



Gluten-Free Diet and Drug Instruction

Updated October 2021

The gluten-free (GF) diet can provide adequate nutrition while eliminating wheat, rye and barley from the diet as long as GF grains with high nutritional value are used and the diet includes a variety of nutritious foods. Gluten is a generic term referring to storage proteins in grains. The fractions of gluten protein in wheat which are problematic in people with gluten-related disorders are gliadin and glutenin. There are equivalent toxic protein fractions in barley and rye. Research on oats indicates small quantities (1/2 cup dry) are safe for most people with celiac disease. Consult with your dietitian or physician before consuming. Oats used should be free of cross-contact with gluten-containing grains, and certified or labeled gluten-free.

Gluten damages the intestine of individuals with celiac disease and dermatitis herpetiformis (a skin manifestation of celiac disease). It is not thought to cause damage to the intestine of those with non-celiac gluten sensitivity, but it still has an adverse effect on the health of people with this condition.

When all sources of gluten are removed from the diet of individuals with celiac disease, the intestine is able to regenerate and normal function is usually restored. Similarly, a gluten-free diet leads to resolution of symptoms in individuals with non-celiac gluten sensitivity.

Gluten in many foods

Gluten may be present in foods either as a basic ingredient (that is, listed as wheat, rye or barley), or added as a derivative when a food is processed or prepared. **READING LABELS CAREFULLY IS VERY IMPORTANT.**

How to Determine if a Product is Gluten-Free

1. Certified

A product which carries a 3rd party certification such as that of GIG's Gluten-Free Certification Organization (GFCO) is considered safe for gluten-free consumers. (See GFCO logo below.)



Questions to ask your doctor:

- Is there any testing I should have done to assess for nutritional deficiencies?
- Could I have associated food intolerances?
- Should I take nutritional supplements?
- How often should I follow-up with the doctor? With the dietitian?

2. Labeled

If an FDA-regulated product is labeled “gluten-free” it is considered safe to consume. Manufacturers choosing to label products “gluten-free” are required to comply with the FDA regulation defining use of the term. The rule also applies to the terms “no gluten,” “free of gluten,” and “without gluten.”

FDA and USDA

The FDA gluten-free labeling regulation is a part of FALCPA (the “Food Allergen Labeling and Consumer Protection Act”). FALCPA applies to FDA-regulated products only. The FDA regulates the vast majority of packaged foods. The USDA regulates meats, poultry, egg products and mixed products which generally contain more than 3% raw or 2% cooked meat (e.g. some soups and frozen entrees). Products regulated by the USDA are not required to comply with FALCPA, but an estimated 80-90% do so voluntarily.

3. Ingredients

For products which are neither certified nor labeled “gluten-free”, it is essential to read the ingredient list. If any of the following are present on the ingredient list, the product is not gluten-free: *wheat (including all types of wheat such as spelt), rye, barley, oats (unless certified or labeled gluten-free), malt, brewer’s yeast.*

- *A product that is labeled gluten-free may include the term “wheat” in the ingredient list (e.g. wheat starch) or in a separate “Contains wheat” statement, but the label must also include the following statement: “The wheat has been processed to allow this food to meet the Food and Drug Administration (FDA) requirements for gluten-free foods.”*
- Remember: wheat-free is not the same as gluten-free. A product may be wheat-free but still contain rye or barley.

More information regarding looking for wheat on ingredient labels

FALCPA (the “Food Allergen Labeling and Consumer Protection Act”)

FALCPA requires that the top 8 allergens be clearly identified, wheat being one of them. Derivatives of wheat such as “modified food starch” must clearly indicate that “wheat” is the source when this is the case. “Wheat” can either appear in parentheses in the ingredient list or in a separate “Contains” statement below or next to the ingredient list. As stated above, even though USDA products are not required to comply with FALCPA, it’s estimated that 80 to 90% do so voluntarily. If there is any doubt about whether a product is complying with FALCPA labeling, the following ingredients may be derived from wheat and need to be avoided or investigated: starch, food starch, modified food starch, dextrin.

Foods included in the “Foods to Avoid” section of the chart below should be avoided if safety cannot be established. At times, you may find foods listed here that are gluten-free. The majority of the time this will not be the case. Think of these foods and ingredients as potentially dangerous until you have checked them for safety. Safety is established when a package item is certified or labeled gluten-free or when the ingredients and preparations are known to be gluten-free (see notes above about “gluten-free” labeling on FDA vs. USDA regulated products.)

Getting the appropriate number of servings from each food group will help ensure adequate nutrition, including vitamins and minerals. Remember that combination foods such as a sandwich or casserole will have servings from more than one food group. The guidelines in this instruction follow the recommendations of “My Plate,” the U.S. government guidelines for healthy eating. The numbers of recommended servings listed below are general averages for adults, and amounts vary depending on activity level, age, gender, and other factors. (Find more details here: <https://www.choosemyplate.gov/MyPlate>)

At times people newly diagnosed with celiac disease or gluten sensitivity, or those who have been following the GF diet may show signs of nutrient deficiencies including B vitamins, calcium, iron, zinc and other nutrients. Speak with your dietitian or physician about solving deficiency problems. Occasionally vitamin and mineral supplements may be recommended (these often will include calcium, folate, and other B vitamins, and/or iron). Recommended supplementation will vary with each individual. Once the intestine is healed (in the case of celiac disease), and provided there is no other health problem that will cause a deficiency, an adequate, well-balanced diet with a variety of foods should provide all the vitamins and minerals you need.

GRAINS	Foods Allowed:	Foods to Avoid:	Notes:
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6 ounces/day

Grains supply many of the B vitamins and minerals required daily. Grains can also supply a significant amount of soluble and insoluble fiber.

Not all GF grains have similar nutrient content. Choose whole grains with high nutrient density.

Gluten-free bread products are often higher in calories than wheat breads. Read labels to determine a serving.

- **Make at least half of your grains whole grains.**

BREAD & GRAINS

Specially prepared breads using only allowed flours: amaranth, arrowroot, bean, buckwheat, chia, corn, flax, millet, nut, and oats (certified GF), potato, quinoa, rice, sorghum, soy, tapioca, and teff are allowable†.

COOKED GRAINS

Amaranth, buckwheat, corn/polenta, millet, oats (certified GF), quinoa, rice, sorghum, teff.

CEREALS

Hot cereals: made from the allowable grains and seeds. Cold cereals: Cereals made from allowed grains and with no malt or malt flavoring.

Foods to Avoid:

If safety cannot be established

Those containing wheat (including einkorn, emmer, durum, faro, graham, semolina, spelt, bulgur, couscous), rye, or barley.

BEWARE: WHEAT-FREE does not always mean gluten-free

Those containing wheat (including einkorn, emmer, durum, faro, graham, semolina, spelt, bulgur, couscous), rye, or barley.

Breads may be purchased ready-to-eat, as mixes to prepare at home, or baked using GF flours.

In general, 1 slice of bread, 1 cup of ready-to-eat cereal, or ½ cup of cooked rice, cooked pasta, or cooked cereal can be considered as 1 ounce-equivalent from the Grains Group.

New products with 'unusual' grains are constantly being introduced. Do not use them before confirming GF status.

CRACKERS & SNACK FOODS

Rice wafers; rice crackers; corn and potato chips*; rice cakes*, pure corn tortillas; popcorn, caramel corn*

Those containing wheat (including einkorn, emmer, durum, faro, graham, semolina, spelt, bulgur, couscous), rye, or barley.

READ LABELS CAREFULLY.

If the product shows 'brown rice syrup,' contact the manufacturer to check for "barley malt enzymes" used in processing

*Consult label and contact manufacturer to clarify questionable ingredients.

POTATO, RICE, PASTA & OTHER STARCHES

White and sweet potatoes; yams; hominy; rice, wild rice; pasta made from rice, soy, corn or other allowed ingredients. Some Asian rice* and bean thread noodles*

Noodles, spaghetti or macaroni made from grains not allowed. Most packaged* or frozen rice or pasta side dishes*.

*Consult label and contact manufacturer to clarify questionable ingredients.

VEGETABLES	Foods Allowed:	Foods to Avoid:	Notes:
<p>2 ½ - 3 cups per day* Vegetables are an excellent source of vitamins, minerals and fiber. Fresh vegetables or flash frozen will have the highest nutrient content. Limit the amount of added fats to control caloric intake.</p> <ul style="list-style-type: none"> • Make at least half of your plate fruits and vegetables. 	<p>All plain, fresh, frozen, or canned. Some commercially prepared vegetables*</p>	<p><i>If safety cannot be established</i> Creamed vegetables*, vegetables canned in sauce*, some canned beans*, some commercially prepared vegetables and salads*</p>	<p>*Consult label and contact manufacturer to clarify questionable ingredients.</p> <p>In general, 1 cup of raw or cooked vegetables or vegetable juice, or 2 cups of raw leafy salad greens can be considered as 1 cup from the Vegetable Group.</p>

FRUITS	Foods Allowed:	Foods to Avoid:	Notes:
<p>1 ½ - 2 cups per day* Fruits are an excellent source of vitamins, minerals, and fiber. Use of raw, fresh fruits increases the fiber in the diet.</p> <ul style="list-style-type: none"> • Make at least half of your plate fruits and vegetables. 	<p>All fresh, frozen, canned or most dried fruits*. All 100% fruit juices; some canned pie fillings*.</p>	<p><i>If safety cannot be established</i> Thickened or prepared fruits; some pie fillings*.</p>	<p>*Consult label and contact manufacturer to clarify questionable ingredients.</p> <p>In general, 1 cup of fruit or 100% fruit juice, 1 piece of many fruits, or ½ cup of dried fruit can be considered as 1 cup from the Fruit Group.</p>

DAIRY	Foods Allowed:	Foods to Avoid:	Notes:
<p>3 cups per day Dairy foods are our primary source of calcium. If you are dairy intolerant, use of a calcium supplement may be recommended. Dairy foods are also a good protein source and may be substituted for other protein foods in a vegetarian diet.</p> <ul style="list-style-type: none"> • Choose skim or low fat products 	<p>MILK Fresh, dry, evaporated or condensed milk; cream; sour cream*; whipping cream; yogurt.</p> <p>CHEESE All aged cheeses, such as cheddar, Swiss, Edam, and Parmesan. Cottage cheese, cream cheese, pasteurized processed cheese*. Veined cheeses, such as blue cheese are also allowed*.</p>	<p><i>If safety cannot be established</i> Malted milk; some commercial chocolate drinks*; some nondairy creamers.*</p> <p>Any cheese product containing products to be avoided.</p>	<p>In general, 1 cup of milk, yogurt, or soy milk, or 1 ½ ounces of natural cheese can be considered as 1 cup from the Dairy Group.</p> <p>*Consult label and contact manufacturer to clarify questionable ingredients.</p> <p>*Consult label and contact manufacturer to clarify questionable ingredients.</p>

PROTEIN	Foods Allowed	Foods to Avoid	Notes
<p>5-6 ounce equivalents* Protein is an essential nutrient for growth, tissue repair and fighting infections. Complete proteins are found in all meats from animals, poultry and fish. Choose lean cuts and cooking methods to limit your fat intake.</p> <p>In addition, the following are good plant-based protein sources: beans, peas, lentils, nuts and seeds.</p>	<p>MEAT, FISH, POULTRY All fresh meats, seafood, poultry. Fish canned in water, oil, brine, or vegetable broth; some processed meat products, such as hot dogs, lunch meats, or cured meats*.</p>	<p><i>If safety cannot be established</i></p> <p>Prepared or processed meats containing grains to avoid, such as: some sausages*, hot dogs*; bologna*; and luncheon meats*. Chili con carne*. Bread-containing products, such as Swiss steak, meat loaf, meatballs, and croquettes. Tuna canned with hydrolyzed protein*. Turkey with hydrolyzed vegetable protein (HVP) injected as part of the basting solution. "Imitation Crab or other meat analogs" containing wheat starch or other unacceptable filler. Quick Individually Frozen (QIF) seafood‡.</p>	<p>*An ounce equivalent is: 1 oz cooked meat poultry or fish, 1 egg, 1/2 oz nuts or seeds; 1 TB nut butter, 1/4 cup cooked beans, lentils or peas.</p> <p>*Consult label and contact manufacturer to clarify questionable ingredients.</p> <p>‡May be dusted with flour or other starches in processing.</p>
	<p>EGGS Plain or in cooking.</p>	<p>Eggs in sauces made from wheat, rye, oats, or barley. Usually wheat flour is used in white sauce.</p>	<p>Be aware that some restaurants may add a wheat-based filler in scrambled eggs and omelets.</p>

FATS & SWEETS	Foods Allowed	Foods to Avoid	Notes
<p>Use sparingly. Although fats and sweets often provide desirable taste and texture to meals and snacks, they also often provide excess calories. Use small amounts.</p>	<p>FATS Butter, margarine, vegetable oil, olive oil, hydrogenated butter, vegetable oil, shortening, nuts, peanuts, some salad dressings*, mayonnaise*.</p>	<p><i>If safety cannot be established</i></p> <p>Some commercial salad dressings with thickeners*. Some dry roasted nuts may contain wheat.</p>	<p>*Consult label and contact manufacturer to clarify questionable ingredients.</p>
	<p>DESSERTS Cakes, cookies, quick breads, pastries, puddings made with allowed ingredients. Cornstarch, tapioca and rice puddings. Puddings*. Ice cream w/few, simple ingredients. Sorbet*, frozen yogurt*, sherbet*.</p>	<p>Commercial cakes, cookies, pies, etc., made with grains and flours that are not allowed. Products containing brown rice syrup made w/ barley malt enzyme*.</p>	<p>*Consult label and contact manufacturer to clarify questionable ingredients.</p>
	<p>SWEETS Jelly, jam, honey, brown & white sugar, molasses, most syrups*, some candy*, chocolate, pure cocoa, coconut, marshmallows*.</p>	<p>Some commercial candies. Watch for malt/malt flavoring. Brown rice syrup made w/ barley malt enzyme*.</p>	<p>*Consult label and contact manufacturer to clarify questionable ingredients. Wheat must be labeled on all products with oversight by the FDA.</p>

OTHER	Foods Allowed	Foods to Avoid	Notes
<p>Liquids are important in our body's regulation and balance. Most people need 6-8 glasses of liquids daily.</p> <p>Spices and herbs add flavor and variety to any diet. There is no need for the gluten-free diet to be bland!</p>	<p>BEVERAGES Instant, ground coffee, and flavored coffee beans; tea, and instant tea; carbonated beverages*; pure cocoa powder; wine and distilled spirits, such as rums, vodka, whiskey, etc. Most hard ciders.</p>	<p><i>If safety cannot be established</i></p> <p>Grain-based beverages (such as Ovaltine®), malted milk; ales; beer; some hard ciders; Instant Flavored coffees*. Some herbal teas w/barley or barley malt added*.</p>	<p>*Consult label and contact manufacturer to clarify questionable ingredients.</p>
	<p>MISC Spices (pepper, cloves, ginger, nutmeg, cinnamon, allspice, etc.). Salt.</p> <p>Herbs (oregano, rosemary, etc.).</p> <p>Food coloring.</p> <p>Flavoring extracts and imitation and natural flavorings.</p> <p>Baking and Nutritional Yeast, baking soda, baking powder, cream of tartar, and dry mustard, vinegars (except malt vinegar), and olives. Monosodium glutamate (MSG).</p>	<p>Some curry powders*. Some dry seasoning mixes or blends*. Some gravy extracts*, meat sauces*, and soy sauces*.</p> <p>Malt vinegar</p> <p>Brewer's Yeast</p> <p>Communion wafers/bread.</p> <p><i>Note:</i> In Catholic communion, host crumbs are often added to the wine before it is served. A workable solution is to arrange to use a goblet of your own. GF communion wafers are available.</p>	<p>"Spices" on labels refers to pure spices, which are GF. Seasonings or blends could include blended spices with a flow or anti-caking agent which needs to be cleared as safe to use. "Flavorings" are only problematic in meat products; however labeling law requires that if wheat is used, it must be declared on meat products. Natural and artificial flavorings regulated under FDA are required to identify wheat.</p> <p>Vinegar (with the exception of malt vinegar) & distilled spirits do not contain protein, therefore, are gluten-free. All proteins, including gluten, are too large to pass through the distillation process and are not found in end products of distillation. Therefore distilled alcoholic spirits are safe. Use alcoholic beverages in moderation. Malt vinegar should be avoided.</p>

FOOD ADDITIVES THAT ARE SAFE FOR PERSONS WITH GLUTEN-RELATED DISORDERS
(This list is not an exhaustive list)

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|------------------------|-----------------------------|-------------------------------|--------------------------|
| Annatto | Dextrimaltose | Mannitol | Sodium Hexametaphosphate |
| Ascorbic Acid | Dextrose | Microcrystalline Cellulose | Sodium Nitrate |
| BHA | Folic Acid – Folacin | Niacin – Niacinamide | Sodium Silico Aluminate |
| BHT | Fructose | Polyglycerol | Sorbitol |
| Beta Carotene | Fumaric Acid | Polysorbate 60: 80 | Sucrose |
| Biotin | Gums: Acacia, Arabic, Carob | Potassium Citrate | Sulfosuccinate |
| Calcium Chloride | Bean, Cellulose, Guar, | Potassium Iodide | Tartaric Acid |
| Calcium Pantothenate | Locust Bean, | Propylene Glycol Monostearate | Thiamine Hydrochloride |
| Calcium Phosphate | Tragacanth, and Xanthan | Propyl Gallate | Tricalcium Phosphate |
| Carboxymethylcellulose | Invert Sugar | Pyridoxine Hydrochloride | Vanillin |
| Carrageenan | Lactic Acid | Sodium Ascorbate | Vitamins & Minerals |
| Citric Acid | Lactose | Sodium Acid Pyrophosphate | |
| Corn Sweetener | Lecithin | Sodium Benzoate | |
| Corn Syrup Solids | Magnesium Hydroxide | Sodium Caseinate | |
| Demineralized Whey | Malic Acid | Sodium Citrate | |

QUESTIONABLE INGREDIENTS	Foods Allowed	Foods to Avoid	Notes
		<i>If safety cannot be established</i>	
	These must be cleared with the manufacturer before they are eaten. A sample letter requesting information on the questionable ingredients and packaging, and processing of these ingredients is on the last page of this diet instruction.		
DEXTRIN	Allowed when sourced from non-wheat carbohydrates, e.g. rice or potatoes.	When derived from wheat, in which case “wheat” will be indicated on label.	
“FLOUR” or “CEREAL PRODUCTS”:	Rice flour, corn flour, corn-meal, potato flour, amaranth‡, quinoa‡, teff‡, millet‡, buck-wheat‡, and soy flour or any other allowed grains.	Wheat, rye, barley, spelt and other flours to be avoided.	‡Be sure the source is pure. To avoid risk of cross-contact with gluten, choose labeled or certified gluten-free.
“VEGETABLE BROTH”:	In the US, this must contain 2 or more of the following: beans, cabbage, carrots, celery, garlic, onions, parsley, peas, potatoes, green bell pepper, red bell pepper, spinach, or tomatoes. It cannot contain any other ingredients. IT IS GLUTEN-FREE.		
“MALT” or “MALT FLAVORING”:	Rarely derived from corn or rice; if so, safe to consume.	If label states “malt” or “malt extract/ flavoring”, must be avoided.	
“BROWN RICE SYRUP”:	From rice only.	Made with barley malt enzyme.	
“STARCH”:	In the US, it must be CORN STARCH (in food products only).	If made with sources other than corn, it must be labeled as to its source (i.e.: wheat starch)	In medicines ‘starch’ is not necessarily made from corn.
“MODIFIED STARCH” or “MODIFIED FOOD STARCH”:	Arrowroot, corn, potato, tapioca, waxy maize, or maize.	From source ingredients other than those allowed. If it is made from wheat it must be labeled as such.	
“VEGETABLE GUM”:	Carob bean, locust bean, cellulose, guar gum, Arabic gum, acacia gum, tragacanth, or Xanthan gum.	Oat gum	
“SOY SAUCE” or “SOY SAUCE SOLIDS”:	Those which DO NOT contain wheat (SOY ONLY).	Those brewed from wheat and soy.	GF tamari is a good alternative to soy sauce
“MONO- and DIGLYCERIDES”:	Always gluten-free. When used in wet products, such as ice cream, there is no concern. In dry products, such as seasoning mixes, they must be ‘dried’ with a carrier. Those using a non-wheat-based carrier*.	Those using wheat-based carriers in dry products. The problem is the carrier ingredients, not the mono- and diglycerides.	*Consult label and contact manufacturer to clarify questionable ingredients.

MEDICATIONS

Regulations for ingredients in medications are different than regulations for foods. Inactive ingredients are potentially problematic ingredients in medications. Only medications that come in direct contact with any part of the intestinal tract must be gluten-free. IV Drugs, medicated patches, liquids, topical agents, and inhalants generally do not contain ingredients with gluten.

Ask your doctor to add the following statement on all prescription drug orders "OR GLUTEN-FREE EQUIVALENT"

Gluten-Free Pharmaceutical Excipients:

Acacia	Croscarmellose sodium	Magnesium stearate	Simethicone
Alginic acid	Dextrose	Matitol	Sodium benzoate
Alpha tocopherol	Docusate sodium	Maltose	Sodium lauryl sulfate
Ascorbic acid	Fructose	Mannitol	Sorbitol
Benzyl alcohol	Glucose	Microcrystalline cellulose	Stearic acid
Calcium carbonate	Hydrogenated vegetable oil	Polydextrose	Sucrose
Carboxymethylcellulose	Hydroxypropyl cellulose	Povidone	Vanillin
Citric acid	Lactose	Propylene glycol	Xanthan gum
Corn starch	Magnesium carbonate	Silicon dioxide	Zinc stearate

Medication Ingredient	When Allowed	When to Avoid <i>If safety cannot be established</i>	Notes
STARCH:	Made from corn, rice, tapioca or potato.	Made from wheat.	
PREGELATINIZED STARCH:	From corn or tapioca starch.	Made from wheat	
DEXTRIMALTOSE:		If sourced from barley	
MALT, MALT SYRUP:		Always avoid	Derived from barley & used in production of other ingredients.
DEXTRIN, DEXTRATES, CYCLODEXTRINS:	From corn or potato starch.	Made from wheat	
MALTODEXTRIN:	Derived from caramel color - in the U.S. is generally corn based.	Wheat or oat maltodextrin.	
SODIUM STARCH GLYCOLATE (CARBOXYETHYL STARCH):	From potato, corn, rice or tapioca.	Made from wheat.	
ALCOHOL (DISTILLED ETHANOL):	All		Distillation separates out pure ethanol from proteins in original starting matter. Distilled spirits are gluten-free.

Resources for Gluten-Free Drug Information:

- gluten.org/2019/10/17/medications-and-the-gluten-free-diet/
- www.glutenfreedrugs.com (Pharmacist controlled site)
- dailymed.nlm.nih.gov/dailymed/

This educational bulletin has been produced by the Gluten Intolerance Group of North America, a registered 501(c)3 organization. Learn more about GIG at www.gluten.org.

GIG is on a mission to make life easier for everyone living gluten-free.

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