

## SELF-MONITORING OF BLOOD GLUCOSE (SMBG) or CONTINUOUS GLUCOSE MONITORING SYSTEM (CGMS) is important in TYPE 1 DIABETES







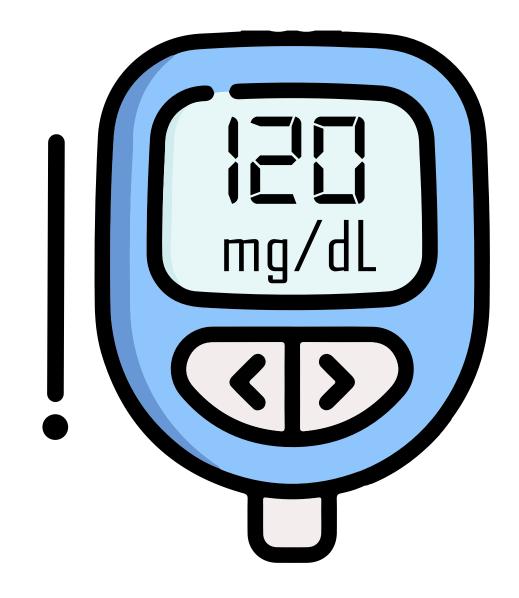
**THEY HELP YOU AND YOUR DOCTOR** understand the impact of meals, exercise, medication, Insulin and other aspects like stress, illness, sleep and menses on your

#### blood glucose levels.



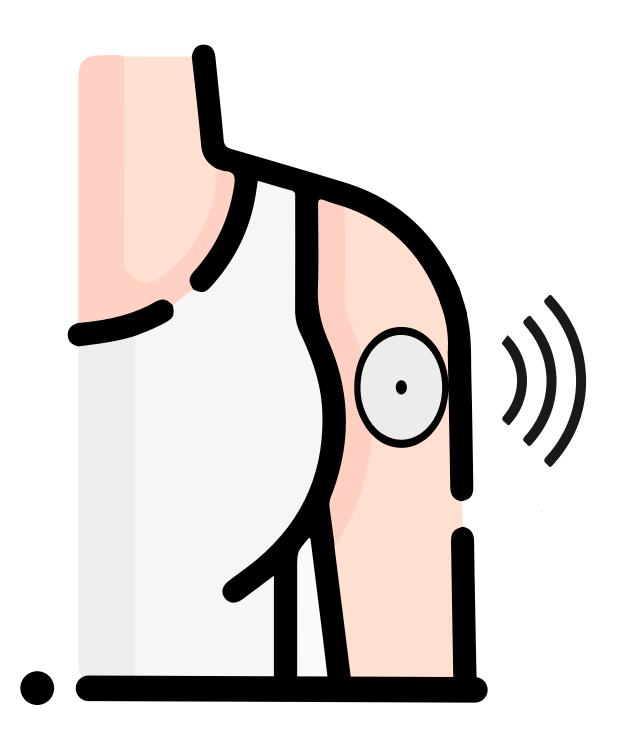


SMBG REFERS TO HOME BLOOD GLUCOSE TESTING through the use of a glucose monitoring device.



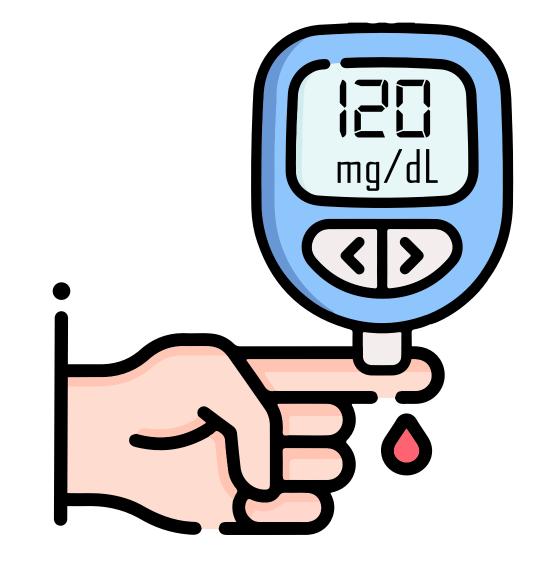


CGMS AUTOMATICALLY TRACKS BLOOD GLUCOSE LEVELS through a tiny sensor inserted under your skin, usually on the belly or arm.



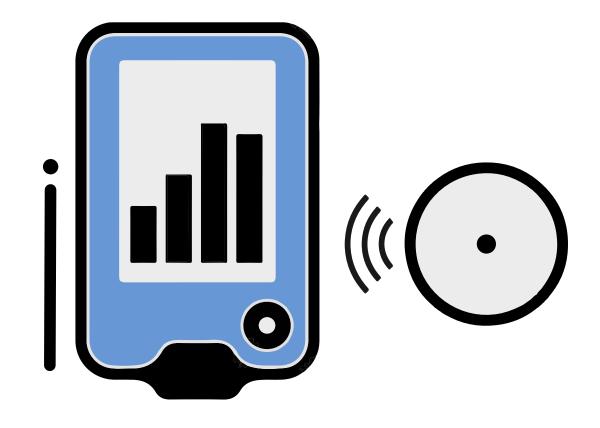


## SMBG MEASURES your capillary (blood vessel) glucose levels.



## CGMS SENSOR MEASURES

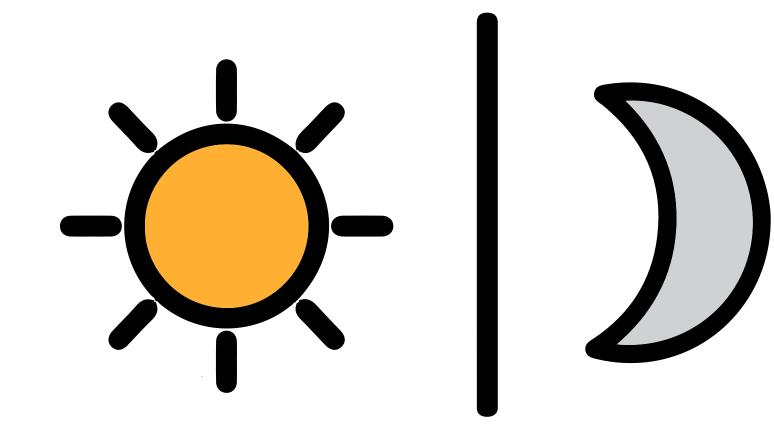
your interstitial glucose level, which is found in the fluid between the body cells.





With the help of CGMS, **YOU CAN SEE YOUR GLUCOSE READINGS ANYTIME IN THE DAY** or also analyse the trends of glucose patterns in an entire day over a period of

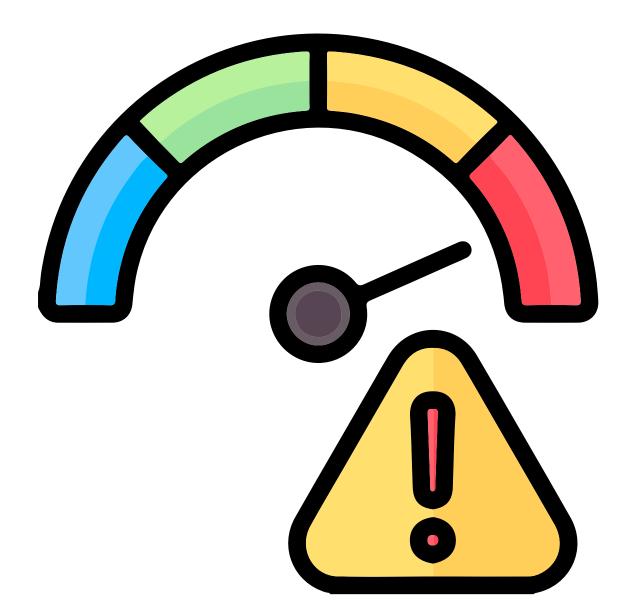
#### 7 or 14 days.





THESE TOOLS ARE LIKE THE SPEEDOMETER OF A CAR which shows you the current speed and guides you on the speed that you should be driving at to

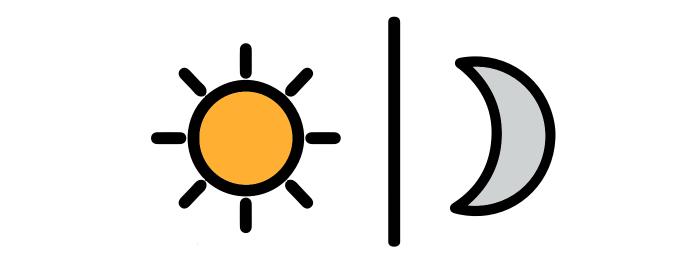
#### prevent an accident.





Regular monitoring at different times of the day and night will help you **UNDERSTAND HOW WELL YOUR DIET, EXERCISE, OR MEDICATION/INSULIN ARE** 

## **WORKING** or if you need to make changes.







SHARING THE LOG BOOK OF YOUR BLOOD GLUCOSE READINGS or the blood glucose trends of CGMS with the doctor, dietitian and MyCARE Diabetes educator will help them make informed decisions with respect to your lifestyle, Insulin type and dose.



**NOTE:** This will help you achieve the desired glucose control



#### BLOOD

## GLUCOSE TARGETS



## POSTPRANDIAL BLOOD GLUCOSE (2 HRS AFTER A

FASTING/PRE-PRANDIAL (PRE-MEALS) BLOOD GLUCOSE: 80-130 mg/dL

#### **MEAL):** <180 mg/dL

#### HbA1C: <7%





For those using CGMS, THE DESIRED TARGET FOR THE TIME IN RANGE FOR MOST PEOPLE WITH TYPE 1 DIABETES IS 70%. (70-180 mg/dL).





**NOTE:** Hypoglycemic episodes in children must be minimum and should be kept below 4% (<70mg/dL). Depending on your age, any problems, and other circumstances, your target ranges may vary.



## KNOWING YOUR BLOOD GLUCOSE TARGETS IS IMPORTANT. Consult with your doctor or MyCARE Diabetes educator

about establishing suitable target ranges and developing a regular, precise blood glucose testing routine that works for you.



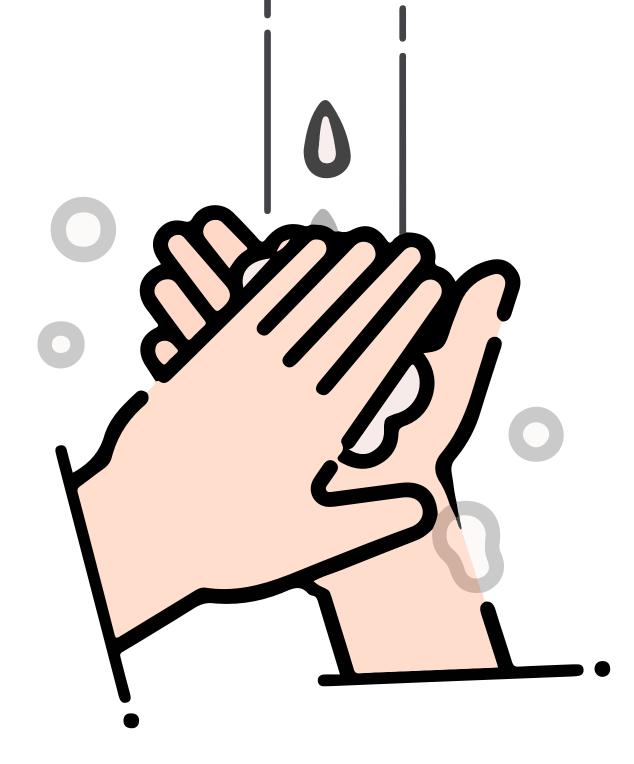


## THE FOLLOWING STEPS ARE GENERAL GUIDELINES FOR TESTING BLOOD GLUCOSE LEVELS

**NOTE:** You should read the specific details of your blood glucose monitor from the information given in the pack by the manufacturer.

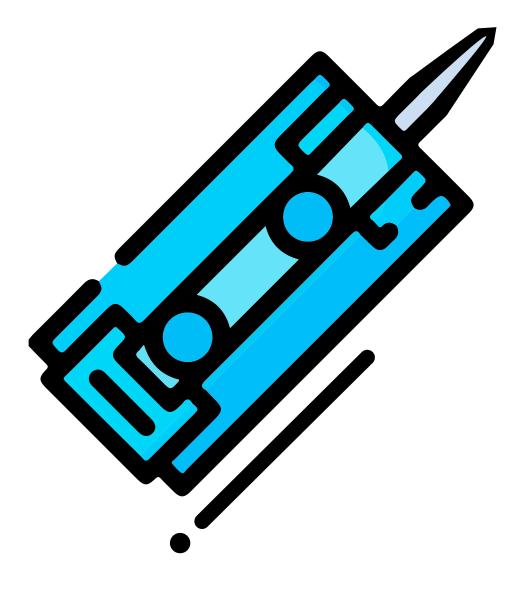


## WASH HANDS WITH SOAP and warm water. Dry hands well.





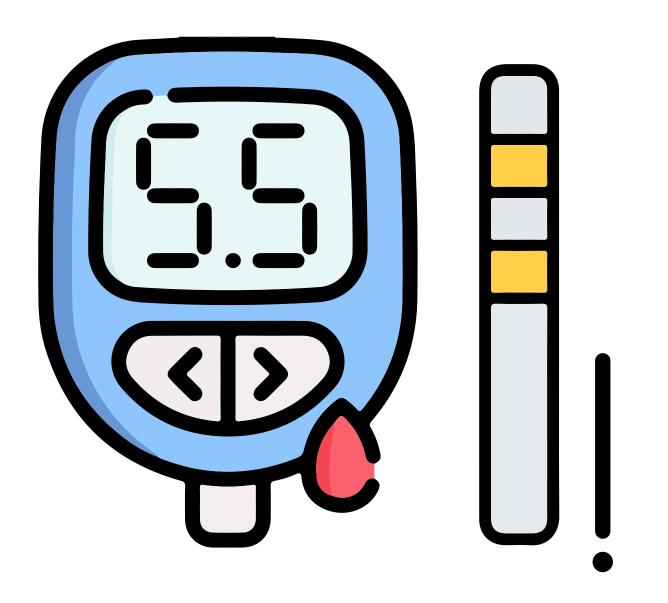
**PREPARE THE LANCING DEVICE** by inserting a fresh lancet.



**NOTE:** Lancets that are used more than once are not as sharp as a new lancet, and can cause more pain and injury to the skin.

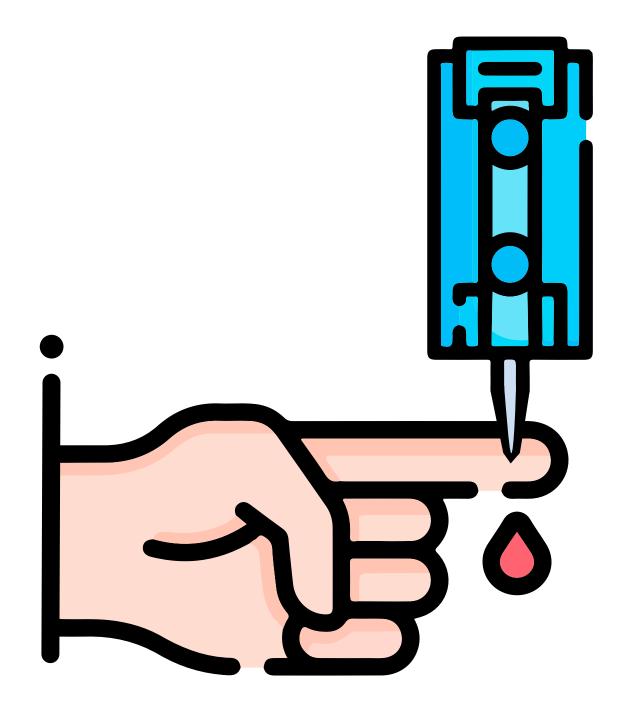


PREPARE THE BLOOD GLUCOSE METER AND TEST STRIP (as per instructions given in the glucose monitoring device pack)





Use the lancing device to **OBTAIN A SMALL DROP OF BLOOD** from your fingertip

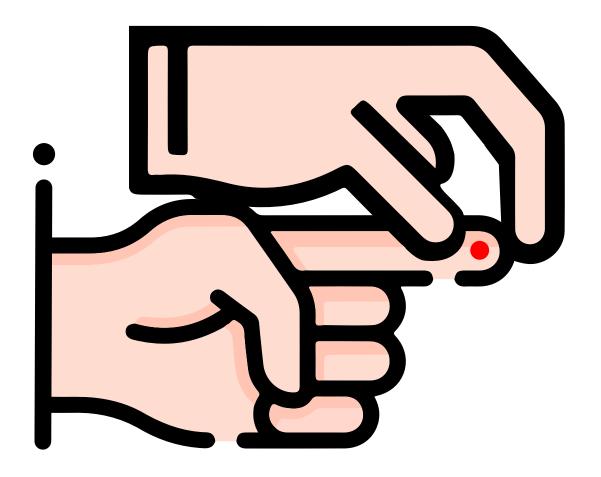






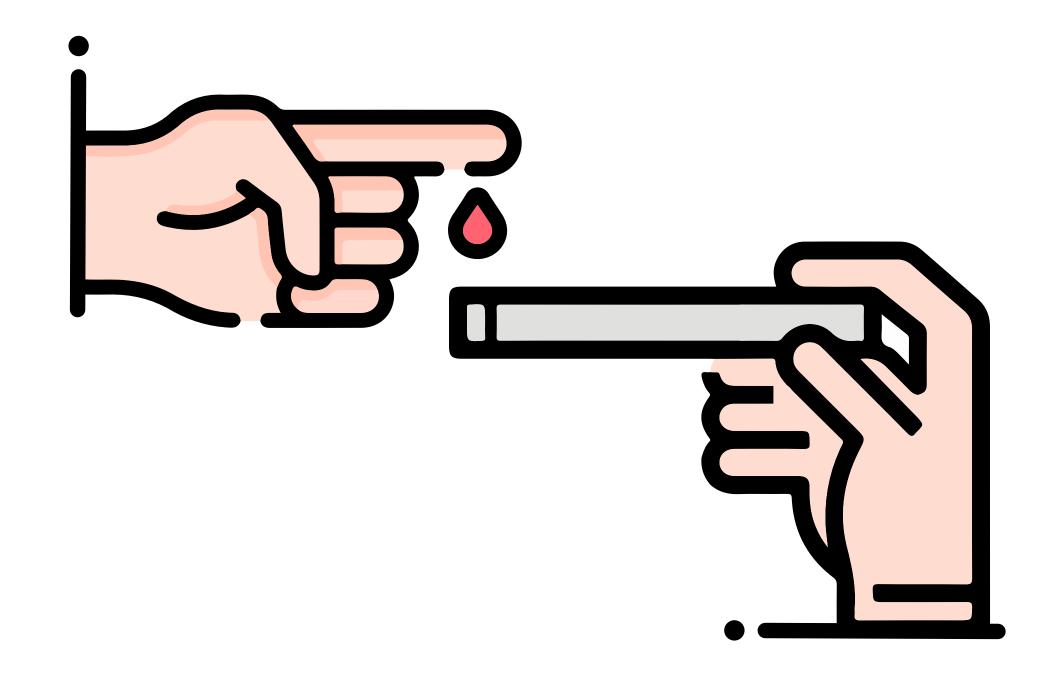
If you have difficulty getting a good drop of blood from the fingertip, **TRY RINSING YOUR FINGERS WITH WARM WATER,** shaking the hand below the waist, or

## squeezing ("milking") the fingertip.





APPLY THE BLOOD DROP TO THE TEST STRIP in the blood glucose meter. The results will be displayed on the meter after several seconds.



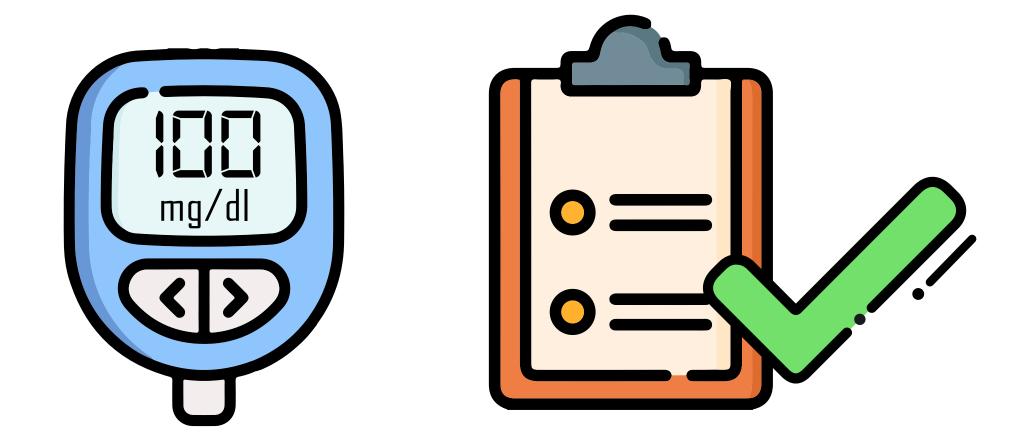


## ACCURACY OF

## GLUCOSE MONITORING DEVICE



## You must **PERIODICALLY CHECK THE ACCURACY OF THE BLOOD GLUCOSE MONITORING DEVICE** by comparing it with the laboratory report.

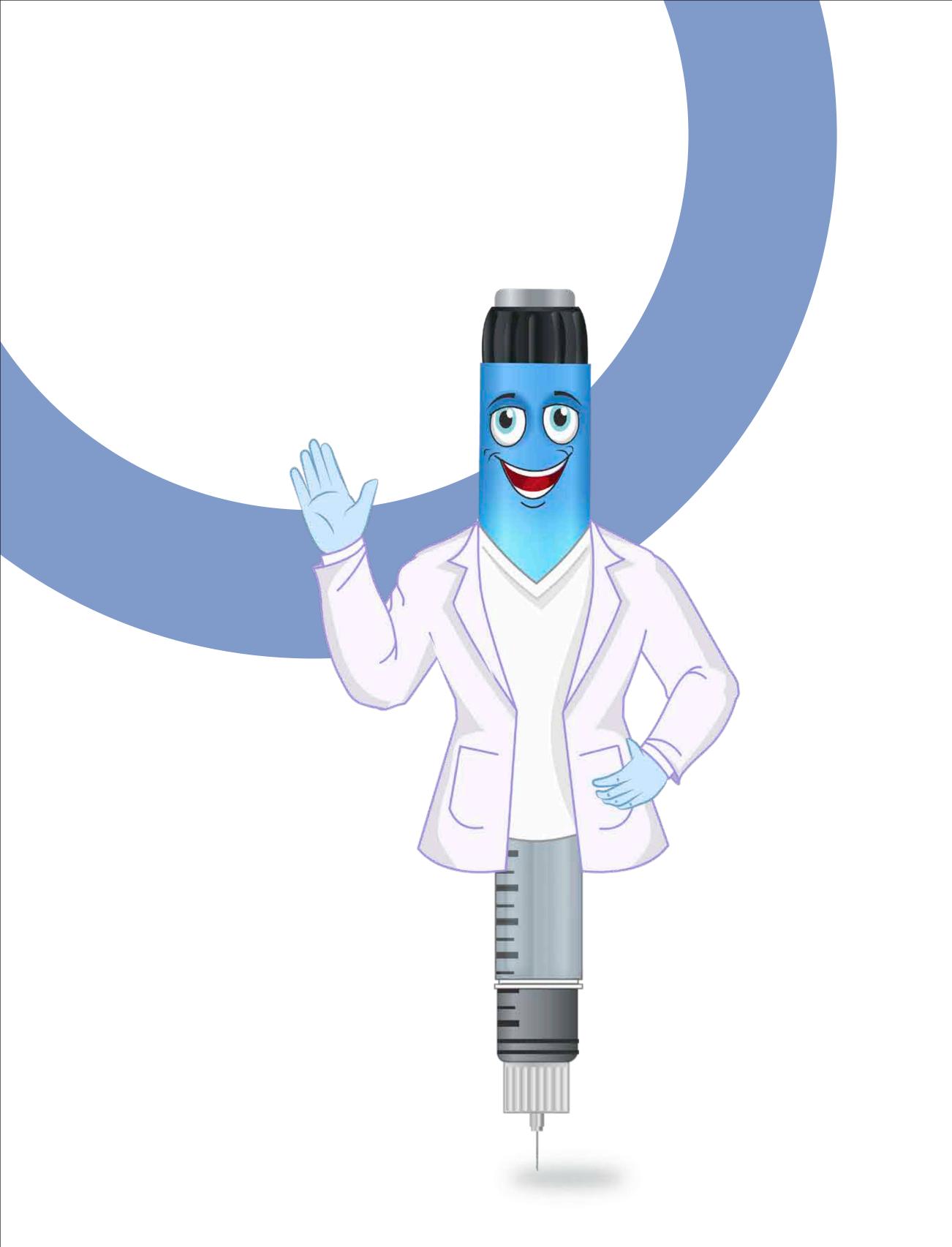


#### When comparing glucose monitor results with those from a laboratory, **THERE SHOULD NOT BE MORE THAN A 20% DIFFERENCE IN THE READINGS.**

**NOTE:** Use your home monitor to check your blood glucose at the same time that blood is drawn in the lab.

**NOTE:** Larger differences may indicate a problem with your monitor, glucose strips, or your monitoring technique.





## Let's learn about the BEST TIME TO MONITOR YOUR BLOOD GLUCOSE LEVELS



## FIRST THING IN THE MORNING, BEFORE EATING OR DRINKING ANYTHING

#### A FASTING TEST CAN REVEAL

whether your Insulin, medicine, and bedtime snack are keeping your blood glucose levels within the safe range throughout the night.

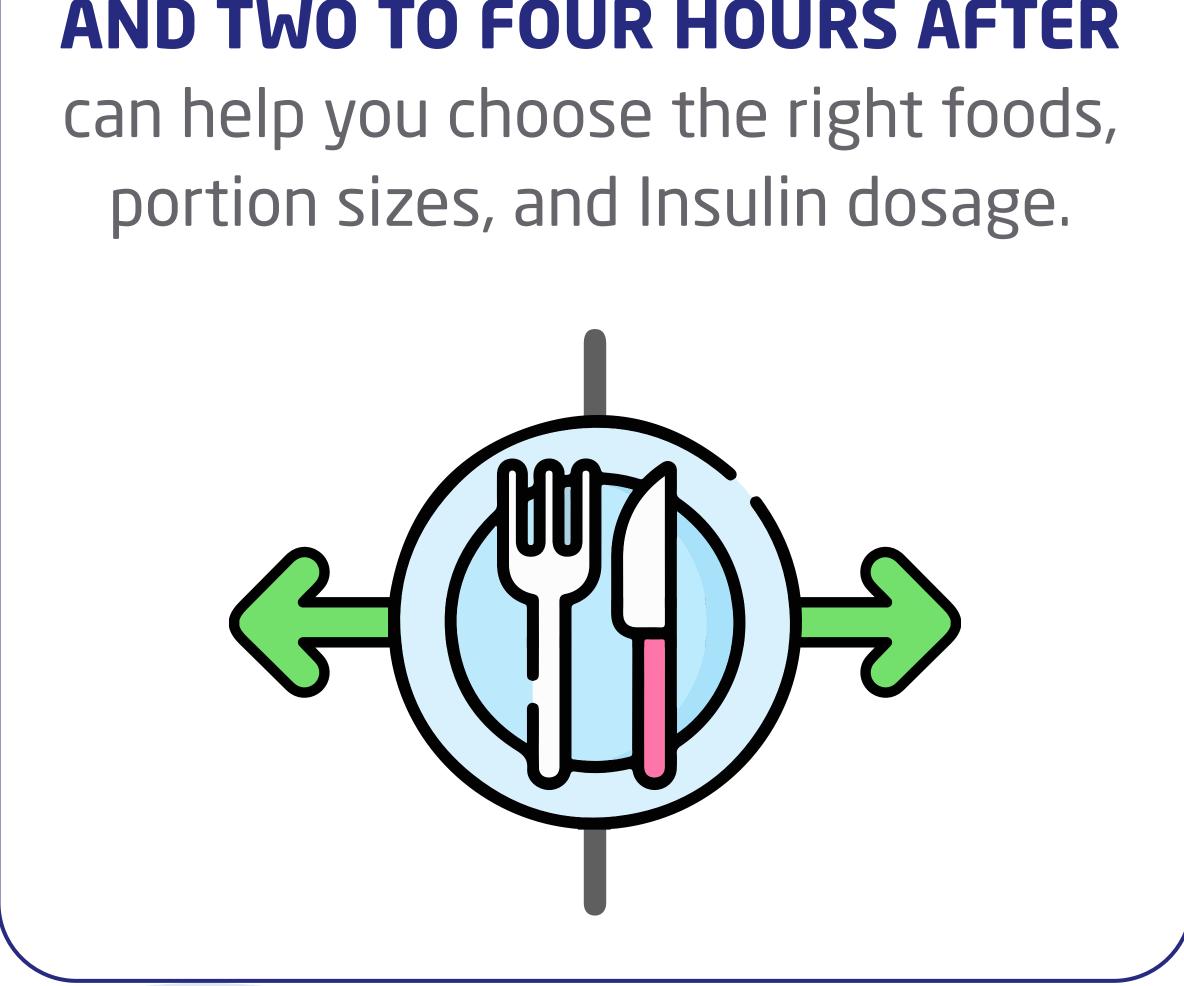
#### CHECKING BLOOD GLUCOSE AT 3 AM IS RECOMMENDED.

It helps to interpret high or low fasting blood glucose readings and to identify night time Hypoglycemia.



#### BEFORE AND TWO HOURS AFTER MEALS

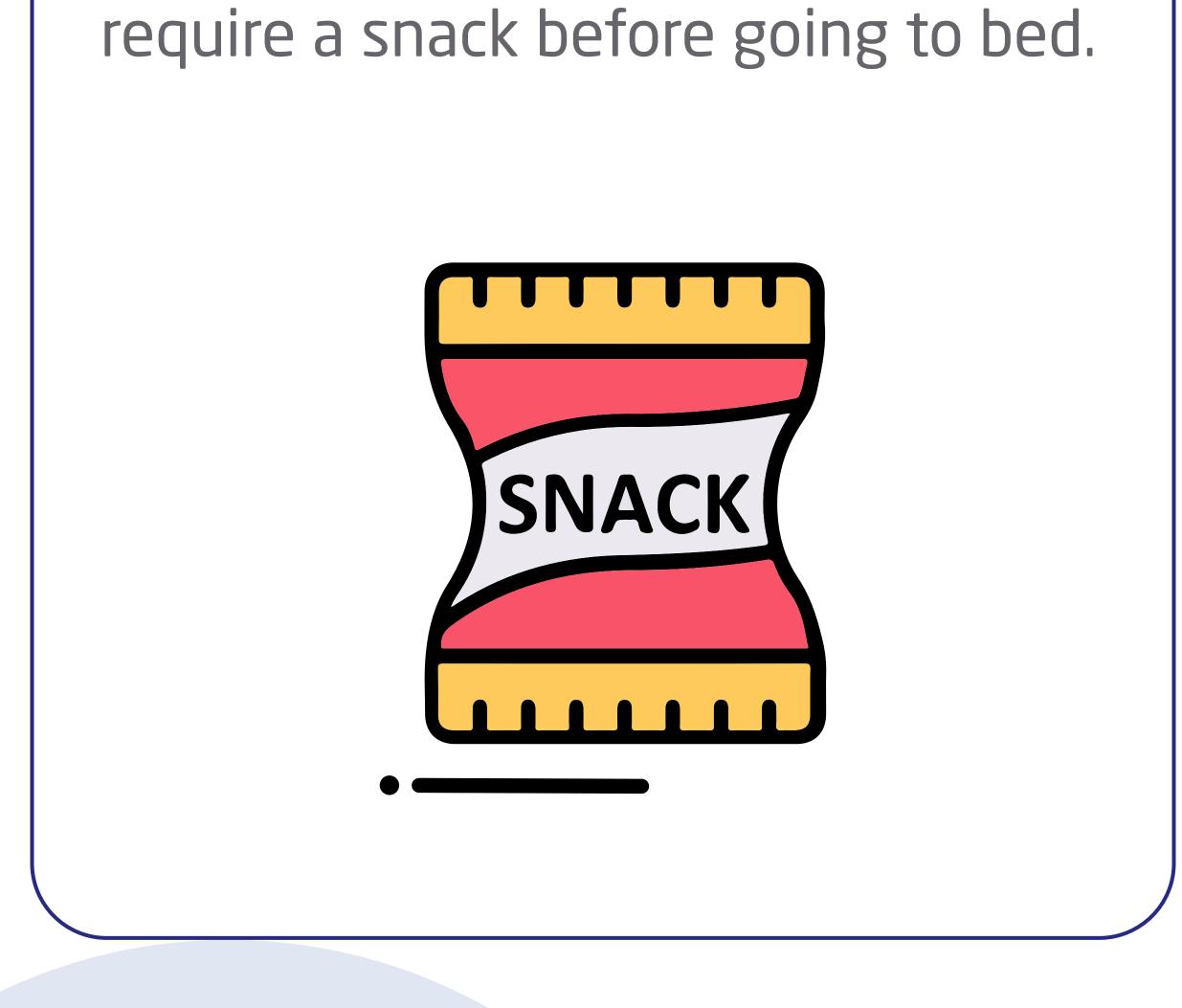
## TESTING BEFORE EACH MEAL,





#### **AT BEDTIME**

#### IT HELPS TO UNDERSTAND if you





#### **BEFORE AND AFTER PHYSICAL ACTIVITY**

#### **HELPS TO DECIDE**

#### WHETHER TO DELAY

or postpone exercise or to have a snack before you begin to exercise.

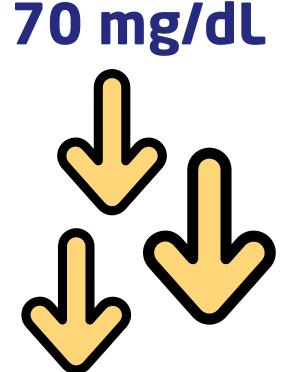
#### MONITORING AROUND EXERCISE HELPS TO UNDERSTAND

how exercise impacts blood glucose levels and whether there are any long-term effects on blood glucose.



## YOU MUST CHECK YOUR BLOOD **GLUCOSE MORE FREQUENTLY IF**

You have Hypoglycemia 70 mg/dL (low blood glucose) or Hyperglycemia (high blood glucose) and after correcting the hypoglycaemia to monitor recovery.

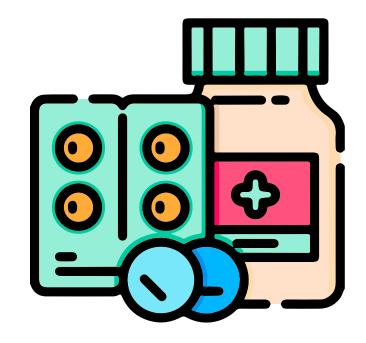


You start taking new, prescribed Insulin.

Your Insulin dose is adjusted

You try new foods or there is a change in the daily routine

You are sick or don't feel well



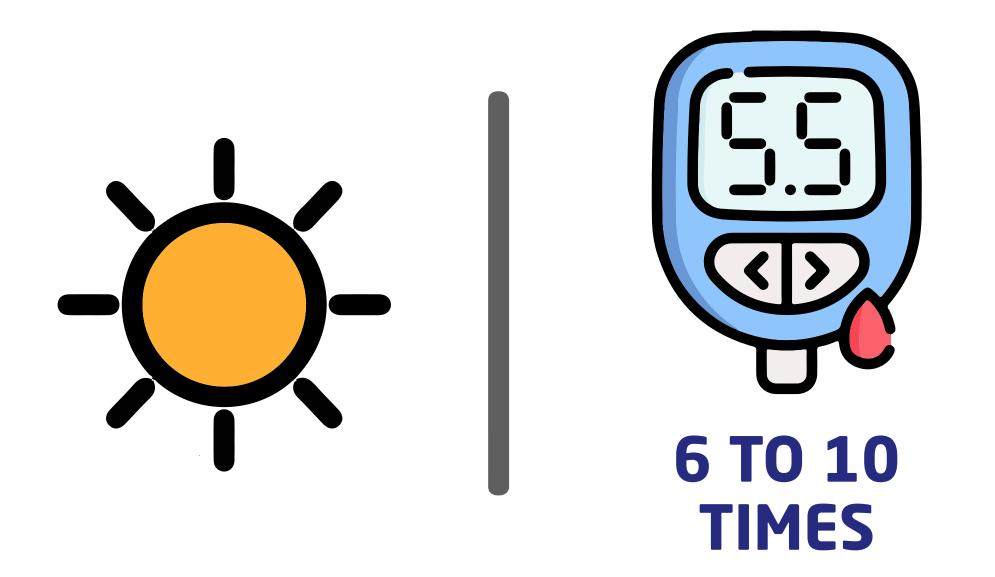






IT IS ADVISED TO PERFORM BLOOD GLUCOSE MONITORING 6 TO 10 TIMES PER DAY in people with Type 1 diabetes

#### who are not using a CGM.



**NOTE:** Appropriate action needs to be taken based on the observed readings



HOWEVER, IT IS IMPORTANT TO UNDERSTAND that monitoring patterns must be tailored to each individual based on Insulin

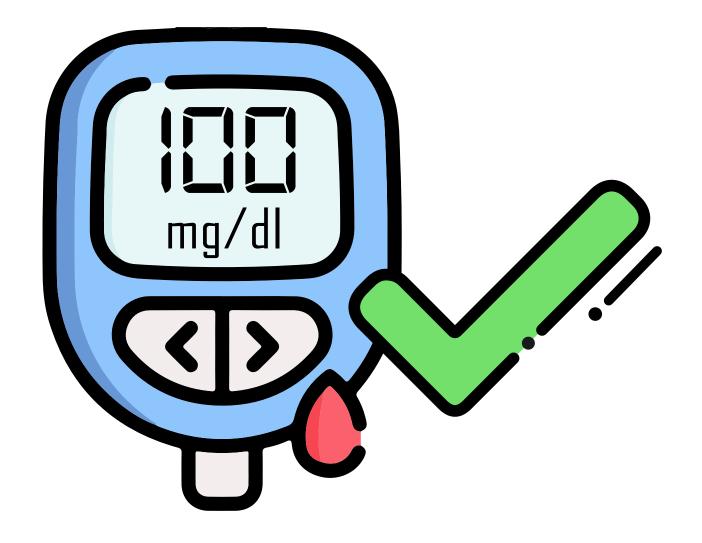
## regime, practical situation and glucose control.





#### REMEMBER

The more times the testing is done, the better adherence to the treatment and better glycaemic control is possible.







# For more information, contact your doctor or your MyCARE Diabetes Educator.





#### Reference

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