## MASSACHUSETTS <br> GENERAL HOSPITAL

## 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:

o 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 Barley: 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.
o 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
Sweeteners
Candy
Cold cuts, hot dogs, sausages, salami
French fries
Gravies and sauces
Imitation fish and imitation bacon
Malted Products
Cereals (including rice and soy varieties)
Meat and dairy substitutes

Matzo
Seasoned rice mixes
Soy sauce and marinades
Seasoned tortilla/potato chips
Self-basting turkey
Soups and soup bases
Trail mixes
Panko (Japanese bread crumbs)
Energy bars and supplements
Flavored beverages

## Miscellaneous Ingredients on Food Labels*:

Wheat starch
Seasonings
Emulsifiers
Stabilizers
Starch
Caramel Coloring

Natural and artificial flavorings
Hydrolyzed vegetable protein (HVP)
Textured vegetable proteins (TVP)
Hydrolyzed plant protein (HPP)
Cereal Extracts
Dextrins
*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.

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.

## 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 |
| $\begin{array}{l}\text { Tapioca; soybean; potato; arrowroot flours } \\ \text { Buckwheat; quinoa; amaranth; millet; teff; } \\ \text { sourghum (Milo); flax } \\ \text { Rice; puffed rice; cream-of-rice; wild rice } \\ \text { Corn; unflavored popcorn; cornmeal, } \\ \text { hominy; grits; corn starch } \\ \text { Pure, gluten-free oats may be allowed: talk flour; whole wheat flour; white flour; } \\ \text { bromated flour; enriched flour; phosphated flour; } \\ \text { self-rising flour; graham flour; durum flour; } \\ \text { semolina; wheat germ; bran; bulgur (tabbouleh); } \\ \text { kamut; wheat berries; couscous; spelt; faro; emmer; professional } \\ \text { einkorn; triticale; atta; dinkel } \\ \text { Ready-to-eat cereal made from allowed } \\ \text { grains; gluten-free pasta and bread rye flour; rye bread } \\ \text { products. } \\ \text { Barley; pearl barley; barley groats; barley flakes } \\ \text { Oats; oat groats; oat fiber; oat bran; oat flour }\end{array}$ |  |
| $\begin{array}{l}\text { Many cereals; pasta; macaroni; noodles; spaghetti; } \\ \text { farina; cream of wheat; dumplings; bread; bakery } \\ \text { bread; rolls; stuffing; cake; crackers; muffins; } \\ \text { pastries; biscuits; melba toast; zwieback; rusk; } \\ \text { matzo; waffles; pancakes; donuts; prepared mixes; } \\ \text { pretzels }\end{array}$ |  |
| 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 |  |
| cocoa with grains added some herbal teas; instant |  |
| 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)

## 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)

## 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 sauce
Distilled rice, wine, or cider vinegar

## 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

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

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

| Dairy | Dairy |
| :---: | :---: |
| Whole, low-fat, skim, fresh, dried or evaporated milk; flavored milks (check labels) | Flavored milks made with prohibited ingredients; malted milk products <br> Cheese food and cheese spread made with prohibited ingredients; Roquefort cheese made with bread mold |
| Plain yogurt and kefir; flavored yogurt and kefir (check labels) |  |
| All aged hard cheeses (cheddar, parmesan, Swiss, etc.); cottage cheese (check labels) |  |
| Fruits \& Vegetables | Fruits and pie filling containing thickeners; canned products with preservatives, emulsifiers or food starch made from prohibited grains |
| Fresh, frozen, dried or canned (check labels) |  |
| Meat or Meat Substitutes | Meat or Meat Substitutes <br> 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) <br> 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 |
| Fresh meat; poultry; fish and shellfish; eggs <br> Edamame (soy beans); tofu; beans; nuts (check labels) |  |
| Miscellaneous | Miscellaneous |
|  | Some chewing gums <br> Some toothpaste; mouthwash; medicines (especially imported medicines); laxatives; vitamin supplements <br> Some make-up (especially lipstick and balm) <br> Communion wafers <br> Glue; play dough |

## Helpful Resources

## Specially Prepared Products:

| Ener-G Foods Inc. $\quad$ www.ener-g.com | (800) 331-5222 (Toll Free) <br> Nature's Pantry (508) 947-1266 |
| :--- | :--- | :--- |

Restaurants with Gluten-Free Menus/Options:
P.F. Changs www.pfchangs.com

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

Grocery Stores with Gluten-Free Options (search gluten free):
Whole Foods Market
Shop and Shop
Peapod
Trader Joes
The Gluten Free Mall
www.wholefoodsmarket.com
www.stopandshop.com
www.peapod.com
www.traderjoes.com
www.glutenfreemall.com
Celiac Sprue Organizations:
American Celiac Society www.americanceilacsociety.org (504) 737-3293
Gluten Intolerance Group
www.gluten.net
(206) 325-6980

Celiac Disease Foundation
Celiac Sprue Association
www.celiac.org (818) 990-2354

Healthy Villi (Boston)
American Dietetic Assoc
www.csaceliacs.org * (401) 558-0600
www.healthyvilli.com
(617) 262-5422

* 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, 800-8437323 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

