

Glucose station

1. **Blood glucose** : here are the normal ranges for blood glucose. To interpret whether the patient's glucose is normal, you should determine if the patient when the patient last ate something.

Fasting blood glucose: ²	Less than or equal to 110 milligrams per deciliter (<u>mg/dL</u>) (6.1 millimoles per liter, or <u>mmol/L</u>).
2 hours after eating (postprandial): ³	Less than 140 mg/dL (7.8 mmol/L) for people age 50 and younger; less than 150 mg/dL (8.3 mmol/L) for people ages 50-60; less than 160 mg/dL (8.9 mmol/L) for people age 60 and older.
Random (casual): ²	Levels vary depending on when and how much you ate at your last meal. In general: 80-120 mg/dL (4.4-6.6 mmol/L) before meals or when waking up; 100-140 mg/dL (5.5-7.7 mmol/L) at bedtime.

2. If the blood glucose is higher than the levels noted above:
 - a. for fasting blood glucose, a level between 110 mg/dl and 125 mg/dl is designated as 'impaired fasting glucose' (sometimes called 'prediabetes'). Levels > 125 mg/dl on more than once measurement is one of the diagnostic criteria for diabetes.
 - b. a random or postprandial glucose > 200 mg/dl, with symptoms, is also a criteria for diabetes. However, more than one measurement is needed to make the diagnosis.
2. If the fasting blood sugar is between 110-125 mg/dl, tell the patient the sugar is a little higher than it should be, and that the patient should get it checked again in the next few months. Give them a paper with the blood sugar written on it (indicate if it is fasting)
3. If the fasting blood glucose is > 125 mg, ask if the patient has ever been told he/she has a high blood sugar
 - a. Option 1: the patient already has a history of diabetes and is being treated: tell the patient the blood sugar is higher than the recommended level for a fasting blood sugar (recommended 80—120). Tell them they should see their doctor in the next few months to get their diabetes rechecked.
 - b. Option 2: they have been told their sugar is high but have not followed up

- i. ask them what they know about diabetes
- ii. ask them what the barriers are to following up
- iii. encourage them to followup. Use positive reinforcement : “We have a lot of good medicines now that can help you live longer and feel better!”
- iv. give them a resource to followup (clinic number, other referral)

c. Option 3: they have never had a high blood sugar in the past.

- i. tell them that this high blood sugar does NOT mean they have diabetes for sure. It needs to be checked again

- ii. Write down the number and give them a piece of paper with the blood sugar on it.

3. If they wish to discuss ways to reduce their blood sugar, see the tips on the handout.

Cholesterol Station

- I. Determine the LDL
 1. Measure the patient's total cholesterol.
 2. Measure the patient's HDL
 3. Measure the patient's triglycerides
 4. Calculate the patient's LDL goal with the formula: $LDL = \text{total cholesterol} - HDL - \text{triglycerides}/5$
(Note: if the triglycerides are > 400 , this formula is not accurate. Tell the patient that one of the 'fats' in the blood is high. He/she needs to recheck the cholesterol in the fasting state)
2. Determine the patient's LDL goal. The easiest way to do this is to use the Framingham Risk Score in MedCalc. There are paper versions of the calculator as well.
3. Determine the LDL goal.
 1. Ask the patient if they have diabetes, or if they have ever had a stroke or heart attack. If they answer 'yes' to any of these, their LDL goal is < 100 mg/dl
 2. If the answer is 'no' ask about the following risk factors:
 - a. are they over age 45(men) or age 55 (women)
 - b. did someone in their family have heart disease at age < 55 ?
 - c. do they have high blood pressure?
 - d. do they smoke?
 - e. is the HDL < 40 mg/dl
 2. If the patient has 0 or 1 of these risk factors, their LDL goal is 160 mg/dl
 3. If the patient has 2 or more of these risk factors, calculate their risk of an MI using the paper chart
 - i. $< 20\%$ risk: goal is LDL of < 130 mg/dl
 - ii. $> 20\%$ risk: goal is LDL < 100 mg/dl
4. Tell the patient if his cholesterol is below or above goal
5. If the cholesterol is above goal, give the patient the 'Health Tips' sheet. Advise him/her to get the cholesterol checked again in a doctor's office.

1. Identify if the patient has hypertension or prehypertension based on your BP check

CLASSIFICATION OF BLOOD PRESSURE		
CATEGORY	SBP MMHG	DBP MMHG
Normal	<120	and <80
Prehypertension	120-139	or 80-89
Hypertension Stage 1	140-159	or 90-99
Hypertension Stage 2	≥160	and ≥100
Key: SBP = systolic blood pressure DBP = diastolic blood pressure Source: U.S. Department of Health and Human Services, Washington, DC.		

2. If the blood pressure is normal, inform the patient. Ask if the patient wants you to write it down.
3. If the blood pressure is higher than normal (either prehypertension or hypertension) have the patient rest quietly for 5 minutes and repeat the blood pressure reading.
4. If it is still high ask the patient: Have you ever been told that your blood pressure is higher than normal?
 - i. Option 1: the patient is already being treated for high blood pressure.
In this case, the goal is usually $\leq 140/90$.
 - a. If the BP is $\leq 140/90$ Tell the patient if he/she is at the goal. Write the blood pressure on the 'Health Tips' sheet and give it to the patient.
 - b. If the patient is not at the goal, suggest that they go see their doctor and get it checked again soon.
 - ii. Option 2: the patient has been told he/she has high blood pressure in the past but isn't being treated.
 - i. Consider asking why the patient isn't being treated.
 - ii. Convey a POSITIVE message about treatment for high blood pressure (eg 'we have great medications now that can help you live longer without making you feel sick!')
 - iii. Give them the HealthTips sheet about Hypertension. Write their blood pressure on the sheet.
 - iv. Give them information about where they can find a doctor (this should be available from the organizers of the screening activity)
 - iii. Option 3: the patient has never been told he/she has high blood pressure
 - i. Advise the patient that one high blood pressure reading does not mean he/she has high blood pressure. However, it does mean that it should be checked again in the next few weeks.
 - ii. Give them the Health Tips sheet with their blood pressure reading and the name of the place they can get checked again.