

# "CELIAC 101" A HELPFUL GUIDE FOR THE NEWLY DIAGNOSED

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Welcome to the celiac/gluten-free lifestyle! You are relieved to find out what is wrong, but you may still be confused as to what in the world Celiac Disease is and how to go about cooking and eating gluten free. Tackle the obvious first, then fine tune more and more. Take small steps. Develop a friendship with others in your support group to share product news and recipes. Come to support group meetings!

Step 1 - Start with unprocessed fresh meat, poultry, fish, fruits and veggies. Omit the obvious foods from your diet (wheat, barley, rye, oats, triticale, spelt & kamut). Avoid glutinous cereals, breads, pasta, and desserts. Avoid beer and ales. Substitute rice cakes, rice, potatoes, or corn tortillas for the breads & pastas you are used to. (There is good gluten-free pasta available in many health food stores.) Have sherbet, sorbet or fruit for dessert. Use a vinaigrette dressing on salads. Drink milk or Lactaid, 100% fruit juice, fresh coffee or teas.

Step 2 - Begin reading labels for hidden sources of gluten in food. You should check out everything you put in your mouth. You will learn new words and look at food and food preparation in a new way. You will probably feel deprived for a while. It's usually here that people will panic. This is a natural feeling. The reality of your situation is setting in. Carry a pen and paper with you. Keep a food diary of products that work for you and another list of those that seem to elicit symptoms. Ask yourself what are you eating new that might have been the culprit when you have an accident. You will quickly develop a good list of foods that you feel comfortable buying. Quickly review labels each time you buy them.

Step 3 - Reach out a touch someone. Now it is time to try calling or writing to a manufacturer. Many products carry toll-free phone numbers. In doing this make sure you are using the proper terms and being very specific in what you are asking. Look at our New Member Packet for a guide. Ask first if something has wheat, barley, rye or oats in the product, rather than if it contains gluten.

Step 4 - Continue to fine tune. Now start looking at things you may have never thought of: medicines, mouthwash, toothpastes, lipstick, etc. Consider cross-contamination issues - such as toasters, shared food products like mayonnaise, margarine, peanut butter and jam. What about your chewing gum or breath mints? Check out all your medications. You now should be doing better, easier to shop, and feeling some reduction in your initial symptoms.

Step 5 - Join a local support group, [www.dfwceliac.org](http://www.dfwceliac.org). Keep up the good work!

# I. CELIAC DISEASE: THE CLINICAL ASPECTS

## # WHAT IS CELIAC DISEASE?

- Many names for the same disorder:
  - Celiac Sprue
  - Non-Tropical Sprue
  - Gluten-Sensitive Enteropathy
  - Celiac Syndrome
  - Gliadin-Sensitive Enteropathy
- An autoimmune condition and permanent intolerance to GLUTEN found in wheat, barley & rye
- Celiac Disease is twice as common as Crohn's, Ulcerative Colitis and Cystic Fibrosis, combined.
- Ingestion of GLUTEN produces inflammatory injury to the mucosa of the small intestine
- Multi-system effects and multiple signs, symptoms and characteristics of undiagnosed Celiac Disease, for example:

Gastrointestinal - Typical symptoms; now less common.

Dermatologic - Dermatitis Herpetiformis

Neurologic - Peripheral Neuropathy, ataxia

Psychologic - Can affect schizophrenia, "fuzzy thinking", behaviors

Endocrine - Diabetes type 1 is related; thyroid conditions

Reproductive – can affect fertility & miscarriage

Hematologic - Anemia

Orthopedic - Bone & joint pain; osteopenia; osteoporosis

- Exposure to gluten causes the intestinal villi (finger-like projections) to flatten and no longer absorb vitamins, minerals, nutrients, fats, carbohydrates, proteins, at the correct levels for optimum body health.
- For people with Celiac Disease, gluten is a TOXIN.
- Gluten triggers intestinal cells to release cytokines, interleukin 4 and tumor necrosis factor, all of which impacts the intestine's ability to function properly.

## # PATHOGENESIS OF CELIAC DISEASE

- One must have the correct genetic susceptibility – DQ8 and DQ2 Haplotypes.
- One must be ingesting gluten
- An "environmental" trigger that is unknown, seemingly related to infection, stress after operations, pregnancy, stressful job, divorce, etc.

## # PREVALENCE OF CELIAC DISEASE IN THE U.S.

Healthy individuals	1:133
First-degree relatives of CD patients	1:22
Second-degree relatives	1:39
Symptomatic children	1:25
Symptomatic adults	1:68
Infertility (idiopathic)	1:16
Type 1 diabetes	1:23
Autoimmune liver disease	1:12
Irritable bowel syndrome	1:23
Osteoporosis	1:39
Down syndrome	1:11
Short stature	1:25
Anemia	1:24
Arthritis	1:33
Fatigue	1:34
Asthma	1:35
Sjogren's syndrome	1:49
Constipation	1:38
Joint pain	1:31

## # PREVALENCE OF CELIAC DISEASE WORLD-WIDE: 1%

## # WHO HAS CELIAC DISEASE?

- 95% of celiacs have DQ8 and/or DQ2
- Women slightly more than men
- Caucasians more often than non-Caucasians
- 1<sup>st</sup> degree relatives 10% more likely than others
- "Classic" CD is diagnosed between ages 6 to 18 months
- 20% adults are diagnosed over age of 60
- People with the following conditions are at higher risk:
  - Insulin Dependent Diabetes
  - Autoimmune thyroiditis
  - Autoimmune hepatitis
  - Sjogren's Syndrome
  - Autoimmune atrophic gastritis
  - Down Syndrome
  - Turner Syndrome (*chromosomal condition that describes girls and women with common features that are caused by complete or partial absence of the second sex chromosome*)
  - Williams Syndrome (*Williams syndrome is a rare genetic condition which causes multi-system medical and developmental problems, for example characteristic facial appearance, elevated blood calcium levels, low birth weight, dental and/or kidney abnormalities, irritability, learning disabilities, etc.*)
  - Congenital heart defects
  - IgA deficiency

- # WHAT ARE THE CLASSIC SYMPTOMS, ADULT ONSET?
 

Diarrhea	Constipation
Bloating, gas	Abdominal pain
  
- # WHAT ARE THE ATYPICAL SYMPTOMS, ADULT ONSET?
 

Anemia	Osteoporosis
Short stature	Dental enamel defects
Bone & joint pain	Chronic hepatitis
Infertility	Ataxia ( <i>loss of coordination</i> )
50% have no GI symptoms	Recurrent miscarriages
  
- # OTHER EXTRAINTESTINAL FEATURES:
  - Mouth ulcers
  - Primary biliary cirrhosis
  - Isolated hypertransaminasemia
  - Myasthenia Gravis
  - Pericarditis
  - Psoriasis
  - Neuropathies
  - Epilepsy
  - Vasculitis
  - Cardiomyopathy
  - Thyroid disease
  - Reflux
  - Fibromyalgia
  - Migraines
  
- # WHAT ARE THE SYMPTOMS? ADULT ONSET, LATENT OR “ASYMPTOMATIC”
  - Decreased feelings of well-being
  - Easily fatigued
  - Depression
  - Irritability
  - Iron deficiency anemia
  - Reduced bone density
  
- # WHAT ABOUT DH?
  - Dermatitis Herpetiformis is a skin condition associated with Celiac Disease. If you have DH, then you automatically have CD, although with less gut involvement.
  - Itchy, blisters on elbows, knees, buttocks, trunk, sacrum, face, neck that occur when gliadin is ingested. The lesions are generally symmetric in distribution.
  - Fewer intestinal symptoms & malabsorption
  - Majority have abnormal intestinal mucosa, although 90% have no GI symptoms.

## # HOW IS CELIAC DISEASE DIAGNOSED?

1. Doctor observes clinical symptoms and medical history
2. Blood Screening Antibody Tests
  - IgG AGA Antigliadin Antibodies (good sensitivity)
  - IgA AGA Antigliadin Antibodies (good specificity)
  - EMA Endomysial Antibodies (Excellent sensitivity, 97-100%, & 98-99% specificity, but test is analyzed by a person)
  - tTG Tissue Transglutaminase (Good sensitivity & specificity, but test is analyzed by a machine)
  - Total Serum IgA (Needed because 3 of above tests are IgA-mediated, and many people in the general population are IgA deficient)
  - Use all 5 tests in the panel to see whole picture. There are still a lot of false positives & false negatives. Use reliable labs with experience in these specialized tests.
3. Endoscopy Procedure is the “gold standard” of diagnosis. Multiple tissues samples are needed.
4. HLA genetic tests for DQ2 and DQ8 may be valuable. DQ2 is found in 95% of celiac patients; DQ8 is found in remaining patients. If person does not have either of these genes, then they can't develop CD.

## # STRONGLY CONSIDER REFERRAL FOR BIOPSY WHEN:

- a. Positive EMA with or without positive antigliadin antibodies
- b. Positive tTG with or without positive antigliadin antibodies
- c. Positive antigliadin IgG in an IgA deficient patient
- d. Markedly elevated antigliadin antibodies in a very young child (under 3 yrs)
- e. Refer to gastroenterologist for further review when clinical presentation suggests CD, regardless of serology.

## # HOW IS CELIAC DISEASE TREATED?

Lifetime compliance with a Gluten-Free Diet

## # WHY IS COMPLIANCE IMPORTANT?

- Minimize damage to intestine
- Increases quality of life
- Increase life expectancy
- Decreases risk of developing autoimmune diseases
- Lowers risk of developing GI cancers (although rare)
- Decreases healthcare costs associated with long-term complications

## # AFTER DIAGNOSIS, WHAT DO I DO? — FOLLOW-UP

*The role of the gastroenterologist is to diagnose, refer to a knowledgeable dietitian, and to a local support group. After that, go to your family physician or internist for annual examinations. You will have to help that doctor learn what tests are appropriate for celiacs (because he will not know how to treat a celiac). Here are suggestions of tests to perform to help you and your doctor maintain your good health.*

- Bone density test – Get a base line after diagnosis, then later to follow up periodically (DEXA).
- Get a Pneumovax (vaccine against a certain pneumonia)
- Take a GF multi vitamin daily

- Take appropriate amounts of calcium and vitamin D (GF).
- Perhaps a test for diabetes – glucose tolerance test

#### Annual Examination:

- Get annual flu shots
- Check blood pressure
- CBC – complete blood count and Complete Metabolic Panel
- Assess vitamin and mineral levels.
  - RBC – folate level
  - Check Iron level
  - Carotene level. If this test is low, you may still be malabsorbing.
  - Check Vitamin B-12 level.
- LFT's (Liver function tests)
- PT (Prothrombin time)
- TFT's (Thyroid function tests)
- TSH (Thyroid Stimulating Hormone) – this test monitors the function of the thyroid.
- Cholesterol may rise after treatment. Check.
- Celiac antibody tests (IgA and IgG) every year or every other year to test for compliance on the gluten-free diet; or monitor which test was most strongly positive at diagnosis, if IgA or IgG was not elevated.
- Men should get annual PSA test to screen for prostate problems.
  - Women should get annual mammogram and PAP smears, as usual.
- Hemocult test for blood in stool that might indicate polyps in colon.
- Flexible sigmoidoscopy (3 to 5 years -- to check for possible cancer).
- Colonoscopy every 5-7 years to screen for polyps and cancer.

#### # WHAT IF I'M STILL HAVING TROUBLE ON MY GF DIET?

- Celiacs should get regular follow-up exams for monitoring after diagnosis and possible complications.
- The usual primary reason for not doing well is getting into accidental gluten. Check your diet. Check your diet. Check your diet.
- If you need help, keep a complete food diary, including brand names and any physical reactions, and then consult with a knowledgeable dietitian and/or local support group leader.
- It may turn out that you have other food sensitivities clouding the issue. After gluten, the next most common sensitivities are to lactose and then soy.
- Other conditions that can co-exist with CD and confuse patients and doctors are pancreatic insufficiency and bacterial overgrowth, both of which can affect absorption of nutrients.

## II. THE GLUTEN-FREE DIET

### WHAT IS GLUTEN?

- # Gluten is the general name for the storage proteins (or prolamins) found in all cereal grains.
- # Individuals with gluten intolerance are specifically sensitive to the prolamins found in wheat, rye and barley. We celiacs also avoid oats because of the high probability of contamination with wheat.

### FUNCTION OF GLUTEN

- # Gives bread its structure and elasticity (thought of as the “glue” in bread products)
- # Lets dough stretch to hold the gases formed during rising.
- # Because gluten-free flours do not have the stretch factor provided by gluten, they do not rise well. They generally produce a heavier bread and tend to fall apart more easily.

### THE TOXIC PROLAMINES

- # Wheat----- Gliadin
- # Rye ----- Secalin
- # Barley ----- Hordein

These prolamins are the proteins that damage the small intestine in Celiac Disease. All derivatives or combinations of these grains are toxic, including spelt (a form of wheat), triticale (wheat & other grains), and kamut. Cross contamination (especially in oats) is a problem.

### IMPORTANCE OF COMPLIANCE

#### 1. To Resolve Initial Symptoms

- # Diarrhea
- # Abdominal pain & bloating
- # Weight loss
- # Fatigue
- # Anemia
- # Lactose intolerance
- # Irritability
- # Skin lesions (in Dermatitis Herpetiformis)

#### 2. To Prevent Long-Term Complications

- # Osteoporosis
- # Increased risk of certain cancers, especially cancers of the bowel, although rare
- # Infertility and miscarriage
- # Development of other autoimmune Disorders

On a gluten-free diet, the patient now has control of the risk factors and will be healthy just with dietary restrictions, not medications

Note: Many patients diagnosed without symptoms report feeling better on the gluten-free diet.

## TESTS FOR COMPLIANCE

- # Every one or two years get IgG and IgA antibody testing from a reliable laboratory (i.e., Prometheus, 888/423-5227). The IgA & IgG tests are sensitive to the body's ingestion of gluten, rather than the immune component changes as with tTG & EMA.

## GLUTEN-FREE GRAINS & STARCHES

- # Rice – all forms
- # Corn – cornmeal, corn bran, corn grits, hominy
- # Potato – potato starch, potato flour (two different constituencies)
- # Soy
- # Tapioca
- # Bean flours
- # Sorghum
- # Cassava / manioc from yucca plant (Chebe bread and Forno bread)
- # Quinoa
- # Amaranth
- # Buckwheat/Kasha
- # Millet
- # Tef
- # Nut flours
- # Montina™
- # Arrowroot

## HOW LONG WILL IT TAKE TO HEAL?

Most cases...

- # For most people, healing begins within days of eliminating gluten from the diet; normally most symptoms reduce or disappear within 6 weeks. For others it may take up to one year. For those with Dermatitis Herpetiformis, healing generally takes longer.
- # For older adults, it may take up to 2 years for the intestine to heal completely.

RARE cases...

- # Celiacs who seem to continue symptoms while doing a gluten-free diet are probably symptomatic due to avoidable gluten contamination. Check your diet, check your diet, check your diet.
- # For a very small percentage of patients, the intestinal lining does not respond to the GF diet, called "Refractory Sprue."

## OATS?

- # The elimination of oats has been controversial for years.
- # Research *suggests* that...
  - Specially grown oats are safe to eat in small amounts (~1/2 cup) for both adults and children with CD.
  - Avenin (the protein in oats) is not toxic.
- # HOWEVER, cross contamination with wheat is still a problem.
- # Recommendation is to continue eliminating oats until more scientific evidence (and less oat/wheat contamination) is available.

## POINTS TO REMEMBER

- # Many fresh foods are naturally gluten free, such as fresh meat, fresh fish, cheese, eggs, milk, fruit & vegetables.
- # Once these foods have been processed, the likelihood that gluten-containing ingredients have been added increases.
- # Read the food label each time you purchase an item; manufacturers frequently change the ingredients.
- # Foods with the fewest ingredients are the easiest to use.
- # If there is a questionable ingredient, do not use the product until you can verify that it is gluten free.
- # "Wheat-Free" is NOT necessarily gluten free; the product may contain rye, barley or oats.
- # Gluten can get into a product as:
  - A main ingredient
  - Part of a food additive
  - An incidental ingredient (such as when a production line conveyor belt is floured to keep the food from sticking to it)
  - Cross contamination (from equipment used for producing a gluten-containing ingredient)
- # Over-the-counter and prescription medications need to be checked for gluten.
  - Wheat starch is the biggest problem
  - It would be great if we could ask our physician and/or pharmacist to call the manufacturer. HOWEVER, most doctors and pharmacists know little about gluten. Consult the publication "Celiac Disease: Through the Medicine Cabinet". It has lists of GF meds and lists of pharmaceutical companies.
- # Investigate products like toothpaste, mouthwash, and lipstick since they may be swallowed. Doctors say that topical products containing gluten should not cause problems because it is the **ingestion** of gluten into the small intestine that causes celiac problems.

#### INGREDIENTS TO AVOID

- |                    |                                          |
|--------------------|------------------------------------------|
| # Barley           | # Kamut                                  |
| # Breeding         | # Malt vinegar                           |
| # Brown rice syrup | # Malt/malt flavoring, syrup, or extract |
| # Bulgar           | # Matzo/matza meal                       |
| # Cereal           | # Oats                                   |
| # Couscous         | # Rye                                    |
| # Dinkel           | # Semolina                               |
| # Durham           | # Spelt (Dinkel)                         |
| # Eikorn           | # Triticale                              |
| # Farina           | # Wheat                                  |
| # Farro            | # Wheat germ                             |
| # Filler           | # Wheat gluten                           |
| # Fillers          | # Wheat starch                           |
| # Flour            |                                          |
| # Graham           |                                          |

#### FREQUENTLY OVERLOOKED FOODS THAT OFTEN CONTAIN GLUTEN

- |                              |                            |
|------------------------------|----------------------------|
| # Broths and soups           | # Orzo (rice-shaped pasta) |
| # Coating mixes              | # Pastas                   |
| # Communion wafers           | # Processed meats          |
| # Croutons                   | # Roux                     |
| # Imitation bacon            | # Sauces                   |
| # Imitation seafood (surimi) | # Seasoning                |
| # Marinades                  | # Self-basting poultry     |

- # Soup bases
- # Stuffings
- # Thickeners

- # Vegetarian meat substitutes

### GLUTEN-FREE INGREDIENTS THAT ARE FREQUENTLY QUESTIONED

- # Amaranth, Millet, tef – GF, but do question as to cross contamination
- # Buckwheat / Kasha -- GF, but do question as to cross contamination
- # Canola oil
- # Caramel color - OK in North America at the present time.
- # Corn gluten
- # Distilled Vinegars (all are GF except malt vinegar)
- # Glutinous Rice
- # Maltodextrin – usually from corn
- # Monosodium Glutamate (MSG) – In U.S. okay; question imported products with MSG
- # Quinoa -- GF
- # Starch – single word on labels denotes corn source

### CLARIFICATIONS

- # BUCKWHEAT/ KASHA. Pure buckwheat is gluten free. It is from the rhubarb family. HOWEVER, buckwheat flours, cereals, and pancake mixes often have regular wheat flour added to them. They may also be contaminated during processing. Read labels carefully.
- # VINEGAR
  - Apple cider, red or white wine, rice & balsamic vinegars are naturally gluten free.
  - Vinegar is rarely made from gluten-containing grains, but when it is, the distillation process eliminates the gluten protein.
  - EXCEPTION: Malt vinegar has malt added back in after distillation, is not gluten free, and should be avoided.
- # DEXTRIN. This should be questioned.
- # MALTODEXTRIN
  - Seldom made from wheat starch in North America.
  - Maltodextrin made from wheat starch is frequently used in European countries.
- # STARCH
  - For FOOD produced in the U.S. or Canada, the single word “starch” on a food label refers to cornstarch unless the source is otherwise specified (i.e., wheat starch).
  - Wheat starch is used infrequently in North America. Wheat starch is not permitted in “gluten free” foods in Canada or USA, but is used in some European GF foods.
  - This rule does NOT apply to medications. Also, generic brands may have different formulations or coatings from a major brand. Always check with the pharmaceutical company.

## INGREDIENTS TO QUESTION

- # “Seasonings” (as opposed to pure spices) – blend of flavoring agents; may contain a carrier of unknown source to prevent sticking together; important to question in restaurants.
- # Brown Rice Syrup – may contain a derivative of barley
- # Dextrin – may or may not have a wheat source.
- # Flavorings – natural, especially in meats
- # Hydrolysates: HPP (hydrolyzed plant protein) or TVP (texturized vegetable protein) do not have to declare sources – investigate. Hydrolyzed Vegetable Protein must declare source on all labels.
- # Modified food starch - can be from any starch source
- # Mono & Diglycerides – May have a wheat carrier when used in dry ingredients, but it should be declared. Likelihood is small that there is gluten at the present time.
- # Soy sauce (often contains wheat) – look on label.

## CLARIFICATIONS

- # MODIFIED FOOD STARCH
  - Can be derived from wheat, tapioca, potato, etc.
  - In the U.S. & Canada, identification of the starch source is not yet required.
  - HOWEVER, gluten-containing starches are seldom used in North America.
  - BUT ALWAYS call the manufacturer to confirm source.
- # CAMEL COLOR
  - Gluten-containing components not used in North America according to food processors.
  - Corn is most often used.
- # FLAVORINGS
  - Natural flavorings are from any edible source
  - Artificial flavorings are enhancers not from an edible source; these probably do not ever contain gluten, unless they are combined with natural flavorings.
  - Flavorings usually do not use gluten-containing ingredients
  - HOWEVER, some flavorings may contain: BARLEY MALT or HYDROLYZED WHEAT PROTEIN
- # SEASONINGS
  - Seasonings are a blend of flavoring agents, such as herbs, spices, protein hydrolysates
  - Some seasonings are combined with a carrier (of unknown source), like salt, sugar, confectioner’s sugar, lactose, whey powder, milk powder, cereal flours, starches.  
Note: Wheat-containing components are often used in gravy mixes, snack foods and sauces.
- # MONO- and DIGLYCERIDES
  - According to “Gluten-Free Living”, these are fats and at the present time are usually not derived from wheat. A wheat-derived carrier is sometimes used in dry ingredients where the source may or may not be identified on the label. However, this source is unlikely at the present time.

- # HYDROLYZED VEGETABLE PROTEIN (HVP)  
HYDROLYZED PLANT PROTEIN (HPP)  
TEXTURIZED VEGETABLE PROTEIN (TVP)
  - For foods produced in the U.S., the protein source must be identified (e.g., hydrolyzed wheat protein, or hydrolyzed soy protein)
  - Source of plant or vegetable protein may be wheat.
  - Call manufacturer if the source is not specified.
  
- GLUTEN-FREE VEGETABLE GUMS:  
Acacia Gum (Gum Arabic), Algin (Alginic acid), Carageenan, Carob Bean (Locust Bean), Cellulose, Guar Gum, Xanthan Gum, Karaya Gum, Methylcellulose, Tragacanth  
NOTE: Oat gum is *not* currently being used in the North American food supply.

### III. GUIDELINES FOR FOOD SELECTION FOR A GLUTEN-FREE DIET

#### BEVERAGES

# Recommended:

Milk  
Coffee\*  
Tea\*  
Fruit drinks\*  
Soy milk\*  
Wine



# Exclude:

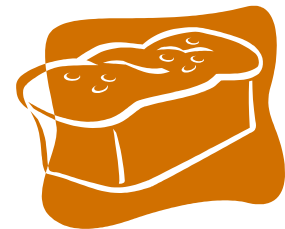
Malted milk  
Some instant drink mixes & some herbal teas & some soy & rice milks may have a barley malt enzyme.  
Beer, ale, lagers

#### BREADS

# Recommended:

Breads, rolls & crackers made from allowed flours\*  
Pure corn tortillas\*  
Rice cakes\*

# Exclude all others unless thoroughly checked out.



#### CEREALS

# Recommended:

Puffed rice\*  
Cream of Rice  
Cornmeal  
Grits  
Hominy  
Breakfast cereals made with allowed grains

# Exclude all cereals with malt flavoring or cereals on gluten-contaminated equipment

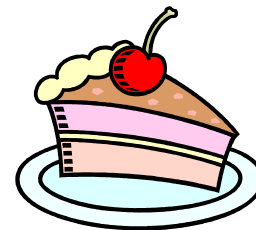


made

#### DESSERTS

# Recommended:

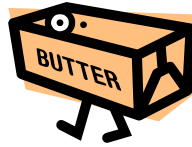
Ice Cream  
Fruit ice  
Custard  
Cornstarch, tapioca & rice puddings  
Commercial cakes, cookies & pies made with allowed ingredients  
Baked fruit



- # Exclude:
  - Bread pudding
  - Ice cream cones
  - All others made with gluten

### FATS

- # Recommended:
  - Butter
  - Margarine
  - Homemade salad dressings
  - Pure mayonnaise prepared with allowed distilled vinegar
  - Vegetable oils



- # Exclude unless thoroughly checked out:
  - Most commercial salad dressings

### FRUITS

- # Recommended:
  - All fresh, canned & frozen fruits
  - Pure fruit juice
  - Dried fruit – check if dusted with flour



- # Exclude unless thoroughly checked:
  - Thickened fruit – pie filling
  - Watch canned fruit dessert for gluten-containing ingredients
  - Check dried fruit for wheat or oat flour

### MEAT & MEAT SUBSTITUTES

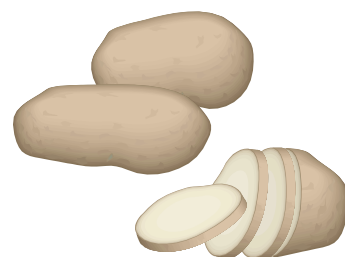
- # Recommended:
  - Fresh meat, poultry, fish & shellfish
  - Eggs
  - Dried peas & beans
  - Nuts
  - Peanut butter
  - Aged brick cheese
  - Many yogurts
  - Tofu (soy)



- # Exclude unless thorough checked:
  - Processed meats, such as lunchmeats & hot dogs
  - Self-basting turkey
  - Imitation meats can contain wheat starch or wheat gluten.

### POTATOES and OTHER STARCHES

- # Recommended:
  - White potatoes
  - Sweet potatoes / Yams
  - Hominy
  - Plain potato chips
  - Plain corn chips



Rice  
Oriental rice noodles  
Pastas made with allowed flours

- # Exclude unless thoroughly checked:
  - Pasta
  - Potato & rice mixes
  - Rice pilaf
  - Creamed or scalloped potatoes
  - French fries fried in a shared vat & seasoned fries
  - Seasoned chips

### SOUPS

- # Recommended:
  - Homemade broth
  - Vegetable or cream soups made with allowed ingredients
- # Exclude unless thoroughly checked:
  - Most commercial soups & broths
  - Most bouillon cubes



### SWEETS

- # Recommended:
  - Sugar
  - Most syrups
  - Honey
  - Jelly, jam
  - Hard candy (unless dusted with flour)
  - Plain chocolate
  - Pure cocoa
  - Cocoa
  - Molasses
  - Meringues
  - Peanut butter
- # Exclude unless thoroughly checked:
  - All others



### VEGETABLES

- # Recommended:
  - All fresh, frozen & canned plain vegetables
- # Exclude unless thoroughly checked:
  - Creamed or breaded vegetables
  - Canned baked beans



## MISCELLANEOUS

- # Recommended:
  - Iodized salt (except for DH'ers who want to avoid iodine)
  - Herbs
  - Pure spices
  - Baking soda, baking powder
  - Cream of tartar
  - Dry mustard – most



- # Exclude unless thoroughly checked:
  - Watch for gluten containing fillers
  - Check out all chip dips

## CALLING THE COMPANIES

- # Look for the phone number on the label.
- # Be sure to be specific.
- # Ask what the source of the questionable ingredient is or ask is there any heat, rye or barley in the product, rather than asking “Is the product gluten free?”
- # Determine how well lines are cleaned and then decide whether to use the product.



## IMPROVED FOOD LABELING – TOP 8 ALLERGENS

In January, 2006, because of the NEW bill recently passed by Congress, these allergens would always be listed when present in foods as ingredients or components:

Milk	Soybeans
Fish	Peanuts
Eggs	Tree Nuts
Wheat	Crustacia – Shellfish (Lobster, shrimp, crab, Etc.)

## TIPS

- # It is best to combine gluten-free flours for better baking
- # Flours need to be stored in a cool dry place
- # Use xanthan or guar gum in baked goods
- # Evaluate your kitchen: Keep separate toasters, flour sifters, spreads & condiments to avoid cross contamination.
- # No “double-dipping”; use separate implements to lift and then spread.
- # Freeze unwanted baked goods; you may find another use for them.
- # Consider buying a bread machine or a very good stand mixer.

## ENRICHMENT

- # Most gluten-free grain products currently are not enriched with vitamins and minerals lost through processing
- # Choose a combination of flours that have more fiber, such as sorghum, bean flours, quinoa, soy, brown rice, Montana, etc., rather than highly processed white rice, potato flours, and tapioca starch.

## GLUTEN-FREE FOOD GUIDE PYRAMID

- # Fats, Oils & Sweets – use sparingly
- # 2-3 servings of meat, poultry, fish, beans, eggs & nuts
- # 2-3 servings of milk, yogurt, cheese
- # 2-4 fruits
- # 3-5 vegetables
- # 6-11 servings of bread, cereal, rice & pasta

#### SERVING SIZES – Per Day

- # GF bread, cereal, rice & pasta:
  - 1 slice GF bread or
  - ½ cup cereal, pasta or rice
- # Vegetables:
  - 1 cup raw leafy vegetables, or
  - ½ cup cooked vegetables, or
  - ¾ cup vegetable juice
- # Fruit:
  - 1 medium piece of fresh fruit, or ½ grapefruit, or
  - ¼ cup dried fruit, or
  - ¾ cup fruit juice
- # Milk:
  - 1 cup milk, or
  - 8 oz. yogurt, or
  - 1-1/2 oz. natural brick cheese, or
  - 2 oz. processed GF cheese
- # Meat, poultry, Fish, Dry Beans, Eggs & Nuts
  - 2-3 ounces cooked lean meat, poultry or fish, or
  - ½ cup cooked dry beans or 1 egg = 1 oz. meat
  - 2 TBSP GF peanut butter, or 1/3 cup nuts – 1 oz. lean meat

#### MEAL PLANNING

- # Convenience is a word from the past
- # Start cooking from scratch
- # Plan ahead; make a weekly menu
- # Make up mixes – pancake, “bread in a bag”, brownie, “cake mix in a bag”
- # Make extra of rice, corn bread, etc.
- # Save all crumbs (in freezer) for other recipes. Use corn bread for breading meat, Cookie crumbs for pie crust or cheesecake crust.
- # Get yourself a fun apron and embrace your new way of life!

#### CONVERTING OLD FAVORITES

- # It's relatively easy.
- # Garfava flour substitutes 1:1 for wheat flour.
- # Have GF flour blends premixed in pantry or refrigerator.
- # Add approximately 1 tsp. Xanthan gum per 1 cup GF flour
- # Substitute the GF equivalent for ingredients in recipes.

#### EXPERIMENT

- # Gluten-free cooking is a science experiment.
- # Different consistency from non-GF products in bread, pizza, dough, buns, cakes, etc.
- # KEEP TRYING!

## BREAKFAST IDEAS

1. ½ grapefruit  
8 oz. yogurt  
½ cup hot buckwheat cereal  
(Pocono brand)
2. 2 GF pancakes  
½ cup blueberries  
1 cup skim milk
3. ¾ cup GF cereal  
1 banana  
1 cup skim milk
4. 2 GF waffles (Van's)  
2 TBSP peanut butter  
¾ cup orange juice

## DINNER IDEAS

1. 3 oz. chicken breast, pan fried  
Sliced apples or applesauce  
Salad
2. Pan sautéed potatoes with 1 TBSP oil  
Baked chicken breast with Picante sauce; slice of  
Mozzarella cheese on top  
Fresh steamed broccoli
3. Baked potato topped with 1 cup cooked vegetables, 1 cup stewed  
tomatoes & 1-1/2 oz. shredded cheese  
½ cup peaches  
Salad
4. Pork chop with GF BBQ sauce  
1 cup brown rice  
½ cup carrots cooked in orange juice  
1 cup strawberries with Cool Whip
5. 3 oz. salmon steak, grilled  
¾ cup “fried” potatoes – baked in 1 TBSP oil with seasonings in oven.  
Green Salad  
Waldorf salad (cut up apples, celery, walnuts & raisins in mayonnaise)  
GF cookies for dessert



## SNACKS (2 – 3 per day)

- Dried fruit
- Nuts
- Pumpkin seeds
- Sunflower seeds
- Fresh fruit
- Fresh cut veggies (dip in GF salad dressing)
- Plain tortilla chips (corn)
- Celery with peanut butter or cream cheese
- Corn nuts
- Soy nuts
- Mini rice cakes (topped with peanut butter or cream cheese)
- GF pudding
- Plain popcorn





## IV. TIPS FOR EATING OUT - MAKING THE CHEF YOUR ALLY

By Aaron E. Flores, Sous Chef, Storyteller's Café,  
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### # WHY IS IT A CHALLENGE TO EAT OUT AS A CELIAC?

You're afraid of getting sick	Everything has glutens!!
You're afraid the Chef will not accommodate	You think it's too much trouble for the kitchen
Possibility of too much contamination	The Chef will get mad at you
Untrained culinary staff	Embarrassed about asking questions/diet
Uncooperative Wait staff	

### ANATOMY OF A RESTAURANT

# Host/Hostess	# Kitchen Manager
# Head Waiter	# Line Cooks (any rank)
# Servers/Busboys	# Sous Chef and Executive Chef
# Maitre D'Hotel Manager / Supervisor	

### THINGS YOU CAN DO WHEN DINING or TRAVELING

- # Call ahead and confirm
- # Ask to speak with kitchen manager or chef (during non-peak times)
- # Always make advanced reservations during holidays or special events
- # A safe meal is ultimate your own responsibility

### TIPS WHEN TALKING WITH THE CHEF

- # Be courteous, friendly and patient
- # Explain your needs to the chef
- # Use a restaurant dining card
- # Make dining selections together
- # Ask if kitchen performs scratch cooking
- # Ask that separate pans be used
- # Always check ingredients lists or packages when unsure
- # Ultimately your own responsibility

### WHAT IF.... THE BEST OF ALL POSSIBLE WORLDS!

- # Restaurants have their GF menus all on the Internet
- # Servers know to get a chef
- # The Chef understands your needs
- # A wide variety of foods. All gluten free!
- # No cross contamination
- # No stress, no worry.
- # Open 7 days a week, 365 days a year!

Unfortunately, this is all a dream at the present time.

## GLUTEN-FREE DINING TIPS - Summary

- # Always ask for the kitchen manager or Chef
- # Explain your needs fully
- # Do not be afraid to speak up
- # Some fast food restaurants have a few gluten-free items (e.g., Wendy's, McDonald's)
- # Finer restaurants have a chef who is usually aware of gluten and other food allergies. Chefs in better restaurants are more likely to be able to cook whatever you want in the manner that is safe for you. Pick a couple of menu items to ask about.
- # Try to use your restaurant card or take your restaurant guide if you have one, especially when traveling.
- # Order a salad – without croutons. Ask for oil & vinegar, a vinaigrette, or bring your own bottle.
- # Bring some items with you – GF crackers, GF salad dressing, GF bread. Be careful if you ask to have your bread warmed up that it does not get contaminated.
- # Ask for “plain, bare-naked” foods: steak (no marinades or meat tenderizers), fresh fish, steamed vegetables, mixed green salad with no croutons, fresh fruit.
- # Ask them to clean/scrape the grill (or avoid if foccacia, hamburger buns, etc., are grilled on the same surface; use clean broiler pan (not one used to broil breaded fish, etc.). Perhaps you can ask if they will use a piece of foil on which to grill your piece.
- # Relax! You are fortunate!
- # Try new foods with a sense of adventure.
- # Think positive!
- # Enjoy your companions! Eat to live, rather than live to eat. Food is not as important any more.
- # Your quality of life with family and friends is your priority and your own responsibility

