What is coeliac disease?

How do you say coeliac? Seel ee ak.

Coeliac disease means you can **not** eat food with gluten. Gluten is in wheat, rye, barley and oats. If you eat gluten, it will make you feel sick.

What food has gluten?

- Pasta
- Bread
- Biscuits
- Cake
- Muffins
- Pastry
- Cereal
- Beer
- Oats For example, porridge

- Gravy
- Salad dressing
- Sauce. For example, soy sauce, stir through pasta sauce
- Fried food
- Lollies
- Fake meat. For example, hot dogs, straz

People who have coeliac disease and eat these foods will feel sick. When you eat gluten, your body thinks it is bad.

How will you feel?

When you eat gluten your body will give you warning signs. You might have 1 or more of these symptoms.

Common symptoms

- Sore stomach
- Bloated stomach
- Lots of gas
- Feeling dizzy
- Vomiting

Very serious symptoms

- Thin and weak bones
- Diabetes
- Trouble getting pregnant
- Low iron in your blood

- Diarrhoea
- Constipation
- Feeling tired
- Weight loss
- Mouth ulcers
- Depression, feeling sad
- Poor teeth and gum health
- Cancer

Who gets Coeliac Disease?

Anyone can get coeliac disease. You do **not** catch coeliac disease from other people. You are born with coeliac disease. You might not know you have coeliac disease. It can be triggered later in life. This is because our bodies change.

Go to your doctor

Coeliac disease is very serious. You must go to see your doctor. Your doctor can do tests and check if you have coeliac disease. Your doctor will tell you what to do.

How to find out if you have

coeliac disease

You might think you have coeliac disease. You must talk to your doctor first. Your doctor will do the proper tests.

1 Keep eating food with gluten

Keep eating what you usually eat. Your doctor needs to do blood tests to see how food with gluten affects your body.

You might have stopped eating food with gluten. You need to start eating food with gluten again. This will make sure you get a correct reading on your blood test. Before your blood test, you should have 4 pieces of bread every day for 6 weeks. This will be hard at the start. You might feel sick. It will get easier.

2 Go to your doctor for a blood test

A blood test is 1 way to show that you might have coeliac disease. Sometimes blood tests for coeliac disease are wrong. Your blood test might be normal but you keep feeling sick after eating food with gluten. You can ask your doctor for another blood test.

3 You can get a bowel test

This test is called an endoscopy. The doctor puts a tube down your throat. The doctor will give you an injection first so you are asleep and the tube won't hurt. The doctor uses the tube to look at the inside of your stomach. The test only takes 10 minutes. Your doctor will work out if you have coeliac disease.

You should have this test again in about 2 years. It will show if your stomach is getting better.

Coeliac disease symptom checklist

Every person with coeliac disease might feel different. Use this checklist to see which symptoms you have. You might have 1 or more of these symptoms.

- Do this checklist
- Take it to your doctor
- Talk to your doctor about your symptoms

Common symptoms that most people have with coeliac disease

- Feeling tired and weak
- Low iron in your blood. You will need a blood test to test this
- Lots of gas and a bloated stomach
- Diarrhoea or Constipation
- Both diarrhoea and constipation
- Stomach cramps
- Feeling sick in the stomach and vomiting
- Sore stomach after eating
- Weight loss
- Mouth ulcers
- Sore bones and pain in your joints. For example, your elbows and knees
- Low vitamin levels. You will need a blood test to test this
- Itchy rash on your skin
- Poor teeth and gum health. For example, your teeth look yellow or brown

Symptoms children might have

- Bloated stomach, pain and lots of gas
- Feeling sick in the stomach and vomiting
- Low iron in your blood. You will need a blood test to test this
- Diarrhoea or Constipation
- Both diarrhoea and constipation
- Large, very smelly poo
- Not putting on weight or weight loss
- Delayed growth
- Delayed start of puberty
- Tired and cranky

Other types of health problems

If you have any of these health problems, tell your doctor.

- Weak bones that break easily. This is called osteoporosis
- Autoimmune thyroid disease. This is problems with your thyroid.
- Type 1 diabetes
- Multiple sclerosis
- Having miscarriages or trouble getting pregnant
- Depression, feeling sad

Tamil Cuisine – Gluten Free

*This information is only to be used once you have been diagnosed with coeliac disease by a doctor or specialist. Do not attempt a gluten free diet unless you have been medically diagnosed as requiring it.

The only treatment for coeliac disease is to follow a strict gluten free diet. This will be life long, where any gluten eaten can make you feel sick and damage the intestinal lining. Even if you don't feel sick eating gluten, if you have coeliac disease, the gluten will still cause damage to your intestines.

Gluten needs to be eaten and swallowed to cause a problem in coeliac disease. All foods, snacks, drinks, treats, medication and supplements that contain gluten must be avoided. Cosmetics, soaps, injections and skin creams that contain gluten do not cause a problem and can still be used. Gluten must be swallowed and pass through the digestive system to cause a problem.

In Australia 1% of the population have coeliac disease, however, research shows that coeliac disease is slightly higher in those originating from the Indian subcontinent.

Once diagnosed with coeliac disease you should:

- 1. Take this document to your dietitian, to determine your individual nutritional requirements and how to incorporate a gluten free diet into your current lifestyle.
- 2. Advise the rest of your family to be tested for coeliac disease. Coeliac disease is a genetic condition.

Following a gluten free diet may not heal you immediately, but you should start to feel better within a few weeks. Some people take longer than others to feel relief from symptoms. At first following a gluten free diet appears hard to follow, but with time it will become a lot easier.

Gluten Contamination

Gluten free products can become contaminated – even a crumb can cause a bad reaction.

To avoid contamination:

- 1. Store gluten free products and ingredients in separate, sealed containers. They are best stored on the top shelf of the pantry or on the shelf above the gluten containing food. This means that if gluten containing foods are spilled or dropped, it won't contaminate the gluten free products.
- 2. Prepare gluten free meals in a separate area of the kitchen. Or prepare the gluten free meal first and then the gluten containing one. For example first make the gluten free sandwich then the gluten containing one, or first grill the gluten free seasoned fish and then the floured fish.
- 3. Use clean knives/spoons in spreads, dips and margarines never dip back into the container if there are gluten crumbs on the knife or spoon or you will add gluten crumbs to the container.
- 4. Salads or meals must not be served with or touching with gluten bread, just a crumb is enough to cause damage.

How to find gluten free foods:

There are four basic steps to finding gluten free foods:

- 1. Foods that are naturally gluten free
 - ✓ Fresh Fruit & Vegetables
 - ✓ Plain/unflavoured nuts & seeds
 - ✓ Fresh Herbs & spices
 - ✓ Eggs
 - ✓ Fresh meats (NOT battered, coated, marinaded, crumbed)
 - ✓ Dairy (NOT flavoured milks)
 - ✓ Fats and oils
- 2. Gluten free by ingredient

Read the ingredients on the food label to make sure they do not contain barley, rye, oats or wheat

- × Wheat
- × Rye
- * Barley
- × Oats

or any ingredient made from barley, rye, oats or wheat.

For example:

- Starch (wheat)
- × Yeast (barley)
- × Bran (oats)
- × Flour (rye)

BUT, there are 3 exceptions to this rule, that are gluten free:

- ✓ Glucose syrup (wheat)
- ✓ Caramel colour (wheat)
- ✓ Dextrose (wheat)

3. Products that use the claim 'Gluten Free'

If a product has the words 'Gluten Free; on the label or the packaging. This means it is gluten free and is suitable for you to eat.

 The Coeliac Australia endorsement Logo Coeliac Australia endorses products that are gluten free. The logo pictured here is placed on endorsed products to show they are safe for use on a gluten free diet.



Typical Australian Foods:

x	Anzac biscuits	✓	Gluten free Anzac biscuits
×	Bagel	\checkmark	Gluten free bagels
×	Battered Fish	\checkmark	Grilled fish (no flour)
×	Bread	\checkmark	Gluten free bread
×	Cakes	\checkmark	Gluten free cake
×	Chicken Nuggets	\checkmark	Gluten Free Nuggets
×	Chocolate bars (KitKat, Picnic)	\checkmark	Gluten Free chocolate
×	Crumbed Meat	\checkmark	Crumbed meat with gluten free crumbs
×	Hamburgers	\checkmark	Gluten free hamburger pattie and rolls
x	Lamingtons	\checkmark	Gluten free lamingtons
x	Lasagne	\checkmark	Gluten free lasagna sheets
x	Meat pie	\checkmark	Gluten free pies
x	Milo	\checkmark	Nesquick
x	Muesli bars	\checkmark	Gluten free muesli bars
x	Muesli cereal	\checkmark	Gluten free muesli
x	Oats	\checkmark	Rice Flakes
x	Oats bars	\checkmark	Gluten free muesli bars
x	Oats porridge	\checkmark	Rice porridge
x	Pasta	\checkmark	Gluten free pasta
x	Pizza	\checkmark	Use gluten free pizza base
x	Tim Tams	\checkmark	Naturally Good D'Lush range are similar
x	Vegemite	\checkmark	Aussie Mite
x	Weetbix	\checkmark	Gluten free weetbix
			u Net alutea free

× Not gluten free✓ Gluten free

Gluten free alternatives

	Not gluten		Gluten free alternative	
	free			
x	Bulgar	\checkmark	Quinoa, buckwheat, rice	
x	Cracked wheat	\checkmark	Quinoa, buckwheat, rice	
x	Freekah	\checkmark	Quinoa, buckwheat, rice, tapioca	
x	Noodles	\checkmark	Gluten free/rice/mung bean noodles	
×	Filo pastry	\checkmark	Gluten free filo	
×	Wheat bran	\checkmark	Rice bran	
x	Wheat germ	~	Rice bran, ground flaxseed, LSA (linseed, sunflower, almond mixture), almond meal	
x	Naan/Chapati	\checkmark	Gluten free naan, gluten free chapati	
x	Paratha	\checkmark	Gluten free paratha	
x	Wheat flour	\checkmark	Potato flour, rice flour, tapioca flour, buckwheat flour	

Bread	x	Bread made from wheat rue	harley or oats				
Diedu	x	Bread made from wheat, rye, barley or oats.					
	x	Roti, Paratha, Naan					
		Thossal					
	×	Hopper and String hopper (with wheat flour)					
	\checkmark	Breads made from rice, potato, tapioca or corn flours					
	√	Gluten free naan, paratha, roti					
	\checkmark	Hopper made using rice flour only					
	\checkmark	Papadums (made using lentil flour only)					
	\checkmark	Gluten free wraps					
	Ø	Tip: If a bread made with wheat flour is served with a meal, ask					
		for it not to be added or, ask for gluten free bread.					
Meat	\checkmark	Fresh fish, red meat, poultry and goat are gluten free.					
	x	Meats cooked with regular bread stuffing, crumbs or flour. Tip: Check marinades for ingredients					
	P						
	P	Tip: Clean the grill, barbeque or pan prior to cooking to remove all					
	Ø	gluten containing coatings or flour.					
	O	Tip: When frying, cook the gluten free item first to prevent					
		contamination	·				
Flours	x	Wheat	✓ Sago				
	x	Rye	✓ Tapioca				
	x	Barley	✓ Millet				
	x	Einkorn	✓ Corn				
	x	Oats	✓ Potato				
	x	Semolina	✓ Tapioca				
	x	Atta	✓ Corn				
	x	Faro	✓ Rice				
	x	Durum	✓ Soy				
	x	Emmer	✓ Amaranth				
	x	Spelt	✓ Arrowroot				
	x	Kamut	✓ Buckwheat				
	x	Farina	Duckwiieat				
		1 di li d	 ✓ Sorghum ✓ Teff 				
			orany contin				
			Quinoa				
		This was die weie slutes for a fl	Besan/Chickpea				
		It is good to mix gluten free flours to get a good outcome.					
	-	Gluten free chapatti and paratha white flour mix: 5 cups white corn					
	\checkmark	flour, 3 cups amaranth flour/besan flour and 2¼ cups soy flour.					
Herbs, Spices &		Most herbs and spices are gluten free					
Curry powder	✓ 	Always check ingredients					
	×	Spice mixes can have wheat starch added, read the ingredients list					
	•	to ensure they are gluten free.					
Gravy	?	Each product differs, check the ingredients.					
Sauce & Chutney	?	Each product differs, check the ingredients					
Marinades	?	Each product differs, check the	e ingredients				
Dairy	\checkmark	All dairy					
	x	Flavoured or malted milk					
Beans	\checkmark	All beans					
	?	If in a sauce check the ingredients					
Batter	x	Batter made from wheat flour or semolina					
	\checkmark	Batter made from corn or lentil flour					
Legumes	x	All legumes					
Legames	?	If in a sauce check the ingredients					
l	<u> </u>	I II a sauce check the highed					

Recipe ideas for adapting to gluten free

This section is to demonstrate how to adapt a recipe to be gluten free. Sometimes a recipe can be adapted directly with gluten free ingredients and sometimes it needs additional ingredients to boost flavour or structure of the meal. Below are some examples of ingredients for a gluten free version.

Gluten Free Paratha

½ cup gluten free white chapatti flour
¼ salt
3-4 drops of oil
50ml water
1 ½ tsp yoghurt

Gluten free Samoosas

Pastry Ingredients 100g Soy flour 100g Rice flour 100g Tapioca flour 80g Potato flour Pinch of tumeric 1 tsp salt 50g soft butter 200ml warm water

Filling Ingredients

1 onion chopped fine 1 large carrot chopped fine 3 cm grated fresh ginger 2 Tbsp cumin seeds 1 tbsp vegetable oil 500g peeled and soft cooked potatoes 1⁄2 bunch coriander 1⁄4 cup frozen peas 1 1⁄2 tsp garam marsala rind juice of 1⁄2 lemon oil for frying

Appa/ Hopper

2 tsp yeast granules 1 tbsp sugar ¹/₈ cup lukewarm water 4 cups rice flour 1 cup lukewarm water 1 cup gluten free beer 900ml coconut milk 450ml warm water 2 tbsp sugar 1 tbsp oil salt to taste

Gluten Free Naan

2 ½ cups white chapatti flour
1 ¼ tsp xanthan gum
½ tsp salt
¼ tsp cream of tartar
4 ½ tsp sugar
2 ¼ tsp instant yeast
1/3 cup plain yoghurt (room temperature)
3 tbsp ghee
1 egg
1 egg white
¾ cup warm water
ghee or butter from frying