



LEARN HOW TO MANAGE TYPE 1 DIABETES WITH

C&E CENTER of
EXCELLENCE
Type 1 Diabetes
An initiative by Changing Diabetes® in Children

MADHU MEET



An initiative by Changing Diabetes® in Children

INDEX

LEARNING POINTS

- Understanding Type 1 Diabetes
- Blood Glucose Monitoring
- What food to eat ?
- Hypoglycaemia and how to recognise it?
- Hyperglycaemia and how to treat it?
- Storage of Insulins
- Principles of Insulin Injections
- Giving an Insulin Injection



Hi, I'm
Meet



Hi, I'm
Madhu

What is Type 1 Diabetes?

I have type 1 diabetes
My body does not
make insulin
So I need to inject it.¹

I can manage
Diabetes with:



Insulin



Diet



Exercise



Monitoring

Did you know ?

**Children can also
develop diabetes?**

SIGNS & SYMPTOMS¹ OF TYPE I DIABETES



WEIGHT LOSS WITH
CONSTANT HUNGER



FREQUENT URINATION



VERY TIRED ALL
THE TIME



EXCESSIVE THIRST

Why do I need insulin ?¹



We need Insulin
To get energy from the
food we eat

The food we eat is
broken down into
glucose



Insulin opens the
doors of cells so that
glucose can enter and
be used as energy

Where should I inject¹ my insulin ?

3 places on
Front side



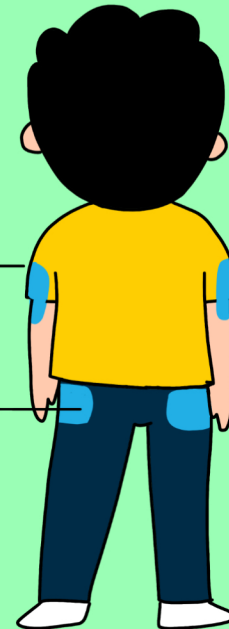
FRONT

Upper Lateral arm

Abdomen

Front of thigh /
Lateral thigh

2 places on
back side



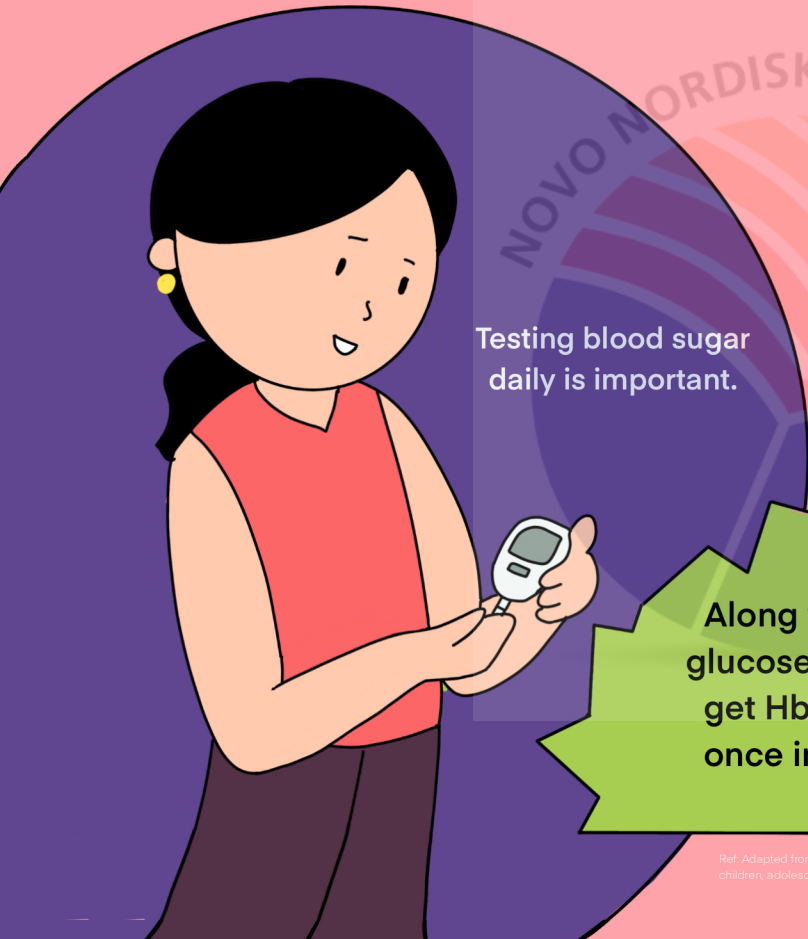
Lateral aspect
of arm

The upper quadrant
of the buttocks

BACK

Rotation of injection sites are
important also within the same
area of injection

Monitoring¹ blood glucose is essential



Testing blood sugar daily is important.

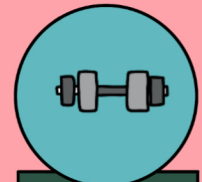
Blood sugar in normal range indicates good health and that



Insulin



Diet



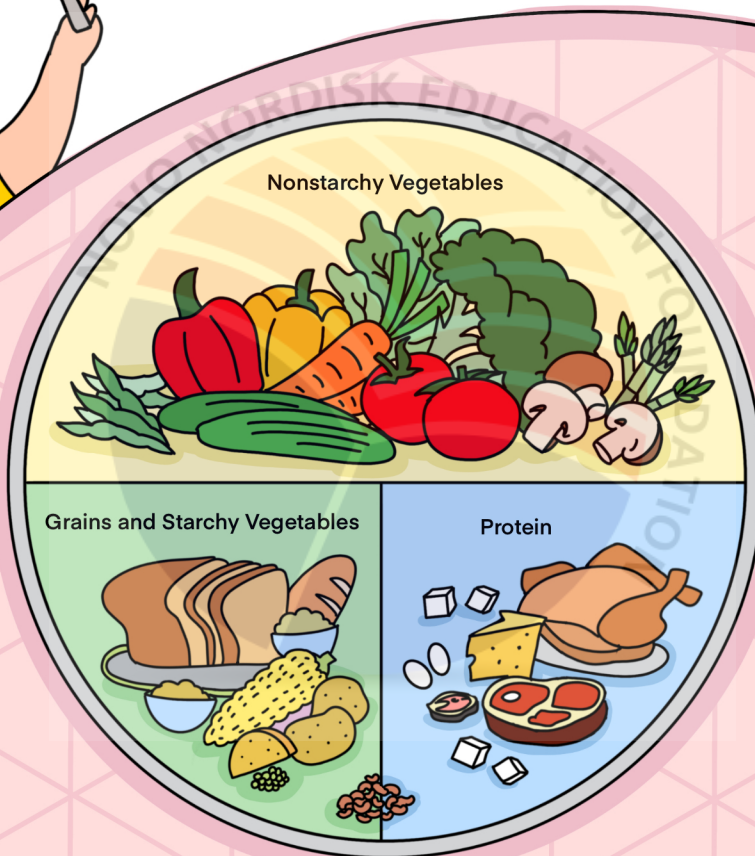
Exercise

regimens are followed well.

Along with blood glucose monitoring get HbA1C done, once in 3 months

Always remember to take glucometer and diabetes diary to the clinic

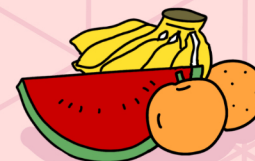
I make healthy food choices to manage my diabetes¹



Low fat milk and Yogurt



Healthy fats



Fruit



Monitor¹
Sugar before
and after any
vigorous
exercise

PHYSICAL ACTIVITY IS ESSENTIAL¹

Being active and exercising are essential for
children with type 1 diabetes

Choose what u like : Walking, playing, dancing or yoga



Low blood sugar (Hypoglycaemia) and how to recognise it?

You might have hypoglycaemia if you have the following :



Tiredness



Sweating



Extreme hunger



Loss of consciousness



Irritability



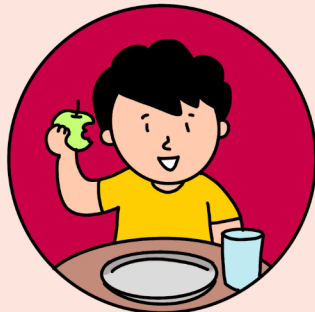
Dizziness & Trembling

Very low blood sugar can lead to convulsions and coma

Why do I get low blood sugar (Hypoglycaemia)¹ and how do I treat it?



Extra insulin



Not eaten enough food

Common causes of Hypoglycaemia



More physical Activity

TREATMENT¹



1. Consume

- 2 to 3 teaspoons of sugar (or)
- 3 to 5 hard candies or glucose tablets (or)
- 1/2 cup of regular fruit juice or cold drink



- ### 2. Recheck blood glucose after 15 minutes and retreat if needed or give 15 gm carbs to eat.



- ### 3. In severe cases take the child to nearest hospital.

How to recognise high blood sugar (hyperglycaemia)¹

You probably have hyperglycaemia if you feel:



Thirsty all the time



Need to urinate a lot



Dizzy



Tired all the time



Blurry vision



Dry mouth

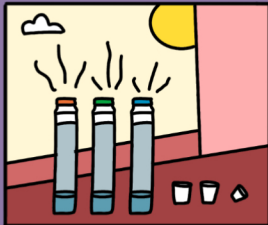


High blood sugar levels continuously can lead to Diabetic ketoacidosis and other long term complications

Why do i get High blood sugar (hyperglycaemia) and how to treat it?



Missed an insulin dose



Insulin that was ineffective



Eaten too much food



Less physical activity



Have infection or fever

TREATMENT¹

Most cases of hyperglycaemia are easily treated

Correction dose of **Rapid acting insulin**

Measure your blood sugar after 2-4 hrs

If your blood sugar is still high

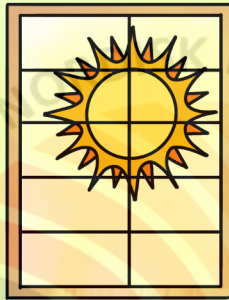
You can add correction dose again and consult your doctor.



Storage¹ of insulin



Refrigerate between
 $2-8^{\circ}\text{C}$ ¹



Do expose to
sunlight (extreme
hot above 30°C)

While traveling carry
insulin with cool gel
pack in your hand
bag



Cool gel
Pack

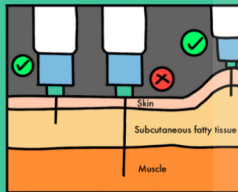
You can also store
insulin in cool mud
pot with little water



Only in case of unavailability of refrigerator

PRINCIPLES¹ OF INSULIN INJECTION

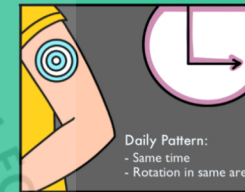
1. Always inject into the subcutaneous fatty tissue



2. The Injection area



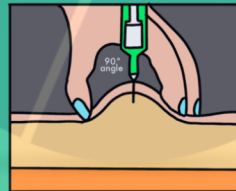
3. Changing injection areas



4. The correct needle length



5. The Correct injection technique



Optionally raising a skin fold
Injection in a 90° angle

6. Change the site after each injection



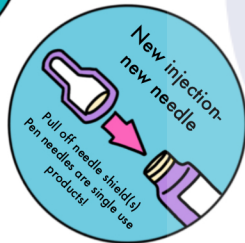
New Injection site should be least
1 to 2 cm apart from Previous site

GIVING AN INSULIN INJECTION¹

1. Preparation



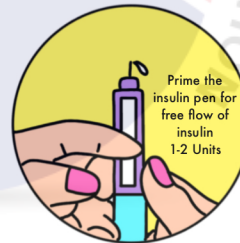
2. Screw on the pen needle onto the insulin pen



3. Thorough mixing of NPH



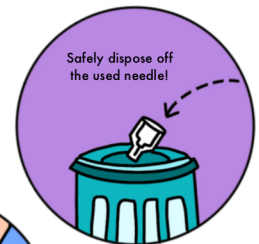
4. Control the functioning of the insulin pen and removal of bubbles



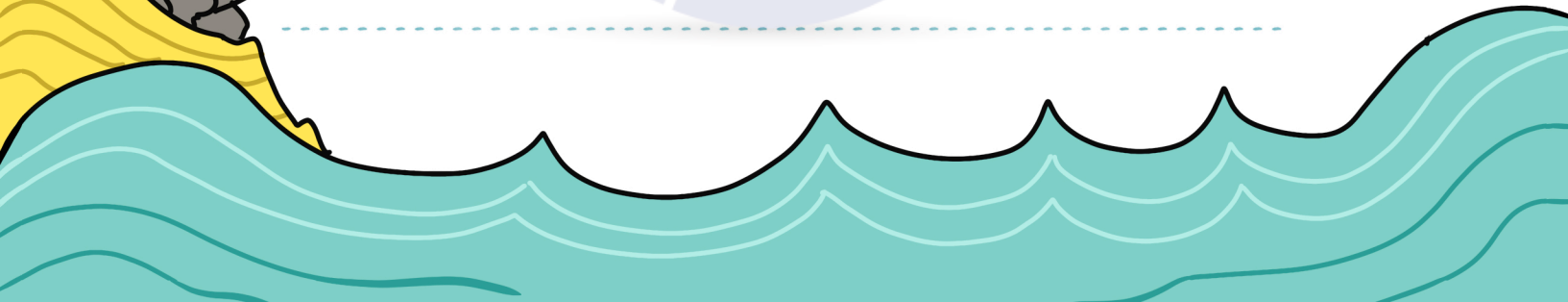
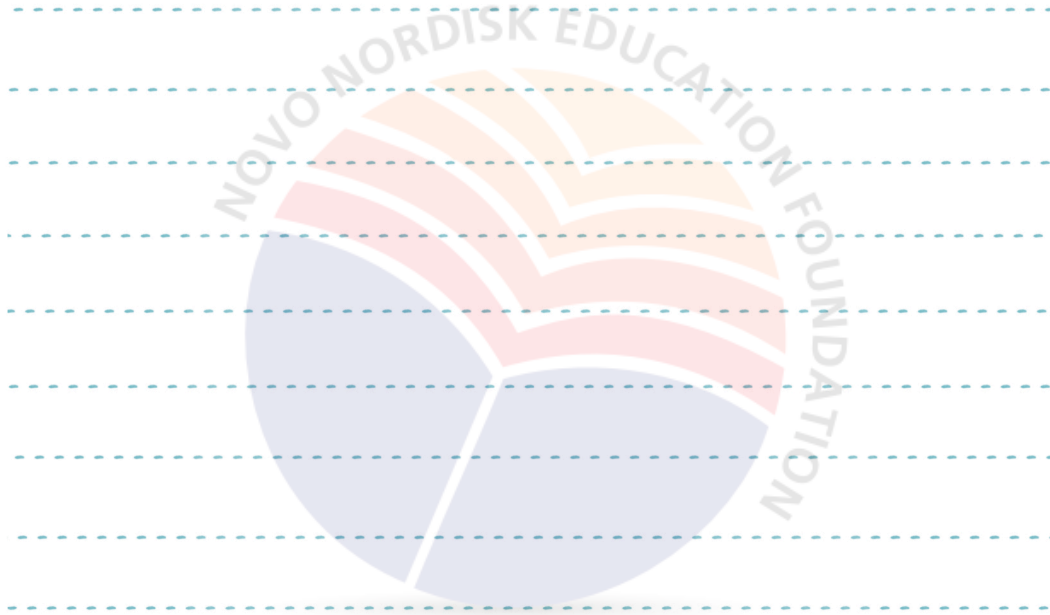
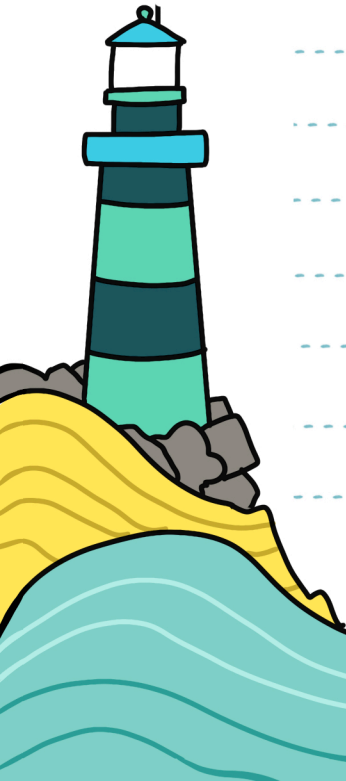
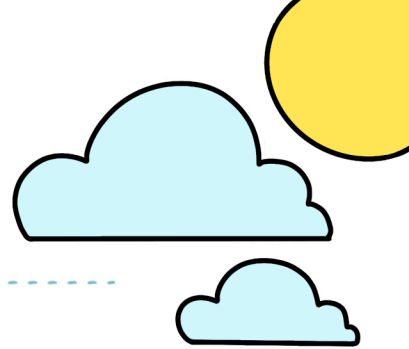
5. Giving the injection



6. Completing the injection



Notes



Say hi to Betty and her Besties

Betty has type 1 diabetes. In five video episodes Betty shows how she deals with her diabetes while still having fun with her friends.

Watch the episodes by scanning the below QR codes



Episode 1
Why do I need insulin?



Episode 2
How to inject insulin with a syringe? How to inject insulin with a pen?



Episode 4
How much insulin do I take?



Episode 5
Low blood sugar and how to recognize it

