

# DREAM NATIONAL

## SESSION 2: DIABETES AND HYPERTENSION- AN OVERVIEW



# PURPOSE OF TODAY'S TRAINING

- To demonstrate strategies CHWs can use to teach program participants about defining and managing diabetes and hypertension.

# PROGRAM INTRODUCTION

- The following components can be used to introduce your program to participants and build rapport
  - Ice breaker/ introductory activity
  - CHW introduction and statement about CHW training/expertise in the community
  - Group Guidelines
  - Session Outline / Objectives
  - Community Statistics – can provide information about the prevalence of the condition and/or importance of the topic for the target community
- We show examples on the next set of slides for how we do this in our program

# WELCOME!

- Introductions (include any ice-breaker activities or games)
- Group discussion: What motivates you to be here today? (discussion questions help get participants to open up and get to know each other; also helps CHWs to understand what people are hoping to get out of the program)

# INTRODUCTIONS

In our introduction, we let participants know about our trainings and affiliation (such as with a medical center, health department, etc.) and about our expertise in the community.

- I am a Community Health Worker (CHW)
- I was trained by the NYU and Emory Medical Schools, I have been with [NYU/Emory] for x amount of years
- I work with the South Asian community to share information about healthy living, managing high blood pressure and diabetes, and preventing chronic diseases.

# 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

We review guidelines or come up with them together as a group. This helps people feel accountable to each other and to the program. Here are some examples, but you can tailor for your program.

- Keep your camera on if you can, so we can get to know one another
- Respect others. Everyone has something to contribute.
- Keep *personal* information shared by others in the group private and confidential - don't discuss outside of this group.
- Be supportive of each other – living with a chronic condition can be hard.

# SESSION OUTLINE

In this session, we will discuss:

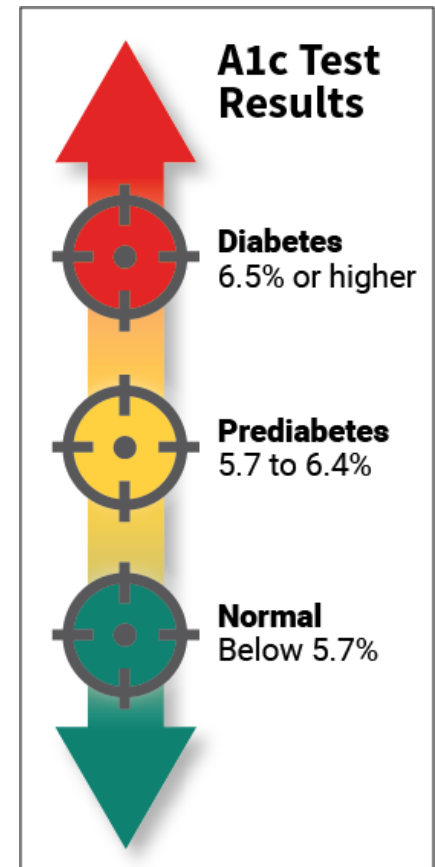
- How are diabetes and high blood pressure linked?
- What is diabetes?
- Diabetes symptoms
- What is high blood pressure?
- High blood pressure symptoms
- Overview on how to manage high blood pressure and diabetes

# WHY ARE WE FOCUSING ON PEOPLE WHO HAVE BOTH HYPERTENSION AND DIABETES?

- For people with Diabetes, also having Hypertension (high blood pressure) can double the risk for heart disease events and death.
- Approximately 1 out of every 4 South Asians in the US has both Diabetes and hypertension (23%)
  - This is higher than in other groups: Whites (6%), Chinese Americans (13%), Latinos (17%), and African Americans (18%).
- We learned in our NYC/Atlanta study:
  - In Atlanta: 75.6% (3 out of every 4) of participants with diabetes had hypertension
  - In NYC: 46.2% (just under half) of participants with diabetes also had hypertension

# WHAT IS HEMOGLOBIN A1C (HBA1C)?

- Your doctor diagnosed you with diabetes based on the results of a blood test called "A1c" - 6.5 or higher
- 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**

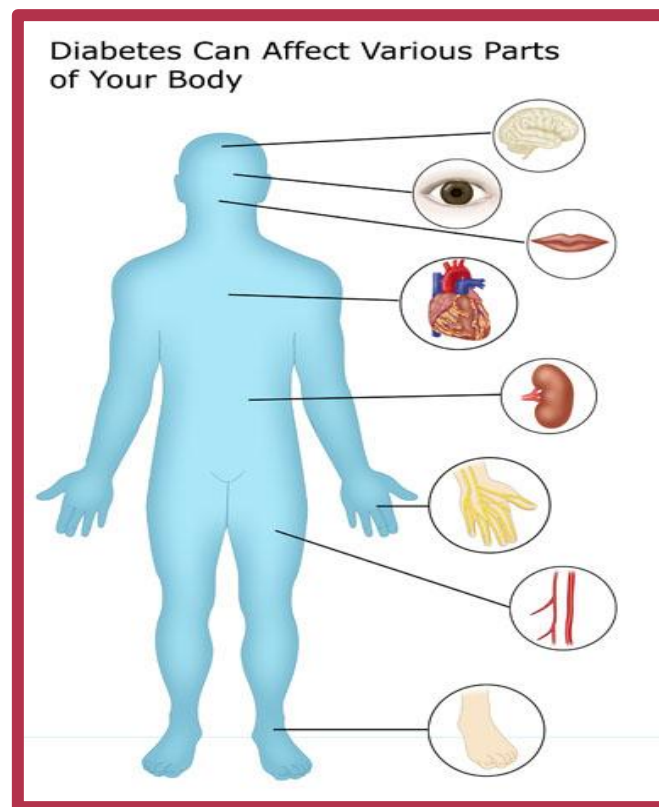


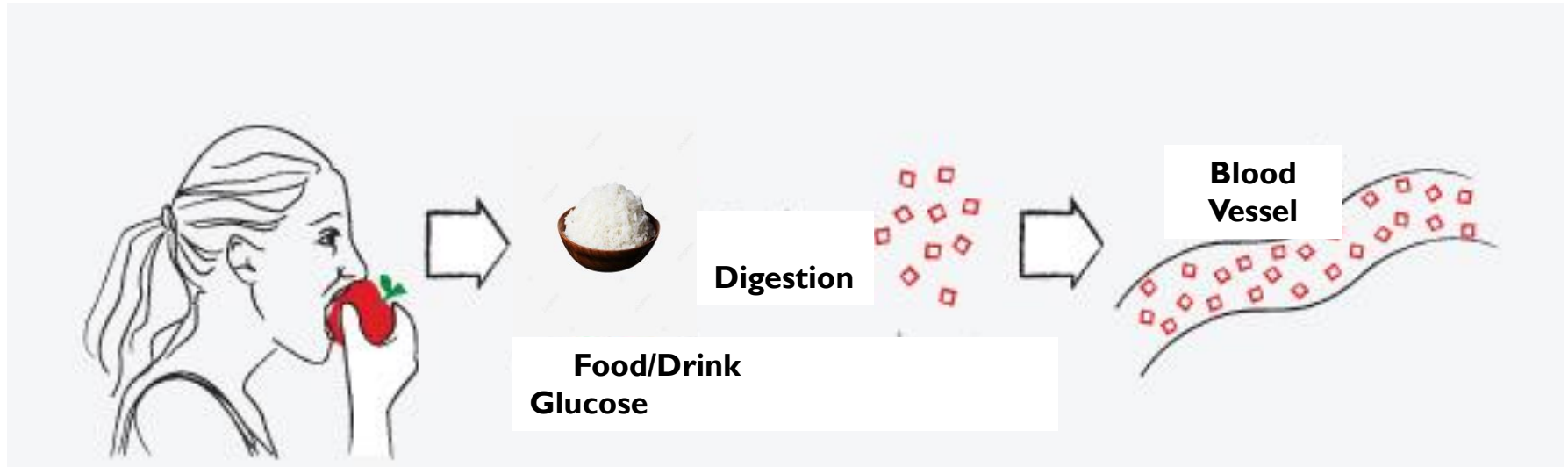
## WHAT IS TYPE 2 DIABETES?

- The body cannot use insulin correctly or cannot produce enough insulin.
- Without proper insulin, the body cannot control the amount of sugar in the blood.
- This is an A1c of 6.5 or more

# 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





Food/**drink** is eaten

Food/**drink** is broken down  
into sugar called glucose

Glucose enters the  
bloodstream

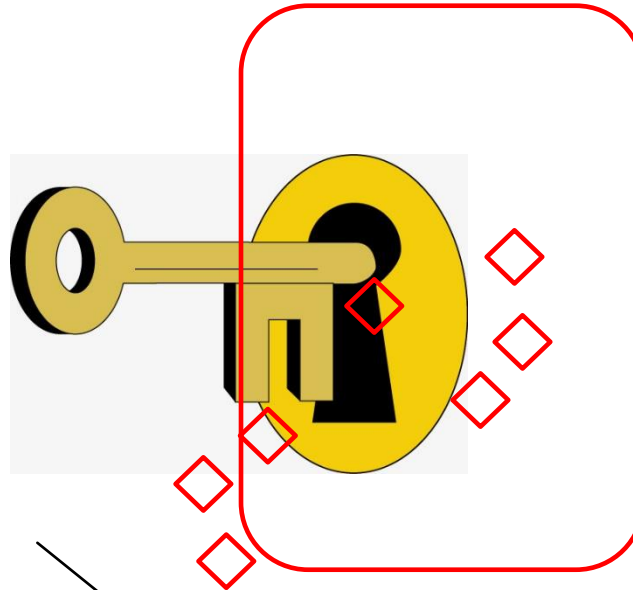
During digestion, food **and sugary drinks are** broken down into sugar which then enters the blood.

**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.**

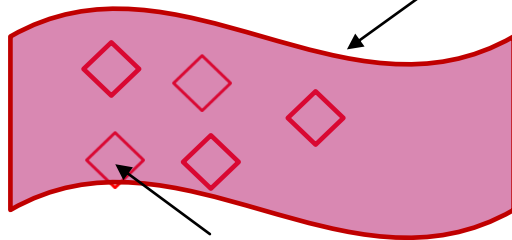
Blood Cell



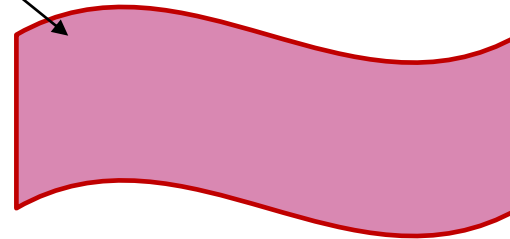
Blood Cell



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



## Blood Glucose 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.

# HOW CAN WE REDUCE OUR CHANCES OF GETTING DIABETES AND HYPERTENSION RELATED COMPLICATIONS?

- Managing hypertension and diabetes through accessible lifestyle modifications such as:
  - Dietary changes
  - Regular exercise
  - Adhering to the medication regimen prescribed by your healthcare provider
  - Seeing your doctor for regular checkups

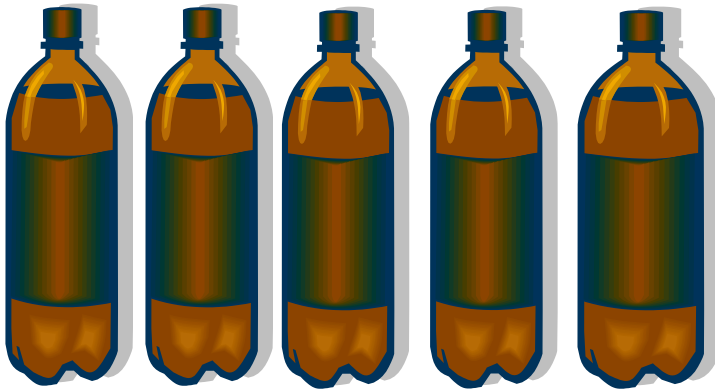
# WHY IS IMPORTANT TO MANAGE YOUR SUGAR LEVELS?

- 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!

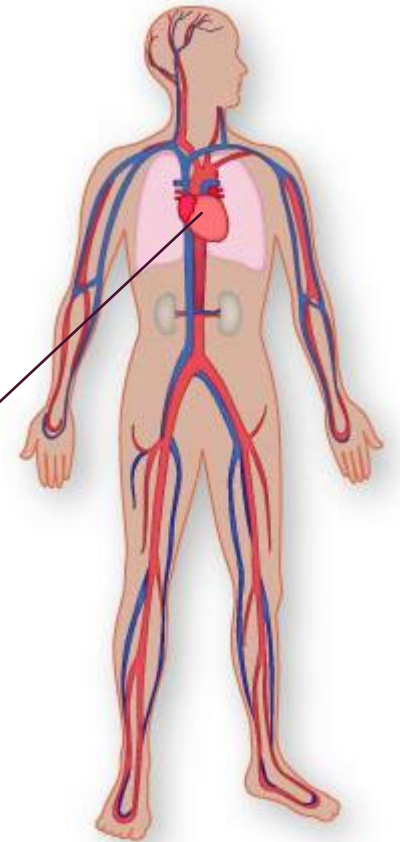
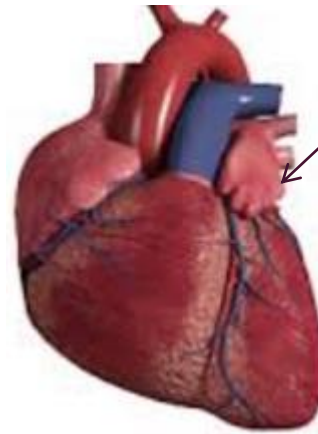
# THE HEART

- 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.

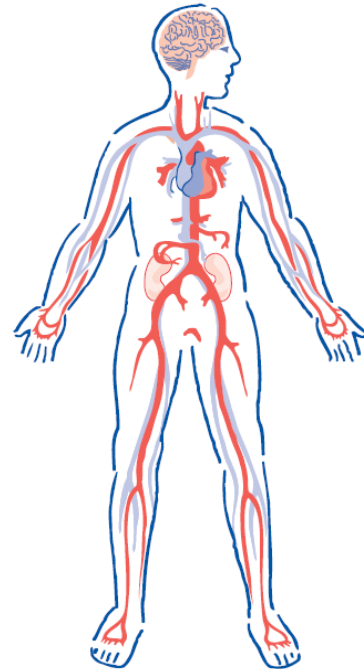
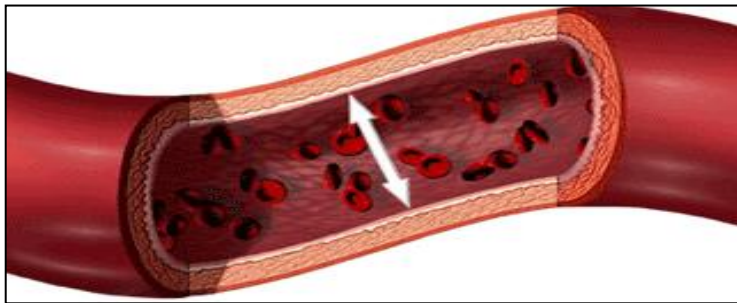


1 L      1 L      1 L      1 L      1 L



# WHAT IS BLOOD PRESSURE?

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



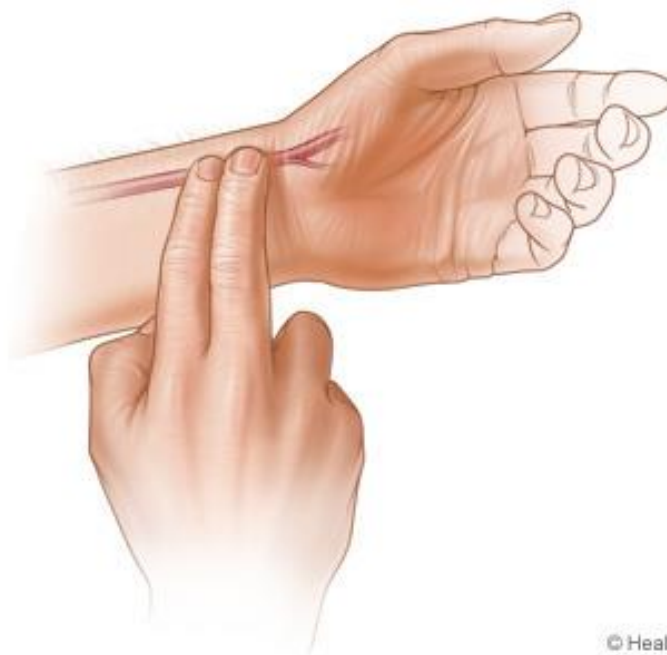
- Blood pressure moves the blood through your body.
- Blood pressure is recorded as two numbers—the **systolic** pressure (as the heart beats) over the **diastolic** pressure (as the heart relaxes between beats).

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

Systolic      Diastolic

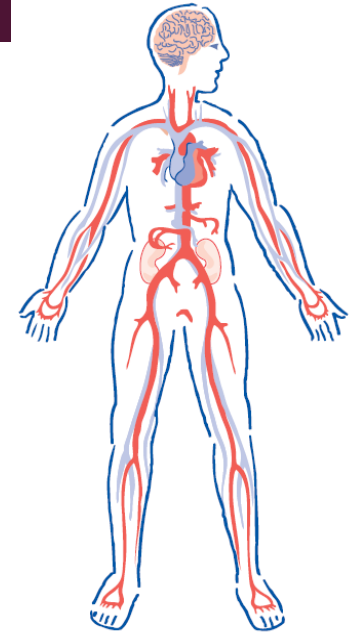
# TOUCH AND FEEL: FEELING THE HEARTBEAT

Find your pulse.

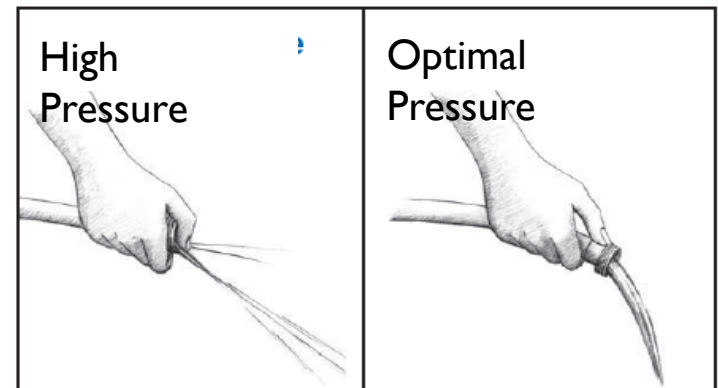


# WHAT IS HIGH BLOOD PRESSURE?

- 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



# 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.

# HOW TO CONTROL DIABETES AND HIGH BLOOD PRESSURE?

- **Diet**
- **Lowering weight**
- **Medication adherence**
- **Regular blood pressure and A1c monitoring**
- **Regular visits to the doctor**

# HOW TO CONTROL HIGH BLOOD PRESSURE:

## DIET

- **Limiting carbohydrates and 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!



# SUMMARY

- Of the concepts we reviewed today, what was easy to understand?
- What was difficult to understand? Do you anticipate you will have difficulty explaining these concepts to participants?
- Are there any cultural nuances that affect how people view and understand chronic diseases?

# PHYSICAL ACTIVITY!

Let's move!  
I will lead you in a 10 minute  
activity!

# WALKING IN PLACE

- Breathe deeply as you walk in place at an easy pace, swinging your arms naturally
  - Do this for 2 minutes
- 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.