



DIETETICS

Caring for Children with Diabetes

By Lauren Goffredo, OSCAR Care Group Dietitian

As one of Australia's most prevalent chronic health conditions, diabetes has been labelled as the epidemic of the 21st century.

But what is diabetes? Can it effect you? How does it impact the lives of children?

There are two different types of diabetes which can impact children:

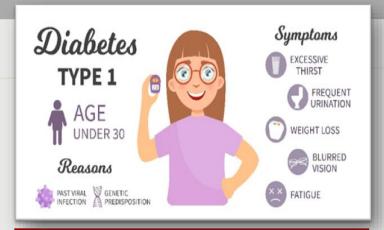
Type 1 diabetes

This is the most common form of diabetes effecting children with early onset typically in younger children and adolescents. Type 1 diabetes is known as an auto-immune condition in which the body's own immune system has attacked and destroyed the cells in the pancreas that produce insulin.

As a result, no insulin is released and sugar remains in the blood stream which cannot be used for energy.

Type 2 diabetes

This form of diabetes accounts for approximately 90% of all diabetes cases in Australia. It usually occurs in adults; however, more and more children, adolescents and young adults are developing it sooner due to poor diet and lifestyle choices. In type 2 diabetes, the pancreas does not produce enough insulin OR the body develops a resistance to the effect of insulin.



Signs and symptoms of type 1 diabetes

The onset of type 1 diabetes in children can be gradual but often, it is sudden and severe so it is important to know what indicators to look out for. The most common signs and symptoms include:

- Frequent urination
- Being extremely thirsty
- Feeling tired
- Weight loss
- Being hungry all the time
- Nausea and/or vomiting
- Blurred vision
- High levels of glucose in the blood or urine during testing
- Irritability and mood swings
- Abdominal pain

What is the role of nutrition & food in diabetes management?

Managing what a type 1 diabetic eats is almost as important as the medication therapy itself as sugar comes from our food. There is no real "diabetic diet" – children with diabetes are encouraged to eat a normal, healthy balanced diet just like everyone else with a wide variety of foods from the 5 food groups.



Food group	Boys	Girls
Grains (bread, cereals, pasta, rice, noodles)	1-3 years = 4 serves	1-3 years = 4 serves
	4-8 years = 4 serves	4-8 years = 4 serves
	9-11 years = 5 serves	9-11 years = 4 serves
	12-13 years = 6 serves	12-13 years = 5 serves
	14-18 years = 7 serves	14-18 years = 7 serves
Fruit	$1-2 \text{ years} = \frac{1}{2} \text{ serve}$	1-2 years = ½ serve
	2-3 years = 1 serve	2-3 years = 1 serve
	4-8 years = 1 ½ serves	4-8 years = 1 ½ serves
	9-18 years = 2 serves	9-18 years = 2 serves
Vegetables, legumes and pulses	1-3 years = 2-3 serves	1-3 years = 2-3 serves
	4-8 years = 4 ½ serves	4-8 years = 4 ½ serves
	9-11 years = 5 serves	9-11 years = 5 serves
	12-18 years = 5 ½ serves	12–18 years = 5 serves
Lean meat, fish, poultry, eggs, nuts, seeds and their alternatives	1-3 years = 1 serve	1-3 years = 1 serve
	4-8 years = 1 ½ serves	4-8 years = 1 ½ serves
	9-18 years = 2 ½ serves	9-18 years = 2 ½ serves
Milk, yoghurt, cheese and their alternatives	1-3 years = 1 ½ serves	1-3 years = 1 ½ serves
	4-8 years = 2 serves	4-8 years = 1 ½ serves
	9-11 years = 2 ½ serves	9-11 years = 3 serves
	12-18 years = 3 ½ serves	12-18 years = 3 ½ serves





Food & Diabetes

Food and nutrition can help or hinder the way in which diabetes is managed. The main nutrient at play is carbohydrates. When we eat carbohydrates, the body breaks them down into glucose (sugar) which is then released into the blood stream. This gives us 'high blood glucose/sugar levels'.

Carbohydrates are healthy – they contain lots of different vitamins and minerals such as B vitamins and fibre which fuel our bodies so it is important not to cut them out of a child's diet.

Blood glucose level can be altered by the amount and type of carbohydrate we eat.

Choose low GI foods wherever possible!

Low GI foods include:

- Pasta
- Oats
- Wholegrain breads and cereals
- Milk & Yoghurt
- Beans/lentils/legumes
- Most fruits

On diagnosis of type 1 diabetes, a Dietitian will educate children and their families on how to correctly count, portion and consume carbohydrates tailored to the child's diabetes care plan. Speak to your APD for more information on carbohydrate counting, carbohydrate foods or GI.



What can I do as a Childcare worker?

- Have up to date training on diabetes, including having a basic understanding of the disease, food and nutrition education, first aid practices (administering insulin, treating hypoglycaemia, emergency care)
- Ensure you have a current diabetic care plan for each child (where required)
- Maintain a good relationship with the child, their parents/family and health professionals
- Get a Dietitian to develop or assess your facility menu will be able to help ensure food provision is balanced, healthy and contains adequate carbohydrates
- For special occasions or events let the child participate as per normal but show an increased sensitivity in care
- Ensure the child is performing in safe physical activity & test their blood glucose levels after they have finished (exercise can lower the blood glucose level)
- Use your power as an educator to teach the child/children about food, nutrition and healthy eating



Where can I go for further information?

- Caring for Diabetes in Children and Adolescents by the Royal Children's Hospital, Melbourne
- Children's Diabetes Centre
- National Diabetes Education Program from the Centers for Disease Control and Prevention
- As 1 Diabetes from Diabetes NSW & ACT,
- <u>Diabetes Education & Training</u> from WA Government Child & Adolescent Health Service,

For more information on children with diabetes or diabetes in general, contact:

- Dietitians Australia
- Diabetes Australia
- Your state diabetes body (e.g. Diabetes SA, Diabetes Vic, Diabetes NSW & ACT, Diabetes WA, Healthy Living NT, Diabetes QLD, Diabetes Tas) accessible here
- Glycaemic index foundation
- National Diabetes Service Scheme Helpline on 1800 637 700
- JDRF

Or speak to your local GP, Diabetes Nurse Educator, Endocrinologist or Accredited Practicing Dietitian



Do you need further Diabetes information?

This article was written by OSCAR Care Group Dietitian, Lauren Goffredo. Please call or email via our contact details below.

References:

- Australian Institute of Health and Welfare 2020
- Victoria State Government 2017, Diabetes Long Term Effects
- Recommended Number of Serves for Children, Adolescents and Toddlers
- Making Sense of the Glycaemic Index
- Care of Young People with Diabetes in the Child Care Setting
- What is GI?,
- Type 1 and nutrition
- Managing Type 1
- Type 1 Diabetes Mellitus in Children
- Type 1 Diabetes: What is It?
- <u>Diabetes</u>

