.

**Blood vessel bleed:** Blood vessels can burst or bleed in the brain. When a blood vessel bursts, it cannot carry blood to part of the brain, causing this part of the brain to die. High blood pressure can cause a blood vessel in the brain to burst, causing brain death or stroke.

### What do I need to do now?

Learn more about your blood pressure and how to limit your risks. More information is available from your health care provider. By working with your provider, you can limit your risks and control your blood pressure.





## DASH Eating Plan (Dietary Approaches to Stop Hypertension)

*This guide has been prepared for your use by registered dietitians. If you have questions or concerns, please call the nearest Aurora facility to contact a dietitian. Diet counseling is available to address your specific needs.*

People with high blood pressure, and those in danger of getting high blood pressure, can benefit from the DASH (dietary approaches to stop hypertension) eating plan. This plan follows heart-healthy guidelines. It limits unhealthy fats and sodium. It focuses on foods with nutrients that can help lower blood pressure. These include potassium, calcium, magnesium, protein and fiber.

The DASH eating plan below promotes healthy eating and gradual weight loss. It is based on:

- 1,600 calories for most women and inactive men
- 2,000 calories for most men and very active women
- It is recommended most people reduce sodium to less than 1,500 milligrams (mg) per day. Younger, healthy people without risk for hypertension should reduce to 2,300 mg.

### Who needs 1,500 milligrams (mg)?

- People age 51 and older
- People with high blood pressure or hypertension
- People with diabetes
- People with chronic kidney disease
- African Americans

To plan meals and your grocery shopping list, use the following chart:

High blood pressure can be controlled or prevented by taking these steps:

- Focus food choices on fruits, vegetables, low-fat dairy, lean poultry, fish or meats, nuts and whole grains
- Choose foods lower in salt; read food labels
- Maintain a healthy weight
- Be moderately active most days
- If you drink alcohol, do so moderately
- Stop smoking
- If you have high blood pressure and are prescribed pills, take as directed

Food group	Daily servings		Serving sizes	Examples and notes
	1,600 calories	2,000 calories		
<b>Grains and cereals</b>	6	7 to 8	1 slice bread 1 oz. dry cereal $\frac{1}{2}$ cup cooked rice, pasta or cereal	Whole-wheat bread, English muffin, pita bread, bagel, cereal, grits, oatmeal, unsalted crackers, unsalted pretzels and unsalted popcorn
<b>Vegetables</b>	3 to 4	4 to 5	1 cup raw leafy vegetables $\frac{1}{2}$ cup cooked vegetables 6 oz. low-sodium vegetable juice	Tomatoes, potatoes, carrots, green peas, squash, broccoli, turnip greens, collards, kale, spinach, artichokes and green beans

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Food group	Daily servings		Serving sizes	Examples and notes
	1,600 calories	2,000 calories		
<b>Fruits</b>	4	4 to 5	6 oz. fruit juice 1 medium fruit $\frac{1}{4}$ cup dried fruit $\frac{1}{2}$ cup fresh, frozen or canned fruit	Apricots, bananas, dates, grapes, oranges, orange juice, grapefruit, grapefruit juice, mangoes, melons, peaches, pineapples, prunes, raisins, strawberries, tangerines
<b>Dairy foods</b>	2 to 3	2 to 3	8 oz. milk 1 cup yogurt $1\frac{1}{2}$ oz. cheese	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 with less than 300 mg sodium per ounce
<b>Meat and poultry</b>	4 to 5	6	1 oz. cooked meat, poultry or fish	Beef, pork, lamb, veal, chicken, turkey and fish – Select lean cuts and trim away visible fat. Remove skin from poultry. Broil or roast instead of frying or deep-frying.
<b>Nuts and seeds</b>	3 per week	4 to 5 per week	$\frac{1}{3}$ cup or $1\frac{1}{2}$ oz. of nuts 2 Tbsp. or $\frac{1}{2}$ oz. of seeds $\frac{1}{2}$ cup cooked dry beans or peas	Almonds, filberts, mixed nuts, peanuts, walnuts, sunflower seeds, dry beans (kidney, navy, lima, pinto, etc.) and split peas
<b>Fats and oils</b>	2	2 to 3	1 Tbsp. 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)
<b>Sweets</b>	2 or less per week	5 or less per week	1 Tbsp. sugar 1 Tbsp. jelly or jam $\frac{1}{2}$ oz. jelly beans 8 oz. lemonade	Maple syrup, sugar, jelly, jam, fruit-flavored gelatin, jelly beans, hard candy, fruit punch, sorbet and ices

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### Getting started on the DASH plan

- Add extra servings of fruits, vegetables and whole grains slowly
- Center your meal on vegetables, pasta, rice and dry beans or peas
- Use fresh meat, poultry, fish and vegetables rather than canned or processed types
- Treat meat as one part of the meal, not the focus
- Use fruit for desserts and fruit or vegetables as snacks
- Drink low-fat milk instead of sweetened beverages
- Cut portion of oil, soft margarine, mayonnaise salad dressing in half
- Hold the salt in cooking and at the table
- Avoid breaded products

### These high-sodium foods are best avoided:

- Luncheon meats, bacon, ham and sausage
- Regular canned or dried soups
- Pickles, olives, sauerkraut and salted fish
- Worcestershire, soy, teriyaki, steak, barbecue sauces and marinades
- Foods with salt topping, such as crackers, pretzels and chips
- Processed cheese and spreads

### Season foods with no-salt options:

- Some salt substitutes can raise your potassium level. Check with your doctor before using.
- Use garlic, celery or onion powder instead of the salt forms.
- Try herbs and spices, such as basil, bay leaf, dill and oregano.
- Add lemon, lime or flavored vinegars for zip.
- Salt-free herb mixes are available in many combinations.

### Use the food label to guide your choices:

- Note the serving size and how it compares to your portion.
- Eating a double serving means the calories, sodium, fat and other nutrients are doubled.
- “Whole grain” should be the main flour or grain ingredient.
- Low-fat, fat-free, no-sodium or low-sodium products are a better choice.\*
- Boxed, bagged, bottled, canned, frozen or dried foods with less than 300 mg\* sodium per serving are OK.
- Select entrees and frozen dinners with 800 mg\*\* of sodium or less per serving.

### Cooking tips

- Add an herb or spice to a small amount of oil or soft margarine.
- Rinse canned foods such as tuna, beans or vegetables.
- Prepare potatoes, rice, pasta and cereals without salt.
- Use only half of seasoning packets.
- Prepare extra fresh meats to use for sandwiches.

\* Less than 140 mg per serving if limiting total sodium intake to 1,500 mg per day

\*\* 500 mg per serving if limiting sodium intake to 1,500 mg per day

**For a list of Aurora facilities with a dietitian, please call Aurora Health Care toll free at 888-863-5502.**

*The information presented is intended for general information and educational purposes. It is not intended to replace the advice of your health care provider. Contact your health care provider if you believe you have a health problem.*

## Sodium Restricted Diet Guidelines

*This guide has been prepared for your use by registered dietitians. If you have questions or concerns, please call the nearest Aurora facility to contact a dietitian. Diet counseling is available to address your specific needs.*

### Why should I limit sodium?

Reducing salt intake may help control high blood pressure and reduce water retention. If you are taking medication for these conditions, it is important to reduce your salt intake.

### How much sodium should I have?

- 2,300 milligrams (mg) of sodium is recommended as part of an overall healthy diet.
- 1,500 mg of sodium is recommended if you are age 51 or older, African American, or have high blood pressure, diabetes, or chronic kidney disease.
- The average adult consumes 4,000 to 6,000 mg per day.

### How can I reduce my sodium intake?

- Limit use of the salt shaker.
- Avoid the salt shaker if limiting total sodium intake to 1,500 mg per day.
- Use processed foods less often.
- Choose fresh, unprocessed foods more often.

### Use the food label as a guide to select lower-sodium foods

- If limiting sodium to 2,300 mg per day, choose foods that have:
  - less than 300 mg per serving
  - less than 800 mg per frozen meal
  - 140 mg sodium or less most often
- If limiting sodium intake to 1,500 mg per day, choose foods that have:
  - less than 200 mg per serving
  - less than 500 mg per frozen meal
  - 140 mg sodium or less most often
- Remember to compare the serving size to the amount you normally consume.

Food groups	Choose most often	Foods to avoid	Tips
<b>• Breads, cereals and starches</b>			
5 to 8 servings per day  1 serving = 1 slice of bread 1/2 bagel, bun, English muffin  1 cup ready-to-eat cereal 1/2 cup cooked cereal  1/2 cup cooked rice or pasta	Bread, rolls, breadsticks or crackers without salted tops Bagels, English muffins  Most ready-to-eat cereals and cooked cereals without salt added  Rice, noodles and pasta	Bread, rolls, crackers and breadsticks with salt on top  Box mixes of quick breads and biscuits  Instant hot cereals  Seasoned box mixes of pasta, rice or stuffing  Commercial bread crumbs and cracker crumbs	Cook cereals, rice and pasta without adding any salt  Salt can be omitted or decreased in most recipes for baked goods  Limit ready-to-eat cereals to one serving

Food groups	Choose most often	Foods to avoid	Tips
<b>• Vegetables</b>			
<i>2 to 3 cups per day</i>	<p>Most fresh, frozen and low-sodium canned vegetables</p> <p>Low-sodium vegetable juices</p> <p>Low-sodium tomato and pasta sauces</p> <p>White or sweet potatoes</p>	<p>Frozen vegetables with sauces</p> <p>Vegetables canned with added sodium</p> <p>Regular tomato or vegetable juices</p> <p>Regular tomato and pasta sauces</p> <p>Sauerkraut, pickled vegetables and olives</p> <p>Processed potato and vegetable mixes</p>	<p>Season vegetables with herbs, spices or lemon juice</p> <p>Choose fresh or frozen vegetables most often</p> <p>Rinse canned vegetables under water to reduce sodium content</p> <p>Look for canned vegetables packed without salt</p>
<b>• Fruits</b>			
<i>1½ to 2 cups per day</i>	<p>Most fresh, frozen and canned fruits</p> <p>All fruit juices</p>	Fruits processed with salt or sodium (i.e., some dried fruits)	
<b>• Milk, yogurt and cheese</b>			
<p><i>3 cups per day</i></p> <p><i>1 cup =</i> 1 cup milk or yogurt 1½ oz. cheese</p>	<p>Milk</p> <p>Yogurt</p> <p>Reduced or low-sodium cheese</p> <p>Low-sodium cottage cheese</p>	<p>Buttermilk</p> <p>Processed cheese, cheese spread, cheese sauces</p> <p>Regular cottage cheese</p>	<p>Dairy products contain sodium</p> <p>Milk and yogurt are lower in sodium than most cheeses</p> <p>Natural cheeses are usually lower in sodium than processed cheeses</p> <p>Limit natural cheese to 1 ounce per day</p>
<b>• Meat, poultry, fish, dry beans and peas, eggs and nuts</b>			
<p><i>5 to 6 ounces per day</i></p> <p><i>1 ounce =</i> 1 oz. cooked meat, poultry or fish 1 egg ¼ cup cooked dried beans 1 Tbsp. peanut butter ½ oz. nuts</p>	<p>Any fresh or frozen meat, poultry or fish</p> <p>Eggs and egg substitute</p> <p>Low-sodium peanut butter</p> <p>Dry beans and peas</p> <p>Unsalted nuts</p> <p>Reduced sodium frozen dinners</p> <p>Low-sodium canned tuna or canned tuna, rinsed</p> <p>Tofu</p> <p>Edamame</p>	<p>Smoked, cured, salted, pickled or canned meat, poultry, fish or seafood, including ham, bacon, sausage, cold cuts, sardines and imitation seafood</p> <p>Breaded frozen meat, fish or poultry items</p> <p>Pizza</p> <p>Salted nuts</p> <p>Frozen chicken breast with more than 300 mg sodium</p>	<p>Choose low-sodium, reduced-sodium, or salt-free convenience foods and processed meats</p> <p>Prepare additional fresh meats to use in sandwiches</p> <p>Use herbs or spices to season foods</p>

Food groups	Choose most often	Foods to avoid	Tips
<b>• Fats, snacks, condiments and beverages</b>			
Use sparingly	Low-sodium or unsalted salad dressings Low-sodium bouillon and soups Pepper, herbs, vinegar, cooking wine, lemon or lime juice Fresh garlic Garlic, onion or celery powder Fresh deli salsa Low-sodium ketchup, chili sauce or mustard Low-sodium soy sauce (limit to 1 tsp) Coffee, tea, fruit drinks, powdered drink mixes and low-sodium carbonated beverages	Salad dressings containing more than 200 mg sodium per serving (140 mg or less if limiting sodium to 1,500 mg per day) Regular soups, broth, soup bases or bouillon cubes Gravies, sauces and seasonings made from mixes or high-sodium ingredients Sea salt Regular ketchup, chili sauce or mustard Softened water	Try air-popped popcorn with salt-free seasoning Make your own soup using low sodium or salt-free broth Sea salt contains the same amount of sodium as table salt Limit foods that contain these high-sodium ingredients: <ul style="list-style-type: none"> <li>• Salt</li> <li>• Brine</li> <li>• Broth</li> <li>• Pickled</li> <li>• Smoked</li> <li>• Soy sauce</li> <li>• Teriyaki sauce</li> <li>• Barbecue sauce</li> <li>• Monosodium glutamate (MSG)</li> </ul>

### A registered dietitian can help

If you have concerns or difficulty following this diet, ask your doctor to refer you to a registered dietitian. The dietitian will talk to you about:

- Label reading, shopping, food preparation, dining out
- Combining other diet restrictions, if necessary
- Attention to personal preferences and ethnic or religious choices
- Additional resources regarding your personal needs

**For a list of Aurora facilities with a dietitian,  
please call Aurora Health Care toll free at 888-863-5502.**

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## Understanding Food Labels

This guide has been prepared for your use by registered dietitians. If you have questions or concerns, please call the nearest Aurora facility to contact a dietitian. Diet counseling is available to address your specific needs.

### Why read food labels?

Read food labels to find out more about the foods you eat. For instance, the labels can tell you which foods are:

- Lower in calories
- Lower in saturated fat and trans fat
- Lower in sodium (salt)
- Good sources of fiber, calcium, iron, vitamin A and vitamin C

### A simple guide to reading the Nutrition Facts

#### Start with the Serving Size:

- All of the numbers on the label are for that serving size
- Compare how much you eat to the serving size listed. If you eat two servings, then you will also eat twice the nutrients on the label.

#### Check out these things

- 1 Total fat grams** – Generally, women should aim for 40 to 50 grams a day or 10 to 15 grams per meal. Men should aim for 55 to 65 grams a day or 15 to 20 grams per meals. Try to limit total fat to 0 to 3 grams per serving.
- 2 Saturated (solid) fat** – Generally, women should aim for less than 15 grams a day or 5 grams per meal. Men should aim for less than 20 grams a day or 7 grams per meal.
- 3 Trans (partially hydrogenated) fat** – Try to choose products with 0 grams trans fats.
- 4 Cholesterol** – If you have heart disease, limit cholesterol to less than 200mg a day. If you do not have heart disease, limit to 300mg a day.
- 5 Sodium** – Limit to less than 2,300 mg a day. Some individuals will be advised to reduce intake to 1,500 mg a day. High levels of sodium may raise blood pressure.
- 6 Fiber** – Aim for 20 to 35 grams a day. Choose more products that have at least 2 grams of fiber per serving.
- 7 Vitamins and minerals** – Check the label for the amount of vitamin A, vitamin C, calcium and iron. Aim for high amounts of these nutrients whenever you can.

## Nutrition Facts

Serving Size 1 cup (228g)  
Servings Per Container 2

Amount Per Serving

Calories 250      Calories from Fat 110

% Daily Value\*

Total Fat 12g	①	18%
Saturated Fat 3g	②	15%
Trans Fat 1.5g	③	
Cholesterol 30mg	④	10%
Sodium 470mg	⑤	20%
Total Carbohydrate 31g		10%
Dietary Fiber 0g	⑥	0%
Sugars 5g		
Protein 5g		
Vitamin A		4%
Vitamin C	⑦	2%
Calcium		20%
Iron		4%

\* Percent Daily Values are based on a 2,000 calorie diet. Your Daily Values may be higher or lower depending on your calorie needs:

	Calories:	2,000	2,500
Total Fat	Less than	65g	80g
Sat Fat	Less than	20g	25g
Cholesterol	Less than	300mg	300mg
Sodium	Less than	2,400mg	2,400mg
Total Carbohydrate		300g	375g
Dietary Fiber		25g	30g

Source: FDA Consumer

Continued



## Are you allergic to certain foods?

Labels must clearly state if the product contains protein from milk, eggs, fish, crustacean shellfish, tree nuts, peanuts, wheat and soybeans. Be sure to look at the list of ingredients on the package.

## “% Daily Values” column

The daily values are for the *entire day*, not for just one meal or snack. This section shows amounts needed each day for a healthy person on a 2,000-calorie diet. 20% or more is high. Try to aim high in fiber, vitamins and minerals. 5% or less is low. Try to aim low in total fat, saturated fat, cholesterol and sodium.

## Food package terms

What do all the terms on food packages mean? Most of the words used to market products must follow guidelines from the Food and Drug Administration (FDA). But other words can mislead you. Here is a list of many common terms and what they mean:

**Reduced** – Contains 25% less of something (such as fat) or 25% fewer calories than the original product

**Less or fewer** – Contains 25% less (such as fat or calories) than another food (pretzels have 25% less fat than potato chips)

**Low fat\*** – 3 grams or less per serving

**Low saturated fat\*** – 1 gram or less per serving

**Low cholesterol\*** – less than 20mg per serving

**Low calorie\*** – less than 40 calories per serving

**Low sodium\*** – less than 140mg per serving

**Very low sodium** – less than 35mg per serving

**Calorie free\*\*** – less than 5 calories per serving

**Sugar free\*\*** – less than 0.5 grams per serving

**Fat free\*\*** – less than 0.5 grams per serving

**Light or Lite** – A product that:

- Contains one-third fewer calories than the original, *or*
- Contains half the fat or sodium of the original, *or*
- Describes texture or color, such as “light brown sugar” or “light and fluffy”

**Lean** – Meat, poultry or fish that contains less than 10 grams of fat, less than 4.5 grams of saturated fat, and less than 95mg of cholesterol per serving

**Extra lean** – Meat, poultry or fish that contains less than 5 grams of fat, less than 2 grams of saturated fat and less than 95mg of cholesterol per serving

**High** – Contains 20% or more of the Daily Value of a certain nutrient

**Good source** – Contains at least 10% of the Daily Value of a certain nutrient

**High fiber** – 5 or more grams of fiber per serving

**More** – Contains more of a certain nutrient than the original food. You will often see terms such as “fortified,” “enriched,” “added,” “extra” and “plus”

**Healthy** – Must be low in fat and saturated fat, and contain limited amounts of cholesterol and sodium. If it’s a single item food, it must provide at least 10% of one or more of vitamins A or C, iron, calcium, protein or fiber.

\* **Little, few or low source of** may be used in place of **low** on food packages

\*\* **Without, no or zero** may be used in place of **free** on food packages

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## Are You at Risk for Kidney Disease?

### Did you know?

Anyone can get chronic kidney disease at any age. But some people are more likely to get it than others. You may have an increased risk for chronic kidney disease if you:

- Have diabetes
- Have high blood pressure
- Have a family history of this disease
- Are older
- Are in a population group that has a high rate of diabetes or high blood pressure, such as African American, Hispanic American, Asian or Pacific Islander, or American Indian

Kidney disease often has no symptoms until it is in the late stages. Many people are not aware they have kidney disease, even when their kidneys are barely able to work. Testing is very important for people at risk – it may be the only way to find kidney disease in the early stages and prevent damage.

### What are the kidneys and what do they do?

Your kidneys are two fist-sized organs shaped like kidney beans. They are located just below the ribs on either side of your spine. Your kidneys are mainly a filtering system, but have other important jobs as well. Your kidneys:

- Clean the blood of wastes that come from food and your normal muscle activity
- Take away extra fluid (water) and keep the chemicals in your blood balanced (some of these chemicals are sodium, potassium, phosphorus and calcium).
- Take away the drugs and toxins in your body
- Help control blood pressure, make red blood cells and make vitamin D for healthy bones

### What is chronic kidney disease?

Chronic kidney disease means the kidneys may have been damaged by diabetes, high blood pressure or another disease. Kidney damage cannot be fixed but you can take steps to keep it from getting worse. Usually there are no symptoms, but if kidney disease gets worse, wastes build up in your blood which can make you feel sick and cause many other serious problems. These problems can lead to kidney failure, which means you would need dialysis or a kidney transplant to stay alive.

### What causes kidney disease?

- High blood pressure and diabetes are the most common causes of kidney failure. Both high blood pressure and high blood sugar can damage the small filters in the kidneys (glomeruli) that get rid of waste and extra fluid. Controlling high blood pressure and high blood sugar can slow or prevent kidney disease.

### Other conditions that can cause kidney disease are:

- Glomerulonephritis: a group of diseases that cause inflammation and damage
- Inherited disease, such as polycystic kidney disease which causes large cysts in the kidney
- Lupus and other diseases of the immune system
- Diseases that cause blockage in the kidney, such as kidney stones or enlarged prostate disease (in men)
- Repeated bladder and kidney infections
- Kidney cancer
- Normal aging

### **If you are at risk, get tested.**

Checking for chronic kidney disease should be part of your routine care if you have diabetes or high blood pressure. Talk with your health care provider about getting tested if you have any of the other conditions that cause kidney disease. Two tests are recommended:

- A simple blood test to measure your glomerular filtration rate (GFR): This test shows how well your kidneys are filtering wastes from your blood. The lower the GFR number, the more damage your kidneys have.
- A simple urine test to see if there is protein in the urine. Protein in the urine is not normal. When your kidneys are damaged protein leaks into the urine.

There are other tests that may be done to detect kidney damage or to see how badly the kidneys are damaged. Your health care provider will discuss these tests with you if they are needed.

### **What's the good news?**

Chronic kidney disease can be prevented even if you are at increased risk. You should make a plan with your health care provider for how to keep from developing kidney disease. Be sure to:

- Have your kidneys tests done at least once a year if you have diabetes, high blood pressure or other risk factors.
- Keep your blood sugar and blood pressure in good control to prevent kidney damage:
  - Take medicines for diabetes and high blood pressure exactly as prescribed.
  - Follow your diet for diabetes and keep your blood sugar as close to normal as you can.
  - Keep your blood pressure low enough to prevent kidney damage. Discuss how low your blood pressure should be with your health care provider.
  - There are two types of blood pressure medicine that can slow CKD down and help keep the kidneys from failing. These medicines – ACE inhibitors and ARBs – can be used even if you don't have high blood pressure.

### **Your health care provider may also suggest that you:**

- Make changes in your diet, such as cutting down on salt, protein, alcohol and caffeine.
- Lose extra pounds. Ask your health care provider what your weight should be and work toward that goal.
- Exercise regularly. Your goal is to work up to 30 minutes of moderate exercise most days of the week. Before beginning an exercise program it is important to talk with your health care provider and make a plan.
- If you smoke or use tobacco products take steps to quit as soon as you can.
- Avoid taking large amounts of over-the-counter pain relievers. Make sure your health care provider knows about your CKD and talk with them about what you can take safely. Examples of drugs to ask about or avoid include: aspirin, ibuprofen (Advil, Motrin, and others), naproxen (Aleve and others), indomethacin (Indocin), Celebrex, Toredol, as well as other prescription pain relievers offered by healthcare providers who may not know about your CKD.

### **Need more information?**

Be sure to ask questions and discuss any concerns with your health care provider. You can also learn more by visiting the National Kidney Foundation website at:

[www.kidney.org](http://www.kidney.org)

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## Checking Your Blood Pressure at Home

### You may be asked to check your blood pressure at home for any of these reasons:

- Prevent the problems that come from high blood pressure when it is not treated.
- Help your provider find out if your higher blood pressure numbers in the office stay that way at home.
- Tell your provider whether your blood pressure medications are working well and what your numbers are from day to day.

### Choosing a home blood pressure monitor

- Digital or electronic monitors have a cuff with a manual or electric pump. The blood pressure is shown on a digital display.
- Aneroid monitors are like the ones used in your doctor's office. They have a dial gauge and a cuff that you inflate by squeezing a rubber bulb.
- Wrist monitors are small and seem easy to use. But, their readings are not always as accurate as arm-cuff monitors.

Ask your provider or pharmacist for advice on choosing a good monitor that is right for you. Make sure the monitor meets your needs and is easy for you to use. Some monitors have features to store or track past readings.

- Bring your monitor to an office visit to make sure it is working well for you. Ask your provider if you need help or have questions.

### Choosing the right cuff size for your arm

If the cuff is too large or small, your reading will not be correct. Some people need to buy a special cuff. Ask your provider or pharmacist to help make sure you are using the correct cuff size.

### Before you take your blood pressure

- Don't smoke, use caffeine, or exercise for 30 minutes before you take your blood pressure.
- Go to the bathroom and empty your bladder.
- Sit quietly and rest for 5 minutes.

### Taking your blood pressure

- Wear short sleeves.
- Sit still and do not talk.
- Sit comfortably with your arm resting on a flat surface at the level of your heart. Use the same arm each time you take your blood pressure.
- Your feet should be flat on the floor and you should not cross your legs.
- Read your monitor instructions completely before you start.
- Follow your monitor instructions for how to place the cuff on your arm.
- Inflate the cuff (use the button or bulb, depending on the monitor). Automatic machines will read your blood pressure as the cuff is released. Your reading will appear on the display.
- If you need to repeat a reading, wait 2 to 3 minutes before you inflate the cuff again.
- Record your readings in a log or on paper. Bring this to your next office visit or call the office with results if asked to do so.

### Remember

- Don't change your medicines based on your readings at home. If you are concerned about your readings, call your provider for advice. Your provider will use your record of readings to help decide if a change in medicine is needed.
- Checking your blood pressure at home does not take the place of regular checkups with your provider.

## Staying Active to Help Prevent or Control High Blood Pressure

One of the best things you can do to control your blood pressure is to get moving. Regular activity can help make your heart stronger. This means less work for your heart and less pressure on your arteries. If your blood pressure is normal, staying active can help keep it that way. If you have high blood pressure, you can help control it by being more active.

### Just getting started?

If you are not used to being active, talk with your doctor before starting an exercise program. Discuss any health problems, especially if you or your family members have ever had heart trouble. Also, ask whether exercise will change the way any of your medicines work.

Ask for help if you need it. Your doctor may refer you to an exercise specialist to help you get started. Here are some general guidelines you may find helpful.

### Start slowly

Every little bit helps. You can begin with small steps to increase your activity, such as:

- Take the stairs instead of the elevator
- Work in the garden at a relaxed pace
- Walk slowly around the block or the shopping mall

### Work your way up to fitness

Your goal is to work up to a moderate level of activity for 30 minutes a day on most days of the week. To control your blood pressure, this activity should be one that increases your heart rate and breathing, and is done at a steady pace. Good examples are brisk walking, cycling, swimming, hiking, climbing stairs and dancing.

### If it feels like too much ...

Keep in mind that you can break up your activity into shorter periods of at least 10 minutes each. Even washing windows, raking leaves or scrubbing the floor can be good short bursts of activity.

Use the “talk test” to check that you are exercising at a good pace. Your heart rate and breathing should be faster than normal, but you should still be able to talk without getting out of breath. If you can’t, slow down.

### Keep it up – for your blood pressure and your good health

Make exercise a part of your life. Choose activities you enjoy. Try to vary them so you don’t become bored. Set small goals, one at a time, and reward yourself each time you achieve a goal.

You may be doing this for your blood pressure, but exercise affects your health in many more ways. It can help you to:

- Lose weight or avoid gaining weight
- Control cholesterol and blood sugar
- Build healthy bones, muscles and joints
- Improve your mental outlook
- Reduce stress
- And the list goes on ...

### Stop exercise right away if you feel any of these symptoms and report them to your doctor:

- Faint or lightheaded
- Dizzy
- Shortness of breath
- Chest pain or pressure

## Test Your Knowledge on High Blood Pressure (Hypertension)

*(Circle your answers, then check the next page to see how you did.)*

1. Which of these is a healthy blood pressure reading?
  - a. 130/90
  - b. 180/110
  - c. 116/70
  - d. 140/80
2. Which of these statements about high blood pressure is **true**?
  - a. Almost 1 out of 3 adults in the United States have high blood pressure
  - b. The rate of high blood pressure grows as the number of older and obese people increases
  - c. High blood pressure usually has no symptoms, and its cause is usually unknown
  - d. All of the above
3. Your risk for developing high blood pressure is greater if you:
  - a. Are overweight
  - b. Have diabetes
  - c. Have parents who had high blood pressure
  - d. Are African American
  - e. All of the above
4. Lifestyle changes that can help control high blood pressure include:
  - a. Smoking fewer than 10 cigarettes a day
  - b. Cutting down on salt and following a healthy eating plan
  - c. Stopping any physical activities that would raise blood pressure
  - d. Having no more than 3 drinks a day
5. A person with high blood pressure:
  - a. Doesn't exercise and eats a lot of salt
  - b. Has a higher risk of stroke and heart attack
  - c. Got that way by being nervous and stressed out
  - d. Has a body type that is easy to recognize
6. Which of these statements is **false**? You should take your high blood pressure medication:
  - a. Under stressful situations or when you have a headache
  - b. Exactly as your doctor prescribed
  - c. As a lifelong way to manage high blood pressure
  - d. Along with maintaining a healthy weight, diet and activity level
7. I know my blood pressure numbers and how often I should have my blood pressure checked.
  - a. True
  - b. False

*(See next page for correct answers.)*



## Answers for High Blood Pressure Quiz

1. **c. 116/70 mm Hg** is a healthy blood pressure. When your blood pressure stays below 120/80 at rest, that's a healthy level. If it stays at or higher than 120/80 at rest (pre-hypertension), you are at increased risk for health effects from high blood pressure. If your numbers stay over 140/90 at rest (130/80 if you have diabetes, heart failure or kidney disease), your blood pressure is high and you are at high risk for stroke, heart disease and other complications.
2. **d. All of the above.** In 9 out of 10 high blood pressure cases, the cause is unknown. High blood pressure is often called the “silent killer” because it has NO symptoms. About 30 percent of adults in this country have high blood pressure – and many of them don't even know it.
3. **e. All of the above.** Risk factors that can lead to a higher risk for high blood pressure include:
  - Overweight/obesity – people who are overweight or obese are more likely to develop high blood pressure
  - Family history of high blood pressure
  - Age – the older you get, the more your chances of developing high blood pressure
  - Race – African Americans are at a higher risk for this disease than other races. High blood pressure tends to be more common, happens at an earlier age and is more severe for many African Americans.
  - Too much salt in the diet can increase blood pressure in some people.
  - Smoking and too much alcohol can greatly increase blood pressure.
  - Little or no physical activity can lead to being overweight and can increase your risk
  - Diabetes or other medical conditions: Seven out of 10 people with diabetes have high blood pressure.
4. **b. Cutting down on salt and following a healthy eating plan.** The Dietary Approaches to Stop Hypertension (DASH) plan teaches you about a healthful diet that is rich in fruits and vegetables and lower in fat and salt (sodium). This diet plan has been proven to help reduce blood pressure. Other lifestyle changes that can help control blood pressure include:
  - Losing excess weight
  - Regular physical activity
  - Limiting alcohol (2 drinks a day for men, 1 for women)
  - Quitting smoking
5. **b. Has a high risk of stroke and heart attack.** High blood pressure is the No. 1 risk factor for stroke and early heart disease. It is also a key risk factor for heart attack and kidney disease. Keeping your blood pressure under control can greatly reduce your risk for these problems.

## Answers for High Blood Pressure Quiz, *continued*

6. a. **Under stressful situations or when you have a headache is *false*.** Controlling your high blood pressure involves all of the lifestyle changes mentioned in answer No. 3. If these changes are not enough, your doctor may also prescribe medication.

Take your medication exactly as prescribed. Cutting back or stopping your medication puts you in danger. Your blood pressure will rise and so will your risk for health problems. High blood pressure is a lifelong disease that needs lifelong treatment.

7. **If you answered “True,”** then you know your blood pressure. If it’s normal, you have it checked at least every two years. If you have high blood pressure, you follow your doctor’s advice on follow-up checks, diet, activity and alcohol. You don’t smoke and you take medication exactly as prescribed.

**If you answered “False,”** have your blood pressure checked by your doctor and ask how often you should have it checked in the future. Talk with your doctor about your risk factors for high blood pressure.