



Coeliac Disease

"BE AWARE OF HOW YOU PREPARE"



What is it?

- Auto-immune disorder affecting the small intestine.
- Triggered by gluten (protein found in wheat, rye, barley, and oats)
- Strong genetic link: 1st generation relative = 10% increased risk.
- 1 in 70 Australians have it
- 4 in 5 don't know they have it
- If not diagnosed/treated, increases the chance of:

Nutrient
deficiency

Premature
osteoporosis

Other auto-
immune diseases
(thyroid)

Infertility

Multiple
Sclerosis

Malignancy
(lymphoma)

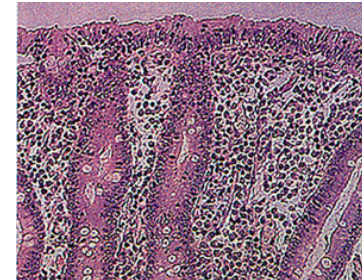


Anatomy - Villi



Villi are 1mm finger-like projections that line the inside of the small intestine, containing capillaries.

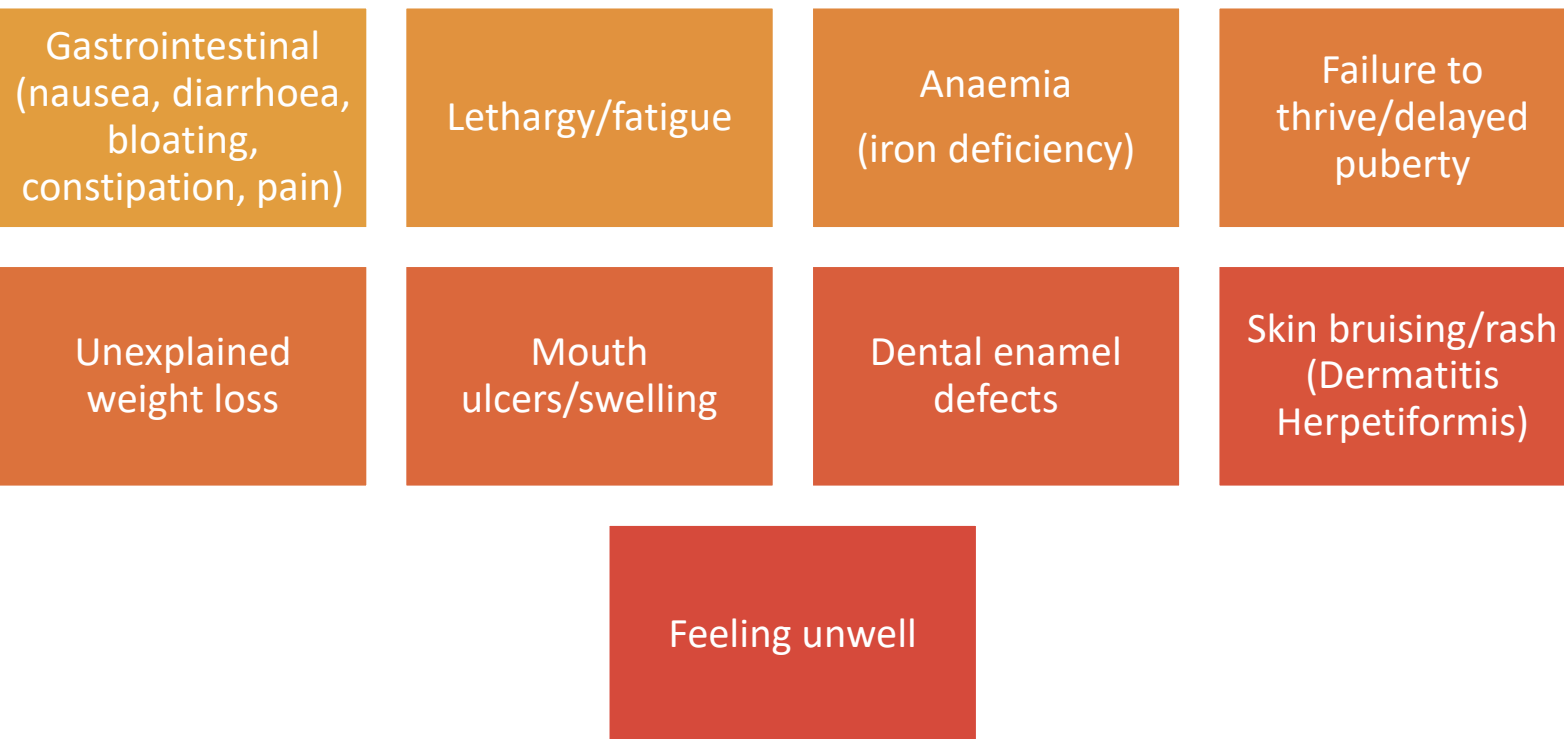
Digested foods are normally absorbed into these capillaries for distribution through the body



- In coeliac disease the immune system reacts abnormally to gluten, causing the villi to become inflamed and flattened.
- Villous atrophy reduces the surface area of the bowel available for nutrient absorption, leading to various gastrointestinal and malabsorptive symptoms.



Signs and Symptoms





Associated Conditions

Glands <ul style="list-style-type: none">• Thyroid disease• Type 1 diabetes• Addison's disease• Sjogren's syndrome• Amenorrhoea	Joints <ul style="list-style-type: none">• Polyarthritis• Rheumatoid arthritis• Lupus• Sarcoidosis	Blood <ul style="list-style-type: none">• Anaemia• Chronic thrombocytopaenic purpura	Gastrointestinal <ul style="list-style-type: none">• Lactose intolerance• Pernicious anaemia• Pancreatic insufficiency• Microscopic colitis• Gastrointestinal cancers	Bone <ul style="list-style-type: none">• Premature osteoporosis• Low trauma fracture• Rickets or osteomalacia
Liver <ul style="list-style-type: none">• Abnormal liver function tests• Autoimmune hepatitis• Primary biliary cirrhosis• Primary sclerosing cholangitis	Nervous <ul style="list-style-type: none">• Multiple Sclerosis• Neuropathy• Epilepsy• Depression	Skin and mouth <ul style="list-style-type: none">• Dermatitis herpetiformis• Alopecia• Dental enamel defects• Mouth ulcers	Reproductive <ul style="list-style-type: none">• Infertility• Recurrent miscarriage	Other <ul style="list-style-type: none">• Lymphoma• Pneumococcal pneumonia• Down's syndrome• Turner's syndrome



Diagnosis and Treatment

Early, Accurate diagnosis by serology and/or biopsy is essential

- Many people don't show any symptoms, but damage is still occurring
- Associated diseases such as thyroid disease or type 1 diabetes should prompt testing as they are closely related
- Symptoms can be misdiagnosed as irritable bowel syndrome or chronic fatigue syndrome
- Should not start a gluten free diet before being tested
 - Serology and biopsy are only effective if the patient is taking a gluten diet

The only known treatment is a strict, lifelong, gluten free diet

- Allows the small bowel lining to heal, resolving symptoms and reducing chance of long term illness



Catering Considerations

Strictly gluten free

- Cross contamination is a serious concern for Coeliacs
- It is a serious medical condition – you cannot be “a little bit Coeliac”.

Tips for catering for people with coeliac disease:

- Shop for items marked ‘gluten free’ or that have the Coeliac Australia Endorsement Logo.
 - Be careful of oats – not considered gluten free in Australia but there is an ongoing debate
 - If it says gluten free, then by law it must be
- Have the ingredients list/packet available if requested
- Try to make as much of the meal gluten free as possible to avoid any risk of cross contamination
- If baking, start with something easy, such as a gluten free packet mix (making sure no cross contamination).
- Everything can have gluten in it such as cordial, salt (chicken salt), tuna, baking powder, cornflour, gravy, icing sugar etc
- BUT there are gluten free alternatives for (almost) everything, you just have to find them





Cross Contamination

50 mg of gluten is all it takes (1/100th bread)

Tips to avoid cross contamination:

- Store gluten free products/condiments in separate sealed containers
 - Where possible, have separate condiments for gluten free users, especially when dipping is required (e.g. butter)
- Label all foods once they have been removed from original packaging
- Prepare the gluten-free meals first
- Thoroughly clean bread boards and cooking utensils (e.g. tongs, cutting and butter knives) – don't use the same ones for gluten and gluten free food preparation
- Clean toasters, sandwich makers and grills – no crumbs (TIP: Use baking paper and have a separate GF toaster)
- Use separate water and strainer for cooking or re-heating gluten free pasta
- Do not dust meats, fish or cake tins with gluten containing flour or icing sugar
- Clean oil should be used when deep frying i.e. you can't cook GF potato fries in oil that has had battered fish
- Look at the product's ingredient lists very carefully, including "may contain traces of gluten or wheat" – these are not suitable for Coeliacs (even things you don't think of, like cans of tuna and chocolate!)





GluteGuard

<https://glutagen.com/product/gluteguard/>

GluteGuard is a dietary enzyme supplement designed to digest gluten into harmless, non-toxic fragments. GluteGuard's patented natural enzyme action targets and breaks down the gluten peptides that cause unpleasant symptoms. It is designed to prevent the symptoms of inadvertent gluten ingestion (e.g. where cross-contamination may occur, if ingredient labelling is uncertain or when food preparation is out of your control, i.e dining out or travelling).

GluteGuard is recommended for anyone seeking to prevent the symptoms of gluten ingestion, anyone wanting to maintain a gluten-free diet, or anyone looking to offset the possibility of gluten cross-contamination.

If you follow a gluten-free diet you should continue to maintain that diet. GluteGuard is an adjunct to a gluten-free diet, not a replacement.

Made in Australia and based on world-first clinical trial.





Making it Inclusive

- Consider naturally gluten free recipes– e.g. meat and vegetables/salad for a main, panna cotta or crème caramel for dessert.
- When serving dip platters, it is easier if all of the biscuits are gluten free, or consider using veggie sticks to avoid gluten-containing crumbs in the dip.
- Have gluten free “fun” food (lollies, chips, fish, and pies) frozen or stored ahead of time ready to use when others are having similar meals, especially during trips/events.
- Everything can easily be made gluten free with a few minor substitutions through a bit of research and creativity
- The products that are naturally gluten free rather than specifically gluten free tend to taste better and are cheaper – ask for suggestions from person you are catering for



Tips from a Coeliac

- Ingredient list laws state that a product must say whether it has gluten it
 - Read the ingredients and carefully read for gluten/wheat etc. (including traces/may contain)
 - Sometimes the may contain isn't directly underneath the ingredients so look around the packaging
 - Malt is barley (therefore not GF)
- Try and find gluten free alternatives in areas other than the Health Food section
 - Soy Sauce and marinades (Fountain is good for labelling GF)
 - Lollies from Big W (check ingredients lists)
 - Potato chips are newly GF (e.g. Smith's, Thins) but rice crackers are GF and good options for dips (Fantastic, Sakatas). For corn chips, CC's and Mission chips are GF but Dorito's aren't (except for plain/original)
 - Sausages from Coles/Woolworths (home brands)



Tips for eating out

- Use GluteGuard
- Eating out is possible
 - Fast food restaurants have their ingredient lists online so you can log on anytime to find out if something is GF e.g. McDonalds – chips, Quarter Pounder without the bun (if you have a bun with you put in yourself)
 - Make sure they understand cross contamination (ask them about fryers, toasters, chicken salt, dusting, salad dressings/sauce)
 - When travelling, look up translation cards for the country's language you are travelling to that states you are gluten free and what that means



Further Information

Coeliac WA <https://wa.coeliac.org.au/>

- Ingredient list booklet and catering guides
- Risk management plans
- Lists of accredited restaurants and endorsed products
- Education guides for teachers, children, parents, caterers, and health professionals
- Membership (supermarket tours, dietitian consultations)

