

## Diabetes Nurse Educators

For more information on screening for diabetes in your child whom you think is at risk, please contact:

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## Other Instructions

**National University Hospital**  
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Website: [www.nuh.com.sg](http://www.nuh.com.sg) • Email: [NUH\\_enquiries@nuhs.edu.sg](mailto:NUH_enquiries@nuhs.edu.sg) • Tel: +65 6779 5555



- 1 National University Cancer Institute Singapore
- 2 National University Heart Centre Singapore
- 3 Khoo Teck Puat – National University Children's Medical Institute (NUHkids) (via Kent Ridge Wing Level 2)
- MRT Kent Ridge MRT Station @ Level 1
- A Linkway @ Level 1 via MRT station (Exit A)
- B Linkway @ Level 1
- C Linkway @ Level 4
- D Linkway @ Level 1
- E Linkway @ Level 2
- TAXI Taxi Stand / Drop-Off
- Bus Stop
- Drop-off Point
- P Carpark

## About the Khoo Teck Puat – National University Children's Medical Institute (KTP-NUCMI)

The KTP-NUCMI is the paediatric arm of the National University Hospital and comprises the Departments of Paediatrics, Paediatric Surgery and Neonatology. We provide comprehensive and specialised medical and surgical services for newborns, children and adolescents, and are the only public hospital in Singapore that offers paediatric kidney and liver transplant programmes. Through a generous gift from the Estate of Khoo Teck Puat, we have set up an integrated outpatient facility with medical, diagnostic and rehabilitation services.

For more information about us, visit [www.nuh.com.sg/nuhkids](http://www.nuh.com.sg/nuhkids).

## Contact Us

**24-hour Children's Emergency**  
General Enquiry: +65 6772 2555

### KTP-NUCMI (NUHkids)

Operating Hours: 8.30am - 5.30pm (Mon to Fri), 8.30am - 12.30pm (Sat)  
General Enquiry: +65 6772 5736 Appointment line: +65 6772 2002  
Fax: +65 6776 2102 Email: [ktpnucmi\\_appt@nuhs.edu.sg](mailto:ktpnucmi_appt@nuhs.edu.sg)

### NUH Child Development Unit

Operating Hours: 8.30am - 5.30pm (Mon to Fri)  
Jurong Medical Centre Appointment Line: +65 6665 2530/2531  
Kent Hong Community Club Appointment Line: +65 6769 4537/4637  
Fax: +65 6665 0158 Email: [cdu@nuhs.edu.sg](mailto:cdu@nuhs.edu.sg)

## Children do get Diabetes



**Khoo Teck Puat – National University  
Children's Medical Institute**

The information provided in this publication is meant purely for educational purposes and may not be used as a substitute for medical diagnosis or treatment. You should seek the advice of your doctor or a qualified healthcare provider before starting any treatment or if you have any questions related to your health, physical fitness or medical condition.

Information is correct at the time of printing (Dec 2019) and subject to revision without prior notice.

# What is diabetes?

Diabetes is a condition in which either the pancreas does not produce enough insulin or the cells in the body do not respond to the insulin produced (also known as insulin resistance). Insulin is a hormone which helps deliver glucose to the body cells to produce energy. The glucose comes mainly from the food we eat and from stores in the liver and muscles. If a child has diabetes, the glucose stays in the blood and the body cells cannot convert it to energy. Hence, his or her blood will show a high blood sugar (glucose) level when it is checked for glucose.

## What are the types of diabetes?

### Type 1 Diabetes

This is the most common form of diabetes in children.

- It occurs when the pancreas is not able to produce enough insulin.
- The blood glucose level rises as a result.



- The child becomes unwell with symptoms such as excessive thirst, excessive urination, dehydration and weight loss.
- Insulin treatment is required.



### Type 2 Diabetes

This form of diabetes is more commonly seen in adults. However, it is also becoming more common in children due to rising obesity rates.

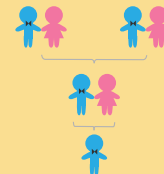
- The pancreas is still able to produce insulin but the body is resistant to it. Hence, it is called insulin resistance.
- It is often associated with being overweight.
- The treatment comprises a change of lifestyle, oral medication and for some, insulin treatment.

## Who typically gets Type 2 Diabetes?

It is more likely to affect children who are/have:



Physically Inactive



Family History of Diabetes



Overweight



Unhealthy Eating Habits

## What are the common symptoms of diabetes?

The common symptoms of diabetes are:

- Frequent thirst despite drinking lots of water
- Constant hunger
- Constant tiredness
- Itchy skin especially around the genital area
- Passing excessive urine during the day and night
- Weight loss despite good appetite
- Poor healing of cuts and wounds

## How is diabetes diagnosed?

Diabetes is diagnosed with blood tests and confirmed when:

- **Fasting glucose levels  $\geq 7.0\text{mmol}$  and glucose levels 2 hours after a sugar load (75g)  $\geq 11.1\text{mmol}$ .**

**OR**

- **Random blood glucose test shows  $\geq 11.1\text{mmol}$  in the presence of symptoms.**

Taking care of children with diabetes requires a team of healthcare professionals of various specialties. They will help and educate the child as well as his or her family to manage the condition. The aim is to ensure that children with diabetes will be happy, healthy and well-adjusted while growing up and developing normally in all aspects.

