

MY OWN TYPE 1 DIABETES BOOK



Written and illustrated
by Sandra J. Hollenberg
(Malcolm's Grandma Sandy)

2008 Edition © Sandra J. Hollenberg
Additional copies available for free downloading at www.grandmasandy.com

To the adult reader

Has a child you love been diagnosed with diabetes? This book will help! It's the kind of book our family could have used when my grandson Malcolm was diagnosed with diabetes at the age of 2 in 1996.

I wrote this book for Malcolm when he was 5, his mom, my daughter Barbi Lazarow asked me to write it so that Malcolm would have his own resource and not need to go to an adult every time he had a question. Although written specifically for children the book's simple structure makes it an excellent starting point for adults too.

I want the book to be the child's; in most cases it will have to be read aloud, though not necessarily in a one-sitting read. Members of the diabetes team may want to go over the book with your child. There is room to make notes specific to the treatment regimen.

Children will refer to the book when they have questions; they will ask you to read it when they forget what the pictures are saying. They'll show the book to their friends. This is meant to be their own special book, written just for them.

Malcolm is now 14 and technological advances in care have made it much easier and less painful to track blood glucose levels and insulin pumps make life almost normal.

I would like to thank the dieticians, educators, nurses, and physicians in the United States and Canada who checked my work for accuracy. Special thanks to Mary Ann Crowdson, RN and Diane O'Grady, RN, BSN, CDE. Others whose advice was gratefully accepted include, of course, my daughter Barbi, Malcolm's brother my grandson Paul, Barbara Corwin, Karla Marks and Dyane Lynch, my editor.

And, of course, special thanks and love to Malcolm Lazarow, the child who made me an author.

Sandra J. Hollenberg

Summer, 2008

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This book is dedicated to my daughter
Barbi Hollenberg Lazarow,
the best Mom a child with diabetes can have!

MY OWN TYPE 1 DIABETES BOOK, 2008 edition ©by Sandra J. Hollenberg
This book is available for free downloading at grandmasandy.com

Do you know someone with diabetes?

Maybe it's you -

maybe a classmate?

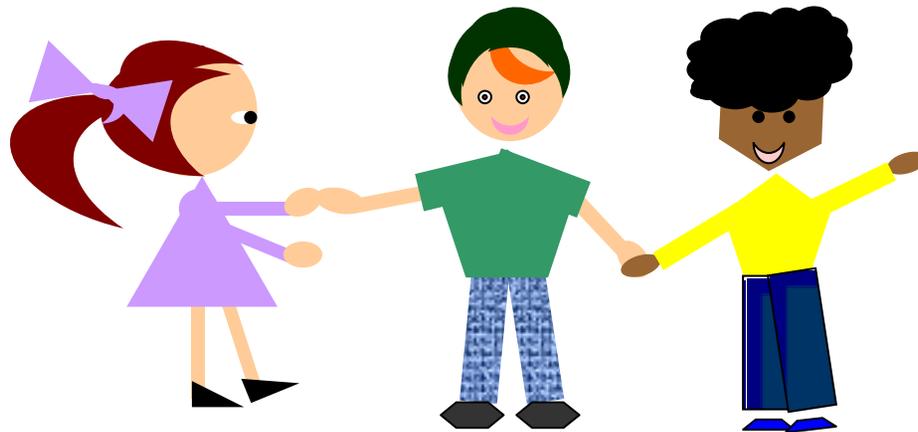
Is it your brother or sister?

In any case this book is just for you.

It will tell you about type 1 diabetes.

Knowing about diabetes will help you help yourself.

It will help you help your friend.



HOW DO YOU GET DIABETES?

YOU CAN'T CATCH IT!

It isn't like a cold or chickenpox.
You can play with people that have diabetes.
You can whisper to them.
You can kiss and hug them.



YOU CAN'T GIVE DIABETES TO ANYONE!

Do you sometimes have bad thoughts about someone?
Or wish a bad thing would happen to them?

Those thoughts can't give anyone diabetes.

YOU CAN'T GET DIABETES FROM WHAT YOU EAT!



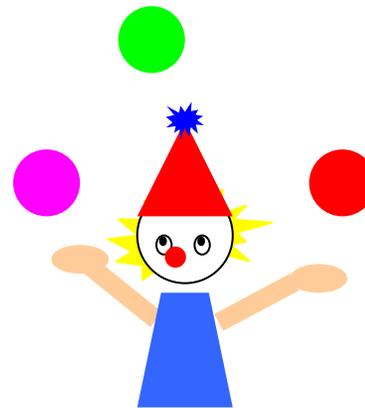
What you eat can help if you have diabetes.
But what you eat can't stop you getting it.

We don't know yet why some people get it.
But we do know how to take care of it!

IF YOU HAVE DIABETES

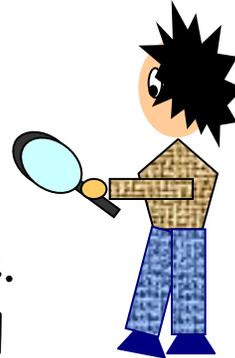


You will become like a doctor.
You will learn to take care of yourself.



You will become like a juggler.
You will learn to balance diet, exercise and insulin.

You will become like a detective.
You will learn the clues that tell
if your blood sugar is high or low.



You become even more special than you already are!
You can do it and your friends can help.

Friends help just by knowing what you have to do.

WHAT IS DIABETES?

Diabetes changes the way your body uses energy.

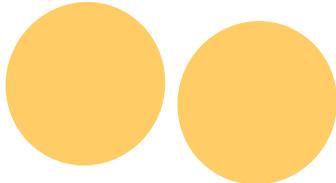
We get our energy from food.

Some food we eat makes us grow.

Some food we eat gives us energy.

The foods that give us energy are carbohydrates.

ENERGY FOOD
Hamburger bun



Bread is a carbohydrate



Can you think of other carbohydrates?

cereal corn potatoes milk
apples dried beans pasta

GROWING FOODS



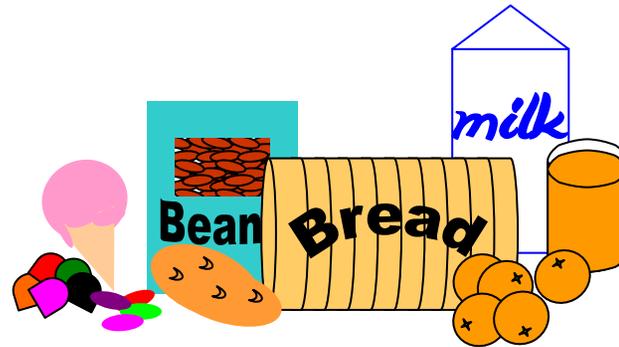
Hamburger patty
Lettuce
Tomato

Can you think of other growing foods?

cauliflower spinach string beans
fish chicken cheese milk

Some energy foods also help us grow.
Some growing foods also give us energy.
It is important to eat both!

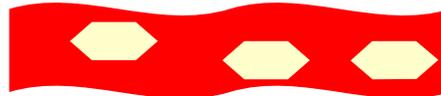
When you eat CARBOHYDRATES



They become a kind of sugar called

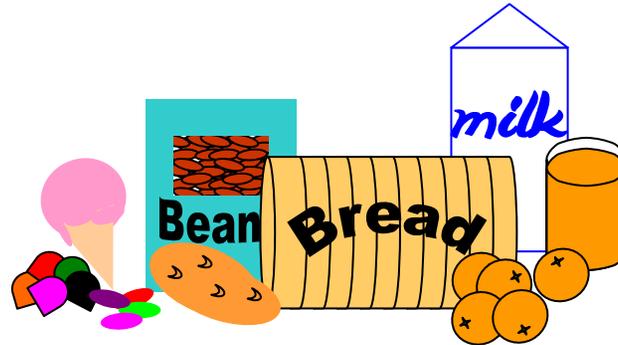
GLUCOSE

The glucose goes into the bloodstream. 

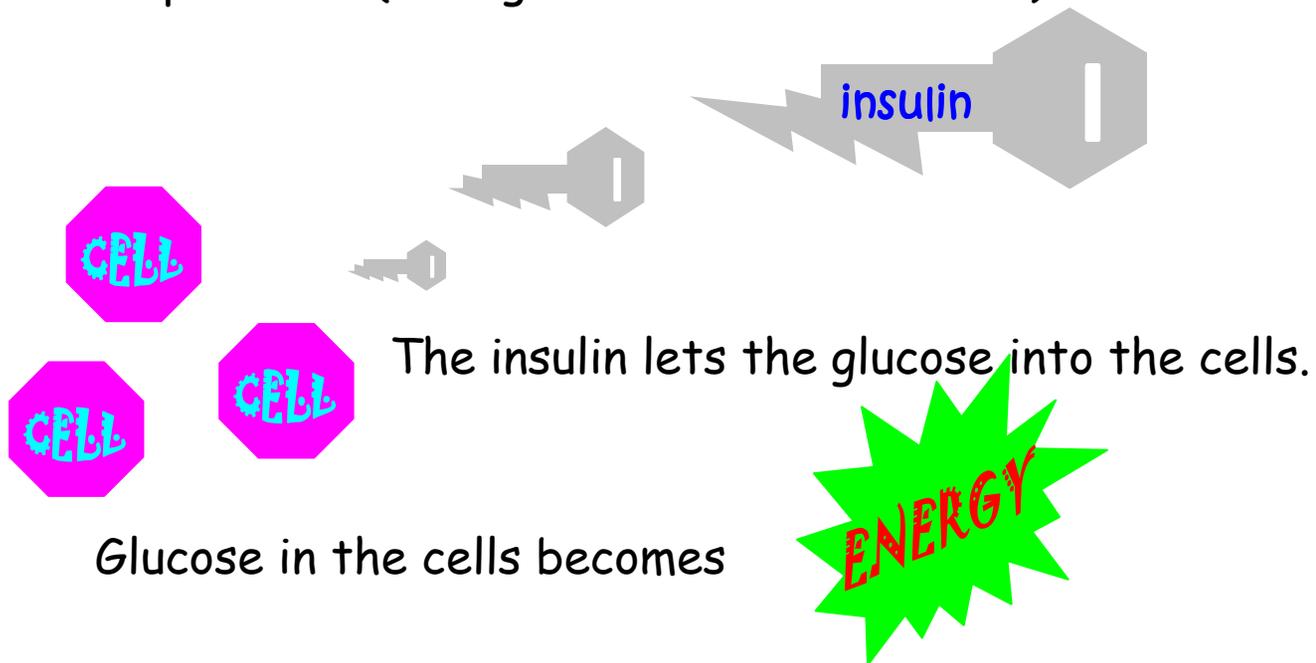


 It travels to the Cells.

When you eat CARBOHYDRATES



The pancreas (an organ behind the stomach) makes



Diabetes means your pancreas isn't working properly.

It means the pancreas doesn't make insulin anymore.

The glucose (blood sugar) can't go into the cells.

You can't get energy that you can use.

But you need energy to live.

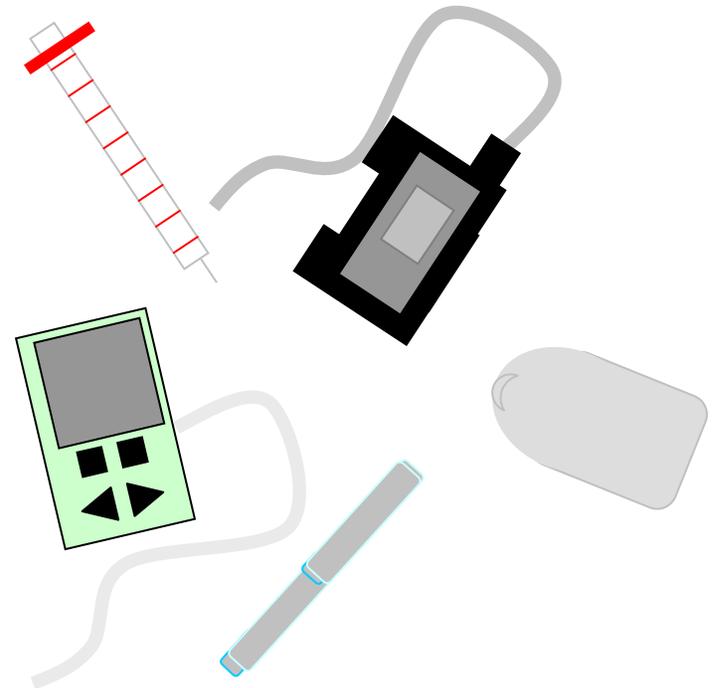
The pancreas doesn't make insulin.

You must take insulin another way.

Pills won't work for type 1 diabetes.

By the spoonful like cough syrup
won't work either.

The only way to get the insulin you
need is by injection.



When the pancreas works properly
it lets out just the right amount of insulin.

Now, *you* have to do the job of the pancreas.

How do you know how much insulin to inject?

THERE ARE TWO WAYS OF KNOWING:

- 1) You count the carbohydrates you eat;
- 2) You check your blood.

A pancreas that makes insulin
balances the insulin to the carbohydrates you eat.
When you take insulin by injection you do the balancing.

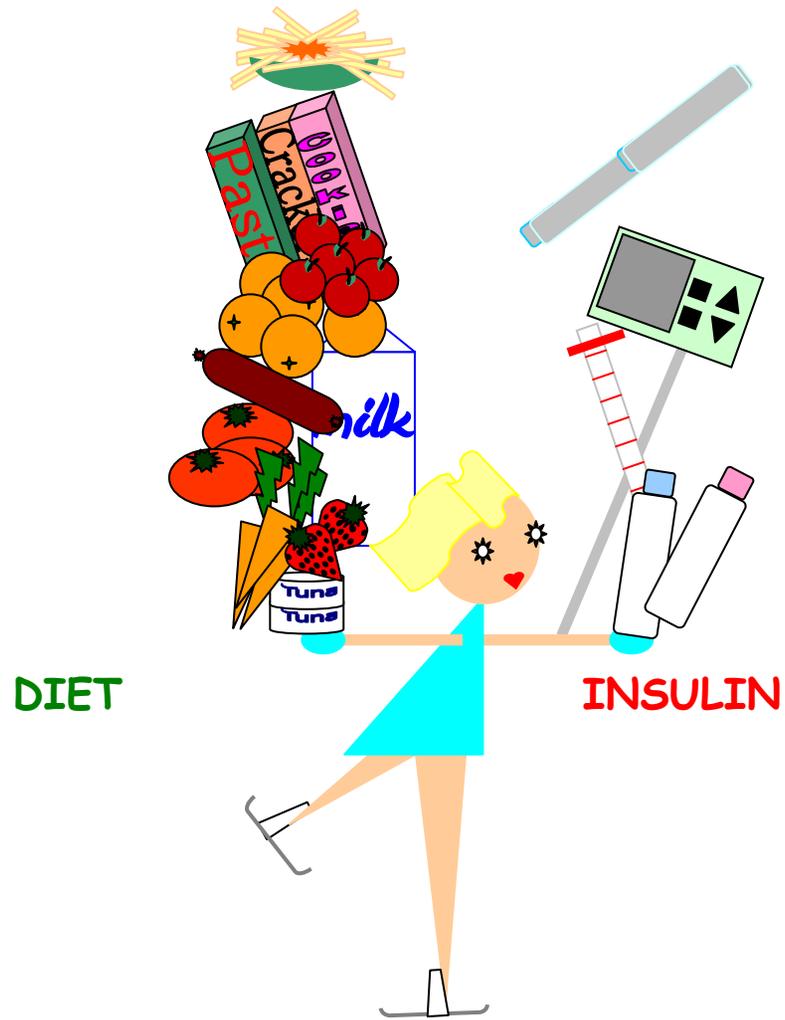
THE BALANCING ACT

People with diabetes have to balance three things.

1) Diet -
diet is the food you eat.

2) Exercise -
activities that use energy are called exercise.

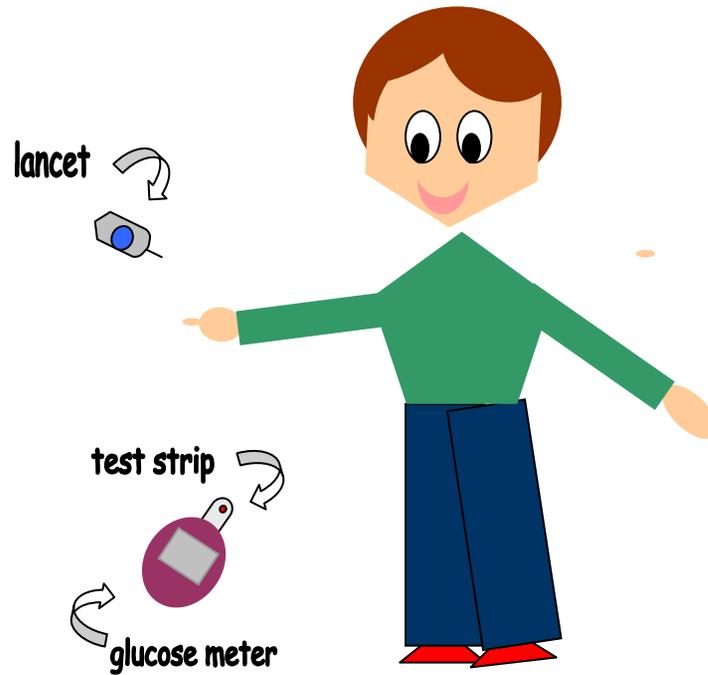
3) Insulin -
insulin is a hormone
that changes glucose into energy you can use.



ICE-SKATING IS EXERCISE

What exercise do you like best?

BLOOD CHECKS HELP YOU STAY BALANCED



In your diabetes kit there are special papers called test strips.

- 1) Put a strip into a machine called a glucose meter or glucose monitor.
- 2) Clean your finger – don't use alcohol – alcohol will dry your skin and make it crack.
- 3) Prick your finger tip with a lancet.
- 4) Put a drop of blood on the test strip.

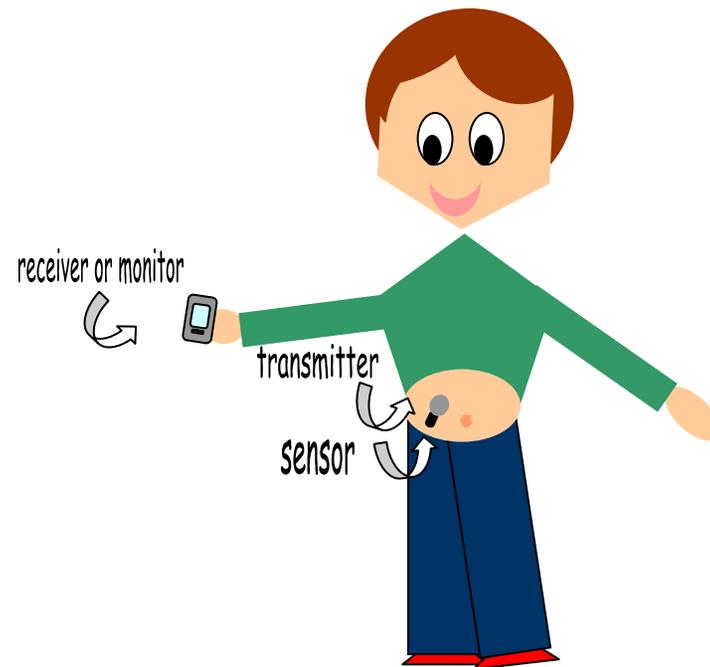
The meter will show how much glucose is in the blood.
Some meters use blood from your arm.

If the check shows low blood sugar you need carbohydrates.
If the check shows high blood sugar you need insulin.

The time and results of your check should be
recorded in your Diabetes Log.

CONSTANT GLUCOSE MONITORING (CGM)

Constant Glucose Monitoring or CGM is another way to check



CGM means that your glucose is tracked all the time.

This lets you and your caregivers see what is happening.

Is the glucose starting to go high?

Is it starting to go low?

Does it peak or drop at certain times?

HOW DOES IT WORK?

A tiny *sensor* is inserted under your skin.

The sensor has to be changed every few days.

A small *transmitter* attaches to the sensor.

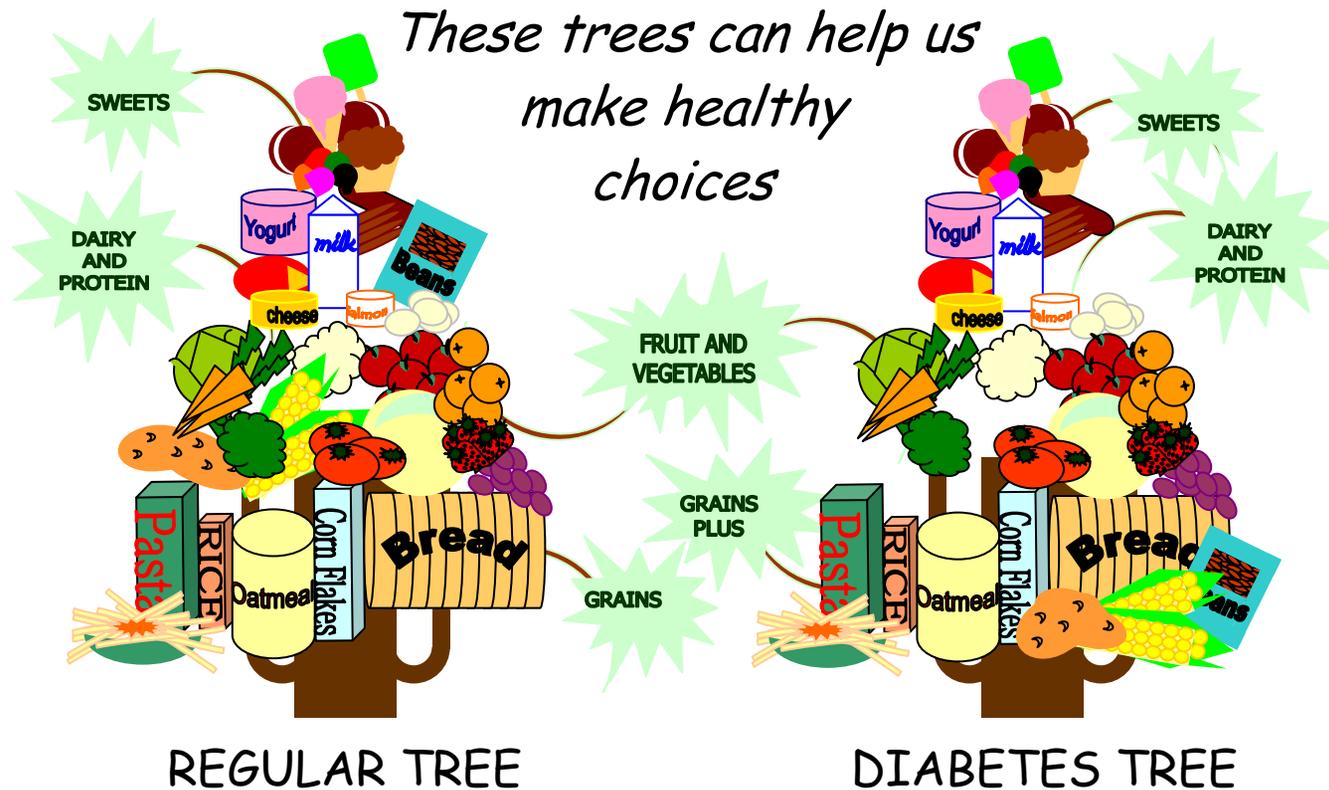
The transmitter sends the information to a *receiver*.

The receiver can be with you or somewhere nearby.

This information, like the information in your log,
helps keep you in balance.

DIET

The foods we eat



Can you see a difference in the trees?

(A hint: grains have a lot of carbohydrates, so do dried beans and starchy vegetables.)

People should pick more foods
from the bottom of the food tree.

People should pick fewer foods
from the top of the food tree.

What foods are at the top of both trees?

Something that everyone loves -

SWEETS!

Do you know why we should eat fewer sweets?

Too many sweets take away your appetite.

You won't be hungry for other foods -
foods your body needs to grow and stay healthy.

People with diabetes shouldn't have too many sweets,
just like anyone else.

Nowadays some sweets are made with artificial sweeteners.
Artificial sweeteners don't have any carbohydrates.
So the sweets with artificial sweeteners have fewer
carbohydrates than other sweets.
Still, they must be counted for your diet plan.



*You can eat them,
but save room for growing foods!*

Many things are the same for everyone.
Everyone should eat a variety of healthy foods.
No one should eat too many sweets.

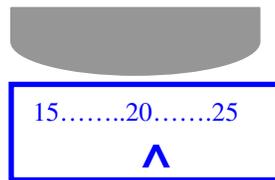
Some things are different for people with diabetes . . .

People with diabetes have to count their food.
They have to count the grams (gm) of carbohydrate (carbs) they eat.

THIS IS VERY IMPORTANT

It is important because insulin is injected to balance the carbohydrates.

The carbohydrate grams are counted by weighing or measuring the food.



The numbers of grams are also on some food packages.

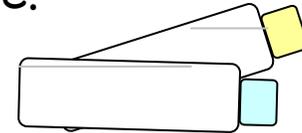
The time and the amount of carbohydrates you eat should be recorded in your Diabetes Log.

INSULIN

There are different kinds of insulin.
Some kinds will work well for you.
Other kinds will work well for another person.

When insulin works well
and is in balance with your diet and exercise,
you will feel good.

If the insulin isn't right you won't be in balance.
You won't feel good.



Insulin can be injected with a pump or with a shot.

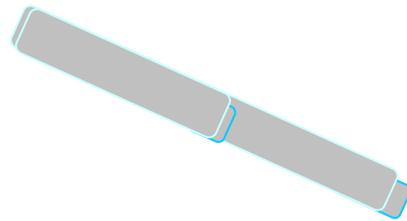
Keep a Diabetes Log

The information in the Log helps find the *type* of insulin that is best for you.
The information in the Log helps find the *amount* of insulin that is best for you.

Insulin shots are given with a syringe or an insulin pen.
The shots are given before or after meals.

Before meal shots mean
you eat to balance the insulin.

After meal shots mean
the insulin is balanced to what you eat.



You give the shots under the fatty parts of your body.
You can have the shots in your upper arm or thigh.
You can have shots in your tummy or tushy.

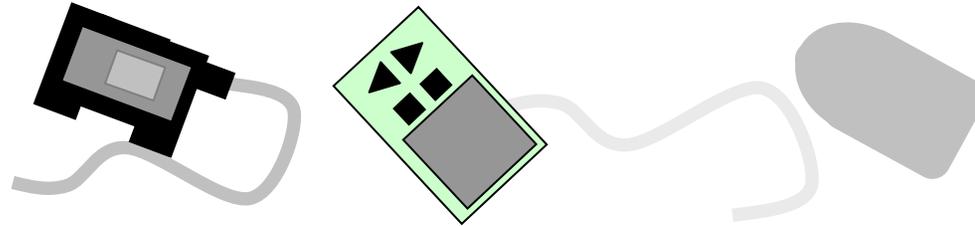
“Injection aids” can make the shots easier to take.

A pump gives a steady amount of insulin.
You wear it all the time, even when you are sleeping.

The pump can be programmed to give extra insulin.

With some pumps the insulin goes from the pump,
through a tube and into an "infusion site".

Some pumps do not have a tube - the pump is the infusion site.



The infusion site can be on the tummy or high on the tushy.

It can even be on your arm.

The infusion site must be changed every two or three days.

Special cream can be used to numb your skin.

That way you can't feel the site being changed.

You won't feel it, but you still might not like it.

Try taking a deep breath and holding it.

Try thinking of your favorite thing.

EXERCISE

People with diabetes can do anything anyone else does.

They can play ball or hide and seek.



They can ride their tricycles.

They can swim and dive.



THERE ARE TWO THINGS TO REMEMBER

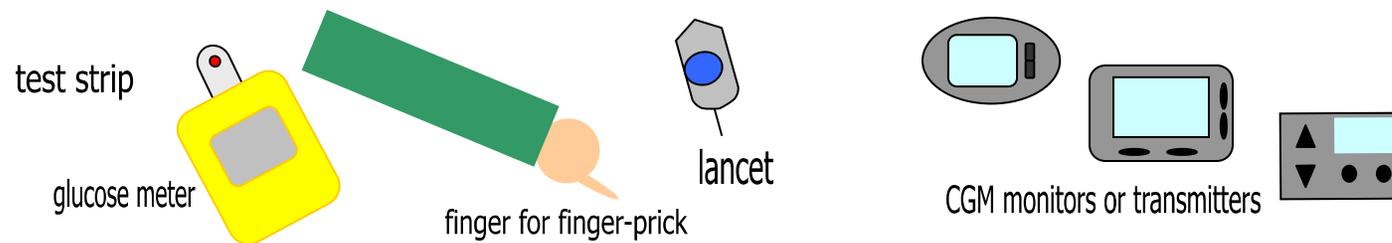
1) Check blood sugar *before* you exercise!

It is OK if blood sugar is a little high before exercising.

It is NOT OK if it is a little low.

When the blood sugar is low eat some quick-energy food.

Check again in 15 or 20 minutes.



2) Check blood sugar *after* you exercise!

When you exercise you use lots of energy.

The blood sugar could be low.

When the blood sugar is low eat some quick-energy food.

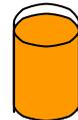
Check again in 15 or 20 minutes.

When you exercise

ALWAYS

HAVE YOUR DIABETES KIT NEARBY
HAVE QUICK-ENERGY FOODS ON HAND

Some good quick-energy foods are
glucose tablets and orange juice.



The time and what you did should be recorded
in your Diabetes Log

WATCH OUT!

Sometimes you can lose your balance.
Sometimes there is a reason.

Do you have a cold or the flu?
Is there a new baby at your house?
Did your best friend move away?



Your blood sugar/insulin balance
can change when you are sick.

It can change when you are very sad or very glad.

It can sometimes change
when you are scared or mad!

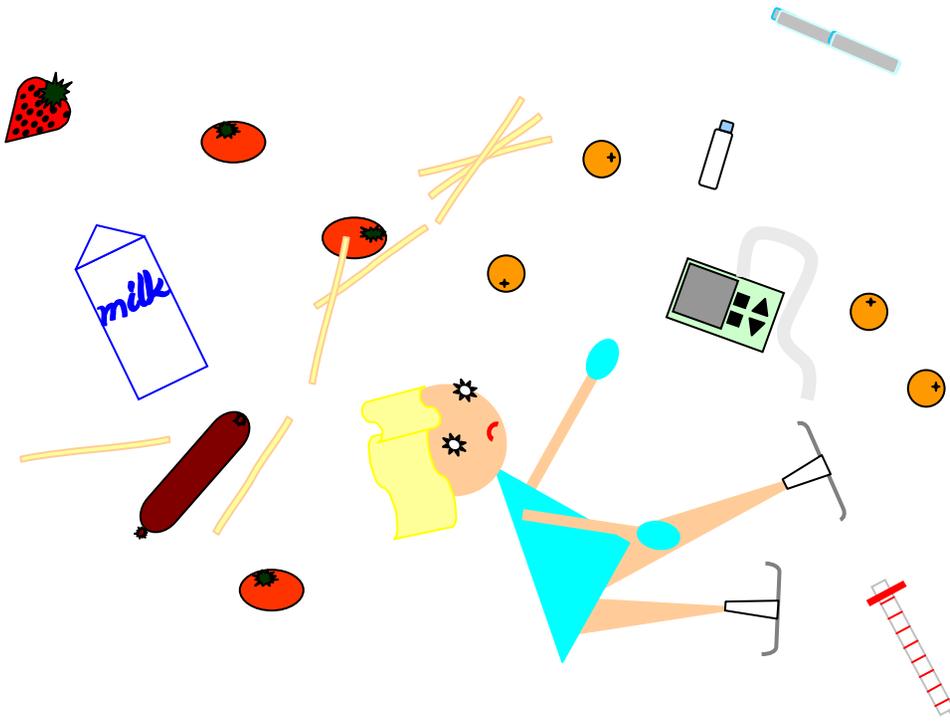
It changes when you have growing spurts.

Sometimes it changes when you get hurt.

Sometimes it changes for no reason at all.



WHOOPS!



You've lost your balance.
That means your blood sugar is way too high -
or way too low.

If it's **high**
you have **HYPERGLYCEMIA**.
You feel terrible and are very thirsty.
You have to go to the bathroom a lot.
Too much glucose in your bloodstream is bad.
You can't get any energy.
You could be tired or even wired.
You need insulin right away!

If it's **low**
you have **HYPOGLYCEMIA**.
Your arms and hands might be numb and tingly.
You might be shaky and dizzy.
You might even be sweaty.
You'll probably be grouchy and grumpy.
Have quick-energy food right away!

It is important that other people know you have diabetes.

That is why you wear an ID like a

"MEDIC ALERT' bracelet.

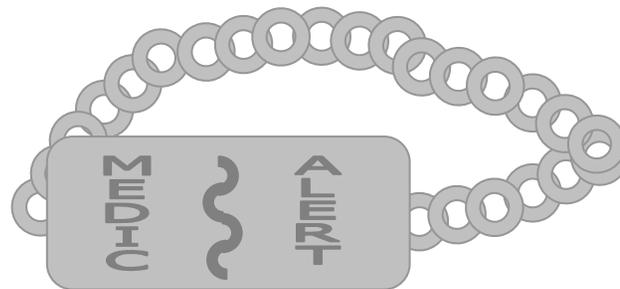
That is why you keep your diabetes kit with you always.

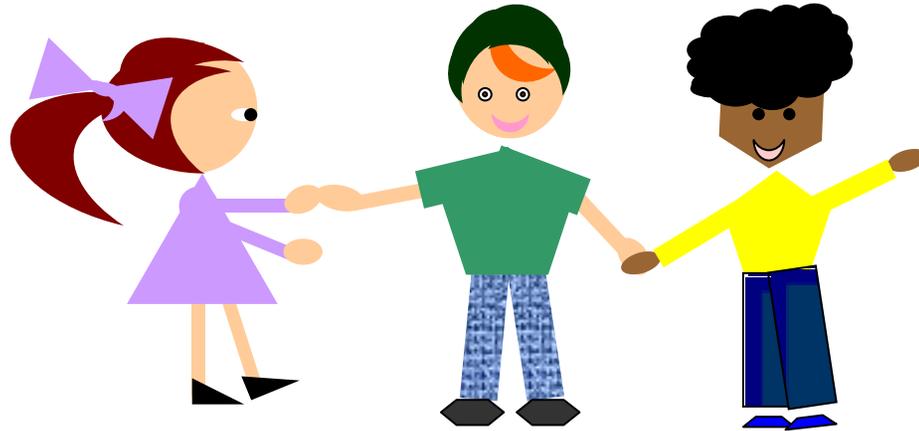
People will be able to take care of you.

They will know you have diabetes.

They will have the supplies they need for you.

They will know the phone number to call.





It is nice when your friends know about diabetes.

They will understand why you wear a pump
or need shots.

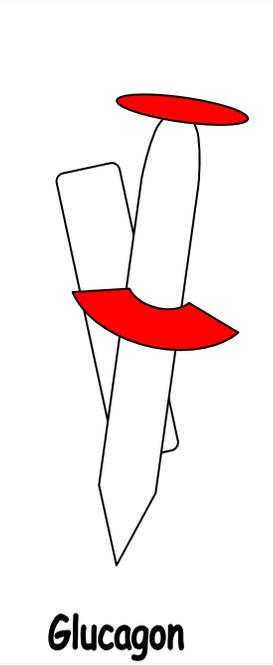
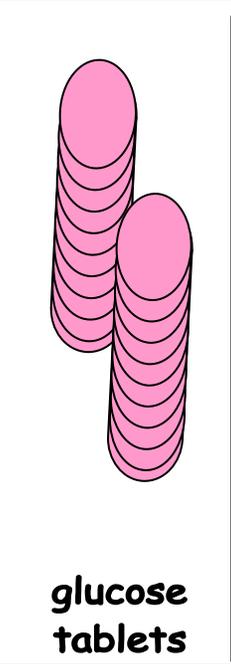
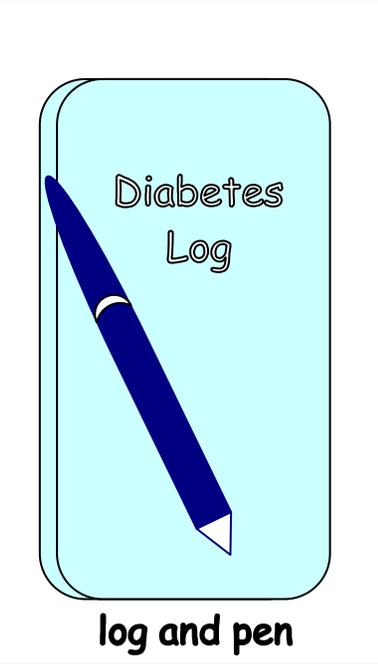
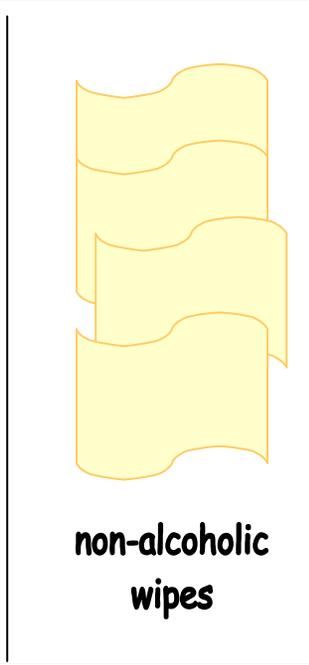
They will understand why you count your food
and check your blood.

They might even help find the clues
that tell when your blood sugar is high or low.

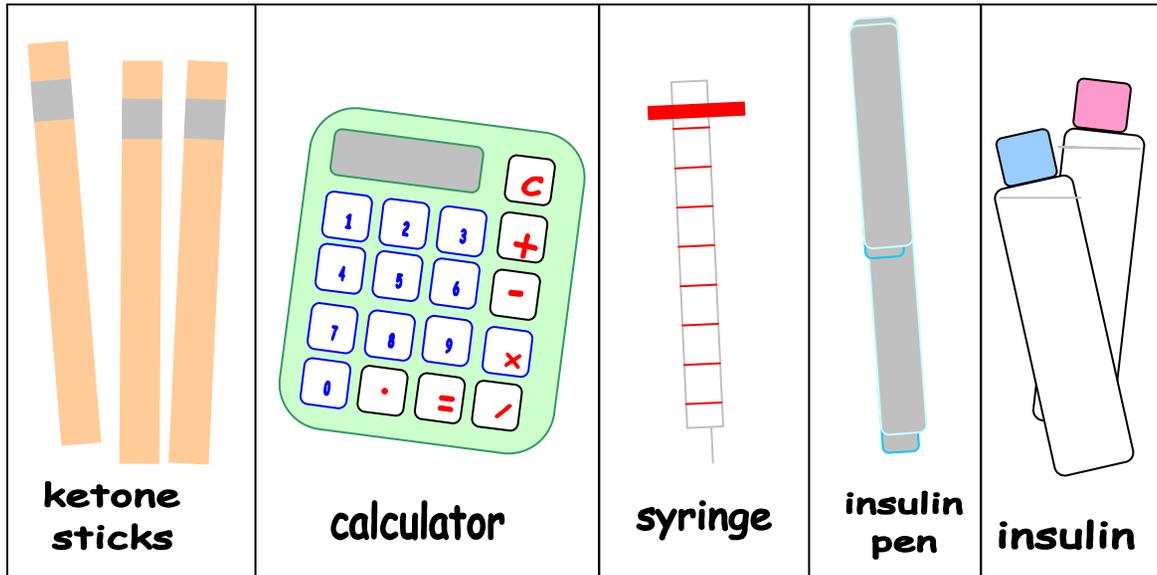
Have you read this book through?
It was written just for you.
It can help you learn what you should do.
Look at it from time to time.
There's a lot to learn, but you'll do fine!

MY OWN NOTES AND REMINDERS

MY OWN TYPE 1 DIABETES KIT

 <p>lancets</p> <p>glucose monitor</p> <p>test strips</p> <p>(or CGM receiver)</p>	 <p>Glucagon</p>	 <p>glucose tablets</p>	 <p>log and pen</p>	 <p>non-alcoholic wipes</p>
<p>Here are test strips, lancets and a glucose monitor. (or CGM receiver)</p> <p>You have them so you can check your blood glucose levels.</p>	<p>Here is Glucagon.</p> <p>You have it in case you get very hypoglycemic.</p>	<p>Here are glucose tablets (quick-energy food).</p> <p>You have them in case your blood sugar is low.</p>	<p>Here is a Diabetes Log and a pen.</p> <p>The log is a notebook to keep a record of your blood checks, your carbohydrates and your exercise.</p>	<p>Here are non-alcoholic wipes.</p> <p>You need them to clean your skin before checking your blood.</p>

MY OWN TYPE 1 DIABETES KIT



Here are ketone sticks.

You have them in case your blood sugar goes very high.

Here is a calculator.

It is used to calculate your insulin dose.

Here is a syringe, an insulin pen and insulin.

You have them so you can take your insulin shots when you need them.

