## My

## Coeliac Diet for Children

## What is coeliac disease?

Coeliac disease is a lifelong condition where the body's immune system reacts to gluten. Gluten is a protein found in foods made with wheat, barley, rye or oats. Eating any gluten causes the small, finger-like projections (villi) in the bowel to become inflamed and flattened. This makes it harder to absorb nutrients from food.


Used with permission from Coeliac New Zealand

## How is it managed?

The only treatment is to follow a strict gluten free diet for life. Eating a gluten free diet allows the bowel wall to heal and digestion to return to normal.

## What are the risks of not following a strict gluten free diet?

Consequences of small bowel damage and poor absorption of nutrients include:

- Iron deficiency anaemia and/or other nutrient deficiencies
- Delayed puberty
- Growth problems
- Osteoporosis
- Infertility
- Gastrointestinal cancers
- Altered mental state
- Increased risk of other autoimmune conditions


## How do I make my diet gluten free?

Choose foods which are naturally gluten free and change to gluten free products where required. Suitable foods on a gluten free diet include:

Naturally gluten free foods

- Fresh fruits and vegetables
- Fresh/unprocessed meat, fish, chicken and eggs
- Plain legumes and nuts
- Naturally gluten free grains - rice, quinoa
- Gluten free breads and cereals
- Plain dairy (milk, yoghurt, and cheese)

Packaged foods with an ingredient list:

- Products that do not contain ingredients derived from gluten-containing grains
- Products labelled 'gluten free’
- Products with the Coeliac Australia Endorsement Logo are tested to be suitable for people with Coeliac disease



## Tips for reading food labels

In Australia, products need to list all ingredients and allergens on packaging.

## Read the ingredient list

Products containing gluten have:

- Ingredients derived from gluten-containing grains including:
- Wheat, rye, oats or barley
- Wheat starch, cornflour (wheat), thickeners 1400-1450 (wheat derived) or wheat maltodextrin - the gluten-containing grain source must be written

Ingredients that are gluten free:

- Starches and thickeners derived from a grain that does not contain gluten - e.g. 'modified starch thickener'
- Glucose, glucose syrup, caramel colour, dextrose and monosodium glutamate derived from wheat - processing removes the gluten
- Yeast extract is generally gluten free unless it has been cultured in a barley malt medium. If this is the case, the barley malt must be declared as 'Yeast extract (barley malt)'


## Read food labels

- Products labelled 'wheat free' may still include other gluten-containing ingredients, such as rye, barley or oats
- Products labelled 'gluten free' contain no detectable gluten and are safe to eat
- Products labelled 'contains gluten' or 'contains traces of gluten' should be avoided
- Products labelled 'may contain traces of gluten/wheat' should also be avoided (this is to avoid cross-contamination).

|  | Gluten free | May contain gluten (READ LABEL) | Contain gluten (AVOID) |
| :---: | :---: | :---: | :---: |
| Grains \& flours | - Amaranth <br> - Arrowroot <br> - Buckwheat <br> - Chickpea flour <br> - Coconut flour <br> - Corn, cornmeal, cornflour (from maize) <br> - Guar gum powder <br> - Lentil flour <br> - Linseed/flax meal <br> - Lupin <br> - Millet <br> - Nut (almond, chestnut) flour/meal <br> - Pea flour <br> - Polenta <br> - Potato flour, starch <br> - Psyllium <br> - Quinoa <br> - Rice (brown, white, and wild) <br> - Sago <br> - Sorghum <br> - Soy flour <br> - Tapioca <br> - Teff | - Baking powder | - All varieties of wheat (including durum, eikorn, emmer, graham, Khorasan, spelt) <br> - Barley <br> - Bulgur <br> - Couscous <br> - Freekeh <br> - Kibbled wheat <br> - Oats, oat flour <br> - Products using malted gluten grains e.g. malt barley <br> - Rye <br> - Semolina <br> - Triticale <br> - Wheat germ, wheatmeal, wholemeal flour <br> - Wheat starch <br> - Wheaten cornflour |
| Cereal products | - Gluten free corn tortillas <br> - Gluten free muesli <br> - Gluten free pasta \& lasagne sheets <br> - Plain rice \& corn cereals (no malt) <br> - Puffed rice <br> - Rice bran <br> - Rice noodles <br> - Rice porridge | - Corn \& rice tortillas/wraps <br> - Corn taco shells <br> - Glass noodles <br> - Infant/baby rice cereal <br> - Rice paper <br> - Soba noodles <br> - Vermicelli noodles | - Egg noodles <br> - Infant cereals (except rice) <br> - Lasagne <br> - Muesli <br> - Noodles/spaghetti <br> - Oat porridge, oat bran, oatmeal <br> - Pasta/macaroni <br> - Ravioli/tortellini <br> - Udon noodles <br> - Wheat-based \& mixed grain breakfast foods <br> - Wheat bran |


| Breads \& baked goóds | - Breads/biscuits/cak es labelled as gluten free Pastries/rolls/bread crumbs/desserts made from allowed flours <br> - Plain rice crackers <br> - There are many gluten free breads, biscuits, cakes and pizza bases, etc. now available | - Flavoured rice cakes and crackers <br> - Plain rice cakes <br> - Plain corn cakes <br> - Flavoured rice crackers | - Barley, rye, and $=$ sourdough bread <br> - Crispbreads <br> - Croissants <br> - Ice cream cones or wafers <br> - Pizza bases <br> - Pumpernickel bread <br> - Regular biscuits/cakes <br> - Regular bread \& rolls (including multigrain) <br> - Waffles/pancakes |
| :---: | :---: | :---: | :---: |
| Meat, fish, poultry \& alternatives | - Eggs <br> - Fresh (nonmarinated) meats <br> - Fresh seafood <br> - Plain tinned fish (check for 'may contain' statements) | - BBQ chicken (stuffing and seasoning) <br> - Deli meats (ham/turkey/salami etc.) <br> - Flavoured tinned fish/chicken <br> - Marinated meats/seafood <br> - Sausages <br> - Tofu | - Crumbed/battered meats <br> - Hamburgers <br> - Imitation seafood e.g. seafood sticks <br> - Meat pies/sausage rolls |
| Dairy | - Buttermilk <br> - Cheese (hard/soft) <br> - Fresh cream <br> - Milk (goats/cow) condensed, evaporated, fresh, powdered, UHT <br> - Plain cream cheese <br> - Ricotta cheese | - Artificial cream <br> - Cottage cheese <br> - Custard <br> - Custard powders <br> - Dairy desserts <br> - Flavoured milk <br> - Ice cream <br> - Processed cheeses \& cheese spreads <br> - Sour cream <br> - Soy milk <br> - Yoghurt \& Fruche (that contain thickeners) | - Malted milk <br> - Oat milk |
| Fruit | - All fresh, frozen, tinned, dried fruits | - Christmas mince <br> - Commercially thickened fruit products |  |
| Vegetables | - Fresh \& dehydrated vegetables <br> - Fresh salad items <br> - Canned or frozen in vegetables in sauce | - Frozen \& canned vegetables (check for added thickeners) <br> - Frozen or take-away chips (watch out for beer battered and sharing of contaminated oil) | - Canned or frozen in vegetables in sauce |


|  |  | - Commercially prepared vegetable and potato salad or coleslaw |  |
| :---: | :---: | :---: | :---: |
| Legumes, nuts \& seeds | - Dried legumes (including lentils, peas, chickpeas, beans, soybeans etc.) <br> - Plain nuts \& seeds | - Coated \& seasoned nuts <br> - Processed/canned legumes <br> - Textured vegetable protein (found in some vegetarian products) |  |
| Beverages | - Water <br> - Fruit \& vegetable juices <br> - Mineral water <br> - Soda \& tonic water <br> - Sports drinks <br> - Nesquik <br> - Plain dark or milk chocolate (check for 'malt') | - Chocolate dusting powder <br> - Cordials (some contain barley) <br> - Drinking chocolate <br> - Herbal/flavoured tea \& coffee \& substitutes (coffee 'sachets') <br> - Soft drinks (some contain malt/barley) | - Malted cocoa drinks (Milo, Ovaltine, and other malt powder drinks) <br> - Barley waters |
| Sauces, spreads \& herbs | - Butter \& margarine <br> - Golden \& maple syrup <br> - Jams \& honey <br> - Nutella <br> - Marmalade <br> - Molasses <br> - Oils <br> - Peanut butter <br> - Pure herbs \& spices <br> - Salt \& pepper <br> - Tahini <br> - Treacle <br> - Vinegars (except malt) | - All commercial sauces (tomato, BBQ, sweet chilli etc.) <br> - Asian sauces (soy, fish, oyster etc.) <br> - Cholesterol-lowering spreads <br> - Chutney, mustard, relish <br> - Curry powder/pastes <br> - Meat \& fish pastes <br> - Pickles <br> - Salad dressings \& mayonnaise <br> - Stock cubes \& gravy mixes <br> - Tomato paste <br> - Vanilla \& flavouring essences <br> - Mixed packaged herbs or spices | - Malt vinegar - Mixed seasonings - Soy sauce containing wheat - Vegemite, Promite \& Marmite (gluten free varieties available) |
| Other | - Gelatine <br> - Gluten free corn chips <br> - Plain nuts \& seeds <br> - Plain popcorn <br> - Pure icing sugar <br> - Sugar | - Brewer's yeast <br> - Filled chocolates \& chocolate snack foods <br> - Flavoured crisps/chips <br> - Icing mixture <br> - Lollies/sweets <br> - Tinned \& packet soups | - Liquorice (gluten free now available) <br> - Malt extract/flavour/syrup |

## What about food preparation?

Even $1 / 100$ th of a slice of wheat bread can damage the small bowel even though you may not feel unwell. Therefore, it is essential to prepare, store and cook gluten free foods away from foods that contain gluten to avoid cross contamination. Try the following:

| $\checkmark$ | AT HOME OR WHILST TRAVELLING |
| :---: | :---: |
|  | Wash your hands with soap and water after handling gluten-containing food and products |
|  | Use a designated gluten free area or wipe down surfaces with hot soapy water. |
|  | Thoroughly clean with soap and hot water, all utensils and cooking equipment when preparing gluten free food |
|  | Use separate, labelled containers for gluten free foods (e.g. bread, biscuits, flour) |
|  | When making gluten free toast, use a clean grill/press, a separate (labelled) toaster or toaster bags. |
|  | Use separate spreads e.g. margarine for gluten free products or use clean utensils and avoid 'double-dipping' |
|  | Use separate water in a clean pot for cooking gluten free pasta and use a separate or clean strainer |
|  | Use clean oil when deep frying. If sharing, make sure the gluten free foods are fried before the gluten-containing options |
|  | Replace some common pantry foods with gluten free alternatives that everyone can enjoy e.g. gluten free soy sauce, gluten free stock cubes. |
| $\checkmark$ | EATING OUT |
|  | Call restaurants before to ask about suitable gluten free options |
|  | Always alert staff as you arrive and ask for their gluten free options |
|  | Ask staff about possible sources of gluten - e.g. breadcrumbs, soy sauce, croutons in salad, stock cubes, salad dressings |
|  | Explain the importance of avoiding cross contamination - is gluten free pasta cooked and heated in separate water, are foods prepared on the same board |
|  | Choose foods labelled gluten free on the menu |
|  | Ask staff at fast food restaurants to change their gloves and use new utensils to help prevent cross contamination |
| $\checkmark$ | PLAN AHEAD |
|  | Inform all staff and day-care managers of food allergic child and ensure they have awareness of coeliac disease and cross contamination issues |
|  | Can gluten free versions of gluten-containing products be used in crafts (e.g. play dough, pasta) or can alternative materials be used (e.g. beans, legumes) |
|  | Ask about any planned events where food will be served in schools or childcare. Can parents supply a 'treat box' or can frozen gluten free cupcakes be kept in the freezer in a labelled sealed container |
|  | Visit your canteen to check which food products may be safe |
|  | If staying at a friend's house remind them of your coeliac disease and your specific food restrictions or bring your own food, including dinner, breakfast and snacks |
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## Gluten free meal and snack ideas

## BREAKFAST

- Egg omelette with cheese, bacon and vegetables (e.g. spinach/tomato/red onion/capsicum) or
- Pikelets (made from rice flour or gluten free flour) with mixed berries and honey or
- High fibre gluten free cereal/muesli with milk and fruit or
- Avocado, eggs and tomato on gluten free toast or
- Gluten free baked beans on gluten free toast


## MORNING TEA

- Plain rice cakes with cheese topped with tomato and cucumber or
- Vegetable sticks (e.g. cucumber, carrot, capsicum) with hummus or tzatziki or
- Apple/pear slices with cottage cheese and cinnamon or peanut butter


## LUNCH

- Salad with chopped vegetables (tomato, cucumber, red onion, capsicum, snow peas, lettuce), sunflower seeds and canned beans or chicken/tuna or
- Loaded baked potato with cheese and vegetables or
- Sushi roll with egg/avocado/tuna (with gluten free soy sauce) or
- Sandwich or wrap (choose wholemeal or multigrain gluten free bread) with salad and chicken/tuna/egg filling, piece of fruit or
- Gluten free pasta with meat/lentils/beans, vegetables and tomato-based sauce


## AFTERNOON TEA

- Yoghurt and berries or
- Unsalted nuts (avoid whole nuts for children under 5) and dried fruit mix or
- Corn tortilla chips with guacamole or chopped tomatoes and lemon juice

DINNER

- Meat/fish/chicken with potato, vegetables or
- Stir-fried meat/chicken with vegetables and brown rice/rice noodles or
- Curry made with meat/chicken and vegetables, tomato and spices/chillies or
- Rice paper rolls with chicken, vegetables, herbs/spices and tamari or
- Meat and vegetable fajitas or quesadillas made from corn tortillas with salad SUPPER
- Fruit (fresh/dried/stewed/poached/grilled/frozen/canned) or
- Custard or ice cream topped with berries or
- Gluten free cake/slice/biscuit or
- Hot chocolate


## Useful resources

| Websites | - An Accredited Practicing Dietitian <br> https://member.dietitiansaustralia.org.au/faapd can support transition and adherence to a gluten free diet and ensure diet is nutritionally adequate. Talk to your GP about a dietitian referral and ongoing review. <br> - The Coeliac Society of Australia www.coeliac.org.au provides information services and support for people with coeliac disease and their families. Membership is recommended for all people diagnosed with coeliac disease. <br> - The Gluten Free Eating Directory www.glutenfreeeatingdirectory.com.au provides a list of eateries, shops, online shops, products, manufacturers, services, and publications that specialise in gluten free needs. <br> - Queensland Health https://www.health.qld.gov.au/nutrition/patients provides Nutrition Education Materials Online (NEMO) that cover general nutritional information about a range of topics. Check out 'Label reading for food allergies', 'Allergies and avoiding cross contamination' and 'Cooking for friends with food allergies' |
| :---: | :---: |
| Mobile phone apps | Coeliać <br> Coeliac Australia helps with shopping. Details over 800 ingredients \& 300 additives. <br> Find me Gluten Free helps with eating out. Lists gluten free restaurants filtered to specifics e.g. location or meal <br> FoodSwitch helps with shopping. Use the GlutenSwitch filter \& scan barcodes to find gluten free choices. <br> Recipeezi Gluten Free helps with cooking. Gluten free recipes and shopping list. |
| Recipes, take-away \& preprepared meal resources | - Taste: https://www.taste.com.au/recipes/collections/gluten-free <br> - BBC Good Food: https://www.bbcgoodfood.com/recipes/collection/gluten-free <br> - Australian Gluten Free Life: https://agfl.com.au/ <br> - Gluten Free Eating Directory: www.glutenfreeeatingdirectory.com.au/ <br> - Gourmet Meals: www.gourmetmeals.com.au <br> - Nourish'd: https://nourishd.com.au |

For further information contact your Dietitian:

