

Gluten free diet

What is gluten?

Gluten is a protein found in grains such as wheat, rye, barley and their by-products. When you have celiac disease, gluten damages your small intestine and can cause mild to severe symptoms. You also do not absorb all the nutrients from the foods you eat.

Symptoms of celiac disease include:

- nausea
- reflux
- bloating
- gas
- diarrhea
- constipation

- weight loss
- lactose intolerance
- anemia
- stomach pain
- tiredness
- skin rashes

Even if you do not have symptoms, you must follow a strict gluten free diet to reduce the risk of long term complications such as osteoporosis and cancers of the digestive system.

Why is it important to follow a gluten free diet?

A **lifelong** gluten free diet is the **only** treatment for celiac disease.

This diet will help your small intestine heal and will reduce your symptoms. Your body will then be able to use the nutrients in foods needed for good health.

How do I follow gluten free diet?

You will need to **avoid** foods that have gluten in them:

Table 1

- Avoid - Grains that contain gluten			
Barley	Graham flour		
Barley malt/extract	Rye		
Bulgar	Semonlina		
Couscous	Spelt		
Durum flour	Kamut		
Eikorn	Triticale		
Emmer	Wheat		
Farina	Wheat bran		
Farro	Wheat germ		
Gluten flour	Wheat based semolina		
	Commercial oat products		

Hidden sources of gluten

There are many hidden sources of gluten. Always read food labels to find out which products have gluten in them.

Avoid food products that do not list the source of their ingredients such as:

- modified starch
- seasonings and flavourings
- hydrolyzed vegetable protein (HVP)
- hydrolyzed plant protein (HPP)

Most large chain grocery stores and specialty food stores have a "gluten free" section, which makes finding products easier.

Check with your pharmacist about the ingredients in prescriptions and over-the-counter medications to make sure they are gluten free such as:

- · vitamins, minerals, herbal supplements
- toothpaste
- mouthwash
- cough and cold medications
- nutrition supplements (such as protein powders and shakes, weight loss drinks)

Ask your pharmacist if you are not sure if a product has gluten.

What is cross contamination?

Cross-contamination is when bits of food such as crumbs from foods that contain gluten, accidentally mix with gluten free foods. This can happen in your home, restaurants, bulk food bins, and in food manufacturing plants where there are both gluten containing and gluten free products.

Can I eat oats?

You can eat oats only if they are free from gluten. This means that they have not been cross-contaminated with gluten. Pure, uncontaminated oats are available in Canada and are likely safe in moderate amounts for most people with celiac disease.

However, it is not easy to buy pure oats in Canada since most of the oats are cross-contaminated with gluten containing grains or cereals during milling and processing.

If you choose to include oats in your diet, you must make sure that the oats are free from gluten contamination.

The best way to be sure the oat product is safe is to contact the food company. The label must state "pure, uncontaminated, gluten free".

Please talk to your doctor or dietitian before adding oats to your diet.

To avoid cross-contamination:

- · prepare gluten free foods first
- have a separate toaster and separate container of peanut butter, margarine, butter, jams, jellies and mayonnaise containers
- clean all meal preparation surfaces, cutting boards, utensils and pots and pans to make them free from gluten before you prepare a gluten free meal
- be cautious when buying foods from bulk food bins as they can be contaminated with gluten from scoops being used from other bins
- avoid buying foods from the deli counter as they may be contaminated with gluten containing foods

What can I eat?

There are many foods you can still enjoy on a Gluten free diet. Choosing foods from the "Foods to Include" list in each food group will help you eat a nutritious, balanced diet.

Grain products

Foods to Include	Foods to Question	Foods to Avoid
Breads, crackers, pasta and baked products made from gluten free grains – amaranth, arrowroot, corn, millet, quinoa, rice, soy, sorghum, flax, tapioca, buckwheat, corn bran, cornstarch, potato flour, taro, teff, legume flour	Items made with Buckwheat flour	Breads, crackers, pasta and baked products made with grains that contain gluten – See Table 1
 Hot Cereals such as: Cornmeal Cream of rice Hominy grits Cream of buckwheat Rice flakes Quinoa Soy flakes Pure oatmeal 	Oats: Oats (some may be contaminated with gluten) Cereals: Rice and corn cereals (may contain barley malt extract or oat syrup)	 Cereals: Cereals made from grains in Table 1 including wheat, rye, triticale, barley and oats Cereals with added malt extract or malt flavouring

Grain products (continued)

Foods to Include	Foods to Question	Foods to Avoid
Cold cereals (without malt flavouring) such as: Puffed corn Puffed rice Puffed millet Amaranth flakes Rice flakes Soy cereals Corn flakes Puffed corn Puffed or flaked amaranth Rice crisps	Rice and corn cereals may contain barley malt flavouring	
Other: • Plain corn tacos or tortillas • Plain rice cakes • Popcorn • Corn cakes • Rice tortillas • Plain corn chips • Rice (basmati, brown, jasmine, white, wild)	Other: Rice cakes, corn cakes and rice crackers (multigrain or flavoured often contains barley and/ or oats. Some contain soy sauce which contains wheat). Seasoned potato and corn chips Seasoned or flavoured rice mixes	 Other: Ice cream cones Wafers Waffles Communion wafers Wheat flour tacos and tortillas Some imported foods labelled "gluten free". These may still contain ingredients with gluten, such as wheat starch Modified food starch (if source not identified)

Fruits and Vegetables

Foods to Include	Foods to Question	Foods to Avoid
Fresh, frozen and canned fruit and fruit juices Fresh, frozen and canned vegetables and juices	Dried fruits (often dusted with flour to prevent sticking) such as dates	Vegetables with creamy sauces (may contain wheat) Scalloped potatoes with
	Fruit pie filling Creamed canned	wheat flour Battered vegetables
	vegetables and french fries (often contain wheat)	including french fries
	Vegetables in sauces	
	French fries	
	(in restaurants and frozen)	

Milk and Alternatives

Foods to Include	Foods to Question	Foods to Avoid
Milk, cream, buttermilk	Milk drinks and milk	Malted milk
Plain yogurt	Puddings, Nesquick (chocolate milk,	Ice cream made with ingredients not allowed
Cheeses, cream cheese, processed cheese, cottage cheese	flavoured drinks and puddings may contain wheat starch	
	or barley malt)	

Milk and Alternatives (continued)

Foods to Include	Foods to Question	Foods to Avoid
Most ice cream Most soy, nut and rice beverages	Flavoured yogurt and frozen yogurt (may be thickened with a gluten source or contain granola or cookie crumbs)	
	Cheese spreads and sauces (may be thickened with wheat, flavourings and seasonings may contain wheat)	
	Sour cream (low fat or fat free may contain oat gum)	
	Rice and soy drinks (may contain barley, barley malt extract or oats)	
	Some soy, nut and rice beverages contain barley malt extract or flavouring	

Meats and Alternatives

Foods to Include	Foods to Question	Foods to Avoid
Meat, fish, shellfish,	Prepared or processed	Fish canned in vegetable
and poultry that is	meats, luncheon meats,	broth containing HVP or
fresh, frozen, canned	wieners, bologna,	HPP*
salted or smoked	bacon, meat, spreads,	Turkey besterd or
Eggs	meat patties, sausages, imitation meat or fish	Turkey basted or
Eggs	products (crab meat),	injected with HVP or
Lentils, chickpeas,	dried meats (beef jerky),	HPP*
dried peas, dried	pates may contain fillers	
beans, plain nuts,	or flavourings made	*HVP or HPP
seeds and tofu	from wheat	(Hydrolyzed Plant
		Protein or Hydrolyzed
Plain seed and nut	Egg substitutes,	Vegetable Protein)
butters	dried eggs	if made from wheat,
		or the source is not
	Baked beans, soy nuts,	listed.
	dry roasted nuts,	
	flavoured tofu, miso,	
	seasoned nuts/seeds	

Fats

Foods to Include	Foods to Question	Foods to Avoid
Butter, margarine, lard, vegetable oil, cream,	Mayonnaise	Packaged suet
shortening	Commercial salad dressings (seasonings	Salad dressings made with ingredients not
Homemade salad dressings with allowed	may contain flour)	allowed
ingredients	Cooking sprays	

Other Foods

Foods to Include	Foods to Question	Foods to Avoid
Beverages: Cider, instant or ground coffee, soft drinks, tea Distilled alcoholic beverages – rum, gin, bourbon, brandy, rye, whiskey, scotch whiskey, vodka and liqueurs, wine Gluten free beer, lager and ale	Instant tea, flavoured and herbal teas and coffee substitutes, hot chocolate mix (may contain grain additives) Fruit-flavoured drinks, chocolate drinks and chocolate mixes (may contain wheat starch or barley malt)	Cereal and malted beverages such as Ovaltine Beer, ale and lager Instant hot chocolate mixes
Condiments and Seasonings: Ketchup, gluten free soy sauce, plain prepared mustard, olives, plain pickles, pure black pepper, pure herbs and spices, relish, tomato paste and vinegar (apple, cider, rice, balsamic, grape), Monosodium Glutamate (MSG)	Seasoning mixes, imitation pepper, curry paste, Worcestershire sauce (may contain wheat or HPP, HVP)	Regular soy sauce (made from wheat), mustard pickles (made with wheat flour) malt vinegar, Teriyaki sauce, hydrolyzed wheat protein
Desserts: Ice cream, sherbet, egg, custards, whipped toppings, gelatin desserts, cakes, cookies, pies made with allowed ingredients	Milk puddings and pudding mixes (may contain a gluten source) Cake icings and frostings	Desserts made with ingredients not allowed

Other Foods (continued)

Foods to Include	Foods to Question	Foods to Avoid
Baking Ingredients: Baking soda, baking yeast, carob chips and powder, pure baking chocolate, chocolate chips, pure cocoa, coconut, cream of tartar, vanilla, pure vanilla extract, artificial (synthetic, imitation) vanilla extract, vanillin, sauces and gravies made with allowed ingredients	Baking powder (may contain wheat starch)	Brewer's yeast Oat gum, sauces, marinades and gravies made from ingredients not allowed, such as HVP or HPP*. *HVP or HPP (Hydrolyzed Plant Protein or Hydrolyzed Vegetable Protein) if made from wheat, or the source is not listed.
Sweets: Corn syrup, honey, jam, jelly, marmalade, maple syrup, molasses, sugar (brown and white), artificial sweeteners	Icing sugar, confectioner's sugar (may contain wheat starch) Spreads (Nutella), candies, chocolate bars, chewing gum, marshmallows Lemon curd (may be thickened with flour)	Licorice, chocolate and candies made with ingredients not allowed
Soups: Homemade broth, gluten free bouillon cubes, cream soups and stocks made from ingredients allowed	Canned soups, dried soup mixes, soup bases and bouillon cubes	Canned, packaged or homemade soups made with ingredients that contain gluten (See Table 1), bouillon and bouillon cubes containing hydrolyzed wheat protein

Where can I find gluten free products?

There are a number of gluten free products available. Many of the big grocery store chains carry a wide selection of gluten free products.

Many of the food companies or manufacturers who produce gluten free products often sell their products on site (at the factory) to the public.

Some manufacturers also provide mail order services. Buying products in bulk and freezing for later use will help save you money.

Other tips to help you find out if a food contains gluten:

- The Canadian Celiac Association's "Pocket Dictionary" will give you information if a food is gluten free or not. Copies of this book can be ordered from the website: www.celiac.ca
- Do not assume that your favourite foods will remain gluten free. Read the label every time you use a product as food products change all of the time. Ingredient lists available online are not always accurate as they can become outdated.
- Contact the food company directly and ask if you have questions about whether certain products are gluten free.

Other resources

- Stay informed through the Canadian Celiac Association by becoming a member and/or attending local chapter events. There are local chapters in Hamilton, St. Catharines and Kitchener/Waterloo. See the website: www.celiac.ca
- There are many cookbooks available offering gluten free recipes. The Canadian Celiac Association has published several cookbooks and recipes can also be found online.



Gluten free diet Can I go out to eat?

If you and your family want to go to a restaurant, try to pick one that offers gluten free choices.

Tips for eating out

- Most restaurants will not understand if you ask for "gluten free foods". Instead, tell your server that you are allergic to anything with wheat flour or barley in it.
- Ask your server to have foods cooked or baked in separate pans or dishes. This will reduce the risk of cross-contamination.
- Ask for freshly ground pepper. Many pepper packages contain wheat germ.
- Before eating french fries, ask if they are coated with a batter or are fried in the same oil as other battered foods. If they are, avoid them as they will contain gluten.
- Avoid salad bars, buffets and fondues since other people eating at these places can contaminate the gluten free foods.