

Gluten Free Diet

What is Gluten?

Gluten is a protein found in *wheat*, *rye* and *barley* that causes intestinal damage (often resulting in wt loss and nutrient deficiencies) for individuals with gluten intolerance.

Common symptoms of gluten intolerance include: diarrhea, abdominal pain, bloating, fatigue, forgetfulness and irritability.

Why Do You or Your Child Need to Follow a Gluten-Free Diet?

The gluten free diet is used in the treatment of celiac sprue and dermatitis herpetiformis. Although a gluten free diet does not cure celiac sprue and dermatitis herpetiformis, following the diet will relieve the symptoms associated with gluten sensitivity.

How Do I Know What Foods Contain Gluten?

- To find out what foods contain gluten it is important to read food labels. Products change frequently so check the label carefully before purchasing. Contact the manufacturer if more information on ingredients is needed.
- Oats do not naturally contain gluten, but they are often contaminated with wheat or other grains and may need to be avoided.
- Avoid products with any of the following ingredients on the label:
 - Wheat*: includes items made or processed with flour; various parts of the wheat kernel (including the germ, bran and endosperm [starch]); and grain species derived from prohibited grains (for example: triticale is a hybrid of wheat and rye).
 - o <u>Barley</u>: includes all parts of the barley grain and items produced from barley (such as malt flavorings, brown rice syrup, brewer's yeast and beer).
 - o **Rye:** includes all parts of the rye grain, usually found in our food supply as rye flour and rye bread. Unlike wheat and barley, rye is typically not used as a food additive.
 - Oats: includes all products containing oats (including oat flour, oat bran and oat gums). There are sources of uncontaminated oats available; talk with your dietitian or gastroenterologist about how to introduce oats safely.

Common Processed Foods Containing Wheat, Barley or Rye:

Bouillon cubes Matzo

Sweeteners
Candy
Cold cuts, hot dogs, sausages, salami
Seasoned rice mixes
Soy sauce and marinades
Seasoned tortilla/potato chips

French fries Self-basting turkey
Gravies and sauces Soups and soup bases

Imitation fish and imitation bacon Trail mixes

Malted Products Panko (Japanese bread crumbs)
Cereals (including rice and soy varieties) Energy bars and supplements

Meat and dairy substitutes Flavored beverages

Miscellaneous Ingredients on Food Labels*:

Wheat starch
Seasonings
Hydrolyzed vegetable protein (HVP)
Emulsifiers
Textured vegetable proteins (TVP)
Stabilizers
Hydrolyzed plant protein (HPP)

Starch Cereal Extracts

Caramel Coloring Dextrins

Example(s) of the wheat allergy statement:

INGREDIENTS: Water, skim milk, hydrolyzed vegetable protein, salt, potassium sorbate (preservative). Contains wheat, milk, soy.

OR

INGREDIENTS: Semolina (wheat), egg whites, ground flaxseed, durum flour (wheat), niacin, thiamine.

A few things to consider:

- 1. Any flavorings, no matter how small, are subject to the wheat disclaimer. Though unlikely, flavorings may be made with malt flavoring (which is not covered by the wheat disclaimer because it is made from barley).
- 2. Caramel coloring and dextrins are not typically made from wheat, but should now contain a wheat disclaimer if they are made using the grain.
- 3. Many products containing starches (if made in North America) are likely made from corn. Modified food starch, though unlikely, could be made from barley (which is not covered by the labeling law).
- 4. When in doubt contact the product's manufacturer. There have been cases in which companies have not yet changed food labels.

^{*}As of January 1st, 2006: food products manufactured with wheat should be listed in an allergy statement below the ingredients on the label or in parentheses following the name of the ingredient. If you suspect that the label is not up-to-date call the company to verify that the item does not contain wheat. When in doubt, do not eat it. Barley, rye and oats are not covered by this law.

Below is a list of foods to avoid and foods that are generally tolerated with a gluten-free diet:

FOODS ALLOWED	FOODS to AVOID	
Grains & Starches	Grains & Starches	
Tapioca; soybean; potato; arrowroot flours Buckwheat; quinoa; amaranth; millet; teff; sourghum (Milo); flax Rice; puffed rice; cream-of-rice; wild rice Corn; unflavored popcorn; cornmeal, hominy; grits; corn starch Pure, gluten-free oats may be allowed: talk to a health professional Ready-to-eat cereal made from allowed grains; gluten-free pasta and bread products.	Wheat; flour; whole wheat flour; white flour; bromated flour; enriched flour; phosphated flour; self-rising flour; graham flour; durum flour; semolina; wheat germ; bran; bulgur (tabbouleh); kamut; wheat berries; couscous; spelt; faro; emmer; einkorn; triticale; atta; dinkel Rye; rye flour; rye bread Barley; pearl barley; barley groats; barley flakes Oats; oat groats; oat fiber; oat bran; oat flour Many cereals; pasta; macaroni; noodles; spaghetti; farina; cream of wheat; dumplings; bread; bakery bread; rolls; stuffing; cake; crackers; muffins; pastries; biscuits; melba toast; zwieback; rusk; matzo; waffles; pancakes; donuts; prepared mixes; pretzels	
Beverages	Beverages	
Fresh brewed coffee (no grains added); teas without prohibited grains Milk, chocolate milk prepared with cocoa 100% fruit juices, soda (check labels) Wine; distilled alcohols and cordials (check labels for preservatives and dyes); gluten- free beers	Instant coffee; instant tea; some herbal teas; instant cocoa with grains added Malted milk; Ovaltine; chocolate or flavored milk with cereal fillers added; rice or soy beverages using barley enzymes Beverages with flavoring syrups of unknown content or those that contain cereal grains or malt; some root beers Beer; ales; lagers; malted wine coolers	

Soups and Casseroles

Clear, home-made broth; gluten-free bouillon cubes; soups made with rice or gluten-free pasta and gluten-free stock; creamed soups and chowders thickened with cream, cornstarch, potato flour or other allowed special flours

Homemade or prepared gluten-free macaroni without sauces thickened with flour; gratins made with only cream (no flour or prohibited thickeners)

Soups and Casseroles

Bouillon-based broths; creamed soups or chowders thickened with flour; most gumbos; prepared soups with prohibited cereal grains or thickeners

Macaroni and cheese, gratins, and casseroles in a white sauce thickened with flour (using a roux or beurre manie); dishes served with gravy, béchamel, veloute or espagnole sauces

Fats

Butter; oils (check label for wheat germ oil or any unidentified oil source); lard; most vegetable shortenings and margarines (check labels); foods fried in uncontaminated oils that have not been breaded with prohibited flours

Pure mayonnaise (and other salad dressings that are thickened with egg, cornstarch or allowed special flours); homemade salad dressings made with distilled vinegar

Cream; bacon; nuts; olives; peanut butter; avocado; sour cream and cream cheese (check labels)

Fats

Wheat germ oil; margarines and spreads made with prohibited stabilizers; Olestra; most fried and breaded foods

Low calorie mayonnaise made with prohibited cereal thickeners; commercial salad dressings that contain wheat flour; dressings made with malt vinegar; gravies; béchamel, veloute, espagnole sauces or other sauces thickened with flour (using a rouxs or beurre manie); low fat sour creams, low fat cream cheese and any other low fat products made with prohibited ingredients

Seasonings & Sweets

Pure spices and herbs; salt; monosodium glutamate (MSG)

Sugar; molasses; honey; jelly; jam; corn syrup; maple syrup; imitation or pure vanilla extract

Pure cocoa; pure chocolate; coconut; marshmallows and candies made from allowed grains

Ketchup; mustard; pickles; relish; horseradish; steak sauce not prepared with prohibited ingredients; gluten-free soy

Distilled rice, wine, or cider vinegar

Seasonings & Sweets

Marinades, seasoning mixes and dips, some ground spices and curry powders containing prohibited ingredients; bouillon cubes; malt flavoring; brewer's yeast

Malt syrup; brown rice syrup; malt extract Candy and other confections which contain prohibited ingredients or are of unknown content Soy sauce; teriyaki sauce; prepared sauces and condiments containing prohibited ingredients Malt vinegar; vinegars processed with prohibited ingredients

<u>Dairy</u>	<u>Dairy</u>	
Whole, low-fat, skim, fresh, dried or evaporated milk; flavored milks (check labels) Plain yogurt and kefir; flavored yogurt and kefir (check labels) All aged hard cheeses (cheddar, parmesan, Swiss, etc.); cottage cheese (check labels)	Flavored milks made with prohibited ingredients; malted milk products Cheese food and cheese spread made with prohibited ingredients; Roquefort cheese made with bread mold	
Fruits & Vegetables	Fruits & Vegetables	
Fresh, frozen, dried or canned (check labels)	Fruits and pie filling containing thickeners; canned products with preservatives, emulsifiers or food starch made from prohibited grains	
Meat or Meat Substitutes	Meat or Meat Substitutes	
Fresh meat; poultry; fish and shellfish; eggs Edamame (soy beans); tofu; beans; nuts (check labels)	Most luncheon meats, sausages and hot dogs containing prohibited grains; self-basing turkeys; animal proteins marinated using prohibited ingredients; animal proteins in sauces made with prohibited grains; imitation seafood; crabstick; sushi made with crabstick (California rolls)	
	Seitan; soy-based meat substitutes that contain plant proteins made with prohibited ingredients; bean dips made with prohibited ingredients; dry roasted nuts containing prohibited ingredients	
Miscellaneous	Miscellaneous	
	Some chewing gums	
	Some toothpaste; mouthwash; medicines (especially imported medicines); laxatives; vitamin supplements	
	Some make-up (especially lipstick and balm)	
	Communion wafers	
	Glue; play dough	

Helpful Resources

Specially Prepared Products:

Ener-G Foods Inc. www.ener-g.com (800) 331-5222 (Toll Free)

Nature's Pantry (508) 947-1266

Restaurants with Gluten-Free Menus/Options:

www.pfchangs.com P.F. Changs Outback Steakhouse www.outback.com Legal Seafoods www.legalseafoods.com **Boston Market** www.bostonmarket.com www.chick-fil-a.com Chick-fil-A www.subway.com Subway Wendy's www.wendys.com

Grocery Stores with Gluten-Free Options (search gluten free):

Whole Foods Market www.wholefoodsmarket.com Shop and Shop www.stopandshop.com Peapod www.peapod.com Trader Joes www.traderjoes.com www.glutenfreemall.com

Celiac Sprue Organizations:

The Gluten Free Mall

American Celiac Society	www.americanceilacsociety.org	(504) 737-3293
Gluten Intolerance Group	www.gluten.net	(206) 325-6980
Celiac Disease Foundation	www.celiac.org	(818) 990-2354
Celiac Sprue Association	www.csaceliacs.org *	(401) 558-0600
Healthy Villi (Boston)	www.healthyvilli.com	(617) 262-5422
American Dietetic Assoc	www.eatright.org *	

^{*} Celiac Sprue booklet available

Recommended Reading:

Gluten Free Diet: A Comprehensive Resource Guide. Shelly Case, RD, Case Nutrition Consulting, Canada, 2005.

Kids with Celiac Disease: A Family Guide by Dian Korn, Woodbine House, 800-843-7323 or www.woodbinehouse.com

Contact a registered dietitian or gastroenterologist for more gluten-free information.

To schedule an appointment with a Registered Dietitian (RD), please call MGH **Ambulatory Nutrition Services at 617.726.2779**