



information pack  
for TEACHERS



A diabetes information kit: India

## Acknowledgements:

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DISSEMINATION AMONGST YOUTH

IDF gratefully acknowledges the support of Sanofi in this project

**SANOFI** DIABETES 



## Guidelines:

This pack should be used in tandem with an information session and is not intended to be distributed as a stand alone item. A programme on diabetes education should be organized at school around the pack.

**If you wish to translate the pack into further languages or make culturally specific adaptations, please notify PHFI, HRIDAY and IDF before any changes are made: [communications@idf.org](mailto:communications@idf.org); [info@ctchp.org](mailto:info@ctchp.org); [info@hriday-shan.org](mailto:info@hriday-shan.org).**

PHFI, HRIDAY, IDF, ISPAD and Sanofi Diabetes logos must remain visible on this material. If you have a new local partner that endorses the project, make sure to seek IDF permission before adding new logos on the pack.

We would appreciate your feedback on pack usage and photos from your information sessions.

No fees will be asked for using this pack.

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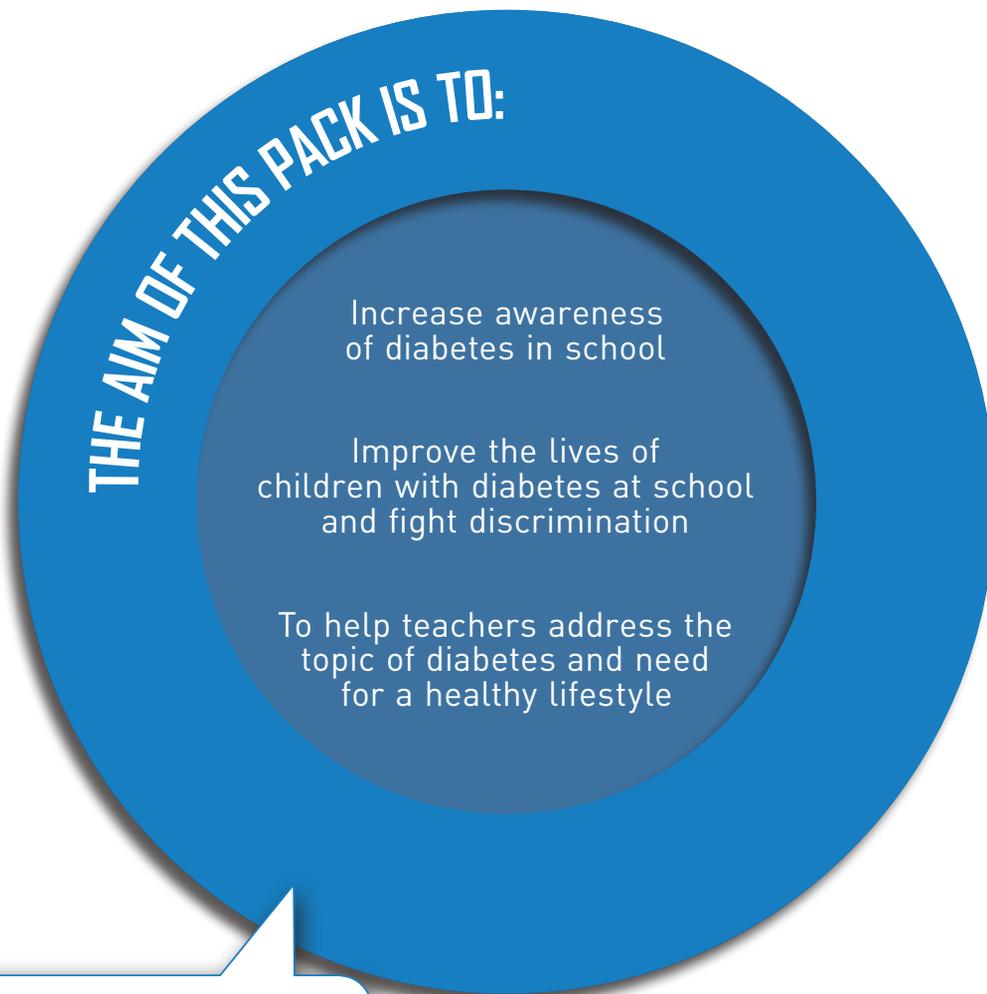
## Annexes:

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# INTRODUCTION

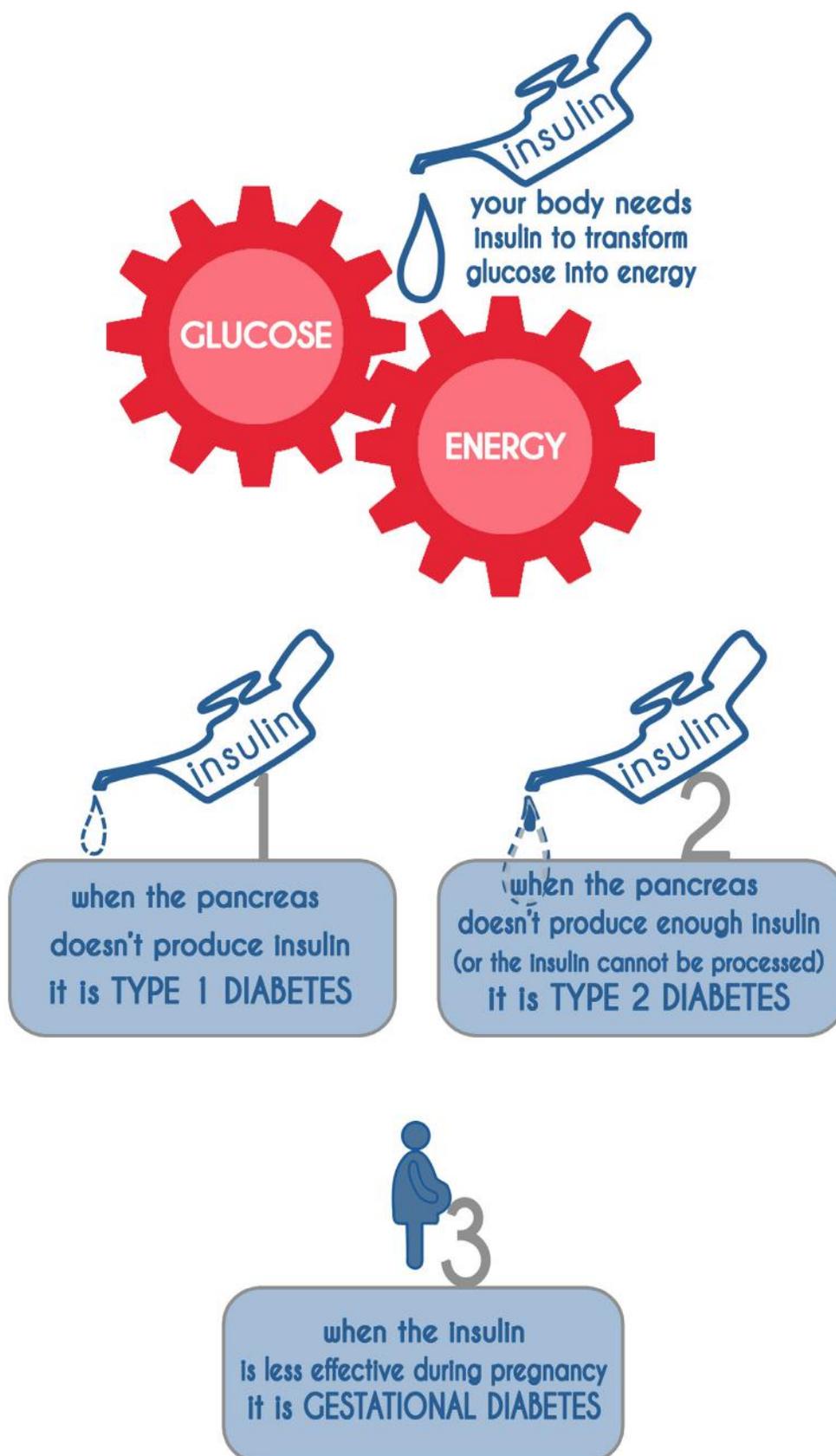
The following KiDS information pack has been prepared to guide you in making the school environment a better place for children with diabetes. The pack is an awareness and information tool created to inform teachers and children about diabetes. This pack should be seen purely as an information resource and **is not intended to replace any medical advice.**



## Why a blue circle?

The icon was designed as a call to unite for diabetes and is a symbol of support for the UN Resolution on Diabetes. The colour blue represents the sky and it's the same colour as the flag of the United Nations

# WHAT IS DIABETES?



(Source: International Diabetes Federation, 2014; <http://www.idf.org/about-diabetes>)

# WHY IS IT IMPORTANT TO TALK ABOUT DIABETES IN CHILDREN?

India ranks second in the world, just after China, in terms of existing number of people with diabetes.

A Chennai-based study suggests that one out of every four patients with Type 2 Diabetes is diagnosed before 15 years of age.

Every fifth child with Type 1 Diabetes in the world is an Indian.



Type 2 Diabetes, which usually develops in adults, is now increasingly affecting children due to unhealthy lifestyle habits, overweight and obesity.

Young diabetics (onset of diabetes before 15 years of age) constitute 1-4% of the total diabetic population in India.

Early intervention, when lifestyle habits are being formed among children is of utmost importance.

Awareness about diabetes in India is low. Around 25% of urban Indians have not even heard of diabetes.

Enabling school environment with well-informed teachers, can positively influence the students to adopt healthy lifestyle habits, and also aid management of students already suffering from Diabetes.

# WHAT IS TYPE 1 DIABETES?

Diabetes can develop in a child of any age, including infants and toddlers. Diabetes can affect both boys and girls. Type 1 diabetes often develops quickly and may be life-threatening if not diagnosed early.

Type 1 diabetes is diagnosed when the pancreas stops making insulin completely. It is an autoimmune disease which means the body's own immune system attacks the pancreas destroying the cells that make insulin. This results in the body being unable to control the amount of sugar in the blood.



# MYTHS ABOUT DIABETES?

**TRUE OR FALSE:**

**Eating too much sugar causes diabetes**

**FALSE:** When kids get type 1 diabetes, it's because their bodies can't make insulin anymore. It has nothing to do with eating too much sugar. When kids get type 2 diabetes there might be a connection because eating too much sugar (or foods with sugar, like toffees or soft drinks) can cause weight gain, and weight gain can lead to type 2 diabetes.

**TRUE OR FALSE:**

**People with diabetes should not exercise**

**FALSE:** Exercise is important for all children— with or without diabetes. Exercise has many benefits. It keeps kids healthy and fit, and also helps them balance their blood sugar.

**TRUE OR FALSE:**

**You can catch diabetes from another person**

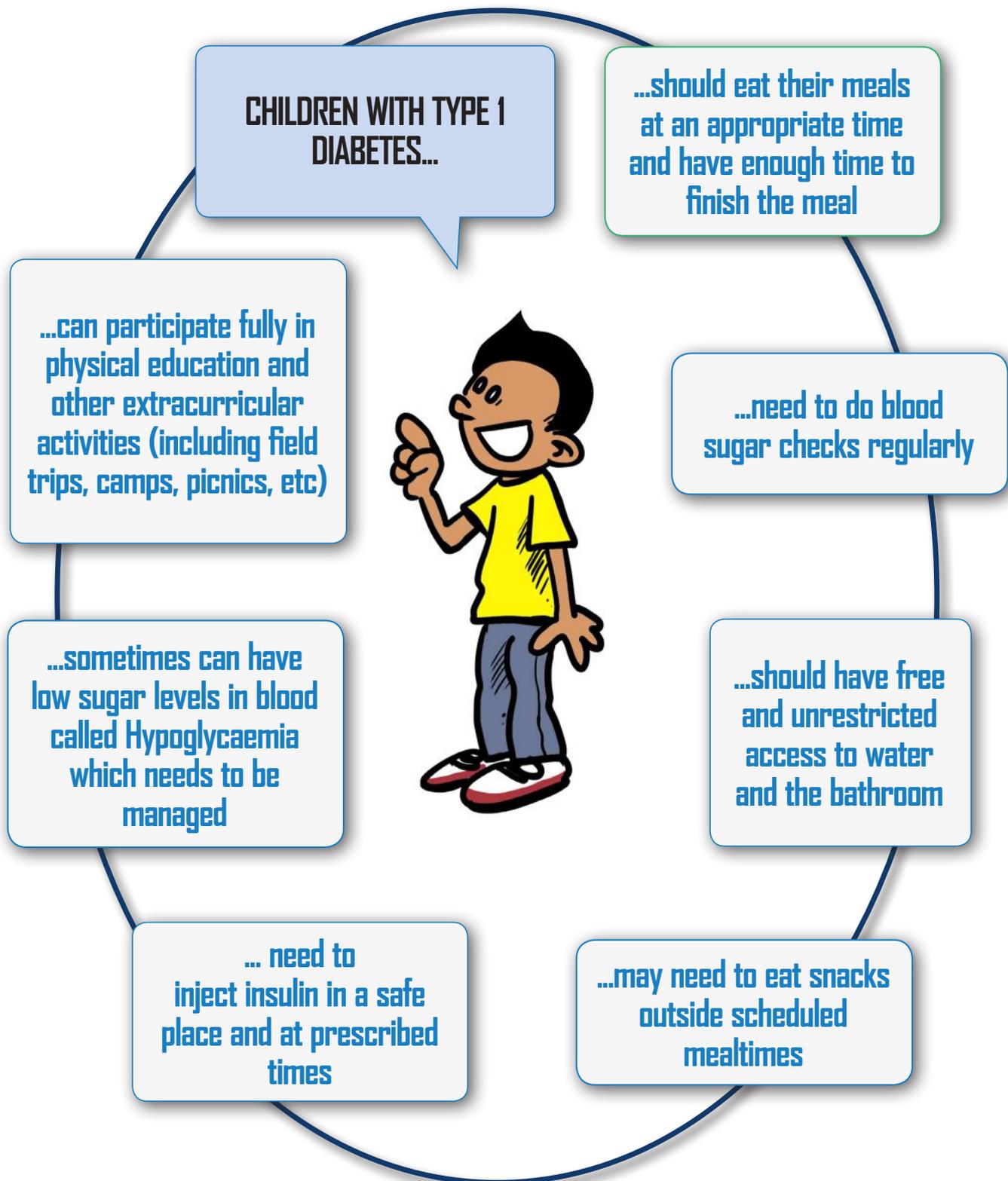
**FALSE:** Diabetes is not contagious, so you can't catch it from someone who has it.

**TRUE OR FALSE:**

**Kids with diabetes can never eat sweets**

**FALSE:** Kids with diabetes can eat sweets — as part of a balanced, healthy diet. Like everyone else, a person with diabetes shouldn't eat too many sweets because they may cause damage to teeth and they don't have many vitamins and minerals.

# AS A TEACHER, WHAT DO I NEED TO KNOW ABOUT TYPE 1 DIABETES?



# AS A TEACHER, WHAT DO I NEED TO KNOW ABOUT LOW BLOOD SUGAR?

Hypoglycaemia or low blood sugar

## CAUSES:

**Low blood sugar may be caused by:**

- Taking too much insulin
- Too little carbohydrate
- Unplanned exercise and activities
- Missed or delayed meals/snacks

## SYMPTOMS



# WHAT TO DO IF A CHILD HAS LOW BLOOD SUGAR?

How to cope with Hypoglycaemia or low blood sugar?

**When a hypoglycaemia does happen it is very important to act quickly:**

**Child's blood sugar level should be checked**

**Ensure that the child consumes a fast acting carbohydrate**  
(see next page)

**Listen to the child, dont ignore his/her needs or his/her friends' worries**

## **FOLLOW WITH A SNACK OR MEAL IF DUE**

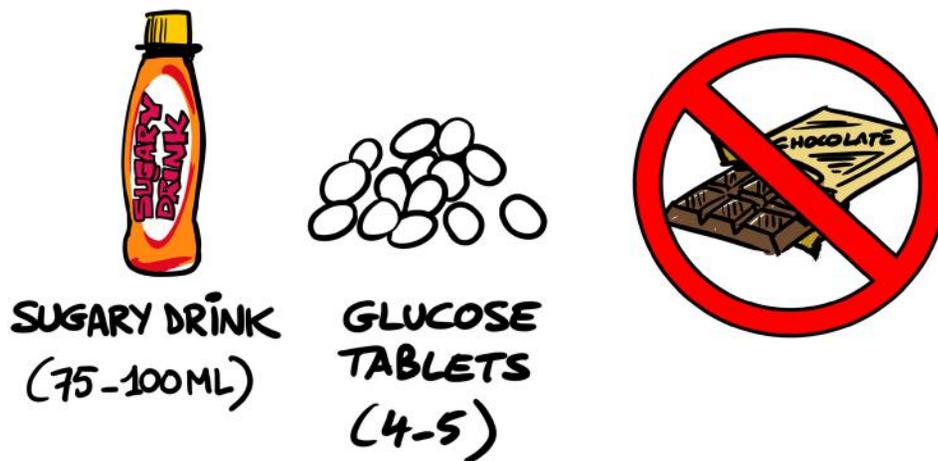
Be aware of the level of consciousness of the child. If the child is unconscious seek immediate medical attention and contact his/her family.

**Ensure that the child is supervised during hypoglycaemia and until recovery.**

Check again after 15 minutes.

# WHAT TO DO IF A CHILD HAS LOW BLOOD SUGAR?

How to cope with Hypoglycaemia or low blood sugar?



The child's blood sugar level should be checked.  
If still low, repeat the treatment.

Inform the parents that their child had a low blood sugar  
at school.

# AS A TEACHER, WHAT DO I NEED TO KNOW ABOUT HIGH BLOOD SUGAR?

Hyperglycaemia or high blood sugar

**CAUSES:**  
high blood sugar  
may be caused by:

Taking too little insulin..  
Eating too much carbohydrate.

Stress from an illness.  
(such as a cold or flu)

Other stress/anxiety.  
(such as family conflicts or exams)

## SYMPTOMS



VERY THIRSTY



NEED TO URINATE  
OFTEN



IRRITABILITY



STOMACH PAIN

# WHAT TO DO IF A CHILD HAS A HIGH BLOOD SUGAR?

How to cope with Hyperglycaemia or high blood sugar?

## What to do in case of high blood sugar?

**A CHILD WITH A HIGH BLOOD SUGAR LEVEL SHOULD BE ADVISED TO:**

**Drink plenty of water to keep hydrated**

**Check his/her blood sugar and repeat the blood sugar test level in about 2 hours**

**If his/her blood sugar level is very high (270 mg/dl or 15 mmol/l) contact the school nurse or child's parents so they can seek further advice**

## ATTENTION

**When high blood sugar occurs over a number of days it's important to report to parents and school nurse.**

# AS A TEACHER, WHAT DO I NEED TO KNOW ABOUT EXERCISE AND DIABETES?

The duration and intensity of exercise will have an influence on my blood glucose levels. To avoid low blood sugar episodes, I may need to eat an **additional snack before, during and after exercising.**

If I have symptoms of low blood sugar or will be participating in more than 40-45 minutes of physical activity, **blood glucose levels should be checked before exercising.**

**Exercise is a key component of diabetes management.**

With few special considerations, I can fully participate in all physical activity opportunities available in schools.

All of the students with diabetes need to have their **"Diabetes Pack"** (see guidelines in annex).



# WHAT ABOUT EXTRA CURRICULAR ACTIVITIES?

I CAN participate in all extracurricular activities. My teacher should notify my parents and invite them to the planning stage of the activity especially if this involves an overnight.



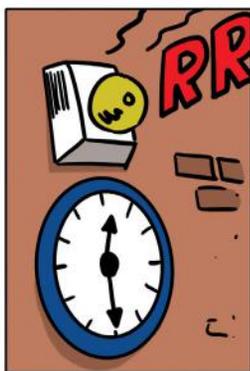
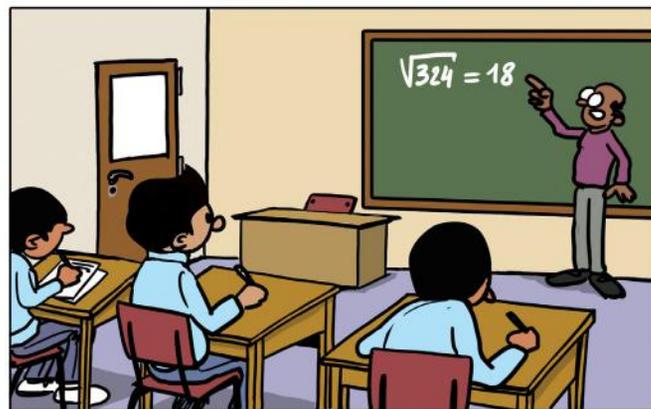
## I'll bring with me:

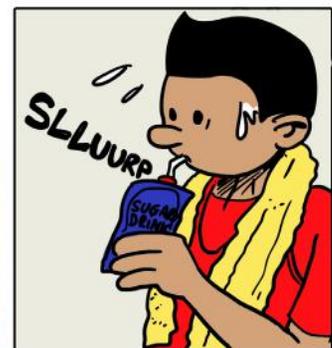
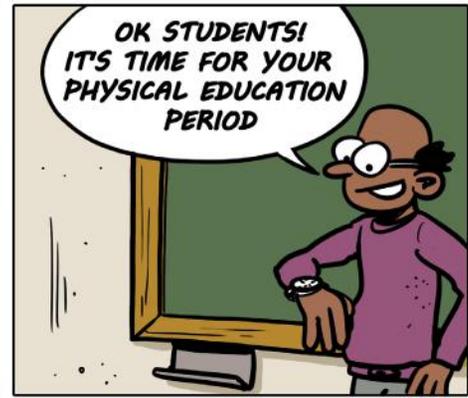
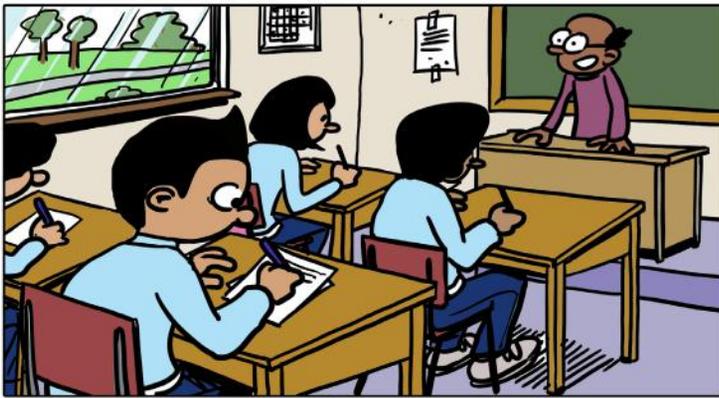
- a diabetes pack with a glucometer, insulin (along with syringe/injection pen) and a sugar source.
- a fast-acting carbohydrate snack or drink in case of hypoglycaemia
- extra snacks in case lunch is delayed or we get more exercise than usual.
- a bottle of water

An overnight activity means I need to be able to inject my insulin or this needs to be discussed by the teacher with my parents.

# A DAY IN THE LIFE OF ARJUN, LIVING WITH TYPE 1 DIABETES









# WHAT IS TYPE 2 DIABETES?

Type 2 diabetes is being diagnosed in children in a growing number of countries, including India. A Chennai-based study suggests that one out of every four patients with Type 2 Diabetes is diagnosed before 15 years of age.

Type 2 diabetes is diagnosed when the body does not produce enough insulin to function properly, or the body's cells don't react to insulin. This is known as insulin resistance. If this happens, the body is unable to control the amount of glucose in the blood.

## SYMPTOMS:

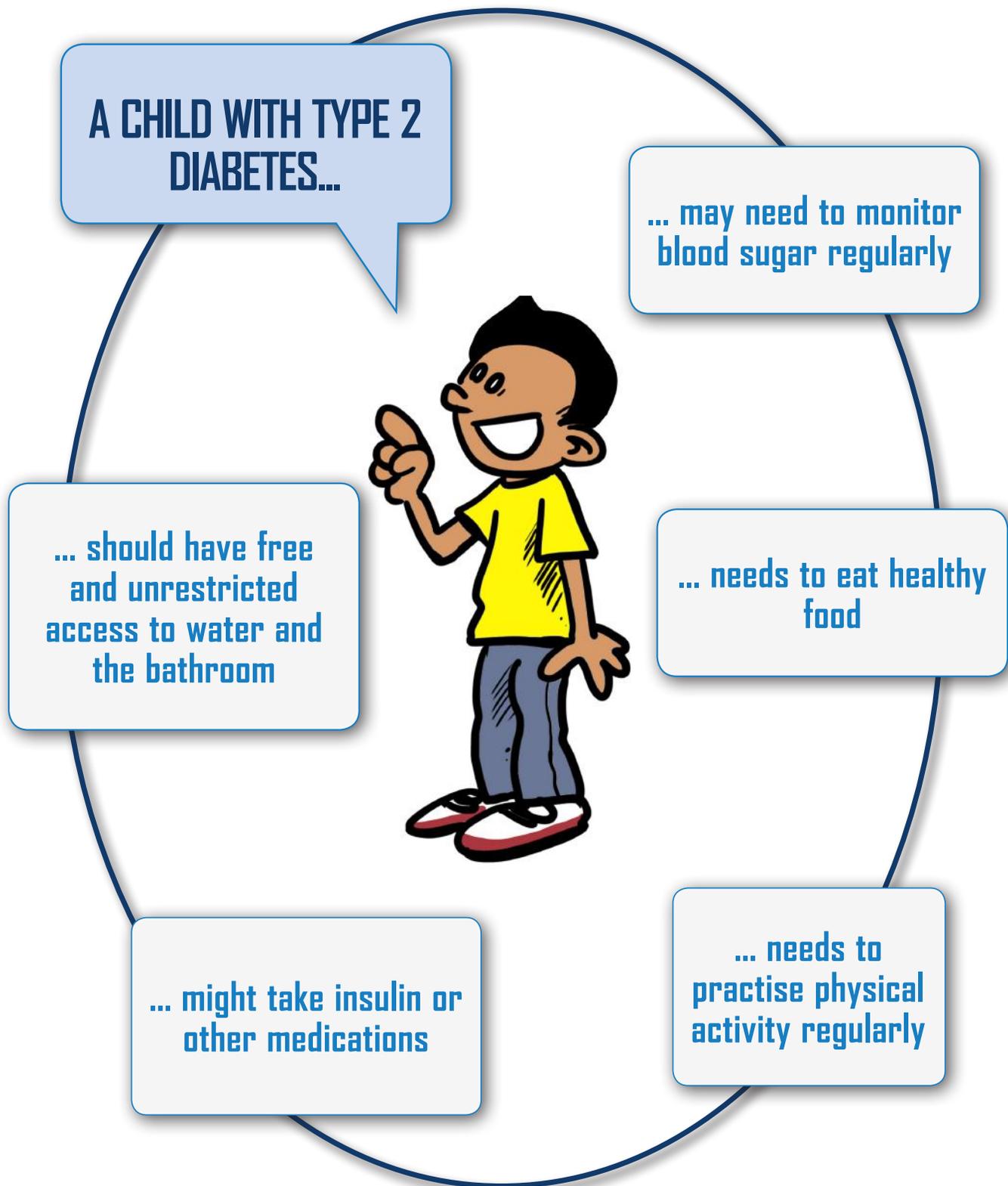
Unlike type 1 diabetes, in people with type 2 diabetes the symptoms are often mild or absent, making this type of diabetes hard to detect.



In general the most common signs are



# AS A TEACHER WHAT DO I NEED TO KNOW ABOUT TYPE 2 DIABETES?

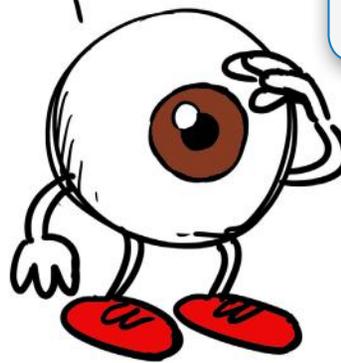


# WHY DO PEOPLE NEED TO PREVENT & TAKE CARE OF TYPE 2 DIABETES?

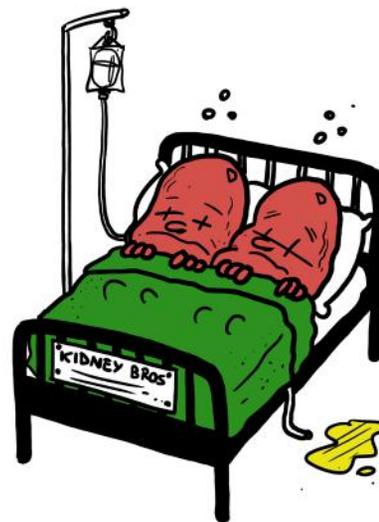
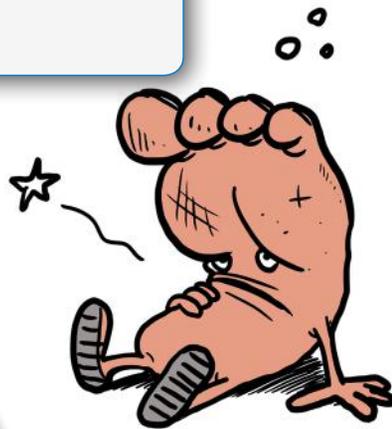
BECAUSE IT CAN LEAD TO :

damage to the retina

I CAN'T SEE...



foot problems



kidney disease

# WHY IS IT IMPORTANT TO CHOOSE A HEALTHY LIFESTYLE?

TO PREVENT:



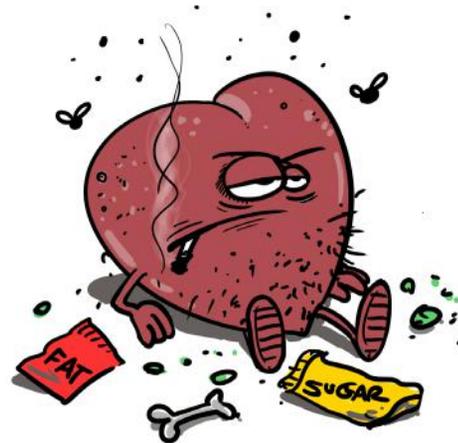
OVERWEIGHT



TIREDDNESS



FEELING SICK

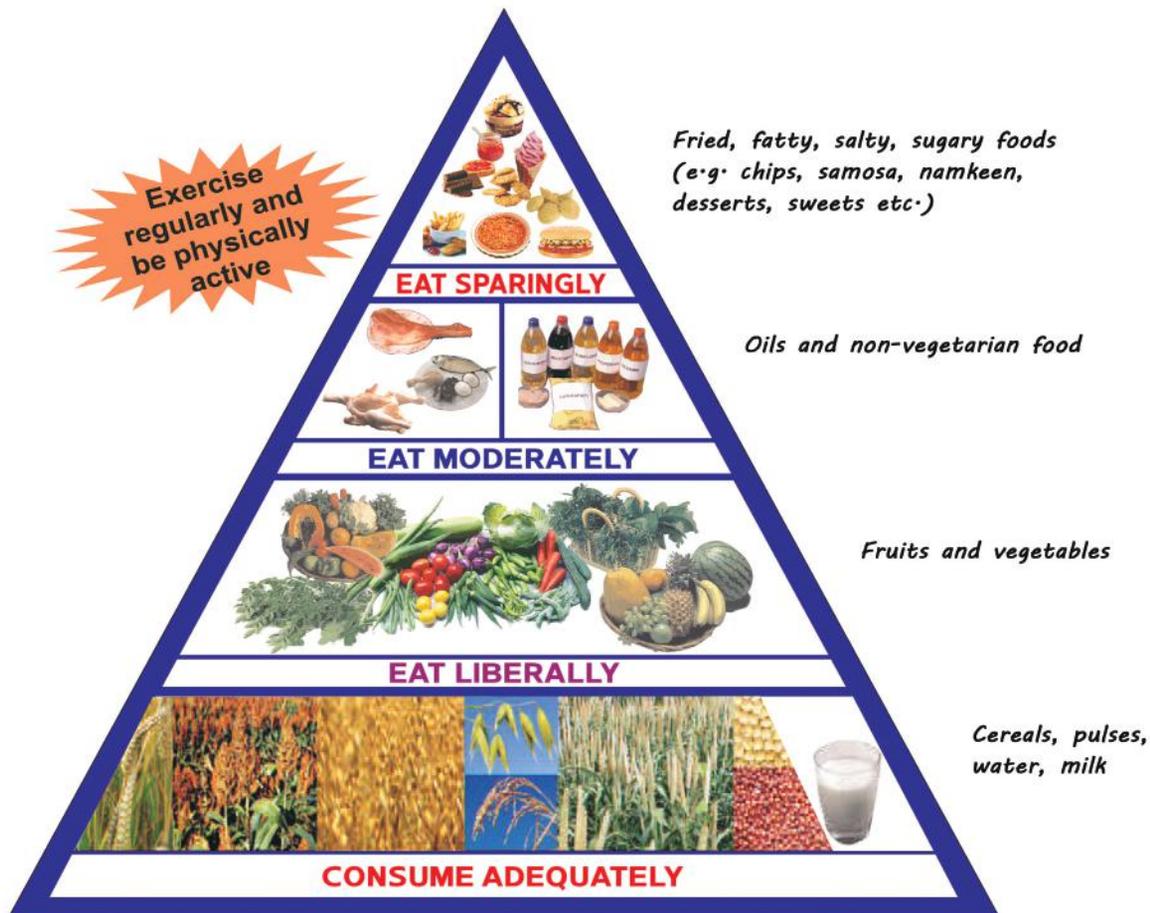


UNHEALTHY HEART

# HOW TO STAY HEALTHY? EAT WELL!

There is a lot of evidence that lifestyle changes can help prevent the development of type 2 diabetes.

## THE FOOD PYRAMID



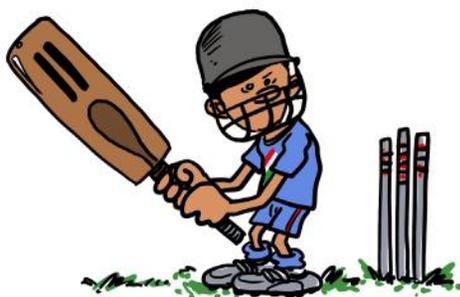
(Source: National Institute of Nutrition, Indian Council of Medical Research. 2011. Dietary Guidelines for Indians - A Manual. Hyderabad: NIN. pp. 12)

# HOW TO STAY HEALTHY? MOVE WELL!

A healthy diet is built on a base of regular physical activity, which keeps calories in balance and weight in check.

## TIPS TO GET ACTIVE:

- Try sports and choose the one you like
- Set regular times for activities; make it a part of your daily schedule
- Reduce use of screen time (TV, computers etc..) and play with friends
- Walk to school (if possible)
- Take the stairs instead of a lift
- Learn to use bicycle instead of using vehicle.
- Go for walk with your parents



- Turn off your TV, mobile or computer and spend some time playing with your friends
- Stay active: do a minimum of 30 minutes of exercise per day!
- Exercise with a friend

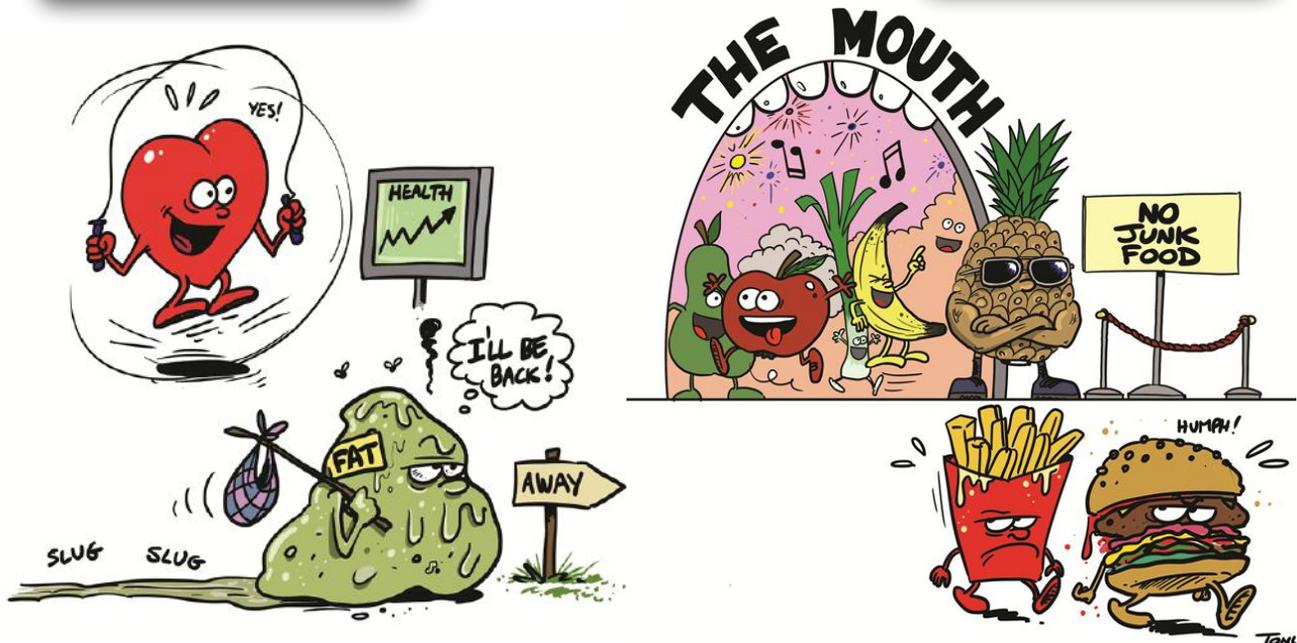
# STAY HEALTHY: FOLLOW YOUR HEART

## BECOME AN HEALTH ANGEL!



Physical activity keeps your heart healthy

Reducing intake of junk food can help reduce your risk of type 2 diabetes



ANNEX I

# DIABETES MANAGEMENT PLAN

to be completed by parent or legal guardian

Child's Name .....

Date of Birth .....

Mother's Name .....

Guardian/  
Father's Name .....

Child's age  
at time of  
diagnosis .....

## Contact phone numbers:

(list by order in which calls should be made, and note if it is a parent, friend, or caregiver and whether the number is home and or work. Also note if each person has legal authority to respond in an emergency situation.)

	Number	Name	Relationship	Location	Authority
1.	.....	.....	.....	.....	.....
2.	.....	.....	.....	.....	.....
3.	.....	.....	.....	.....	.....

## Doctor:

Name ..... Phone .....

## Other Health Providers:

Name ..... Phone .....

Name ..... Phone .....

## MONITORING:

Usual blood glucose monitoring times:

- |  |                                |
|--|--------------------------------|
| <input type="checkbox"/> Mid-Morning             | <input type="checkbox"/> Noon  |
| <input type="checkbox"/> Evening                 | <input type="checkbox"/> Night |
| <input type="checkbox"/> Others (Please Specify) |                                |

Does your child have a preferred location for monitoring (classroom, school office, etc.)?

Goal range for blood glucose: Between \_\_\_\_\_ and \_\_\_\_\_

## LOWS:

If below \_\_\_\_\_, please do the following:

Call parent if below: \_\_\_\_\_ (Tel: \_\_\_\_\_ )

Usual signs/symptoms of low blood glucose are:

- |  |   |
|--|---|
| <input type="checkbox"/> Sweating                | <input type="checkbox"/> Blurry Vision    |
| <input type="checkbox"/> Dizziness               | <input type="checkbox"/> Fast Heartbeat   |
| <input type="checkbox"/> Anxiety                 | <input type="checkbox"/> Hunger           |
| <input type="checkbox"/> Irritability            | <input type="checkbox"/> Shakiness        |
| <input type="checkbox"/> Headache                | <input type="checkbox"/> Weakness/Fatigue |
| <input type="checkbox"/> Others (Please Specify) |   |

## HIGHS:

If above \_\_\_\_\_, please do the following:

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Usual signs/symptoms of high blood glucose are:

- |  |  |
|--|--|
| <input type="checkbox"/> Excessive Thirst        | <input type="checkbox"/> Need to urinate often |
| <input type="checkbox"/> Irritability            | <input type="checkbox"/> Stomach pain          |
| <input type="checkbox"/> Others (Please Specify) |  |

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## Insulin:

Will daily insulin be needed in school?

YES  NO

If insulin is needed at any other time, please specify time, amount and circumstances for administering insulin:

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## FOOD:

Will your child participate in school breakfast and/or school lunch?

YES  NO  NA

If yes, will modifications to the regular menu be needed?

YES  NO  NA

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## EXERCISE:

What are your child's favourite physical activities?

Will your child participate in school sports?  YES  NO

## SELF-CARE:

Please put an **X** in the box that best describes your child's role:

	Does it alone	Does it with su- pervision	Parents help	Parents do it
Pricks finger				
Puts strip in Glucometer				
Reads Glucometer				
Records result				
Adjusts food based on result				
Adjust insulin based on result				
Knows which foods to limit				
Can select kind and amount of food				
Helps plan meals				
Selects insulin injection site				
Prepares for injection, selects site				
Injects insulin				
Measures insulin				
Determines amount and type of insulin				

## PARTIES AND SPECIAL FOOD OR MEALS:

Do you wish to be contacted before each event?

YES  NO

Additional instructions for the school:

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## EMERGENCIES:

What do you feel should be treated as an emergency?

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What do you want the school to do in an emergency?

---

---

Other requests:

---

---

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(Adapted on Recommendations for Management of Diabetes  
for Children in School – Vermont Department of Health)

## ANNEX 2

# GUIDELINES FOR MANAGEMENT OF CHILDREN WITH DIABETES IN SCHOOL

The following guidelines should be taken into consideration when dealing with diabetes in school. The daily routine of a child with diabetes includes: daily blood glucose monitoring and schedule of food, insulin and activities. Therefore, while at school, each child with diabetes must be allowed to:

- Do blood sugar checks.
- Treat hypoglycaemia with emergency sugar.
- Inject insulin when necessary.
- Eat snacks when necessary.
- Eat lunch at an appropriate time and have enough time to finish the meal.
- Have free and unrestricted access to water and the bathroom.
- Participate fully in physical education and other extracurricular activities, including field trips.

In addition:

- The extent of the student's ability to participate in diabetes care should be agreed upon by the school personnel, the parent/guardian, and the health care team, as necessary.
- The ages at which children are able to perform self-care tasks are very individual and variable, and a child's capabilities and willingness to provide self-care should be respected.

- Successful management of diabetes in school requires team work between child, parents/guardians, health care team and the school.

Tips to establish an effective management program for diabetes at school:

- Plan for communicating with parents and the student's physician, agree emergency procedures and list phone numbers required.
- School policies and procedures for administering medications, and handling equipment such as glucometers and pumps should be developed.
- Specific actions for school personnel to perform in the management program should be agreed.
- A specific plan of action for handling high and low blood sugar episodes, including the appropriate treatment foods and medications to have available should be agreed.
- A list of any medications the student receives, noting which ones need to be taken during school hours should be documented.

# WHO DOES WHAT ?

## PARENT/ GUARDIAN

- Supply, equipment and medication necessary for the provision of health support services to students.
- Supply emergency contact numbers to address any expected situation that may arise.
- Supply information about the student's meal/snack schedule.
- Keep the school informed of any changes in plan of care.

## SCHOOL STAFF

- If possible, the school should have its own diabetes kit (containing a glucometer, sterilized lancets batteries) and a high sugar food source (glucose powder etc.)
- Arrange a meeting with parents / guardian at the beginning of the year to complete the diabetes management plan.
- Make sure they have contact numbers for parents / guardians and student's physician (if applicable).
- Agree when parents / guardians need to be contacted.
- Support the child with diabetes at school.
- Allow the child to undertake blood glucose monitoring at agreed times.
- Provide a safe place for a child to inject insulin.
- Familiarise themselves with the signs and symptoms of low blood sugar.
- Know how to cope with a child who has a low blood sugar.
- Ensure a child with low blood sugar is supervised and not left alone.
- Provide unlimited access to water and bathroom.

## STUDENT

- To tell the teacher when they are going low if possible.
- To tell the teacher when they do not feel well.
- To do their blood sugar and insulin injection if able in accordance with the management plan.
- Bring their diabetes equipment to school.
- Carry with them fast acting carbohydrate in case of a low blood sugar.

## ANNEX 3

# SCHOOL ACTIVITIES WITH CHILDREN TO EXPLAIN DIABETES

## GAMES

- Games with images (for instance: recompose the table “A day in the life of someone with diabetes” using images like a puzzle)
- Short video : <http://www.diabeteskidsandteens.com.au/whatisdiabetes.html> followed by a power point with a quiz
- Comics (<http://www.comiccompany.co.uk/?category=34&collection=252&code=764>)

# RESOURCE WEBSITES

- <http://ndep.nih.gov/publications/PublicationDetail.aspx?PubId=97#main>
- <http://www.diabeteskidsandteens.com.au/staycoolatschool.html>
- [http://main.diabetes.org/dorg/advocate/Back to School August 2013/lib/playback.html](http://main.diabetes.org/dorg/advocate/Back%20to%20School%20August%202013/lib/playback.html)
- <https://www.diabetescamps.org/ugc/page-body/doc/JDRF%20School%20Advisory%20Toolkit.pdf>
- <http://www.t1dstars.com/web/>
- <http://www.hriday-shan.org/>
- <http://healthy-india.org/>

## DIABETES MANAGEMENT PLAN IN SCHOOL CONSULTED FOR THE KIDS PACK:

- [http://www.childrenwithdiabetes.com/d\\_0q\\_500.htm](http://www.childrenwithdiabetes.com/d_0q_500.htm)
- <http://healthvermont.gov/prevent/diabetes/SchoolDiabetesManual.pdf>
- <http://www.gnb.ca/0000/pol/e/704AH.pdf>

For further information, please contact:



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