

What is Celiac Disease and Low FODMAP Diet

Katie Judge, CNS, CDCES



Celiac disease is an autoimmune disease that occurs in where the ingestion of gluten leads to damage in the small intestine. It is estimated to affect 1 in 100 people worldwide



What is Celiac Disease



- Celiac disease is hereditary, meaning that it runs in families.
- It is an immune reaction to eating gluten, a protein found in wheat, barley and rye.
- If you have celiac disease, eating gluten triggers an immune response in your small intestine causing inflammation . Over time, this reaction damages your small intestine's lining and prevents it from absorbing some nutrients (malabsorption)
- Left untreated, celiac disease can lead to health problems such as other autoimmune diseases, osteoporosis, thyroid disease and certain cancers.



Symptoms of Celiac Disease



Some common signs and symptoms of celiac disease include:

- [Anemia](#)
- [Anxiety](#)
- [Bloating or gas](#)
- [Brain fog](#)
- [Constipation](#)
- [Delayed growth in children](#)
- [Depression](#)
- [Diarrhea](#)
- [Discolored teeth](#)
- [Fatigue/tiredness](#)
- [Headaches or migraines](#)
- [Infertility](#)
- Irritability
- [Itchy skin rash \(dermatitis herpetiformis\)](#)
- [Joint pain](#)
- [Liver disease](#)
- [Pale mouth sores](#)
- Poor weight gain
- [Thin bones](#)
- [Tingling/numbness/neuropathy](#)
- Vomiting

The Big 3: Wheat, Barley, Rye



Treatment

Currently, the only treatment for celiac disease is lifelong adherence to a strict gluten-free diet. People living gluten-free must avoid foods with wheat, rye and barley, such as bread and beer.

Ingesting small amounts of gluten, like crumbs from a cutting board or toaster, can trigger small intestine damage.

What is Gluten?

Gluten is a general name for the proteins found in wheat (wheatberries, durum, emmer, semolina, spelt, farina, farro, graham, KAMUT[®] wheat and einkorn), barley and rye. Gluten helps foods maintain their shape, acting as a glue that holds food together.



So many choices !!

Gluten Free Foods to Enjoy

Check GF = Check product label for gluten-containing ingredients or gluten/wheat warnings.



Bread & Pizza

- Crisp bread made from rice or buckwheat (check GF)
- Gluten free bread
- Gluten free pizza bases
- Gluten free tortillas
- Gluten free wraps

Pasta & Noodles

- Gluten free pasta made from rice, corn/maize, buckwheat, quinoa
- Pulse pasta/chickpea pasta (check GF)
- Rice noodles
- Rice or bean vermicelli

Baking Ingredients

- Baking powder (check GF)
- Baking soda (check GF)
- Gluten free cocoa powder
- Guar gum
- Vanilla essence
- Xanthan gum

Flours & Starches

- Gluten free all purpose flour
- Gluten free self raising flour or baking mix
- Buckwheat flour
- Arrowroot flour
- Cornflour/corn starch
- Maize flour/cornflour
- Green banana flour
- Millet flour
- Quinoa flour
- Rice flour
- Tapioca flour
- Sorghum flour
- Teff flour
- Yam flour
- Potato starch
- Tapioca starch
- Almond meal/flour

Grains

- Amaranth
- Buckwheat groats
- Millet
- Polenta
- Quinoa (white, red, black)
- Rice (basmati, brown, white, red, sushi, glutinous)
- Teff

Chips, Crackers & Muesli Bars

Look for certified gluten free options.

- Gluten free corn chips
- Gluten free muesli/granola bars or make your own at home
- Gluten free potato chips/crisps
- Gluten free rice or buckwheat crackers

Breakfast Cereals

- Gluten free cornflakes/Weet-Bix
- Gluten free muesli
- Gluten free rice bubbles/pops/puffs
- Puffed quinoa/amaranth/millet
- Quinoa flakes
- Rice flakes

Cooking Oils

- All cooking oils are gluten free

Canned Fruit & Vegetables

These are usually gluten free. The exception is when the vegetables are canned with sauce (e.g. mushrooms, creamed corn or baked beans). Sometimes the sauce is thickened with wheat-based ingredients so check the label.

Dairy Products

Many of these products are naturally gluten free, however you should always check the label.

- Cheese
- Condensed milk
- Cream
- Cream cheese
- Ice cream (check GF)
- Milk
- Milk shakes (check GF)
- Sour cream
- Flavoured milk (check GF)
- Yoghurt (check GF)

Milk Alternatives

Many of these products are naturally gluten free, however some might be fortified with gluten-containing ingredients. Check the label.

- Almond milk
- Cashew milk
- Hemp milk
- Macadamia milk
- Quinoa milk
- Rice Milk
- Soy milk

Avoid oat milk.

Protein

These are naturally gluten free. Check the product for gluten if it has been marinated, crumbed or seasoned. Also check frozen meat and uncooked chicken/turkey roasts for gluten warnings.

- Eggs
- Fish
- Meat (beef/lamb/pork)
- Poultry
- Seafood
- Tempeh
- Tofu





Even more!!

Gluten Free Foods to Enjoy



Herbs & Spices

Most herbs & spices are naturally gluten free, but they may have traces of gluten added during packaging. Check the label. Fresh herbs are gluten free.

Condiments

- Apple cider vinegar
- Balsamic vinegar
- Dijon mustard
- Fish sauce (check GF)
- Gluten free oyster sauce
- Gluten free salad dressings
- Gluten free soy sauce
- Gluten free stock/broth
- Gluten free tomato sauce/ketchup
- Mayonnaise
- Miso paste (check GF)
- Nutritional yeast (check GF)
- Red wine vinegar
- Rice wine vinegar
- Tomato paste
- Wasabi paste/powder
- Wholegrain mustard
- Gluten free barbecue sauce

Nuts & Seeds

Check package for trace gluten:

- Almonds
- Brazil nuts
- Chestnuts
- Chia seeds
- Flax seeds/linseeds
- Hazelnuts
- Hemp seeds
- LSA mix
- Macadamia
- Peanuts
- Pecans
- Pine nuts
- Poppy seeds
- Pumpkin seeds (pepitas)
- Sesame seeds
- Sunflower seeds
- Tigernuts
- Walnuts

Fruit

Fruit is naturally gluten free. Just check dried fruit for trace gluten.

- Apples
- Apricots
- Avocado
- Bananas
- Blueberries
- Boysenberries
- Cantaloupe
- Cherries
- Clementine
- Dates
- Dragon Fruit
- Elderberry
- Fig
- Grapefruit
- Grapes
- Gooseberries
- Guava
- Honeydew melon
- Jackfruit
- Kiwi/kiwifruit
- Lemons
- Limes
- Lychee
- Longan
- Loquat
- Mandarin
- Mango
- Melon
- Mulberry
- Nectarines
- Oranges
- Papaya/pawpaw
- Passionfruit
- Peach
- Pears
- Persimmon
- Pineapple
- Pomegranate
- Rambutan
- Raspberries
- Rhubarb
- Starfruit
- Strawberries
- Tangerine
- Tomato
- Watermelon

Pulses & Beans

All pulses and beans are naturally gluten free. Just check for gluten if canned with a sauce.

Vegetables

Vegetables are naturally gluten free.

- Artichoke
- Aubergine/eggplant
- Asparagus
- Bell pepper
- Beetroot
- Bok choy
- Broccoli
- Broccolini
- Brussels sprouts
- Cabbage (all types)
- Capsicum
- Carrot
- Cauliflower
- Celeriac
- Celery
- Chard
- Chill/chile
- Collard greens
- Courgette
- Cucumber
- Endive
- Fennel
- Garlic
- Ginger
- Green beans
- Jicama
- Kale
- Leek
- Lettuce (all types)
- Microgreens
- Mushrooms (all types)
- Okra
- Onion
- Parsnip
- Potatoes
- Pumpkin (all types)
- Radicchio
- Radish
- Spinach
- Sweetcorn
- Sweet potato
- Squash (all types)
- Tomato
- Turnip
- Yams
- Watercress
- Zucchini



Celiac Disease

- What if I am still having stomach discomfort even with the Gluten free Diet ?



What is low FODMAP

FODMAPs are a group of sugars that are not completely digested or absorbed in our intestines. When FODMAPs reach the small intestine, they move slowly, attracting water. When they pass into the large intestine, FODMAPs are fermented by gut bacteria, producing gas as a result.



Low FODMAP

F

'F' stands for fermentable. Your healthy gut bacteria love to eat FODMAPs. As your gut bacteria break down the FODMAPs, they ferment them. This process creates gas and can lead to wind, bloating, abdominal pain and altered bowel movements (constipation and diarrhoea).



O

'O' stands for oligosaccharides. This carbohydrate group is broken down into galactans (found in foods like beans, legumes, almonds) and fructans (found in foods like wheat, rye, barley, dried fruit, onion, garlic). These foods contain prebiotic fibres that feed our gut bacteria and aren't meant to be broken down by our digestive system. This means they can make everyone windy but for people with sensitive guts they can trigger unpleasant symptoms.

D

'D' is for disaccharide. The only disaccharide we really need to think about is lactose, which is found in foods like cow's milk, yoghurt, ice cream and milk chocolate. To digest lactose we need an enzyme called lactase. Fun fact – there are more people in the world who **don't** have enough of this enzyme than those who do. If you don't have enough lactase enzymes, your body won't be able to break down the lactose and it can trigger symptoms.



M

'M' is for monosaccharide, the most basic form of carbohydrate. Excess fructose is the monosaccharide we need to look at. When foods contain equal amounts of glucose and fructose it's easy for our body to absorb the fructose. When there is more fructose than glucose, we can malabsorb the fructose and it can trigger symptoms for some people. Foods that contain excess fructose include: honey, boysenberries, feijoas, fig, high fructose corn syrup and orange juice.



Low FODMAP Continued

A

This letter stands for 'And' – it's the easiest part of the FODMAP acronym to remember!

P

'P' stands for polyols. These are sugar alcohols but don't worry they won't make you drunk! They occur naturally in a wide range of fruit and vegetables. They can also be manufactured and used as artificial sweeteners in commercially made products. We classify polyols into sorbitol (found in foods like apples, apricots, avocado, blackberries, nectarines, peaches, pears) and mannitol (found in foods like sweet potato, portobello mushrooms, button mushrooms, cauliflower).





Let's get cooking

Gluten free Pizza

Gluten Free Pizza

- Tomato sauce which we will make today and we can use this base for so many different things
- Spaghetti
- Dipping Sauce for polenta
- Shakshuka base



Tomato sauce



1 can of tomato (whole tomato)
1 cup of water
2 bay leaves
1tsp salt and pepper
1 tbp olive oil

combine ingredients and let come to simmer.
Simmer for 1 hour. Let cool. Put in food processor .
(take out bay leaves first)
****simmer for another hour ****



Gluten free crust ---→ April 2023

- For now you can use one of the pre made gluten free crusts such as UDI's
- Trader Joes has cauliflower crusts



Let's create





Thank you !

See you next year 😊