## Introduction to the Gluten-free Diet

Gluten is TOXIC to someone with celiac disease (CD). Gluten is the protein found in wheat, rye, and barley (malt) and their hybrids. A person with CD can only tolerate foods contaminated with less than $\mathbf{2 0}$ parts per million of gluten. For instance: millet flour which has been produced in a facility which also produces wheat can basically only have 20 particles of wheat in a bag of 1 million particles of millet. (Imagine a stack of 999,999,980 pennies with 20 dimes). A gluten-free (GF) product is only as good as the gluten-free process that gets it to the table both in manufacturing and in the kitchen. If coming from a safe source the following are naturally gluten-free.

SAFE

| Almond Meal and <br> Nut Flours | Amaranth | Arrowroot | Bean/ Lentil |
| :--- | :--- | :--- | :--- |
| Buckwheat/ Kasha | Coconut | Corn Starch/Meal/ <br> Semolina/ Flour | Guar Gum |
| Potato Starch | Quinoa | Brown/White Rice <br> Flour | Potato |
| Sorghum | Tapioca | Teff | Oats (Please note: <br> Not all celiacs, for an <br> unknown reason <br> tolerate oats well) |
| Xanthan Gum | Soy | Sweet Rice also <br> known as Glutinous <br> Rice | MSG Monosodium <br> Glutamate |

Note: Genetic modification plays no role in gluten status. Corn \& soy can be genetically modified while wheat still is not on the market GMO.
UNSAFE (any of the above contaminated in growth, transport, or production)

| Barley | Bulgur | Couscous | Durum |
| :--- | :--- | :--- | :--- |
| Einkorn | Emmer | Farina | Farro |
| Graham | Rye | Kamut | Spelt |
| Triticale | Semolina | Malt | Wheat |
| Tempeh | Seitan |  |  |

The best resource for understanding gluten-free safety: https://www.glutenfreewatchdog.org/

Gluten is found is a lot of unexpected places. READ LABELS.
Here are a few examples to be aware of.

| Cereal (often contain malt or contaminated oats) | Soy Sauce (Look for wheatfree tamari or those marked as gluten-free) | Beer (Barley malt). Please note some beers are now made through a process which removes the protein (the offending agent) from the barley and tests belwo 20 ppm . It is marketed to the gluten-free community. Not all celiacs or those on a GF diet tolerate this well. | Matzoh/ <br> Communion Wafers (Some wafers are on the market that are gluten-free. Catholic Church law says that the wafer must contain wheat. Those are made with wheat starch which has been processed to remove the protein and tests below 20 ppm. |
| :---: | :---: | :---: | :---: |
| Soup base, bullion | Croutons | Chips (Pringles, Sunchips) | Vegetarian meat products(seitan is wheat gluten) |
| Canned or packaged sauces or dressings(ie: Enchilada, Alfredo) | Seasonings and spice blends(Taco Bell Taco Seasoning contains flour) | Vinegar (Malt vinegar contains gluten. Apple cider, rice, and distilled are all considered safe). |  |

A few hints to protect the gluten-free foods which you buy.
Toaster: Toasters have crumbs of bread in them. Only toast gluten-free bread in a toaster dedicated as GF.
Frying: When deep frying, special oil needs to be used for GF items. Glutinous particles float in the oil and then can contaminate a GF food.
Boiling: Use new water for boiling noodles. The gluten from noodles will attach itself to GF pasta in a shared pot. Think about how much starch needs to be scrubbed out of a colander. Storage: Don't use common storage containers. And always store gluten-free above glutinous. Regular crumbs can fall on the GF items below.

