



MEMORIAL
UNIVERSITY

Faculty of Medicine

JANEWAY PEDIATRIC RESEARCH UNIT

DIABETES IS...

Diabetes, or diabetes mellitus, is a condition in which the body is either no longer able to make enough insulin (type 1 diabetes), or may be making some insulin, but is unable to use it properly (type 2 diabetes). Most people with diabetes can live a healthy life with good management of blood sugars (with insulin and or medications), checking blood sugars, healthy nutrition and exercise.

JANEWAY PEDIATRIC RESEARCH UNIT

SIGNS AND SYMPTOMS OF DIABETES

Diagnosing diabetes early before severe symptoms start is important. People of any age can develop diabetes. Be on the lookout for the warning signs and symptoms of type 1 diabetes and talk to a healthcare professional if you have any concerns:

- extreme thirst
- frequent urination
- drowsiness or lethargy
- sudden weight loss for no reason
- sudden vision changes
- sugar in urine
- fruity odour on breath

JANEWAY PEDIATRIC RESEARCH UNIT

DKA RECOGNITION AND PREVENTION

Diabetic Ketoacidosis (DKA) is a very serious, life-threatening condition. When the body does not receive enough insulin, it switches to burning fatty acids for energy. Unused glucose and ketones build up in the blood and can make you very sick. DKA can be prevented if it is recognized and treated early.

The symptoms of DKA begin rapidly and commonly include:

- Increased thirst (polydipsia)
- Increased urine production (polyuria)
- Nausea, vomiting, and abdominal pain
- Weight loss
- Increasing fatigue, dizziness
- Rapid shallow breathing (Kussmaul respirations)
- Fruity breath
- Dehydration symptoms such as headache and leg cramps
- Confusion, loss of consciousness, or coma

High blood sugars (>14mmol/L) and ketones in the urine are warning signs and indicate the need for immediate medical attention.

- Never stop insulin unless instructed by your diabetes doctor or diabetes nurse
- Do not ignore high blood sugars
- Know the warning signs of DKA

JANEWAY PEDIATRIC RESEARCH UNIT

HYPOGLYCEMIA

A blood sugar level lower than about 4 mmol/L is called hypoglycemia. The feelings associated with hypoglycemia are called an “insulin reaction”.

Common signs and symptoms of a mild insulin reaction include:

- shakiness, feeling nervous for no other reason
- cold, clammy sweatiness
- dilated pupils
- mood change: irritable, grouchy, impatient; temper tantrums in younger children
- hunger, and sometimes nausea
- lack of energy
- lack of concentration
- blurred vision
- pounding heart
- change in skin colour: pale, most noticeable in the face and around the mouth
- disturbed sleep, restlessness, crying out, sleepwalking, or nightmares
- severe hypoglycemia can cause loss of consciousness and or seizures

All insulin reactions must be treated right away. Always have a source of fast-acting sugar available, such as juice, dextrose tablets, or even table sugar. Glucagon kits are recommended to have at home or with travel as a way of rapidly increasing the blood sugar if there are signs of severe hypoglycemia.