1.Equipment usage



One of the many lessons of this pandemic is that you cannot let your health depend 100% on others. You have to take responsibility individually, family, and collectively for the way you eat, your processes of personal cleaning, and how you prevent yourself from discomfort or illness.

In addition to reviewing yourselves with medical specialists periodically, it is necessary to rely on essential medical devices to monitor the basic indicators of your general health that can alert you to any abnormality in your physical condition. For instance, Diabetes mellitus, cardiac arrhythmias, arterial hypertension, are among other serious non-communicable chronic diseases that are preventable and easily detectable if you have the right instruments. And, to get aware of your health conditions, you must have a minimum of medical equipment to provide first aid or check if it is necessary to go to a clinic. So, here are 5 medical devices you must have in your home.

1.Digital Blood Pressure Monitor

It is essential to monitor your blood pressure at home if you have already been diagnosed. This way, you can make sure you take your medications correctly, you have more accurate data on your pressure, and you can be consistent in your care. The blood pressure monitor acquires your records and keeps track of your health status anytime you want because it is easy to use and fully automatic. This home monitor takes pressure readings quickly and easily.



How do I measure my blood pressure?

Before you check your blood pressure, you should:

- Wait 30 minutes after eating or using caffeine, alcohol, or tobacco products.
- Go to the bathroom and empty your bladder.
- Rest for 3 to 5 minutes and do not talk.
- Sit in a comfortable position, with your legs and ankles uncrossed and your back supported.
- Elevate your left arm to the level of your heart. Place it on a table or desk and sit still.
- Wrap the cuff around the upper part of your bare arm. The cuff should be smooth and snug. There should be enough room for you to slip one fingertip under the cuff.
- Check the placement of the cuff. The bottom edge of it should be 1 inch above the crease of your elbow.
- Turn the power on to start the unit.
- On the automatic models, the cuff will inflate by itself with a push of a button. On the manual models, you have to inflate the cuff. You do this by squeezing the rubber bulb at a rapid rate.
- After the cuff inflates, the automatic device will slowly let air out.
- Look at the display screen to get your blood pressure reading. It will show your systolic and diastolic pressures. Write down the measurement in your record. The systolic pressure goes in front of the diastolic pressure. For example, 120/80.

- Press the exhaust button to release all of the air from the cuff.
- If you need to repeat the measurement, wait 2 to 3 minutes before starting. Video for more information: -

How to use digital blood pressure monitor

What does my blood pressure reading mean?

Normal blood pressure is 120/80 or lower. High blood pressure is 140/90 or higher. If your blood pressure is between 120/80 and 140/90, you may have something called prehypertension. This means that you are at risk for high blood pressure.

	Systolic pressure (first number)	Diastolic pressure (second number)
Normal	Less than 120	Less than 80
Prehypertension	120–139	80–89
High blood pressure: Stage 1*	140–159	90–99
High blood pressure: Stage 2	160 or higher	100 or over

2. Pulse oximeter

This device is vital in this time of the spread of coronavirus. It is a small device that resembles tweezers to press a finger. It measures the levels of

oxygenation in the blood and heart rate. After placing it, after a few seconds, its screen indicates a value that, under normal conditions, should mark a range of percentages between 95 and 98. Some people handle lower readings, but there is no cause for alarm unless the percentages are less than 92%. A low level of oxygen in the blood translates into a lack of it in tissues and, consequently, in vital organs.



Here is how to use a Pulse Oximeter:

Step 1: Remove any nail polish/false nails & warm your hand if cold.

Step 2: Rest for at least 5 minutes before taking your measurement.

Step 3: Rest your hand on your chest at heart level & hold it still.

Step 4: Switch on the oximeter & place it on your middle or index finger.

Step 5: The reading takes time to steady, Keep the oximeter in place for at least a minute or longer if the reading is not stable.

Step 6: Record the highest result once it has not changed for 5 seconds.

Step 7: Identify each reading carefully.

Step 8: Start recording from baseline & record three times a day at the same time. Take extra measures if you feel a change in your health.

Video for more information: -

How to use an oximeter

Normal readings of an oximeter

A normal level of oxygen is usually 95% or higher. Some people with chronic lung disease or sleep apnea can have normal levels around 90%. The "SpO2" reading on a pulse oximeter shows the percentage of oxygen in someone's blood.

If your home SpO2 reading is lower than 95%, call your health care provider.

3. Glucometer

Diabetes is one of the consequences of obesity and can be kept under control with the help of Glucometer. Thanks to this device, it helps monitor blood

sugar levels in people with diabetes or suspected of suffering from this chronic disease. Pharmacies offer several brand options.

They have a slot in which small disposable test strips are placed and a screen that indicates glycemia (glucose measurement). It is accompanied by a kind of "pen" which is a mechanism for inserting needles to prick the fingers, which after being bitten produces a small drop of blood that is placed on a test strip.



How to use glucometer

How to Use a Glucometer

while most instruction manuals are user-friendly, this task can seem daunting if you are new to testing or not that technologically savvy. Follow these guidelines for safe and easy testing.

What You Need to Use a Glucometer

- Alcohol prep pad (or soap and water if you have access to a sink)
- Lancet
- Test strip
- Glucometer
- A notebook to record results

Glucometer Usage Instructions

- 1. First, set out your glucometer, a test strip, a lancet, and an alcohol prep pad.
- 2. Wash your hands to prevent infection. If you are not by a sink, it's okay to just use the alcohol swab. If you are by a sink and wash your hands thoroughly, you do not have to use an alcohol swab.
- 3. Sometimes it helps to warm your hands first to make the blood flow easier. You can rub your hands together briskly or run them under warm water—just be sure to dry them well as wet hands can dilute the blood sample, resulting in a lower number.
- 4. Turn on the glucometer and place a test strip in the machine when the machine is ready. Watch the indicator for placing the blood on the strip.
- 5. Make sure your hand is dry and wipe the area you've selected with an alcohol prep pad and wait until the alcohol evaporates.
- 6. Pierce your fingertip on the side of your finger, between the bottom of your fingernail to the tip of your nail (avoid the pads as this can pinch more). The type of drop of blood required is determined by the type of strip you are using (some use a "hanging drop" of blood versus a small drop for strips that draw blood in with a capillary action).

- 7. Place the drop of blood on or at the side of the strip.
- 8. The glucometer will take a few moments to calculate the blood sugar reading. Follow your healthcare provider's orders for whatever blood sugar reading you get.
- 9. You may use the alcohol prep pad to blot the site where you drew the blood if it is still bleeding.
- 10. Write down your results. Keeping a record makes it easier for you and your healthcare provider to establish a good treatment plan. Some glucometers can store your results in a memory, for easier record keeping.

Normal Readings

While your personalized target range may be slightly narrower, there are established windows as to what's considered normal glucose levels for most people with diabetes. Your levels may vary depending on your age, activity level, gender, and type of diabetes.

According to the American Diabetes Association, the following target range is applicable for most non-pregnant adults.¹ Target <u>hemoglobin A1C</u> (a test that measures an average of your blood sugar over the past two to three months) ranges may differ depending on age/sex and other factors.

Marker	Target Value
Pre-prandial blood glucose (pre-meal)	80 to 130 mg/dL
Postprandial blood glucose (post-meal)	Less than 180 mg/dL
A1C	Less than 7%

4. Inhaler machine

These machines, when used with saline water or albuterol improve congestion, fatigue, coughing of children and family members. Oxygenation machines can save the life of a patient with asthma and fatigue. This machine helps with treatment for patients with severe heart and lung failure and prevents congestion, and oxygenates the blood outside the body.



How to use inhaler

- 1. Wash your hands well.
- 2. Connect the hose to an air compressor.
- 3. Fill the medicine cup with your prescription. To avoid spills, close the medicine cup tightly and always hold the mouthpiece straight up and down.
- 4. Attach the hose and mouthpiece to the medicine cup.
- 5. Place the mouthpiece in your mouth. Keep your lips firm around the mouthpiece so that all of the medicine goes into your lungs.
- 6. Breathe through your mouth until all the medicine is used. This takes 10 to 15 minutes. If needed, use a nose clip so that you breathe only through your mouth. Small children usually do better if they wear a mask.
- 7. Turn off the machine when done.
- 8. Wash the medicine cup and mouthpiece with water and air dry until your next treatment.

5. The Thermometer

The medical thermometer is the first health tool that intervenes when a person has a fever. It allows you to determine your body temperature and assess the extent of hyperthermia to call a medical professional if necessary. Even more important is a medical thermometer for a pregnant woman, child, or newborn baby.

Many people ignore the importance and usefulness of having health equipment such as blood pressure monitors, medical thermometers, and blood glucose meters at home. We hope this article has enlightened you on the subject.



Clean the tip with cold water and soap, then rinse it.

Turn the thermometer on.

Put the tip under your tongue, towards the back of your mouth.

Close your lips around the thermometer.

Wait until it beeps or flashes.

Check the temperature on the display.

How to use thermometer