

A Fact Sheet for Parents and Carers

Healthy Eating for Diabetes

Healthy eating is important for children of all ages, including those living with diabetes. Children and teenagers with diabetes have the same growth and nutrition needs as those without diabetes – so the whole family can eat the same healthy foods. Food choices should be guided by the Australian Dietary Guidelines, focusing on eating lots of nutritious foods to support their growth and development.

The Dietary Guidelines for Children and Teenagers recommend that they:

- Enjoy a wide variety of nutritious foods
- Eat plenty of vegetables, legumes and fruits
- Eat plenty of cereals (eg breads, rice, pasta and noodles), preferably wholegrain / high fibre
- Include lean meat, fish, poultry and / or other protein alternatives
- Include milk, yoghurt, cheese and / or non-dairy high calcium alternatives like soy milk/yoghurt - reduced fat varieties should be encouraged for older teenagers and children over 2 years old
- Include some foods rich in healthy fats such as avocado or 100% nut or seed spread
- Choose water as a drink
- Limit unhealthy saturated fats such as those in fatty meat; fried foods and treats
- Choose foods low in salt and limit added salt
- Limit foods or drinks containing added sugars such as sweet drinks and confectionery
- Be physical active every day

Getting the right balance of foods from the different food groups is important for healthy growth and development but it also helps in managing type 1 diabetes. Understanding which foods affect blood glucose levels is such an important starting point.

Food is made up of 3 main nutrients:

- **Carbohydrate** – our main source of energy, especially for the brain and central nervous system
- **Protein** – for growth, development and muscles, as well as a strong immune system
- **Fat** – used to make hormones and keep cells healthy

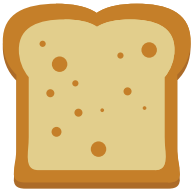
The carbohydrate, protein, and fat in food provides them with the fuel (energy) their growing body needs. Choosing healthy options will also give them the vitamins and minerals they need to maximise their overall health and wellbeing. Of the three main energy sources it's only the carbohydrates that will have a direct effect on blood glucose levels so let's take a closer look at them first.

CARBOHYDRATE

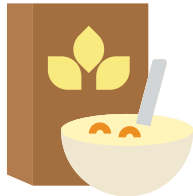
When we eat carbohydrate foods, the starches and sugars are broken down into glucose, which enters the blood stream – this leads to a rise in blood glucose levels. The glucose then enters the body's cells (with the help of insulin) where it's turned into energy for our body's organs and muscles to use.

Carbohydrate rich foods include:

Breads and cereals



Bread



Cereal



Rice



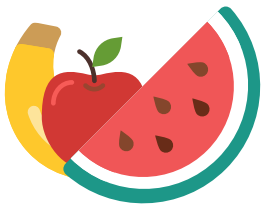
Pasta & Noodles

Buckwheat

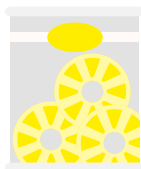
Bourghal wheat

Lebanese bread

Fruit



Fresh fruit



Canned fruit

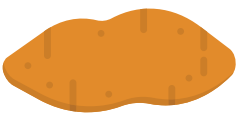


Dried fruit

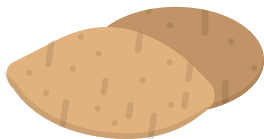


Fruit juice

Starchy vegetables



Sweet Potato



Potato



Corn



Pumkin

Dairy products and non-dairy alternatives



Milk



Yoghurt



Custard



Soy milk



Coconut milk

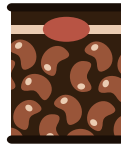
Legumes



Lentils

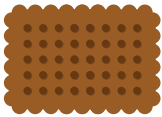


Chickpeas

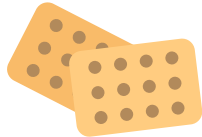


Baked beans

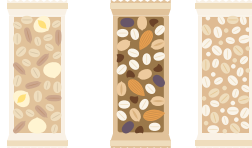
Processed snack foods



Biscuits



Crackers

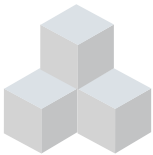


Muesli bars



Fruit bars

Added Sugars*



Sugar



Honey



Maple syrup



Soft drink



Lollies

*these carbohydrate options do not provide essential nutrients and should be limited to hypo treatment or special occasions

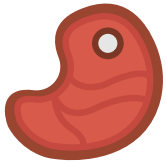
All carbohydrate foods turns to glucose in the blood stream and provide an important source of energy. The right balance of carbohydrate foods is important for managing type1 diabetes as they have the largest impact on blood glucose levels.

PROTEIN

Protein helps to repair the body, is important for normal growth and development, and can be used as a source of energy by the body.

Some protein foods may be high in saturated fat so it is important to choose lower fat options where you can and take off visible fat or skin from meat and poultry.

Protein rich foods include:



Red meat & chicken



Seafood



Eggs



Cheese



Nuts



Beans*



Milk*



Yoghurt*



Tofu

*these protein rich foods also contain carbohydrates so will effect blood glucose levels

FAT

Fats are an essential part of a healthy diet and are important for normal growth and development. There are different types of fats in food including –

- Polyunsaturated fats (eg omega 3 fats)
- Monounsaturated fats
- Saturated fats
- Trans fats

Healthy fats include the polyunsaturated and monounsaturated fats.

These are mainly found in plant foods such as:



Olive oil



Nuts



Peanut butter



Avocado

Fish is also high in healthy fats called healthy omega 3. These fats are the healthiest choices and should be included in a healthy diet.

Unhealthy fats include saturated and trans fats. These fats can raise blood cholesterol levels and lead to insulin resistance so should be limited.

Saturated and trans fats are found mainly in the foods below:



Processed snacks



Pastries



Fried food



Fast food



Butter

Dietary fat won't directly affect blood glucose levels, however, a diet that contains some healthy fats and is low in unhealthy fats, is recommended for long overall health and to reduce the risk of developing diabetes complications later in life. Just remember that all fats are high in energy (kilojoules) so eating too much of any type of fat can lead to weight gain.

To reduce the amount of saturated and trans fat in your child's diet, try the following suggestions:

- Limit high fat processed snack foods such as crisps, chocolates and biscuits.
- Provide healthy snacks based on fruit, vegetables, wholegrain or wholemeal breads or cereals, or low fat dairy instead.
- Replace butter and solid cooking fats with healthy fats such as olive oil.
- Try to limit takeaway foods to less than once a week.
- Save high fat desserts, sweets and pastries for special occasions.
- Discuss healthy school canteen choices on lunch order day like salads, soups, wraps or sandwiches instead of fried foods, pies or sausage rolls.
- Use lean cuts of meat, trim excess fat off meat and remove skin from chicken and other poultry.
- Use low fat cooking methods such as grilling, stir frying, BBQ or steaming
- Use reduced fat dairy products from age 2 years onwards eg reduced fat milk, yoghurt, cheese
- Swap meat for fish at least 1-2 times each week
- Swap butter for avocado, tahini, ricotta or cottage cheese on sandwiches.

Free foods

Free foods are foods that are low in carbohydrate and low in energy (kilojoules). This means they will not have much effect on the blood glucose level or body weight.

Examples of free foods include:



Salads



Non-starchy vegetables



Strawberries

Herbs & spices

Lemon & lime

Fresh passionfruit

Many of these foods also contain lots of vitamins, minerals and fibre and are good for health.

Try to encourage your child to eat plenty of vegetables.

Carbohydrates and type 1 diabetes

Carbohydrates directly affect blood glucose levels and need to be balanced with activity levels and insulin taken. Working with your child's diabetes team to work towards this balance can help keep blood glucose levels within their target range more often and support their health and wellbeing.

Your child's dietitian will work with you to get the right balance in relation to the amount, type and timing of carbohydrate foods eaten over the day. They will teach you and your child (when ready) the tools to work out the carbohydrate content of the foods and drinks they are eating. This is called carbohydrate counting and has been shown to help better manage blood glucose levels.

CARBOHYDRATE COUNTING

Eating enough carbohydrate is important for providing children with the energy they need from day to day as well as for proper growth and development. However, because carbohydrate foods affect blood glucose levels it's important to know how to estimate the amount of carbohydrate being eaten at any one meal or snack.

Carbohydrate counting means to count or measure the amount of carbohydrate in different foods. This can be done in many different ways depending on what works for you and your child. Some of the most common options include counting in grams of carbohydrate or counting in exchanges or portions of carbohydrate. Carbohydrate information can be found on food packages, websites, apps and carbohydrate counting books. Work with a dietitian and choose the method that works for you but knowing how to calculate the carbohydrate content of different foods will help you to better manage blood glucose levels.

**For more information on carbohydrate counting
check out our fact sheet at diabetesnsw.com.au**

If you are an experienced carbohydrate counter, it's still good to re measure carbohydrate foods every 3-6 months as our skills tend to decline over time and portion sizes can creep up. If you are new to carbohydrate counting, book in to spend a few sessions with a diabetes dietitian until you get the hang of things.

How much carbohydrate does my child need?

Every child is different so it's best to see a dietitian who can help you work out how much carbohydrate your child needs. This will depend on things such as appetite, stage of growth and development, weight, height and activity levels. All children living with diabetes should see a dietitian for individualised advice.

What about added sugar?

Despite what many people think, a small amount of sugar can be included as part of a healthy balanced eating plan. However, sugar provides no nutrition and can affect blood glucose levels as well as overall health, so added sugar should only be used in small amounts. This is the same advice given to all children and adults too, even those who don't have diabetes.

Foods which have sugar as a main ingredient such as soft drinks, lollies, syrups and sweets should be kept for special occasions (except in the case of treating low blood glucose levels or hypos).

Diet or low joule soft drinks and cordials can be included occasionally. They don't contain sugar but are still considered treats. Water is the best everyday drink.

Meal Times

Regular meal times is important for managing type 1 diabetes and help to keep energy levels more stable. Meals should include carbohydrate foods and the meal time insulin dose needs to be matched with the amount of carbohydrate food your child eats.

Depending on their management plan, appetite and activity levels, some children living with diabetes may also need snacks between meals to prevent low blood glucose levels (a hypo).

Your child's management plan should also be planned around your child's usual routine, such as school or day care, so that they are able to eat at the same time as other children.

As routines change all the time, it's important to get your child's management plan reviewed regularly by their Dietitian and diabetes Educator, to make sure it is up to date and suitable for their lifestyle and for their growth and energy needs.

**For more information contact
Diabetes NSW & ACT on 1300 342 238 or visit as1diabetes.com.au**

Need an interpreter?

A free telephone interpreter service is available for people who may have difficulty in understanding or speaking English. The Telephone Interpreting Service (TIS) is provided by the government and has access to professional interpreters in almost 2000 languages and dialects and can respond immediately to most requests.

Accessing an interpreter:

1. Simply dial 131 450 for the Telephone Interpreting Service.
2. Explain the purpose for the call e.g. wanting to speak to the National Diabetes Services Scheme helpline
3. The operator will connect you to an interpreter in the required language to an NDSS helpline representative for a three-way conversation.

This free service has been set up by Diabetes Australia and will be promoted with assistance from the Australian Government Department of Health and Ageing.