

ASK EXPERT: Type 1 diabetes in children is different from type 2 diabetes



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India is sitting on a volcanic diabetes epidemic, with more than 65 million people living with diabetes in India. Diabetes occurs when the production and supply of the hormone insulin produced by beta cells of pancreas gets reduced or is stopped in our body. We all need insulin as it is required to convert sugar, starches and other food into energy. Goal of any treatment of diabetes is to keep glucose levels in normal range as uncontrolled diabetes can cause the development of various complications, which includes heart disease, stroke, high blood pressure, circulation problems, nerve damage and damage to the kidneys and eyes.

Understanding type 1 and type 2 diabetes and how it develops

Although, both type 1 and type 2 diabetes are characterised by higher blood sugar levels, the cause and development of the conditions are different.

Type 1 diabetes - Type 1 diabetes is an autoimmune disorder (body's own immune system attacks and destroys the insulin-producing cells in the pancreas) that mostly affects children and young people. A person diagnosed with type 1 diabetes need to take insulin injections from the beginning and for life time. If the diagnosis or treatment is delayed because of any reason, the severe lack of insulin can result in life threatening condition called diabetic ketoacidosis (DKA). While the cause for type 1 diabetes is still not entirely understood, there is nothing one can do to prevent or get rid of it.

Type 2 diabetes - Type 2 diabetes is usually seen in older people, nowadays due to sedentary lifestyle and early obesity, it is more in young people including children and adolescents. Most people with type 2 diabetes mellitus are overweight or obese and have family history of type 2 diabetes. In this form of diabetes, the pancreas still produces some insulin. Treatment includes diet control, exercise and in some cases oral drugs or insulin. It is a progressive disorder and

treatment keeps on changing. Although, we cannot change our family history but by adopting right life style which includes balanced diet, physically active life and keeping weight in normal range, one can definitely delay and to some extent prevent type 2 diabetes.

Type 1 and type 2 diabetes in children

Type 1 diabetes is the most common form of diabetes which happens in children. While both types of diabetes exhibit similar symptoms, there are a few differences. If there are any symptoms that include increased thirst and appetite, frequent urination or restart of bed wetting, unexplained weight loss and fatigue and frequent infections in your young one, then it can be type 1 diabetes. In children having type 2 diabetes, above mentioned symptoms may not be present in marked intensity. They may be overweight. One symptom that is peculiar of diabetes in young people is formation of dark patches (acanthosis nigricans) which are most often found between the fingers and toes, in arm pits and on the back of the neck (dirty neck). It is essential that we do not overlook these symptoms and visit doctor for appropriate diagnosis at earliest.

What are the other differences in management of type 1 and type 2 diabetes

Diet, exercise, medicine and monitoring are 4 pillars for diabetes management.

Type 1 diabetes is different from type 2 diabetes in many ways:

- Children require a treatment plan to have adequate energy for their day to day activities as well as growth.
- Mostly children and adolescents with type 1 diabetes are not overweight, so they do not need major calorie/ dietary restrictions. They need to have a healthy diet, appropriate to their age, activity and stage of growth.
- Insulin doses must be matched to the carbohydrate content of food consumed and need to be adjusted; every few months as child grow.
- Since insulin requirement is affected by many factors, self-monitoring of blood glucose at least two or more times daily is essential.

Ultimate goal for treatment

Ultimate goal for treatment of any type of diabetes is to maintain blood glucose levels near normal as uncontrolled diabetes is a serious condition and can

cause many complaints. It is therefore essential that diabetes is timely recognized and treated adequately. Unfortunately, both types of diabetes are chronic, lifelong conditions. However, by closely monitoring and managing blood glucose levels, one can keep the effects of diabetes to minimum.

Current Indian Scenario

India faces a considerable threat from diabetes and its complications. The most prevalent is type 2 diabetes, which constitutes 95 per cent of the diabetic population in India. In front of this huge epidemic, problems faced by children with type 1 diabetes (less than 5%) are often overlooked.

Changing Diabetes in Children (CDiC) program

Novo Nordisk Education Foundation along with 21 specialized centres across India has tried to address this critical gap in the management of type 1 diabetes through its CDiC program. These centers provide diagnosis, patient education and treatment, including HCP and paramedic training and enhanced access to Diabetes care and management for children with type 1 diabetes. The 4050 children registered in the program are provided with comprehensive care which includes free human insulin, glucose monitoring (both self – monitoring and HbA_{1c}) and diabetes education. CDiC is committed to support normal and healthy childhood in these Children. Apart from India this program is being run in 8 other under-developed and developing countries across the globe



← Type 1 diabetes



Type 2 diabetes ↑

If you would like to have more information on type 1 diabetes you can write to us at -

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