

What is gluten?

Gluten is a protein found in wheat, rye and barley.

Why should I follow a gluten free diet?

If you have celiac disease or non-celiac gluten sensitivity, the gluten free diet is the treatment.

What happens if I eat gluten?

If you have celiac disease, every time you eat gluten, the intestine is damaged. This makes it very hard to absorb nutrients and can lead to vitamin and mineral deficiencies. There are many symptoms and other conditions associated with celiac disease. Some symptoms include abdominal pain, bloating, cramping, nausea, vomiting, diarrhea, constipation, fatigue, headaches, joint pain, skin problems, and poor growth in children. Some conditions that can result are depression, osteoporosis, infertility, cancer and anemia. Every time you eat a crumb of gluten, it causes more damage to your intestine and could take weeks to begin absorbing nutrients again. If you have non-celiac gluten sensitivity, you may have the same types of symptoms as celiac disease, but no damage is done to the intestine.

How do I know if I have a nutrient deficiency?

Your doctor and dietitian can work with you to see if you have any symptoms of vitamin and mineral deficiencies. People with celiac disease should take a gluten free multivitamin daily.

How do I know if I ate gluten?

Many people with celiac disease do not have any symptoms when gluten is eaten but the damage is still being done. If you are someone who does have symptoms, they can occur minutes to hours after eating. It is important for those with celiac disease to have another celiac blood test 3 months after going gluten free. This is only way to know for sure if you are getting gluten in the diet.

Should my family follow a gluten free diet?

Your family does not need to follow a gluten free diet unless they are diagnosed with celiac disease. All first degree relatives (children, siblings, parents) should be tested for celiac disease due to a strong genetic link.

What about oats?

Oats are the grain that is most cross-contaminated with gluten. Only small amounts of certified gluten free oats should be eaten. You should also see improvement on your celiac blood tests and no longer have symptoms before you add certified gluten free oats into your diet.

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A word about ingredient labeling:

The key to following the gluten-free diet is to become a good label reader. *By law, foods that contain wheat as an ingredient or added during processing must state this in or near the ingredient list.* Rye and barley are not required to be labeled. **Labels must be read every time you buy food.** Manufacturers can change ingredients at any time. If in doubt about the gluten status of a food or ingredient, call the company to ask. If “gluten free” is stated on the label, companies are required to make sure their product contains less than 20 parts per million (ppm) of gluten, which is considered a safe level.

**** Remember: Wheat-free does NOT mean Gluten-free ****

Sometimes it is not clear if ingredients are gluten free. This list does not include all ingredients that are gluten free, but just a few that may be confusing. *Remember, if any ingredient comes from wheat, this will be identified in the ingredient label.*

Gluten-Free Ingredients		
Artificial colors (i.e. citrus red No. 2)	Distilled vinegars	MSG (Monosodium Glutamate)
Autolyzed yeast	Fructose	Natural colors (i.e. annatto, carotene)
Baker's yeast	Glucose syrup	Pectin
Baking soda	Guar gum	Starch
BHA/BHT	Hydrolyzed Corn or Soy Protein	Sucrose
Buckwheat	Lactose	Rice syrup
Caramel color	Lecithin	Vanilla extract and flavoring
Dextrose	Maltodextrin	Wine vinegars
	Mono and diglycerides	Xanthan gum

Ingredients That May Contain Gluten	
Modified Food Starch Most often made from corn, potato, tapioca or maize but sometimes made from wheat	Dextrin Most often made from corn or tapioca but sometimes made from wheat

Gluten Containing Ingredients--AVOID	
Brewer's yeast made from a by-product of beer	Oats, oat gum, oat fiber—due to contamination with wheat
Malt	Barley malt
Malt flavoring, syrup, extract	Malt vinegar

For example, on a food label you might see something like this and know to avoid this crisped rice cereal:

INGREDIENTS: RICE, SUGAR, SALT, HIGH FRUCTOSE CORN SYRUP, MALT FLAVORING

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What foods are gluten free and are safe to eat?

This is not a complete list, but is intended to get you started on your gluten free diet. Make sure to read ingredients of all foods.

Food Group	Gluten Free	May Contain Gluten	Contains Gluten
Grains	Breads, baked products, cereals, pastas, crackers, tortillas and other items made with starches and flours containing – Amaranth Arrowroot Buckwheat Corn Flax Legume/beans Mesquite Millet Montina™ Nuts Potato Oats – certified gluten free Quinoa Rice, white, brown and wild Sago Sorghum Soy Sweet potato Tapioca Taro Teff Bold = Whole grains	Buckwheat flour containing items Corn cakes Corn tortillas Rice and corn cereals Rice crackers and cakes, multi-grain or flavored Rice and potato sides and mixes, seasoned or flavored	Breads, baked products cereals, pastas, crackers, tortillas and other items made with starches and flours containing – Atta Barley Bulgur Durum Einkorn Emmer Farro Graham Kamut Semolina Spelt Rye Triticale Oats – not certified gluten free Orzo Wheat Cereals made with barley malt extract or barley malt flavoring Couscous Matzoh Tabouli
Dairy	Buttermilk Cream Custard Milk (skim, low fat, whole) Milk puddings Ice cream made without gluten containing ingredients Natural and processed cheese Whipped topping Yogurt, plain	Cheese sauces and spreads Cheeses, seasoned or flavored Frozen yogurt	Ice cream made with gluten containing ingredients Malted milk

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Food Group	Gluten Free	May Contain Gluten	Contains Gluten
Protein	Dried beans Eggs Fish, plain Meats, plain Nuts and seeds, plain Poultry, plain Tofu, plain	Baked beans Deli meats Ham – ready to cook Hamburgers, frozen patties Hot dogs Imitation crab Meatloaf Jerky Protein foods that are seasoned or flavored Sandwich spread Sausages Nut butters (i.e. peanut, almond) Tempeh or miso	Protein foods containing hydrolyzed wheat protein (i.e. some canned fish or frozen turkeys) Chicken breast, frozen, containing chicken broth made with gluten containing ingredients Meat, fish or poultry – breaded Seitan Turkey with stuffing
Fruits and Vegetables	Fruits - fresh, frozen, canned and dried Fruit juice Vegetables – fresh, frozen and canned Vegetable juice	Dates French fries cooked in oil used for another gluten containing food Fruit with sauces Vegetables with sauces	Scalloped potatoes containing gluten Vegetables, batter fried
Beverages	Beer, gluten free Coffee Cocoa Distilled alcohol (i.e. rum, brandy, whiskey, vodka) Non-dairy beverages – Almond milk Nut milk Rice milk Soy milk Soft drinks Tea Wine	Alcoholic beverages, flavored (i.e. coolers, ciders, mixes) Coffee, flavored Coffee containing chicory Hot chocolate mixes Tea, flavored and herbal	Beer made from gluten ingredients (i.e. barley) Non-dairy beverages made with barley malt extract, barley malt flavoring or oats Malt-based beverages (i.e. Ovaltine®)
Soups	Cream soups and stocks made from gluten free ingredients Gluten free bouillon cubes Homemade broth	Bouillon cubes Canned soups Dried soup mixes Soup bases	Bouillon cubes containing hydrolyzed wheat protein Soups made with gluten containing ingredients

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Food Group	Gluten Free	May Contain Gluten	Contains Gluten
Fats	Butter Lard Margarine Oils and sprays Shortening Salad dressings made from gluten free ingredients	Baking cooking spray Salad dressings	Salad dressing made with gluten containing ingredients
Sweets	Cakes, cookies, pies and pastries - gluten free or made without gluten containing ingredients Corn syrup Gelatin Honey Ice cream cones – gluten free Jam, jelly, marmalade Maple syrup Marshmallows Molasses Powdered sugar Sherbet Sugar (white and brown)	Cake icing and frosting Candy bars Chocolate Hard candies Honey powder	Licorice Candy made with gluten containing ingredients
Snack Foods	Corn/tortilla chips, plain Popcorn, plain Potato chips, plain Gluten free pretzels	Chips, seasoned/flavored	Chips made with gluten containing ingredients Regular pretzels
Condiments/ Sauces	Ketchup Mustard, plain Olives Pickles, plain Relish Soy sauce – LaChoy® Tomato Paste Vinegar (except malt)	BBQ sauce Curry paste Mustard pickles Salsa Specialty mustards Steak sauce Worcestershire sauce	Malt vinegar Sauces and gravies made with wheat flour or hydrolyzed wheat protein Soy sauce Teriyaki sauce made with gluten containing ingredients

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Baking/ Cooking Ingredients	Baking soda Carob chips and powder Chocolate, pure baking Cocoa, plain Coconut Cream of tartar Herbs Guar gum Monosodium glutamate(MSG) Spices Vanilla, pure and artificial Xanthan gum Yeast, except Brewer's	Baking powder Chocolate chips Natural and artificial flavors (rare chance contains gluten) Seasonings Smoke flavoring	Brewer's yeast
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Do any non-food items contain gluten?

- Cosmetics, hygiene products, shampoo, soap, laundry detergent— Gluten only causes intestinal damage when eaten. Gluten is not absorbed through the skin.
- Lipstick/lip balm – May contain gluten, but not enough is ingested to cause problems.
- Toothpaste and mouthwash – Most toothpastes are gluten free, but there are various mouthwashes that are not. Unless you have open sores in your mouth, this likely isn't an area you will absorb much gluten.
- Prescription and over-the-counter medications, vitamin/mineral supplements and herbal supplements - Check your medications on www.glutenfreedugs.com or call the number on your medicine bottle.
- Play-Doh®—Contains gluten, so if residue is left on hands and placed in mouth, it could cause a reaction.
- Gum and mints - May contain gluten, depending on the brand and processing. Call the company to find out.
- Communion wafers – Contain gluten. Talk to your church about your gluten free options. These can be purchased online.

How can I prevent cross-contamination in my kitchen?

A safe kitchen is important when you have celiac disease. You should make sure you have separate:

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| <ul style="list-style-type: none"> • Baking pans • Deep fat fryers • Cloths should be one time use only (i.e. Clorox Wipes®) • Colanders • Cooking Utensils | <ul style="list-style-type: none"> • Cutting boards • Rolling pins • Spreadables in a jar or tub (i.e. mayonnaise, peanut butter, margarine) • Toasters (toaster bags can be used) |
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Guandalini, Stefano, et al. "Gluten Related Disorders Facts and Fallacies." NASPGHAN Foundation. 5 June 2013. Webinar. *The University of Chicago Celiac Disease Center*. The University of Chicago Celiac Disease Center. Web. 9 July 2014. <<http://www.cureceliacdisease.org/>>

For more nutrition information or to speak with a Registered Dietitian, call

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