## Celiac Disease: Gluten-free eating

## What is Celiac Disease?

Celiac disease is an auto-immune disease where the body cannot handle the effects of gluten. Gluten in the diet causes an autoimmune response in the small intestine. This response causes inflammation and if left untreated may result in malabsorption. Specific nutrients are absorbed in the small intestine and gluten causes problems with absorption. If you have celiac, you may want to discuss with your doctor or dietitian the need for vitamin/mineral supplements.

## Is there a cure?

There is no cure for Celiac disease. It is a chronic condition that can only be managed by following a diet free from gluten. Awareness of Celiac disease has greatly improved over the last few years. There are many companies dedicated to producing gluten free products that are safe for people with Celiac disease.

## How do I get started?

After the initial diagnosis of Celiac disease, it is best to avoid highly processed foods. Fresh, unprocessed foods are more likely to be gluten free. A person newly diagnosed with Celiac disease must become an avid label reader; educate yourself on what you can and can't eat and follow the gluten free diet.

## What is gluten?

Gluten is a protein found in most grains. These grains are those most commonly used in commercial and processed food products.

- Wheat
- Spelt
- Rye
- Triticale
- Barley
- *Oats: do not contain gluten, but are often grown and processed alongside wheat; oats are not gluten-free unless grown in separate fields and marked "gluten-free" on the package.


## What can I eat?

Although gluten is in a lot of grains, there are other options:

- Rice
- Corn
- Amaranth
- Arrowroot
- Buckwheat
- Millet
- Quinoa
- Oats*

Meats, cheeses, nuts, fruits and vegetables are inherently free of gluten and a safe place to start. Cereals, pastas, breads, and other baked goods will all contain gluten unless specially made.

## What about hidden gluten?

In addition to the obvious listing of wheat or flour on a food label, gluten may be hidden in a variety of ingredients. One of the biggest sources of hidden gluten is in the form of food starch. When listed on a food label, food starch or modified food starch can be derived from either wheat or corn. People with Celiac disease need to avoid anything with "food starch" or "modified food starch" as they cannot be sure about the source of the starch. Dextrin is another name for starch and a common ingredient on food labels. When listed on an item that is produced in the United States, dextrin is derived from corn. However, if it is an ingredient in a food that has been produced in another country, dextrin is not guaranteed to be derived from a gluten free source.
Gluten is a key component in many additives and fillers and may be present in foods such as:

- soups
- french fries
- lunchmeats
- hamburgers
- soy sauce
- hotdogs
- salad dressing


## What about cross-contamination?

In addition to being aware of the ingredients in the food you consume, also make sure that your food is free from contamination. Cross contamination of gluten products with gluten-free products can harm you.

## Prevent cross contamination at home:

- work on clean surfaces in the kitchen
- use clean and separate utensils
- wash hands before touching gluten-free food
- avoid "double dipping" (dipping a knife back into a jar or stick of butter after touching food with gluten)
- beware of airborne flour
- maintain a safe and clean cooking environment
- use separate "gluten free" toaster and cutting board


## Restaurants

Finding restaurants that are safe for the celiac consumer can be a challenge. Always inform the server and kitchen staff of your gluten intolerance before ordering. The Gluten Free Registry has created a list of over 16,400 celiac friendly restaurants all over the U.S. This online accessible database can be searched through their website at: http://www.glutenfreeregistry.com.
Cross contamination is one of the biggest potential dangers when eating out. When ordering at a restaurant make sure the wait staff understands your condition. Many restaurants have binders with listings of nutritional information. Ask to see the binder so you can check your menu items personally.

## Some tips for dining out:

- ask that your food be prepared in clean dishes with clean utensils
- make sure that French fries are not only gluten free, but also fried in their own oil- away from breaded items
- ask for hamburgers to be taken from the grill and put directly onto your plate, without touching the bun
- Be wary of house specials such as homemade dressings or sauces. These items may be gluten free most of the time, but because they are made on site, ingredients may be substituted without notifying the consumer of an ingredient change
- salad (no croutons), meat, fresh fruits, and steamed vegetables are the safest foods to order when dining out
- Always check with the server regarding your menu choices and request substitutions are made in place of items such as breads.
Many restaurants understand the importance of cross contamination and offer special gluten free menus. Caraba's, Outback Steakhouse and the Olive Garden are
a few of the major chain restaurants offering gluten-free menus. Most restaurants will produce a list of allergens in their menu items upon request.


## Grocery Stores

Many grocery stores have sections dedicated to specialty foods. Gluten-free products may often be found in these sections. Stores catering to the health minded consumer such as Whole Foods and Trader Joe's have a wide selection of gluten free items.

## National Brand Names

With the increased awareness of Celiac disease many major food companies have begun adjusting recipes to cater to the celiac consumer. General Mills recently partnered with the Celiac Foundation and now offers gluten-free cereals such as Rice and Corn Chex as well as gluten free baking mixes under the Betty Crocker label. These are just a few examples of the many gluten-free products readily available in today's market.

## Internet Resources

There are many internet based resources available for the celiac consumer. A number of these websites provide information regarding the disease and diagnosis of Celiac itself, while others exist to provide a list of gluten-free products and resources. The following are several valuable websites.
Informational
www.csaceliacs.org
$\underline{\text { www.celiaccentral.org }}$
$\underline{\text { www.celiac.com }}$
$\underline{\text { www.gluten.net }}$

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| University of Michigan Diabetes Education Program (734)998-2475 |
| http://www.med.umich.edu/diabetes/education/ |
| Last Revised 04/2012 |
| Comprehensive Diabetes Center |
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