diabetes education for children

MEET PETE THE PANCREAS
Contact details

Hospital: _______________________________________
Phone: _______________________________________
Doctor: _______________________________________
Phone: _______________________________________

Other useful numbers

Diabetes Nurse Specialist: _________________________
Diabetes clinic appointments: ______________________
Out of hours contact no.: _________________________
Dietician: _________________________
Family doctor: _________________________
Other: _______________________________________

A booklet for children with type 1 diabetes
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Not feeling well!
You have not been feeling well. You probably have:

- Felt thirsty
- Felt hungry
- Needed to go to the toilet a lot
- Lost some weight
- Been tired a lot of the time.

The doctors have found that you have diabetes.

Your diabetes team
You have probably been in hospital for a few days

You will have met your diabetes team:

**Doctors - Nurses - Dieticians**

and other people who will start to teach you all about your diabetes

- When you are feeling better, you will be able to go home
- Every few months, you will come back to the hospital for a daytime visit to see how you are getting on.
What is diabetes?

Your body is made up of tiny, tiny bits called CELLS

These cells need GLUCOSE (sugar) to give them ENERGY - so you can feel good and do things!

You get glucose (sugar) from the FOOD you eat

INSULIN is a hormone in your body that acts like a KEY to open the cells and let the glucose in

Insulin is made in a part of your body called your PANCREAS

Your pancreas is an organ (like your heart) and it lives near your tummy

We like to call him PETE!

'Hi, I'm Pete - my job is to make insulin!'
When you have diabetes, Pete can’t make any insulin. Without the insulin key, glucose from your food can’t get into your cells. Your cells will feel sad because they have no energy. All the glucose from your food will stay in your blood and make you feel unwell. When you have diabetes, you need to inject insulin to make Pete and all your cells happy again. Then you will feel well and have energy to play!
Where does all the food go?
What food did you eat today and did it have a lot of sugar?
What colour do you think your insides are?

Try colouring in Pete and the other parts of your body.
You will do finger prick tests 3-4 times a day.
Learn how to use new monitors and equipment.
Take insulin injections once as you need them.
Learn about what foods have less sugar, and eat regular meals and snacks every day.

Soon Mum, Dad and especially You will be an Expert with your own Diabetes.

So what do YOU have to do?

You need to check how much glucose is in your blood around 4 times a day.

- Learn how to use new monitors and equipment
- Take insulin injections / use an insulin pump
- Learn about what foods have less sugar, and eat regular meals and snacks every day
- Soon your family and especially YOU will be an expert with your own diabetes.
**Blood glucose (or sugar) levels**

When you have diabetes, people talk a lot about your **BLOOD GLUCOSE** or **BLOOD SUGAR LEVEL**

- This means how much glucose is in your blood

You will need to check this regularly, around 4 times a day

If there is a lot of glucose in your blood, that means there isn't enough insulin in your body

Your cells will be sad and you will feel unwell

Your doctor or nurse will show you how to check your blood glucose level

It's easy - just a little finger prick test!

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**Checking your blood glucose level**

1. Wash your hands and dry well
2. Get your meter ready
3. Prick your finger at the side
4. Put a drop of blood on to the strip in your meter
5. Write the numbers into your diary so you can show your diabetes team at your next visit!
Insulin - your special KEY

Insulin is the KEY that opens the door of your cells to allow the glucose in

- This glucose gives you ENERGY!

When you have diabetes, you will need to inject insulin every day

- Your insulin may come in:
  - A syringe
  - A pen device
  - Or in a pump, which you leave in all the time

Your doctor or nurse will show you and your parents how to inject your insulin.

Injecting your insulin

1. Wash your hands and dry well
2. Get your injection ready
3. Pick your injection site
4. Give your insulin
5. Put your used needle in the sharps bin.
What is a HYPO?
(Hypoglycaemia)

How do you know you’re having a hypo?

A hypo is when your blood glucose level falls too low. A hypo is normally a blood glucose level less than 4.5 or 4.0. Your doctor or nurse will tell you what is too low for you.

You may:
Be pale
Feel sweaty
Be hungry
Have ‘wobbly legs’
Be shivery or shaky
Feel tired and drowsy
Have blurred vision
Feel worried or afraid
Just feel funny!
Or sometimes you may not have any of these feelings.

If you are having a HYPO
(blood glucose level less than 4.5 or 4.0 as advised by your doctor or nurse)

What must you do?

1 Tell somebody straight away - mum, dad or a nearby adult

2 Eat or drink something sugary,
   FOR EXAMPLE:
   Lucozade* sweets or Glucogel* OR
   A sugary drink - Lucozade* (original), 7UP*, Fanta*, Coke* or juice (not a diet drink)
   OR
   Some other kind of sugar - jam, honey
   PLUS
   Eat a snack (biscuits, bread - check with mum or dad).

3 Re-check your blood glucose levels in 15 minutes

4 If your blood glucose level is still low - drink some more sugary drink and have another snack

5 If you still feel unwell, tell the adult looking after you.

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What is a HIGH?
(Hyperglycaemia)

How do you know you are high?
This is when your blood glucose level is more than 15

How might you be feeling?
Flushed
Not well
Thirsty
Going to the toilet a lot
Grumpy
Tummy pains
Off form
No energy
BUT it is important to remember you may also feel normal!

When you are HIGH
(blood glucose level more than 15)
what must you do?

1. Tell mum or dad or a nearby adult straight away
2. Wash your hands and dry well
3. Recheck your blood glucose level
4. Check for ketones
5. Think - did you eat any extra sugary food?
6. Remember - did you take your insulin?
7. Drink plenty of water/fluids
8. If your blood glucose level stays high, or if you have ketones, you need to tell the adult looking after you

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Ketones

Ketones are waste products
- They are found in your blood and urine
- They make you feel ill
- You get ketones in your body when you do not have enough insulin
- Your doctor or nurse will show you how to check for them.

You should always check for ketones when:

1. Your blood glucose level is 15 or more
2. If you are sick or vomiting (even if you blood glucose level is normal)
3. If you have ketones always tell the adult who is looking after you.

If you have a lot of ketones in your blood or urine it means your cells are not happy

When you take more insulin, it will open the door to your cells, allowing glucose to enter, and your cells will be happy again.
Spot the difference
t

there are 6 differences between picture A and B. Can you spot them?

Word Puzzle

B FXF JPBWPMZODQCFBRQR
W LXYQXRXWYXZBBPSBZKBDX
B OQVWMSICKDAYXZTIPB
ZTROXMVXTEQKWEQBKAQV
BGBKDXEXSWTABZAXBNV
QKBKDSBQZPQ0XWZXKCD
WBZBXPUBPENBRBVGHFRL
BZDQBWGBKAEWDIABETES
QPDPZITBABSABWZBDWAH
BKXBJWJHBJBERVEZBHZBNSN
PINSULINLBRNQXYBAXQ
KLJXZBGWBBKEKBPXBKL
BWZJKWHBXZKBVKTOBEPW
WBBHVZWXKWXBEBEBWDXB
ZVYXBCXWRZHQSLKBQPUBS
ARZXWKPHPBQGBWPBSYPTX

The following are hidden in the word puzzle. Can you find all 8?
1. KETONES 2. BLOOD SUGAR LEVELS 3. INSULIN 4. PANCREAS
5. DIABETES 6. HYPO 7. HIGH 8. SICK DAY

Sick days

What do you do when you are sick?

Tell mum, dad or a nearby adult straight away

NEVER stop taking your insulin.

- Check your blood glucose level every 2 hours
- Check for ketones each time you check your blood glucose level
- You need to drink lots of extra fluids, at least one glass of water every hour
- If you cannot eat, you can have sugary drinks instead of food - e.g. 7UP*, Fanta* or juice (not diet drinks) but check with mum or dad how much you should take.

If you are worried or unsure about anything, tell mum, dad or a nearby adult and they can contact your family doctor or the diabetes team at the hospital.

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What will having diabetes mean to your life?

**LIFE AS NORMAL.**

The only new thing is, now you must look after your diabetes as well.

This means:

- **Testing your blood glucose levels every day**
- **Watching what you eat - you must eat regular meals and snacks every day**
- **Exercising as normal**
- **Learning about ‘carbohydrate counting’ with your dietician**
- **Injecting insulin as your doctor or nurse tell you to**
- **Regular visits to the doctor, nurse and dietician**
- **Your parents will tell your teacher and sports coach**
- **It is good to tell your friends that you have diabetes too**
- **Watching out for HIGHS and HYPOS**
- **Carrying or wearing some identification (a bracelet, chain or disc) to say you have diabetes.**

**School**

Your mum or dad will tell your teacher about your diabetes

You may want to tell your school friends too

They can tell your teacher or another grown up if you are not well

Your mum or dad will tell your teacher about what you need to eat at break times

If you become sick you need to tell your teacher immediately

When you are going on a school trip, your mum or dad will organise your food and insulin for the time you will be away

If you are at all worried about anything in school, even if it seems small, tell your mum or dad so they can talk to your teacher.
Play and sports
When you run around a lot you use a lot of energy
This means you also use up a lot of glucose
It is important to make sure you measure your blood glucose levels and eat enough food when you are using extra energy!
Exercise is very important to keep your body healthy
It is also fun!

Friends
You may want to tell your friends that you have diabetes
If you are visiting their houses, your mum or dad will tell their parents too
You need to tell your friend’s parents if you are feeling ill
Your mum or dad will tell your friend’s parents about what you should eat and what to do if you feel sick

Perhaps to explain diabetes to your friends you could show them this book!
Did I catch diabetes?
No, it is not caused by anything you have done or not done. Some children just get diabetes.

Do many children have diabetes?
About 2,000 children in Ireland have diabetes - just like you!

I ate a lot of sweets before I got diabetes.
Did this cause diabetes?
No, eating sweets will not give you type 1 diabetes - the type you have.

Who is to blame for having diabetes?
It is nobody’s fault that you have diabetes.

Is there a tablet available to treat type 1 diabetes?
No, not yet.

I am extra hungry since coming home from hospital, is this normal?
Yes, this is because insulin increases your hunger. You may have lost some weight and now your body wants to get it all back.

Will I grow out of diabetes?
No, you will always have diabetes.

Can I play sports?
With diabetes you can lead a normal healthy life and if you play sports this will help control your blood glucose levels.

**Cells:** are what we call the tiniest parts of your body that make up all the bigger parts. They need insulin to make them healthy.

**Insulin:** is a hormone that is made in Pete the Pancreas and this is the KEY to allow glucose into your cells.

**Glucose:** sugar - this is what you measure in your blood when you do a finger prick test. It comes from the food you eat.

**Ketones:** these are waste products which are made when your body uses fat for energy instead of glucose. You measure for ketones in your urine and blood.

**Pancreas:** Your pancreas is an organ in your body whose job is to make insulin. We like to call him Pete!
Now that you have been diagnosed with diabetes it means that you will have to make a few changes to your everyday life.

At Novo Nordisk we have worked with children with diabetes for many years and we understand that it can sometimes be a bit difficult.

We want to make it easier for you by making looking after your diabetes as simple as possible.

Then all you have to do is get on and enjoy your life!