

DREAM ATLANTA

SESSION I: DIABETES AND HYPERTENSION- AN OVERVIEW



DREAM
Initiative





WELCOME!

- Introductions
- Why are you here today?
- One favorite food

WHO AM I?

- I am a Community Health Worker (CHW)
- I was trained by the Emory School of Medicine
- I work with the South Asian community to share information about healthy living, managing high blood pressure and diabetes, and preventing chronic diseases.

WHAT IS THIS PROGRAM?

- We work with you to help you achieve your healthier lifestyle goals by:
 - Providing 5 educational sessions about healthy living within 6 months
 - Personalized follow-up:
 - Twice a month we will set healthy goals and help you with any challenges.
 - Two in-person meetings to learn how to control your blood sugars and blood pressure.

IS THIS RIGHT FOR YOU?

- If you are a participant with uncontrolled blood pressure and diabetes who
 - Want to control your blood pressure
 - Want to manage your diabetes
 - Want to learn how to be healthier

This is the program for you.

THE GOALS OF THIS
PROGRAM ARE SAFE
AND CAN BE
REACHED

We will help you reach
the goals by making
changes that are:

- Gradual
- Healthy
- Reasonable



PROGRAM GUIDELINES

- Cell phones on silent. Step out to take an important call
- Respect others. Everyone has something to contribute.
- Keep what is discussed by the group private and anonymous.
- Have fun!

SESSION OUTLINE

Part 1

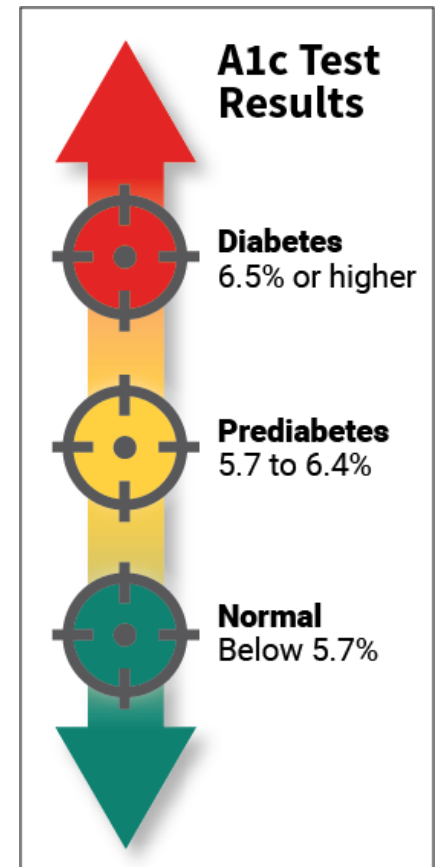
- Introductions
- What is Diabetes?
- How is it measured?
- Risk factors of diabetes
- Diabetes Care Plan

Part 2

- What is high blood pressure?
- How is it measured?
- Dangers of high blood pressure
- Blood pressure management
- Physical Exercises

WHAT IS HEMOGLOBIN A1C (HBA1C)?

- A health value that is found through a blood test during a routine exam
- Shows the average amount of sugar in your blood over the last **2-3 months**
- A1c Goal:
 - for people with diabetes: **ask your doctor**
 - for people with prediabetes: **below 6.4**

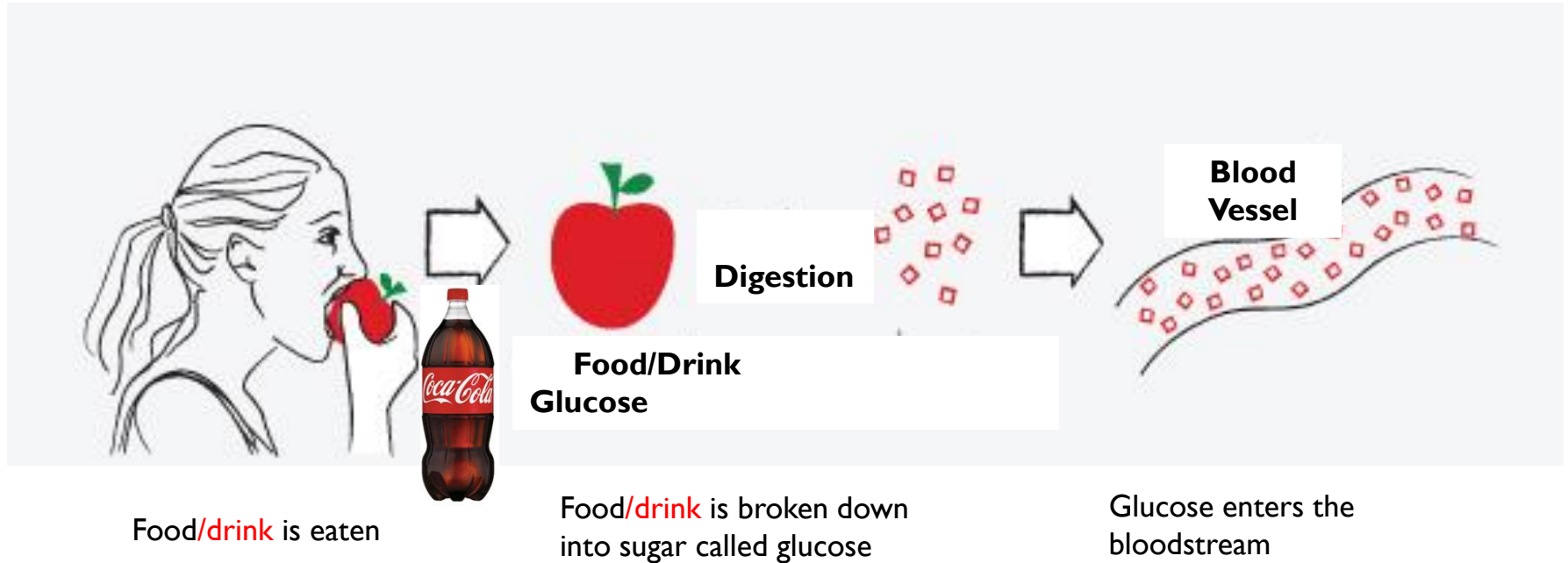


WHAT IS PREDIABETES?

- Your blood sugar level is higher than normal, but not high enough to diagnosis as Type 2 Diabetes.
- An A1c value of 5.7 or below is considered normal. An A1c measurement of 5.8 to 6.4 is prediabetes.
- With lifestyle changes, you can prevent Type 2 Diabetes.

WHAT IS TYPE 2 DIABETES?

- The body cannot use insulin correctly or cannot produce enough insulin.
- The body cannot control the amount of sugar in the blood.
- This is an A1c of 6.5 or more



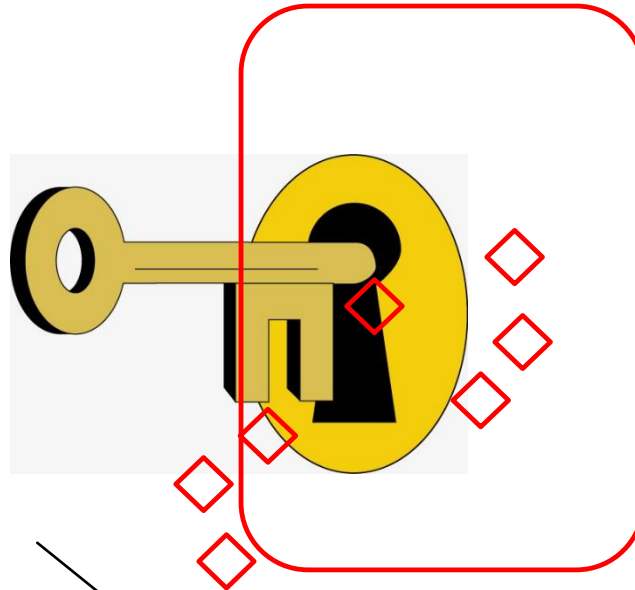
During digestion, food and sugary drinks are broken down into sugar which then enters the blood.

**The more carbohydrates you eat, the more sugar goes in your blood.
This means your body needs even more insulin to keep your blood sugar level normal.**

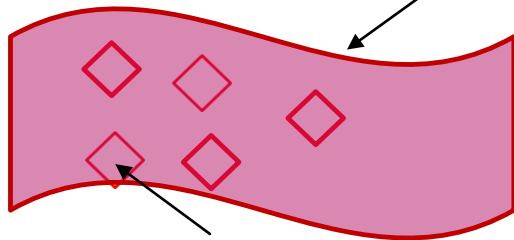
Blood Cell



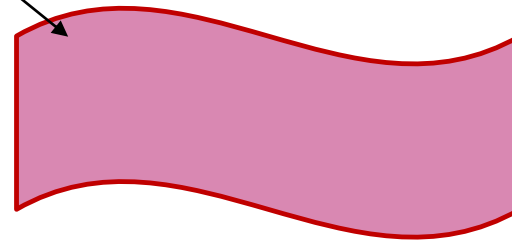
Blood Cell



Blood Stream



Glucose



Insulin is the key to let sugar into a cell.

When there is not enough insulin in your body to move the sugar into the cells, extra sugar collects in the blood. This is diabetes.

BLOOD DEMONSTRATION

What is the difference between these
2 bottles?

BLOOD DEMONSTRATION

- Normal blood is thin and moves easily through the body.
- Blood with extra sugar is thicker which makes it move slower through the body.

IS DIABETES CAUSED BY EATING TOO MUCH SUGAR?

- Yes and No.
- Diabetes is caused by many factors
- Both lifestyle choices (meals, how much you exercise)

AND

- Genetic, or non-changing factors (family history, age)
- Eating too much sugar can lead to weight gain. Being overweight increases your chance of getting Type 2 Diabetes

DOES MY AGE CAUSE DIABETES?

- There is a higher chance of developing Type 2 diabetes as you get older.
- However, anyone, both young and old, can have Type 2 diabetes depending upon their lifestyles.

WHO IS MORE LIKELY TO GET DIABETES?



✓ not active



✓ overweight



✓ family history of diabetes
(father, mother, sister, brother)



✓ Women who had diabetes during
pregnancy (gestational diabetes)

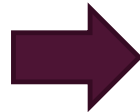


Certain **races/ethnicities**:

✓ Risk is high among South
Asians, Hispanics, and African
Americans

DIABETES SYMPTOMS

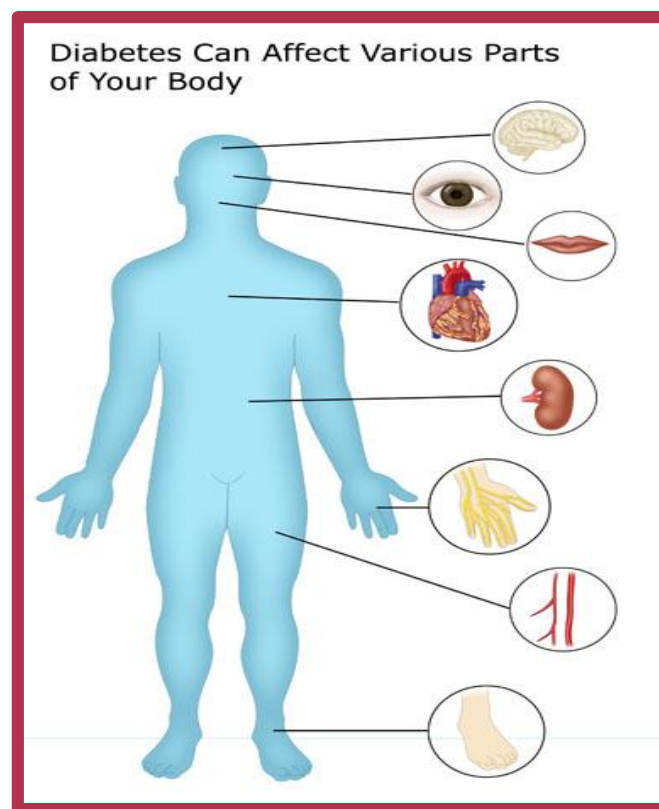
Someone with diabetes
may feel or have:



- Urinating a lot
- Very thirsty
- Very hungry
- Unusual weight loss
- Feeling more tired than usual
- Irritability
- Blurry vision
- Long time to heal skin sores

HEALTH PROBLEMS CAUSED BY DIABETES

- Teeth and gum problems
- Eye problems that can lead to trouble seeing or going blind
- Kidney problems that can cause your kidneys to stop working
- Pain, tingling, or numbness in your hands and feet caused by nerve damage
- Amputation of limbs, can be caused by nerve damage/poor blood flow/skin sores
- Heart attack or stroke



HOW CAN YOU LOWER RISK FOR DIABETES-RELATED PROBLEMS?

Lower your risk with:

- Healthy Eating
- Physical Activity
- Losing weight

**Participating in our
program can help you!**



WHY IS IMPORTANT TO MANAGE YOUR SUGAR LEVELS?

- Controlled diabetes can mean less health related complications
 - Out of control sugar levels leads to hypoglycemia (very low blood sugar) and/or hyperglycemia (very high blood sugar)
 - In the long run, high sugar levels can damage important organs like your heart, kidneys, eyes and nerves
- Controlled sugar levels means lower medical expenses
- It's never too late to make changes to your diet and exercise levels – Let's start now!

BREAK-TIME



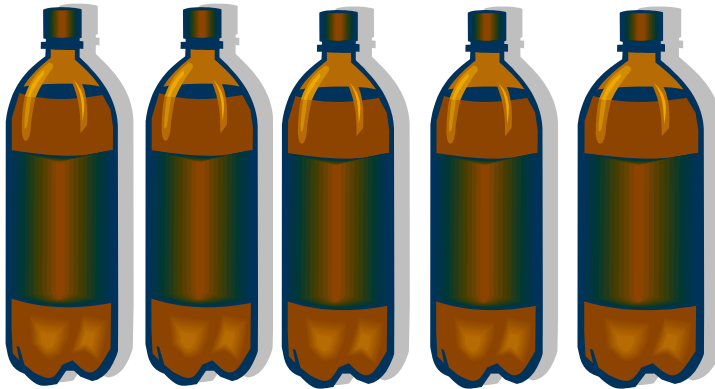
CONNECTION BETWEEN DIABETES AND HYPERTENSION

- High blood pressure is twice as likely to strike a person with diabetes than a person without diabetes.
- Diabetes can increase the risk of hypertension by impacting the arteries, which increases blood pressure.
- There are also many risk factors that are in common for diabetes and hypertension.

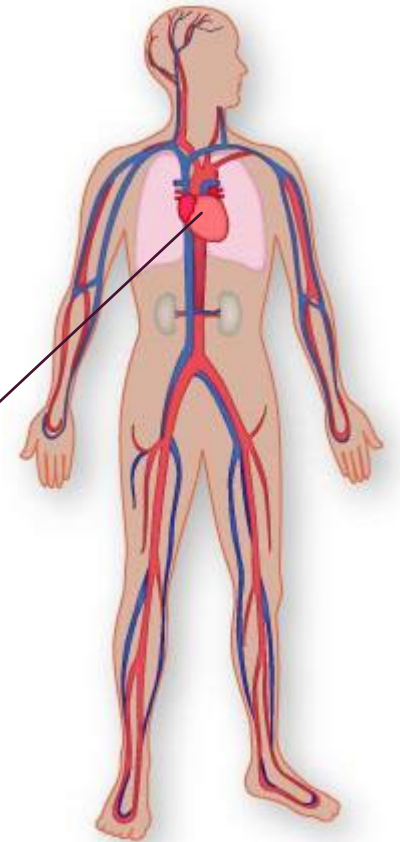
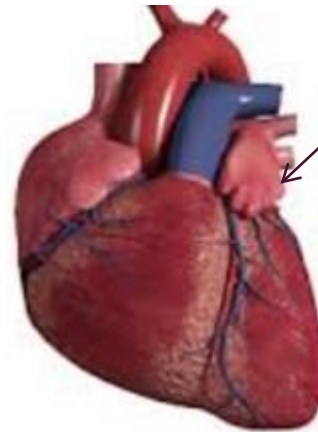
THE HEART

- The heart pumps 5L of blood every minute.
- The heart sends blood to the lungs to pick up oxygen.

Then it delivers oxygen to all the cells in the body.

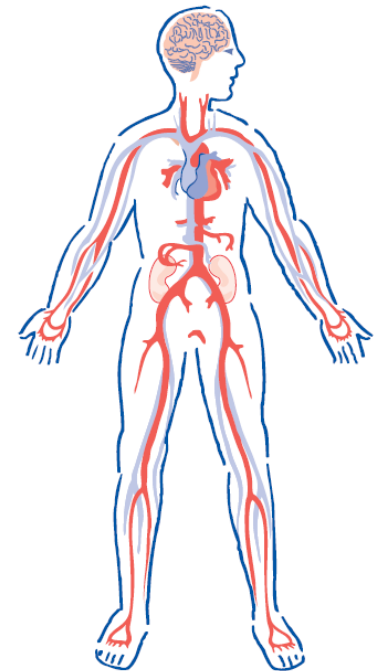
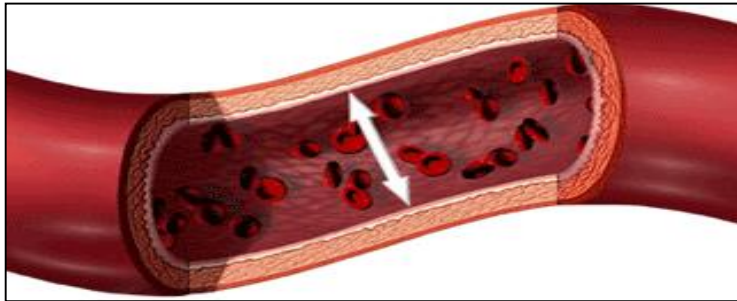


1L 1L 1L 1L 1L



WHAT IS BLOOD PRESSURE?

Blood pressure is the force of blood against the walls of your arteries.



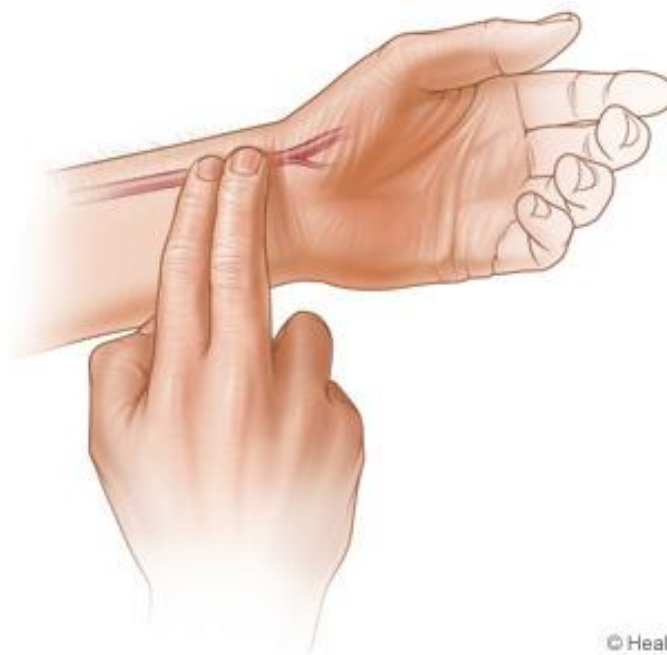
- Blood pressure moves the blood through your body.
- Blood pressure is recorded as two numbers—the **systolic** pressure (as the heart beats) over the **diastolic** pressure (as the heart relaxes between beats).

So, for... $\frac{120}{80}$ or $\frac{120}{80}$...you would say, "120 over 80".

Systolic Diastolic

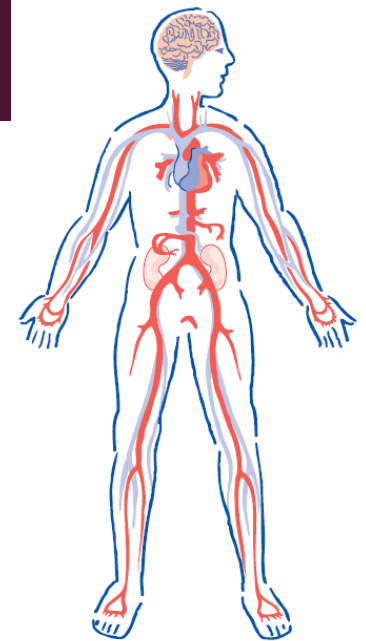
TOUCH AND FEEL: FEELING THE HEARTBEAT

Find your pulse.

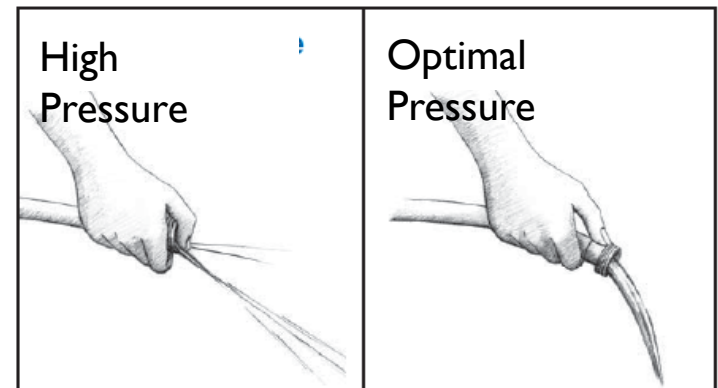


WHAT IS HIGH BLOOD PRESSURE?

- If you have high blood pressure— called “hypertension”—it means your heart has to pump very hard to get blood to all parts of your body.
- Hypertension is diagnosed if someone has high blood pressure (higher than 130/80) on two or more doctors visits.
- High blood pressure= hypertension



Having high blood pressure and narrowed blood vessels is like turning on a garden hose and holding your thumb over the opening.



HOW COMMON IS HIGH BLOOD PRESSURE?

- More than 1 in every 4 adults has high blood pressure



- Of these:

- 1 in 5 don't know they have it



- 1 in 3 don't have their blood pressure under control



HIGH BLOOD PRESSURE IS KNOWN AS THE “SILENT KILLER”

- 1 in 5 people with high blood pressure don't know they have it
- There are often **no symptoms...**
- **...until it is too late** and a person may develop life-threatening problems.

POSSIBLE DANGERS OF HIGH BLOOD PRESSURE

- High blood pressure raises your chances for having one or more of the following:
 - Stroke
 - Heart attack / Heart failure
 - Kidney failure
 - Bulges in blood vessels (aneurysm) that can burst and cause sudden death
 - Poor circulation
 - Poor vision and blindness
 - Sexual problems
- These outcomes are preventable, but once they occur the damage may be permanent.

HOW TO CHECK YOUR BLOOD PRESSURE

- Use a home blood pressure monitor or blood pressure kiosk at your provider's office or local pharmacy
- Wait 30 minutes if you've had caffeine (tea, coffee, soda), exercised, or smoked a cigarette/used tobacco
- Get into the right position:
 - Sit in a comfortable chair that supports your back, with your feet flat on the floor
 - Roll up your sleeves and place your left arm on a table with the palm facing upward, and the arm slightly bend at heart level
- Relax! Don't talk during the measurement.



HOW TO CHECK YOUR BLOOD PRESSURE

Put on the Cuff:

- Use your hand to open cuff slightly and wrap it snugly around your left arm (center it where your forearm folds).
- The bottom edge of the cuff should be approximately half an inch above the natural crease of the elbow.

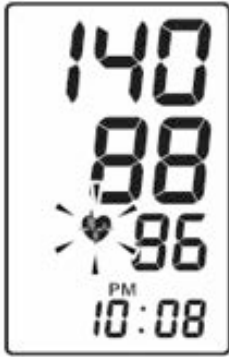


HOW TO CHECK YOUR BLOOD PRESSURE

Take a Measurement:

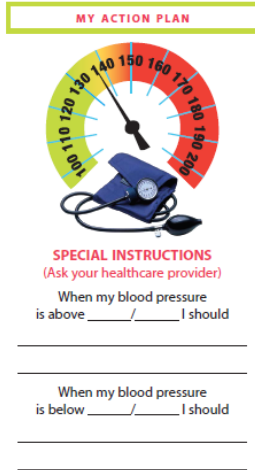
- Press the START/STOP button on the monitor.
- The cuff will automatically inflate.
- Remain still until the monitor completes the measurement.
- Record the blood pressure numbers right away so you do not forget them. **Use your blood pressure tracking card!**
- Bring your blood pressure tracking card to every doctors visit and show your doctor.

Monitor says
this:



You write this:

I 40/88

[illegible]

WHAT DOES YOUR BLOOD PRESSURE MEASUREMENT MEAN?

For normal measures:

| | Optimal | Pre-hypertension | Hypertension | VERY HIGH |
|---------------------------|-----------|------------------|--------------|--------------|
| Systolic (top number) | Below 120 | 120- 129 | 130- 179 | 180 or above |
| Diastolic (bottom number) | Below 80 | 80- 89 | 90- 109 | 110 or above |

For those with high blood pressure:

| | Optimal | Hypertension | VERY HIGH |
|---------------------------|-----------|--------------|--------------|
| Systolic (top number) | Below 130 | 130- 179 | 180 or above |
| Diastolic (bottom number) | Below 80 | 80- 109 | 110 or above |

Blood pressure is always classified into the higher group.

Hypertension is when **either number** is 130/80 mmHg or higher.

If you have hypertension, a blood pressure below 130/80 means that your blood pressure is under control.

WHAT DOES YOUR BLOOD PRESSURE MEASUREMENT MEAN?

- For people with a diagnosis of hypertension:

| Average Reading | Status | See Your Healthcare Physician |
|-------------------------------------|-----------|-----------------------------------|
| Below 130/80 (Both numbers) | Optimal | Keep regular check-in appointment |
| 130/80 - 179/109 (Either Number) | High | Schedule a doctor's appointment |
| 180/110 or above (Either Number) | Very High | Seek emergency care |

Always use the number in the higher group to determine status.

WHAT INCREASES YOUR RISK FOR HIGH BLOOD PRESSURE?

- **Older age** – Increased age leads to increased chances
- **Gender** – Men have a higher rate of high bp under 45 years, the risk is similar between 45-64, and women over 65 have a higher risk
- **Family history** – High blood pressure tends to run in families. There is a greater risk if one or both parents have had it.

WHAT INCREASES YOUR RISK FOR HIGH BLOOD PRESSURE?

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- **Being overweight/obese**
- **Cigarette / tobacco use**
- **Not being physically active**
- **Poor diet / high in salt diet**
- **Drinking too much alcohol**
- **Poorly controlled diabetes**
- **Stress**



These are the risk factors you can change!

HOW TO CONTROL HIGH BLOOD PRESSURE:

HEALTHY DIET

- **Limit salt (sodium).**
 - By eating more fruits, vegetables, whole grains and low-fat dairy.
 - High salt foods can lead to hypertension.
- **Eat lean proteins.**
 - Such as beans, fish, poultry, lean meat can lower blood pressure.
 - Good for your heart and weight.

HOW TO CONTROL HIGH BLOOD PRESSURE:

MEDICATION

- If lifestyle changes are not enough to lower blood pressure, **medications can be effective.**
- Do NOT stop taking your medicine if you feel better or your blood pressure goes below 130/80. That means the medicine is working!
- Different medicines work for different people
 - Do not share medication with anyone.
- A healthy diet and regular physical activity will help your medicine work better.

HOW TO CONTROL HIGH BLOOD PRESSURE:

BP CHECKS/DOCTORS VISITS

■ Regular blood pressure checks

- Check your blood pressure regularly, either at home or at a local pharmacy.
- Check more often if your blood pressure is not under control or there have been changes to the medications.

■ Regular doctor visits

- Required for doctors to monitor or adjust medicines.
- Bring your **blood pressure tracking cards** to your doctor visits and ask your doctor what your blood pressure goal is.
- See your doctor **every 3 months if your blood pressure is uncontrolled** or if there have been changes to your medication

HELPING EACH OTHER

- Ask a family member or buddy to help you become more healthy
- **People who exercise with a buddy are likely to exercise more**
- Think of 2 people who would make a good exercise buddy and ask them to be active with you!



QUIZ: QUESTION 1

What is Hemoglobin A1C?

- **Hemoglobin A1C is a number that shows the average amount of sugar in your blood over the past _____**
 - a) 7-8 months
 - b) 12 months
 - c) 2-3 months

ANSWER

What is Hemoglobin A1C?

- Hemoglobin A1C is a number that shows the average amount of sugar in your blood over the past _____
 - a) 7-8 months
 - b) 12 months
 - c) 2-3 months**

QUIZ: QUESTION 2

Who is more likely to get Diabetes?

- a) Inactive people
- b) Overweight people
- c) People with a family history of diabetes
- d) All of the above

ANSWER

Who is more likely to get Diabetes?

- a) Inactive people
- b) Overweight people
- c) People with a family history of diabetes
- d) All of the above**

PHYSICAL ACTIVITY!

Lets move!
I will lead you in a 10 minute
activity!

EXERCISES TO CONTROL HIGH BLOOD PRESSURE & DIABETES

- We will be focusing on 5 sets of exercises (3-5 repetitions each) that will help you with your:
 - Flexibility
 - Strength
 - Balance
- We will regularly do these physical activities during each session. Please be sure to practice them at home or during your free time.

DEEP BREATHING

- Be sure you are sitting down in a comfortable position (at home, try to find a quiet place).
- Uncross your arms and legs and rest your feet gently on the floor.
- Take a slow, deep breath.
- Hold your breath for about 4 seconds.
- Exhale slowly, pushing out as much air as you can.
- Repeat these steps 5 times.

EXERCISES: NECK

- **Neck Exercise:** improves flexibility and relieves tension in neck. (3 reps)
- Sit in your chair with your back firmly against it.
- Slowly, turn your head from left to right and hold the position for 10 seconds.
- Take deep, slow breaths while doing this exercise.



EXERCISES: UPPER BACK

- **Upper Back Exercise:** improves flexibility and helps with your shoulder and upper back muscles. (3 reps)
- Please remain seated and place your feet firmly on the ground.
- Hold arms in front of you at shoulder height with palms facing outward.
- Relax your shoulders and reach forward with your hands.
- Hold position for 10 seconds.
- Be sure to take slow, deep breaths.



EXERCISES: LEG STRAIGHTENING

- **Leg Straightening Exercise:** strengthens your thighs. (3 reps)
- Remain seated with your back supported by the chair.
- Breathe out and slowly extend one leg in front of you as straight as possible, but do not lock your knee.
- Hold position for 5 seconds. Breathe in as you slowly lower leg back down.
- Alternate legs and repeat.



EXERCISES: ONE FOOT BALANCE

- **Stand on one foot:** improves balance. (3 reps)
- Please get up and stand behind your chair.
- Stand on one foot and hold onto the chair for support.
- Hold position for 5-10 seconds.
- Alternate legs and repeat.



EXERCISES: TOE STAND

- **Toe stand:** makes walking easier by strengthening calves and ankles. (5 reps)
- Remain standing, feet-shoulder width apart.
- Breathe out and slowly stand on your tiptoes and hold for 10 seconds.
- Breathe in as you slowly lower heels to the floor.
- Rest and repeat.



HEALTH IS WEALTH!



NEXT SESSION: EATING HEALTHY

In the next session, we will talk more about how healthy eating can help improve blood pressure and diabetes.

