

Be friends with diabetes,  
along with

Mishti





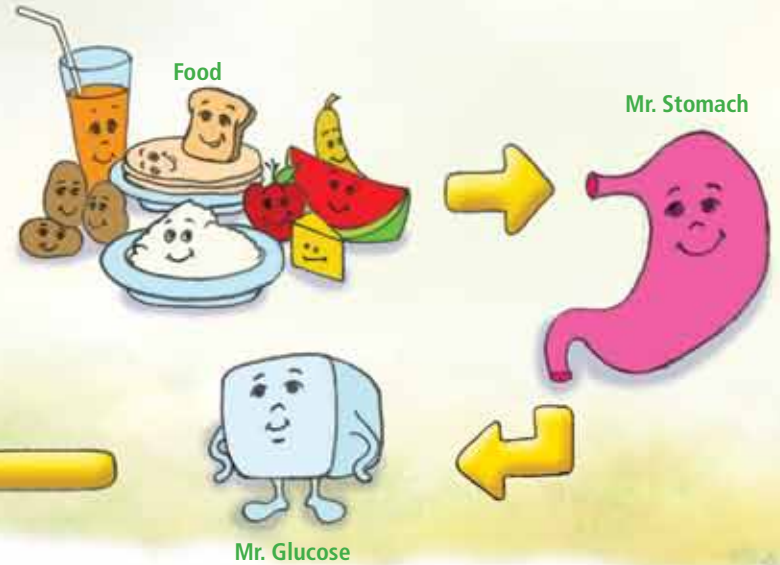
## Hello Friends !

My name is **Mishti**. I study in 4th std. Two years ago I learnt a new word from my doctor uncle. It is called **DIABETES**. My teacher hadn't taught it in the class. So, I didn't even know the spelling of this word and it sounded very difficult. I am sure my papa and mommy knew the spelling but they were also frightened. Very strange I thought! But after that doctor uncle told me about so many other new words like INSULIN, BLOOD SUGAR and GLUCOSE. I wondered why I was the only one in my school gang with diabetes. But again Doctor Uncle was so nice and made me meet many other children like Ruma, my friend who also has diabetes. So I know that there are many children like me! Now, since I understand the meaning of all those big big words, I thought I will explain those to you. It won't be boring. Promise!



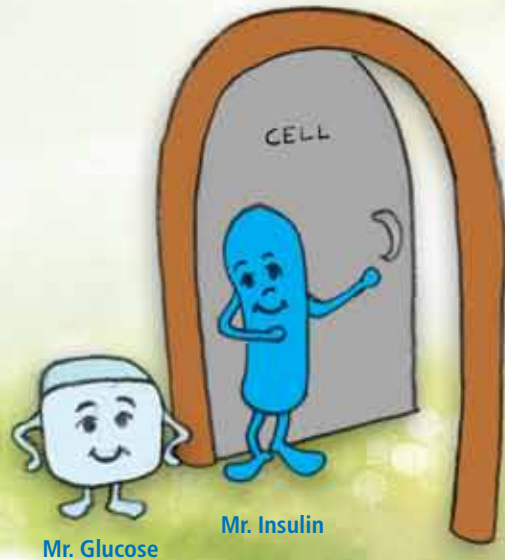
## What's energy?

We all need to grow and be strong for which we need ENERGY. But you knew this! But do you know where we get this energy from? No? It is from food like **roti, bread, rice, potato, fruit and milk** which is broken into glucose in our stomach.

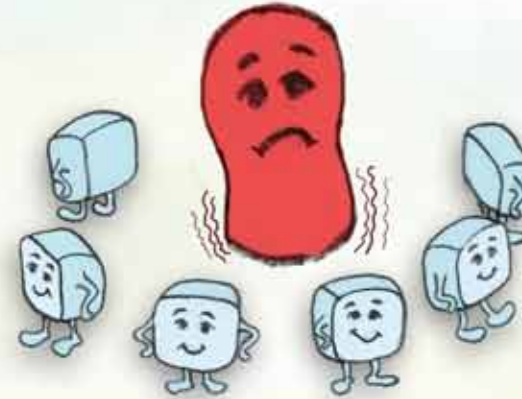


## We all need insulin

Now, I will introduce you to my **best friend INSULIN**. Won't you ask what is this insulin? Glucose is taken from the stomach to small intestine where it enters blood stream. Insulin opens the door of the cells in our body, so that glucose enters the cells and is converted into energy. With this energy we can play, study and enjoy. That is why insulin is our best friend. Do you know where insulin comes from? Insulin comes from the beta cells of the pancreas which is near the stomach and small intestine.



Starving Mr. Cell surrounded by Sugar



## What happens when insulin goes missing?

When insulin goes missing, we feel very tired, thirsty, hungry and need to use the toilet many times in a day. When insulin goes missing, glucose tends to accumulate in the blood, and body cells are starved. So, these cells don't work properly - just like our school bus breaks down if the driver uncle forgets to fill petrol.

## When I got Diabetes

Doctor uncle said that I have type 1 diabetes. **Most of the children with diabetes have type 1 diabetes.** This means that the body completely stops making the insulin it needs and so we cannot get energy. Taking insulin from outside is the only way to replace what our body no longer makes. Insulin needs to be taken by needle and syringe or pen because if taken by mouth it gets destroyed in the stomach.



Rotate your injection site



## Taking insulin is easy

Doctor uncle taught me how to take insulin, and **now I take it myself without anybody's help.** I take some of my shots in areas of lower abdomen and sometimes in arm and thigh. The needle is very short as insulin is to be injected in the subcutaneous layer which is just under the skin.




## Few things which you need to ask from your doctor uncle / aunty

- Whether you need clear insulin or cloudy insulin. Learn from your doctor which insulin to take and when.
- You may need to mix 2 insulins in your syringe. It is not difficult but is important to fill clear insulin before the cloudy one. Ask your doctor in detail.



## What makes blood sugar levels rise & fall ?

- My doctor uncle said that for controlling diabetes, we need to create right balance between insulin, exercise and food.
  - Doctor uncle said that I should play daily for 30-45 minutes. So having diabetes can be fun too. I cycle, and sometimes I play with my friends games like badminton, catch me. On Saturdays I attend dance class. On rainy days I do yoga with my grand father.
  - Doctor uncle told me that I can take a small amount of sweets, chocolate or toffee sometimes but not more as it can make me fall sick again.
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## What do I eat?

- Doctor uncle told my mommy that I can eat every thing. Yipee! We only need to be careful about the quantity I eat.
- Me and my younger brother Chintu have the same food. He does not have diabetes.
- Doctor uncle said that every child should eat 1 bowl of vegetables in each meal. Green leafy vegetables are the best. I love lady's finger, green peas, carrot, cauliflower, cucumber, tomatoes, sprouts, and beans. I finish everything on my plate.
- I also take two fruits every day - one at 11.00 am and one in the evening before I go to play.
- Do you know, when my sugars are controlled, my sunday evening snack is small cup of vanilla ice-cream? Even mommy doesn't say 'No'!











# HYPOGLYCEMIA

(Low Blood Glucose)


**Causes:** Too little food or skip a meal; too much insulin or diabetes pills; more active than usual.

**Onset:** Often sudden; may pass out if untreated.

## SYMPTOMS:

 <b>SWEATING</b>	 <b>DIZZY</b>	 <b>SHAKY</b>	 <b>FAST HEARTBEAT</b>
 <b>BLURRY VISION</b>	 <b>WEAKNESS OR FATIGUE</b>	 <b>ANXIOUS</b>	 <b>HUNGRY</b>
 <b>BLURRY VISION</b>	 <b>WEAKNESS OR FATIGUE</b>	 <b>HEADACHE</b>	 <b>IRRITABLE</b>

## WHAT CAN YOU DO?

 <b>CHECK</b> your blood glucose, right away. If you can't check, treat anyway.	 <b>TREAT</b> by eating 3 to 4 glucose tablets or 3 to 5 hard candies you can chew quickly (such as peppermints), or by drinking 4-ounces of fruit juice, or 1/2 can of regular soda pop.	 <b>CHECK</b> your blood glucose again after 15 minutes. If it is still low, treat again. If symptoms don't stop, call your healthcare provider.
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## Learning about low blood sugar levels.

Doctor uncle said that if I feel hungry, confused, sweating, sleepy, have headache, trembling or shaky hand and feet, I should check my blood sugar. If it is less than 70 mg/dl then I should eat candy (3-4) or 2 spoon sugar or 1/2 cup juice.

Doctor uncle said this is hyp-o-gly-cemia. This happens when I eat less, I forget to take my snack (mid day or evening) or sometimes when I play too much. Even my teachers and friends know about it, so that they can help me during my low blood sugars.



## Checking blood sugar

Papa says, I need to check my sugar level to see if my diabetes is under control. Doctor uncle has given me list of 7 tests.



Mr. Glucometer

	Date	Time	Food Eaten	Sugar Level
Fasting				
Post breakfast	19-8-2011	10:30 a.m.	3 Idlis + 1 Cup sprouts	143
Pre Lunch				
Post Lunch				
Pre Dinner				
Post Dinner				
3.00 AM				

I check my sugars at least twice daily and write it down in my sugar diary very sincerely. You must also do the same.



### Diabetes and going to school

- My teachers and friends know about my diabetes and they are very supportive as mommy and papa have told them about it.
- In fact, my teacher gives all of us 5 min eating break at 11.00 am, when I need to have morning snack.
- During birthday celebrations, when I get toffees, I share it with my brother or keep them for low blood sugars. Sometimes I do eat 1 toffee, but I always tell mommy and doctor uncle about it. So, it is not difficult.

## My diabetes kit



## Some other things I Do ...

- I need to keep insulin in the fridge. For my afternoon dose at school, I carry insulin in a small bag with cool pouch. I take this cool pouch also when I am traveling. I take insulin as advised by doctor uncle every day.
- I keep 2-3 toffees in my bag for low blood sugar.
- I always wear shoes, even at home as doctor uncle had told not to go bare foot.
- I have a diabetes identification card which I keep with me at all times, in which there are phone numbers of mommy, papa and doctor uncle.



## We control diabetes

Nobody really knows what causes diabetes. Doctor uncle says that one thing is for sure; **my diabetes is not because I have done something wrong or because I have eaten something that I shouldn't have.**

My papa and mommy are proud of me as I am a brave girl. I control diabetes by my discipline and so they need not worry about it. I can do every thing just like all my friends. I also come first in my class! My teacher says I am the best student. When I grow up I want to become a doctor and help all the little children. So wish me luck! I am sure you also want to become someone great when you grow up. For this you must first take care of your health and follow whatever doctor uncle / aunty says. Take care! Bye!

## Mishti Quiz

A	U	V	F	N	R	Y	F	K	T	D	H
G	L	U	C	O	S	E	G	L	U	E	I
B	T	W	G	O	S	W	I	M	I	N	G
C	S	X	H	P	S	Z	H	M	V	F	J
B	A	D	M	I	N	T	O	N	W	G	K
D	R	Y	I	Q	T	A	R	N	X	I	H
E	Q	Z	S	P	I	N	A	C	H	C	Y
F	P	A	J	A	U	B	N	O	Y	E	P
G	O	B	K	N	V	C	G	P	Z	C	O
H	G	L	U	C	O	M	E	T	E	R	L
I	N	C	L	R	W	D	I	Q	A	E	M
J	M	D	M	E	X	E	J	R	B	A	N
K	L	E	C	A	N	D	Y	S	C	M	O

1. Healthy Vegetable (7)
2. Fruit with Vitamin C (6)
3. A type of sport (9)
4. Device for checking blood sugar (10)
5. We get energy from (7)
6. Organ which produces insulin (7)
7. People with diabetes have it, when sugars are low (5)
8. It's cold and we love it
9. Good exercise in water (7)
10. Low blood sugars (4)



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