

Gluten Free Diet



In Latin, gluten literally means 'glue'. Gluten is a protein (comprised of gliadin and glutenin) which is found in all forms of wheat (including durum, semolina and spelt), rye, barley and related grain hybrids such as triticale and kamut. Gluten is responsible for the elasticity and stretch of doughs and is found in an endless variety of processed foods.

Coeliac Disease and Gluten Sensitivity

Coeliac Disease (CD) is also known as gluten-induced enteropathy or sprue. It is an autoimmune disease that leads to a permanent intestinal intolerance to gluten. The gluten causes inflammation of the intestinal wall and a flattening of the villi, finger-like projections that line the inside of the bowel. When these villi atrophy (flatten) the surface area for absorption is greatly reduced resulting in deficiencies of a number of nutrients. Our ability to make enzymes such as lactase, which assists in digestion of lactose (a naturally occurring sugar found in dairy) may also be compromised, resulting in secondary dairy intolerance. The overall prevalence of CD is estimated as high as 1 in approximately 130, however if you have a family history of CD your risk is increased significantly to approximately 1 in 10.

Gluten Sensitivity

Gluten Sensitivity is a condition that involves a degree of gluten intolerance without the presence of immune markers associated with CD. The treatment approach is similar and; removal of gluten often results in clinical improvement and symptom relief. After a period of avoidance, small amounts of gluten-containing foods may be well tolerated. Guidance will be provided by your healthcare practitioner.

A Note on Oats

Oats do not contain gluten as such, however they contain a similar prolamine (protein) to gluten called avenin, which may elicit a response similar to gluten intolerance/sensitivity in some individuals. In addition, oats are often processed near other gluten-containing grains which may result in cross contamination. For these reasons Coeliac Australia does not recommend oats as part of a gluten free diet. Please discuss their suitability with your healthcare practitioner.

Symptoms of Coeliac Disease

Although there may be no symptoms of CD, the most common ones involve the digestive system and include abdominal bloating or pain, diarrhoea, constipation, flatulence, heartburn, or nausea with or without vomiting.

Other possible symptoms include sinusitis, asthma, skin disorders including eczema and dermatitis herpetiformis, fatigue, bone, joint and muscle pains, mouth ulcers, loss of tooth enamel, mood and behavioural problems, poor growth or development in children, weight loss, hair loss and menstrual problems.

CD is associated with a higher risk of osteoporosis, iron deficiency anaemia, menstrual problems including amenorrhoea, miscarriage and infertility, and thyroid or other autoimmune diseases.

Speak to your healthcare practitioner for any additional treatment you may require to help reduce any symptoms you may be experiencing, and to address any underlying health issues.



Helpful Hints for Eating Gluten Free

- Read all food labels carefully.
- The Australian Food Standards Code requires that foods labeled as 'gluten free' must not contain any detectable gluten. Food labeled as 'low gluten' must contain less than 0.02% gluten.
- Lactose intolerance commonly accompanies CD. Your practitioner may recommend the removal of dairy products as part of your treatment. (See Dairy Free Diet Guidelines sheet for more detail.)
- Avoid cross contamination in the kitchen by developing gluten free kitchen habits, storage plans and procedures for mixing, cooking and baking.
- Gluten free breads taste better toasted and should be stored in the fridge or freezer.
- When eating out select food without crumbing, 'creaming', coatings, gravies and sauces. Most restaurants now have gluten free options; if you're unsure, call ahead to confirm.
- Obtain your fibre from brown rice, buckwheat, unpeeled potatoes, fresh and dried beans & legumes, fresh fruit & vegetables.
- Nutritional deficiencies are common, particularly of iron, zinc, vitamins B2, folate and B12. To address nutritional deficiencies your practitioner may prescribe a multinutritional formulation such as Tresos*B or Tresos Activated B PluSe.
- Avoid skipping meals, eat slowly and chew all food thoroughly. Enjoy your food!
- Plan your meals and carry snacks with you so you are prepared for all eventualities.

What To Include	What To Avoid
Grains/Flours/Roots/Tubers and Legumes Grains: Buckwheat, brown rice, basmati rice, wild rice, maize (corn), quinoa, amaranth, millet or sorghum. (Some CD patients may have a secondary sensitivity to the grains quinoa, amaranth, buckwheat & millet). Roots and Tubers: Potato, tapioca, arrowroot, sweet potato, parsnip or Jerusalem artichoke. Legumes: Beans, soy, lentils, peanut, pea or chickpea. Flours: Any flours made from the above sources.	Grains/Flours/Roots/Tubers and Legumes Grains: Wheat (including, durum, semolina, triticale), rye, barley, bulgur, couscous and possibly oats. (Spelt and kamut are ancient gluten containing grains but may be tolerated by people with gluten sensitivity or wheat intolerance). Roots and Tubers: French fries (check labels). Legumes: Baked beans unless gluten free. Flours: Wheat flour, wholemeal flour, bakers flour, semolina, barley or rye (avoid battered or crumbed food).
Breads and Cereals Breads: Gluten free breads based on buckwheat, corn, rice, chickpea flour and/or soya flour. Cereals: Gluten free muesli, homemade muesli made from a combination of: brown rice flakes, millet flakes, organic cornflakes, puffed corn, puffed rice, raw nuts & seeds or shredded coconut.	Breads and Cereals Breads: Wheat breads - wholegrain or white, rye bread, oat bread, barley bread, burritos or pumpernickel bread. (Spelt may be suitable for some people with wheat intolerance). Cereals: Commercial cereals (rice bubbles, weetbix, wheat containing muesli, coco pops etc) wheat germ, wheat bran, porridge oats, oat bran or oat germ. Any cereal containing malt.
Pastas Buckwheat noodles, rice noodles, vegetable, corn, spinach or quinoa pasta.	Pastas Durum wheat pasta (spaghetti, macaroni etc), egg noodles, hokkien noodles, barley pasta or spelt pasta.
Crackers Rice cakes, corn cakes, gluten free products.	Crackers Wheat crackers, bran biscuits, ryvita, kavli or oatcakes.
Snacks and Desserts Popcorn, dried fruit (limit), fresh fruit, carob, sesame snacks, fruit and nut bars, gluten free biscuits, vegetable sticks or other snacks.	Snacks and Desserts Commercial biscuits, cookies, cakes, scones, pastries, liquorice, some lollies, chocolate and ice creams, some commercial fruit pies, flavoured or frozen yoghurts, processed cheeses & creams (check labels).
Stock, Seasonings and Thickeners Bouillon stock powder, sesame salt, tamari (check label), mustard seeds, fresh or dried herbs and spices, potato flour, apple cider vinegar, authentic balsamic vinegar, wine vinegar, maize/corn flour, soy flour, arrowroot, kudzu and agar-agar.	Stock, Seasonings and Thickeners Malt, malt vinegar, Vegemite, wheat starch, modified starch, mustard pickles, soy sauce, gravy mixes and seasoning 'rubs', hydrolysed vegetable protein (HVP), texturised vegetable protein (TVP), some binders, fillers, excipients, extenders etc.
Beverages White wine, light rum, gin, tequila without dyes, potato vodka, teas, coffee, soft drinks, mineral water, fresh fruit and vegetable juices.	Beverages Beers, ale and lager, cereal and malted beverages, malted or flavoured milk drinks, instant tea or coffee substitutes.
Other sources of gluten Some medications use gluten as a binder. Contact your doctor or pharmacist for more information. If ingredients are not itemised, check with the manufacturer of the product or with your state Coeliac Society.	

Societies have been established in all Australian States to provide information on the disease, gluten free diet, ingredients, where to buy, cooking and recipes, overseas travel and education material. For more information contact your state society. www.coeliac.org.au