

coeliac disease & diabetes

Coeliac disease is a condition where the lining of the small intestine is damaged due to sensitivity to a protein in food called gluten. Coeliac disease and type 1 diabetes may occur together. It is estimated that up to 10% of people with type 1 diabetes may have coeliac disease.

This information sheet provides tips about managing diabetes and coeliac disease and should be read in conjunction with the *Food Choices for People with Diabetes* information sheet.

What are the symptoms of coeliac disease?

The following symptoms may indicate the presence of coeliac disease:

-
- > Diarrhoea and/or constipation > Loss of weight > Flatulence
-
- > Abdominal bloating or distention > Anaemia
-

It is important to know that people with type 1 diabetes may have coeliac disease without any symptoms. Screening can help detect its presence. Talk to your diabetes team for more information or advice.

Which foods have gluten and therefore need to be avoided?

Grains containing gluten include wheat, rye, oats, barley and triticale. Other foods that may contain gluten include processed foods containing gluten-derived ingredients such as wheaten cornflour, wheat starch, barley malt and barley malt extract. Ingredients such as maltodextrin and some thickeners may or may not be gluten free.

Mandatory labelling standards ensure that if an ingredient, processing aid or additive within a product is derived from wheat, triticale, oats, rye or barley, either the source must be acknowledged or a statement such as 'contains gluten' must be made on the label. It is important to be aware of label reading guidelines to successfully follow a gluten-free diet as gluten-containing grains must be permanently avoided along with products made from these grains. This includes many breads, cereals, biscuits, cakes, scones, pizzas, pies and processed foods.

A lifelong gluten-free diet is currently the only known treatment for coeliac disease. Gluten-free foods include corn, rice, sago, tapioca, buckwheat, potato, soy, arrowroot, fresh fruit, vegetables, unprocessed meat, poultry, fish and most dairy foods.



coeliac disease & diabetes

The Coeliac Society of Australia produces an Ingredient List booklet that lists ingredients and their suitability for a gluten-free diet. All people with coeliac disease should obtain a copy of this booklet to guide their food choices. See the back page for contact details.

Why is it important not to eat gluten?

If coeliac disease is left untreated, your chance of developing other medical problems increases. Even if you are eating gluten and not experiencing symptoms, damage to your intestine can still occur. Untreated or inadequately treated coeliac disease can lead to your body not being able to properly absorb essential nutrients from food such as iron and calcium. It can also lead to difficulty in controlling your diabetes.

Healthy eating for diabetes and coeliac disease

For those who have diabetes and coeliac disease, healthy eating includes:

- > Regular meals and snacks containing gluten-free carbohydrates
- > Foods that are low in saturated fat
- > Foods that are rich in calcium, iron and fibre
- > Plenty of fruit and vegetables.

If you have been diagnosed with diabetes and coeliac disease, it is recommended that you see a dietitian with expertise in coeliac disease for specific advice and guidance about developing an eating plan that's right for you.

Why are carbohydrate foods important?

Carbohydrate foods are the best energy source for your body. When digested, they break down to form glucose in the bloodstream. Eating regular meals and spreading carbohydrate foods evenly throughout the day, may help maintain energy levels without causing large rises in your blood glucose levels. If you take insulin or certain diabetes tablets, you may need to eat between-meal carbohydrate snacks. Discuss this with your dietitian or diabetes educator.

Which carbohydrate foods are gluten-free?

All the foods listed below are gluten-free (GF) carbohydrates. Those in italics have a lower glycemic index (or GI) which means they have a slower effect on blood glucose levels.

Gluten-free carbohydrates:

Gluten-free bread	Made from rice, corn, potato, soy, GF pizza bases, GF corn tortillas, GF pancakes and GF muffins.
Gluten-free breakfast cereals	Rice flakes, GF cornflakes, GF muesli, rice bran, puffed rice and corn, rice porridge.
Rice	<i>Moolgiri, Basmati, Doongara™ and long grain varieties</i> , white rice, arborio rice, brown rice, jasmine rice.
Legumes	<i>Kidney beans, chick peas, lentils, three bean mix, butter beans, GF baked beans</i> (always check the ingredient list on the label for gluten containing thickeners).
Fruit	All types such as <i>apples, oranges, peaches</i> , bananas and melons. As fruit is a good source of fibre, try to eat the whole fruit rather than drinking juice.
Gluten free crispbread	Corn thins, rice cakes, corn cakes, GF crackers.
Dairy products	<i>Milk, GF soy drink, GF custard, GF yoghurt and GF ice cream</i> (always check the ingredient list on the label for gluten containing thickeners).
Vegetables containing carbohydrate	Potatoes, sweet potato, <i>yams, sweet corn</i> .
Gluten free pasta	Corn pasta, rice pasta, rice vermicelli, rice noodles.

Note that some varieties of the above listed foods may come in low GI versions. Visit www.glycemicindex.com for up to date information.

coeliac disease & diabetes

What about salads and green vegetables?

Vegetables such as salad vegetables and green vegetables are low in carbohydrate and therefore have little effect on your blood glucose levels. Fresh vegetables are also gluten free. Try to include at least 5 serves of vegetables each day.

Further information

- Phone the Coeliac Society of Australia in your State: 1300 GLUTEN (1300 458 836)
- Or visit the Coeliac Society of Australia website www.coeliacsociety.com.au

More information on gluten free diets is available in:

Living with Diabetes and Coeliac Disease – available from The Coeliac Society of Australia Inc, your State or Territory Diabetes Organisation on **1300 136 588** or the Dietitians Association of Australia on **1800 812 942**.

Ingredients List booklet – available from The Coeliac Society of Australia.

Would you like to join Australia's leading diabetes organisation?

- > Dietary services
- > Free magazines
- > Children's services
- > Educational literature
- > Product discounts
- > Support groups

For more information phone **1300 136 588** or visit your State/Territory Organisation's website:

ACT	www.diabetes-act.com.au	NSW	www.diabetesnsw.com.au
NT	www.healthylivingnt.org.au	QLD	www.diabetesqld.org.au
SA	www.diabetessa.com.au	TAS	www.diabetestas.com.au
VIC	www.diabetesvic.org.au	WA	www.diabeteswa.com.au

The design, content and production of this diabetes information sheet has been undertaken by:

- > Diabetes Australia – NSW
- > Diabetes Australia – Queensland
- > Diabetes ACT
- > Diabetes SA
- > Diabetes WA
- > Diabetes Australia – Victoria
- > Diabetes Australia – Tasmania
- > Healthy Living NT

The original medical and educational content of this information sheet has been reviewed by the Health Care and Education Committee of Diabetes Australia Ltd. Photocopying this publication in its original form is permitted for educational purposes only. Reproduction in any other form by third parties is prohibited. For any matters relating to this information sheet, please contact National Publications at dapubs@tpg.com.au or phone 02 9527 1951.

Health professionals: For bulk copies of this resource, contact Diabetes Australia in your State/Territory.

Revised August 2009 A diabetes information series from State / Territory organisations of Diabetes Australia – Copyright© 2009