GETTING STARTED

A Guide to Celiac Disease & the Gluten-Free Diet



www.BeyondCeliac.org



ABOUT GETTING STARTED

Did you just learn that you have celiac disease or non-celiac gluten sensitivity? If so, you probably are wondering what to do and where to turn. Perhaps you are thinking about all of the foods that you will miss and are unsure if you will ever be able to go out for dinner again.

Relax!

Getting started on the gluten-free lifestyle can seem challenging at first, but you soon will find that it becomes routine. And going gluten-free doesn't mean that you have to go without! Through my own personal experience, I learned that maintaining a gluten-free diet can be a positive, life-changing experience.

More than ever, there is a wonderful world of delicious gluten-free food available to all of us. The gluten-free marketplace is expanding daily, offering more and more options. Major grocery chains have developed gluten-free sections of their stores, the online gluten-free industry is booming and, increasingly, restaurants offer gluten-free items as a staple part of their menus. You will find that you will not have to compromise to enjoy a delicious and healthy diet.



Beyond Celiac has put together this *Getting Started: A Guide to Celiac Disease and the Gluten-Free Diet* to give you the information you need to navigate these early days of your recovery. We provide tips throughout to help to ease what often feels like a difficult path to walk. Here is my personal tip: Keep it simple and work on incorporating naturally gluten-free and nutritious foods into your diet.

As you go through the Guide, you will see that we have left white space in the columns on each page, as well as a blank Notes section at the end. Use this space to track your own important messages, phone numbers and reminders.

So, let's get started!

Alice Bast President and CEO Beyond Celiac @abast on Twitter

GETTING STARTED

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Celiac disease affects an estimated 1 in 133 Americans.

WHAT IS CELIAC DISEASE?

Celiac disease is an autoimmune disorder where the immune system attacks the tissues of the body. It is triggered by consuming a protein called gluten, found in wheat, barley and rye, which interferes with the absorption of nutrients from food by damaging a part of the small intestine called villi (fingerlike projections that help digest food). Damaged villi make it nearly impossible for the body to absorb nutrients into the bloodstream, leading to malnourishment and a host of other problems which may include anemia, bone disease, adverse pregnancy outcomes, and certain types of cancer.

Tragically, the vast majority—an estimated 83% based on research published in 2012—of people with celiac disease in the United States remain undiagnosed or misdiagnosed. The prevalence of celiac disease has increased fourfold since 1950, furthering the need for prompt diagnosis.

Who Gets Celiac Disease?

In the United States, researchers estimate that 1 out of every 133 persons has celiac disease. Some research suggests that this number may increase to 1 out of 100 for non-Hispanic whites. Celiac disease is genetic, which means that it is more common in people with a family history of the condition.

Because celiac disease is genetically based, both first and second-degree relatives of persons diagnosed with celiac disease are at an increased risk for developing the autoimmune condition. Family members of those diagnosed with celiac disease should be tested. Among relatives, celiac disease occurs in:

- 1 in 22 first-degree family members: parent, child, sibling
- 1 in 39 second-degree family members: aunt, uncle, niece, nephew, cousin, grandparent, grandchild, half-sibling

In some cases, it is believed that stressful events like pregnancy, surgery, infection or severe emotional distress may trigger the onset of the disease in genetically susceptible individuals.

Dermatitis Herpetiformis

Dermatitis herpetiformis (DH) is the skin form of celiac disease. It is characterized by an extremely itchy rash that is triggered when gluten is eaten.

It is important to note that not all people with DH will develop some of the other signs and symptoms that are also associated with celiac disease. In fact, up to 20% of patients with DH will actually have a normal small intestine when examined. Regardless of the presentation or symptoms, a positive diagnosis of DH always indicates celiac disease!

DH is diagnosed through a biopsy of the skin. Treatment includes both a gluten-free diet and medication specifically for the skin rash.

Non-Celiac Gluten Sensitivity

Along with celiac disease and dermatitis herpetiformis, non-celiac gluten sensitivity (NCGS) is a gluten-related disorder. NCGS is considered a non-autoimmune, non-allergic symptomatic response to gluten. Preliminary research suggests that NCGS may affect up to as much as 6% of the United States population. Currently there are no diagnostic tests for NCGS. A diagnosis may be made after celiac disease and other conditions are ruled out. The treatment for NCGS is a gluten-free diet.

SIGNS & SYMPTOMS OF CELIAC DISEASE

Celiac disease is an autoimmune disorder with a wide variety of signs and symptoms because it affects multiple systems of the body. With nearly 300 signs and symptoms associated with the disease, doctors often have difficulty diagnosing it and, in many cases, misdiagnose patients with other conditions, such as irritable bowel syndrome. Some of the most common presentations of celiac disease are often gastrointestinal and can include:

- Abdominal bloating
- National Abdominal Pain
- Constipation
- Diarrhea

- Foul smelling & bulky stool
- Heartburn
- Irritable bowel syndrome (IBS)
- Nausea 💜
- Vomiting
- 🔰 Weight loss or weight gain

Prevalent non-intestinal signs and symptoms can include:

- Anemia
- Bone disease (osteopenia and osteoporosis)
- Dental enamel defects
- Depression
- Failure to thrive (children)

- Fatique
- Headaches
- Irritability
- ltchy skin rash
- Joint pain
- Pale mouth sores

- Peripheral neuropathy (tingling or numbness in hands and feet)
- Short stature (children)
- Unexplained elevation in liver enzymes
- Unexplained infertility
- Unexplained miscarriage

Did you know Beyond Celiac offers a free celiac disease course for physicians? **Tell your doctor** to learn more by visiting: www.CeliacCMECentral.com

People who suffer from unexplained signs or symptoms for several months should speak to a doctor about celiac disease as a potential cause. A delayed diagnosis can increase the risk of developing new symptoms or other complications.

There may be an increased risk of celiac disease among individuals with other auto-immune diseases. These include Down syndrome, autoimmune thyroid disease, type 1 diabetes, Sjögren's syndrome, Turner's syndrome, and autoimmune liver disease.

DIAGNOSIS OF CELIAC DISEASE

With a wide variety of signs and symptoms associated with celiac disease, gaining an accurate diagnosis can be difficult in many cases. To determine if a patient has celiac disease, a physician will first order antibody tests (a simple blood test) followed by a small intestine biopsy. This combination of tests is considered the gold standard for diagnosis. Genetic testing also may be used to rule out a diagnosis of celiac disease.

Antibody Celiac Disease Test

When a physician orders antibody tests to screen for celiac disease, he or she is measuring antibodies to anti-endomysium and anti-tissue transglutaminase. The antibody tests will determine the response a patient's body is having to the gluten protein. A person with celiac disease will have higher-than-normal antibody levels.

The antibody test is made up of a panel consisting of Anti-TissueTransglutaminase (IgA-tTG), Anti-Endomysial Antibody (IgA-EMA), and Total IgA. If a patient is IgA deficient, it is recommended that the IgA/IgG-DGP (deamidated gliadin peptide) also be ordered.

In order for the test to be accurate, patients must be eating gluten regularly. If a patient has a positive antibody test, they will need a small intestine biopsy to confirm a celiac disease diagnosis.

Small Intestine Biopsy

If the antibody tests are indicative of celiac disease, patients should undergo a biopsy of the small intestine to determine if there is damage to the villi, which is characteristic of celiac disease.

The biopsy is taken using an endoscope, a long, thin tube that the physician weaves through the mouth and stomach to reach the small intestine. Once the endoscope reaches the small intestine, several tissue samples can be taken.

It is also important that patients maintain a gluten-containing diet prior to undergoing a small intestine biopsy.

It's important to be on a **normal**, **gluten-containing diet** when getting tested for celiac disease.

Genetic Testing

When a physician orders a genetic test for celiac disease, he or she is looking for certain genes. About 95% of people with celiac disease have the HLA-DQ2 gene and most of the remaining 5% have the HLA-DQ8 gene. Some people with celiac disease have both DQ2 and DQ8.

If a patient does not have either of these genes, it is nearly impossible for them to develop celiac disease. If these genes are not present the patient would not need a follow-up antibody test or endoscopy.

While genetic testing can be used to rule out celiac disease, it is not very helpful in diagnosing celiac disease. Approximately 40% of the United States population carries either DQ2 or DQ8, but a very small percentage of them actually go on to develop celiac disease.

When used to rule out a celiac disease diagnosis, genetic testing may be a good option for at-risk or high-risk children, or at-risk or high-risk people already on the gluten-free diet.

Lab Tests You May Need

When you are first diagnosed with celiac disease your doctor will order several laboratory tests, which may include:

- Celiac disease antibodies (for more information see page 6)
- Nutritional anemia profile (hemoglobin, hematocrit, folate, ferritin, vitamin B12)
- Vitamin profile (thiamin, vitamin B6, 25-hydroxy vitamin D)
- Mineral profile (copper, zinc)
- Lipid profile
- Electrolyte and renal profile
- Bone mineral density (within the first year after diagnosis for adults with celiac disease)
- Complete blood count (CBC)
- Thyroid stimulating hormone (TSH)

The specific tests you receive will vary according to your situation and physician discretion.

Source: Academy of Nutrition and Dietetics' Celiac Disease Toolkit



The treatment for celiac disease is a strict, lifelong gluten-free diet. Currently, there are no medications or surgeries that can cure this autoimmune disease.

What is gluten? Gluten is a protein found in the grains wheat, barley and rye.

The gluten-free diet is a lifelong commitment for people with celiac disease. Eating even tiny amounts of gluten can cause damage to the villi of the small intestine and prevent patients from absorbing nutrients into the bloodstream.

A physician will typically recommend that someone newly diagnosed with celiac disease visit with a registered dietitian skilled in the gluten-free diet. These professionals can help someone with celiac disease learn to read food labels and identify foods that are acceptable on the gluten-free diet. They can also help patients network with local celiac disease support groups and find grocery stores that specialize in gluten-free food items. This will help a patient begin living with celiac disease.

Most patients who strictly follow the gluten-free diet will experience relief of symptoms within a few weeks, although it may take several months or sometimes years for the small intestine to heal. Patients should keep in mind that the time it can take for their small intestine to heal can vary; each person's body is different.

In a small number of patients, symptoms and intestinal damage may persist despite following a strict gluten-free diet. This type of celiac disease is called refractory celiac disease. According to the National Institutes of Health (NIH), researchers are currently evaluating drug treatments for patients with refractory celiac disease.

Due to the harmful and sometimes prolonged effects of gluten exposure, those with celiac disease may have severe nutrient malabsorption issues, and low levels of essential vitamins and minerals. These levels can gradually improve when a gluten-free diet is started, but consulting a doctor or registered dietitian who is knowledgeable about celiac disease during this critical restoration process is strongly encouraged.

If you have been diagnosed with celiac disease your goal is to stay gluten-free for life. Concentrate on what you CAN eat, and start simply!

A first and simple step is to look for dishes that need very little customization, perhaps just the substitution of one gluten-free ingredient for one that is not gluten-free. For example, make macaroni & cheese or baked ziti with rice, corn or lentil pasta, or prepare enchiladas with corn tortillas instead of the wheat flour variety.

Although single ingredient, fresh foods are a great way to start, packaged gluten-free choices are abundant in local stores. A growing number of restaurants have gluten-free selections and many even offer gluten-free menus. Food manufacturers may change ingredients, so it is still important to read labels, visit websites and/or call manufacturers if you have any questions.

In order to maximize the health and nutritional benefits of a gluten-free diet, you should embrace a diet filled with a variety of naturally gluten-free foods, such as fruits, vegetables, lean meat, poultry, and fish, low-fat dairy foods, eggs, nuts, seeds, and legumes. Remember that while the growing number of gluten-free products available is both exciting and tasty, a balanced diet containing a variety of healthy foods is best!

The gluten-free diet may be high in fat and low in carbohydrates, fiber, calcium, iron, folate, niacin, B12, phosphorus and zinc. As a result, those on a gluten-free diet may continue to suffer from low intakes of certain vitamins and minerals, and become

Focus on **what you CAN eat**, not what you can't.

susceptible to unwanted weight gain. To help make sure you get the most nutrition from the foods you eat, make sure to:

- Choose gluten-free whole grain products whenever possible. Read ingredients lists looking for whole grain corn, brown rice, teff, millet, sorghum, wild rice, amaranth, buckwheat, and guinoa as the first ingredient. Whole grains are sources of fiber, B vitamins, iron, and zinc.
- Choose refined gluten-free grain products (e.g., products made with refined flours, such as white rice flour and milled corn, and starches, such as corn starch and tapioca starch) that are enriched or fortified with B vitamins and iron over those that are not enriched or fortified whenever possible. You can tell if a product is enriched or fortified by reading the ingredients list. The added vitamins and minerals will be named. Enriched grain foods are sources of B vitamins and iron.
- Use the Nutrition Facts panel to compare the total fat and saturated fat content of the grain foods you buy. Choose the versions with the lowest fat and saturated fat content.
- Eat and drink recommended amounts of milk and milk-based products (or their equivalents, such as calcium and vitamin D fortified soy milk). Milk is a source of calcium, vitamin B12, and phosphorus. To keep fat intake down, choose low-fat and nonfat varieties most often.

This guide provides suggestions for food during the early healing process and while exploring the rapidly expanding marketplace. Most foods containing gluten have a gluten-free equivalent. Yes, even gluten-free beer and gluten-free pizza are available! When reading this Guide, remember that any food product suggestions are not individualized to meet daily calorie, protein, mineral and vitamin needs. Remember to work with a registered dietitian, as well as your physician, to determine individual nutrition needs.

LIVING WITH CELIAC DISEASE

Many diseases require treatment with medication or surgery. Not celiac disease. The only treatment is a lifelong gluten-free diet, eliminating wheat, barley and rye.

Eating even tiny amounts of gluten can cause damage to the small intestine and prevent nutrients from being absorbed into the bloodstream.

Repeated exposure to gluten can lead to ongoing symptoms and persistent, significant and sustained intestinal inflammation. In other words, if you cheat on your gluten-free diet, you could prevent your intestine from fully recovering, which, research suggests, could even affect your survival rate (Rubio-Tapia, et al. 2010).

Eliminating gluten-containing foods from the diet can seem overwhelming when you are first diagnosed, but with a little extra effort in the kitchen, you can eat delicious food that tastes just as good as the gluten-containing counterparts you are used to.

THE FIRST STEPS

1. Accept that you have celiac disease (or non-celiac gluten sensitivity).

The first step to managing a successful gluten-free diet is accepting that this is a necessity for you in order to live a long and healthy life. Having a positive attitude will make managing the diet much easier!

2. Schedule an appointment with a dietitian.

As soon as you are diagnosed with celiac disease, you should ask your doctor for a referral to a registered dietitian skilled in the gluten-free diet. These professionals can help you learn the basics of a gluten-free diet and make suggestions to get your body healthy. As an added bonus, dietitians also receive hundreds of samples from food vendors, so they may have gluten-free items for you to try!

3. Learn which foods contain gluten.

Gluten is a protein found in the grains wheat, barley and rye, which means that most breads, pastas, breakfast cereals, baked goods and sweet and savory snacks found on the grocery store shelves are off limits.

4. Learn how to read food labels.

It is important to always read the labels of prepared, canned and packaged foods to be sure that they do not include any gluten-containing ingredients. If a food is not labeled gluten-free, look for the words or ingredients "wheat," "barley," "rye," "oats," "malt," and "brewer's yeast" to indicate that the food is not safe to eat.

Plain meat, poultry, fish, fruit, vegetables, eggs, milk, nuts, seeds, and beans are all naturally gluten-free. There are many naturally gluten-free grains and flours including those made from corn, rice, millet, sorghum, teff, quinoa, buckwheat, and amaranth. Whenever possible, it is important to buy grains and flours that are labeled gluten-free.

5. Research gluten-free manufacturers.

As more people are diagnosed with celiac disease, the gluten-free marketplace continues to expand with more products available in grocery stores, natural food stores and online. There are hundreds of gluten-free products available including breads, pizzas, pastas, cookies, cakes and crackers. See page 21 for some examples of gluten-free manufacturers and links to learn more.

For how-to's, videos, recipes,

and more, visit:

www.BeyondCeliac.org/ qluten-free-food

6. Read gluten-free cookbooks and learn how to make your favorite recipes gluten-free.

There are hundreds of cookbooks available that offer tasty gluten-free recipes. Go to your local bookstore and browse through the cookbook section. To find more fantastic cookbooks, visit the Beyond Celiac website at www.BeyondCeliac.org/books. If you are new to cooking in general, spend some time watching cooking shows on the Food Network or check out a basic cookbook from the library that talks about the various principles of cooking.

7. Prevent cross-contact at home by educating your family.

Teach your family about the gluten-free diet. Learning to prevent cross-contact is key to staying on track. This requires separating gluten-free products from other items in your pantry, as well as washing all cooking surfaces before preparing gluten-free foods. Remind your family not to share utensils, pots and pans, toasters and toaster racks, or other cooking items without thoroughly washing them beforehand. For example, take precautions not to dip a knife into peanut butter that has already touched a piece of bread.

8. Attend local celiac disease support group meetings and meet-up groups.

Most cities in the United States have a celiac disease support group. Look up your local chapter and attend a meeting. Vendors send product samples to most meetings, so this is a great opportunity to taste gluten-free goodies. Also, celiac disease meet-up groups are a new social phenomenon! In major cities individuals with celiac disease have joined together to eat out at restaurants. By joining a group, you will meet other people with celiac disease and learn which restaurants are celiac disease friendly.

In addition to **Beyond Celiac** (www.BeyondCeliac.org), there are several national gluten-free advocacy and support groups. Many of these groups have local chapters that are active in your community.

American Celiac Disease Alliance - www.americanceliac.org
Celiac Disease Foundation - www.celiac.org
Celiac Support Association - www.csaceliacs.org

Gluten Intolerance Group - www.gluten.net
Gl Kids: Health & Hope for Children with Digestive Disorders - www.gikids.org
R.O.C.K. (Raising Our Celiac Kids) - www.celiackids.com

9. Schedule follow-up appointments with your doctor and dietitian.

To make sure your gluten-free diet is successful, schedule follow-up exams and take the celiac disease antibody test when directed by your doctor. If your blood test comes back normal, it will confirm that you are maintaining a completely gluten-free diet! If it remains elevated, you can work with your dietitian to determine how you may be accidently eating gluten.

10. Fat at restaurants.

Ask questions, but don't give up your social life! Beyond Celiac's website, www.BeyondCeliac.org, has a directory of restaurant locations that have gluten-free menu options!

GLUTEN-FREE DIET 101

Sticking to a gluten-free diet can be difficult if you don't know what foods contain gluten. If you have celiac disease or non-celiac gluten sensitivity you must avoid protein from the grains wheat, barley and rye.

You'll soon become an expert at reading labels and inquiring about ingredients. It may take a little time, but with the right support system, you'll be able to navigate the glutenfree diet with ease.

UNSAFE INGREDIENTS

Grains which should **not** be eaten (and ingredients derived from them)

Wheat grain, including all types such as einkorn, emmer, kamut, and spelt, and most forms, such as wheat flour, wheat bran, wheat germ, hydrolyzed wheat protein, and wheat starch (unless the wheat starch is labeled gluten-free or is an ingredient in a food labeled gluten-free). There are other words that mean wheat when used in an ingredient list but the word "wheat" should always be listed in either the

Visit www.BeyondCeliac.org/ Kitchens for a list of restaraunts accredited in safe gluten-free procedures. ingredients list or in the Contains statement (for foods regulated by the Food and Drug Administration). These words include bulgur, graham, farina, semolina, and durum.

Other ingredients to avoid:

- Wheat grain
- Barley grain and barley flour
- Malt, malt extract, malt flavoring (these ingredients are found in many foods, including malt vinegar, malted milk, and malt beverages, such as beer)
- Rye grain and rye flour
- Triticale grain and triticale flour (a cross between wheat grain and rye grain)
- Oats (unless labeled gluten-free)

- Brewer's yeast (if it is an ingredient in a food product it may be contaminated with gluten)
- Modified food starch made from wheat (unless it is an ingredient in a food product labeled glutenfree)
- Dextrin made from wheat (unless) it is an ingredient in a food product labeled gluten-free)

Packaged foods that may contain gluten

You have to read the labels of all packaged foods. The foods listed below are just a few of the many products that may contain gluten ingredients:

- Bouillon/Broth
- Communion wafers
- Deli/lunch meat
- Gravies, sauces and marinades
- Imitation meat and seafood
- Licorice
- Salad dressings

- Seasoned potato/tortilla chips
- Seasoned rice mixes.
- Soup Soup
- Soy sauce
- Teriyaki sauce
- Vegetables in sauce
- Veggie burgers

Other products that may contain gluten

- Children's art supplies—While most children do not eat their art supplies, they often put their hands in their mouths before washing them. While Play-Doh® contains wheat, Aroma Dough (www.aromadough.com) is gluten-free.
- Personal care products used on the mouth Some lipstick, lip gloss, and other lip care products may contain ingredients derived from gluten. While

these products are not eaten per se, they may be inadvertently ingested. Regardless, the amount of gluten they contain and the amount that may be "eaten" is likely very small. If you are concerned, read ingredient lists carefully or contact the manufacturer. An increasing number of cosmetics manufacturers are labeling products gluten-free.

- Alcoholic beverages—Malt beverages such as traditionally made beer are NOT considered gluten-free. Specially manufactured gluten-free beers made with a substitute for malted barley are available. Pure distilled alcohol (e.g., vodka) and wine are considered gluten-free.
- Vitamins, supplements and medications—Some inactive ingredients, like excipients and binders, may contain gluten. See page 34 of this Guide for more information on gluten in medications.

Oats: A Special Caution

By definition oats are naturally gluten-free. In their natural form oats do not contain the gluten protein. However, fields where oats are grown and mills that produce and store oats may also grow and manufacture wheat, barley or rye. These practices result in cross-contact. The good news is that cross-contact is preventable.

Current research strongly suggests that the majority of patients with celiac disease can tolerate oats in their pure, uncontaminated form. It is important to note that a very small percentage of individuals with celiac disease do react to pure, uncontaminated oats. Although the cause for this reaction is not completely understood, some literature suggests that a protein in oats can trigger a response similar to gluten.

Individuals who would like to add gluten-free oats to their diet should do so under the guidance of their dietitian or physician. For persons with celiac disease, oat intake should be limited to the equivalent of ½ cup of rolled gluten-free oats per day.

Any oats and products containing oats that are eaten must be labeled gluten-free. When shopping, look for oats that are specifically labeled "gluten-free." This applies to both single ingredient oat products and multi-ingredient products containing oats.

Individuals who develop any new symptoms after adding gluten-free oats to their diet should bring this to the attention of their dietitian or physician.

Talk to your doctor before reintroducing oats into your diet. Choose only "pure, uncontaminated" or "certified gluten-free" oats.

Visit www.BeyondCeliac.org/Baking for recipes, videos, tips and tricks for gluten-free baking.

SAFE GLUTEN-FREE SUBSTITUTES

If you don't use the correct substitutes when replacing wheat flour in gluten-free recipes, your cookies may come out of the oven flat and tasting like rubber. Below is a list of the most useful gluten-free flours that can be used when substituting for wheat flour, and some tips on how to make your favorite recipes gluten-free!

Almond Meal Flour

Almond meal flour is made from whole almonds that have been finely ground into a powder. It is used in cookies, cakes and other desserts. Be sure to store almond meal flour in the freezer.

Amaranth Flour

Amaranth has a very high protein and fiber content and adds a nutty flavor to gluten-free baked goods. It is most commonly used in combination with other flours to make breads, pasta, pancakes and other recipes. Make sure to buy amaranth flour that is labeled gluten-free.

Brown Rice Flour

Brown rice flour packs a bit more of a nutritional punch than white rice flour. Use this flour in muffins and breads when a heartier product is desired. Be sure to buy brown rice flour that is labeled gluten-free.

Buckwheat Flour

Although buckwheat is a grain-like ingredient, it has no relation to wheat and is, in fact, gluten-free. Buckwheat is used throughout Europe to make pancakes and serves as a fantastic alternative for gluten-free cooking, especially when used to make breakfast cereal and gluten-free breads. Make sure that any products you buy containing buckwheat are labeled gluten-free.

Coconut Flour

Coconut flour is a delicious and healthy alternative flour that has a high fiber content. It provides a natural sweetness and added moisture to baked goods.

Corn Flour

Compared to cornmeal, corn flour has a blander taste, as well as a lighter and finer texture when used in baked goods. Whenever possible buy corn flour that is labeled gluten-free.

Cornstarch

Cornstarch is made by grinding up the starchy (carbohydrate) portion of a corn grain and turning it into a very fine powder. Cornstarch is typically used as a thickening agent, such as for soups, sauces and stews. It is also used in pre-made gluten-free flour blends because it creates a smoother texture.

Garbanzo Bean Flour (Chickpea Flour)

Garbanzo bean flour, aka chickpea flour, is like all bean flours in that it is high in protein and fiber content. As opposed to rice, tapioca and potato flours, bean flours more closely mimic the texture of white wheat flour when used in baked products.

Guar Gum

Guar gum is made from guar beans and has eight times the thickening ability of cornstarch. It works well for thickening sauces and is often used to make glutenfree breads.

Millet Flour

Millet flour looks and tastes a lot like corn flour or cornmeal and is a great source of fiber. Use this flour in muffins and cornbreads. Be sure to buy millet flour that is labeled gluten-free.

Potato Flour

Potato flour is made by grinding potato roots and subsequently removing the fibrous material. Potato flour is most commonly used to thicken sauces and is generally included in gluten-free flour blends because it adds moisture to baked goods.

Quinoa Flour

Quinoa is one of the more nutritionally packed gluten-free substitutes. It is loaded with protein and a host of other vitamins and minerals. Quinoa is known for its mild nutty flavor. It can add both texture and moisture in baking. Be sure to buy quinoa flour that is labeled gluten-free.

Sorghum Flour

Sorghum is a millet-like grain and adds a strong flavor to gluten-free baked goods. Be sure to buy sorghum flour that is labeled gluten-free.

Tapioca Flour

Tapioca flour can add chewiness to baked goods, and is a wonderful thickening agent. Tapioca flour is known for being one of the more flavorless gluten-free flours, so it won't affect the taste of your dish.

When starting out, follow recipes exactly to get a sense of the different tastes and textures. Gluten-free batters are thinner than wheat batters, for example.

Teff Flour

Teff flour is a nutritional powerhouse and has a mild nutty flavor and a very soft fine texture. It works well in cookies and pie crusts. Be sure to buy teff flour that is labeled gluten-free.

White Rice Flour

White rice flour is made from finely ground white rice and is most often used as a replacement for wheat flour in gluten-free breads. Be sure to buy white rice flour that is labeled gluten-free.

Xanthan Gum

Xanthan gum is used to add volume or fluffiness to gluten-free breads and other baked goods. It is made from the fermentation of sugar by the organism Xanthomonas campestris.

BAKING WITH GLUTEN-FREE FLOURS

Gluten-free baked goods will generally turn out better if a combination of gluten-free flours and starches is used. Gluten-free flours have different tastes and textures. Gluten-free cooking and baking is all about experimenting! In general, you do not want to substitute a single gluten-free flour for the wheat flour called for in a recipe. You may want to try substituting 34 cup of a gluten-free flour and 14 cup of a gluten-free starch (carbohydrate portion of grain) for 1 cup of wheat flour. It may be easiest to buy an all-purpose baking mix when you are first getting started (see next page under "All Purpose Gluten-Free Flour.") The gluten-free marketplace continues to expand with replacement options that can be substituted one-for-one with wheat flour. (Be sure to read intended use and instructions.)

When you are first learning to bake gluten-free it may be helpful (and far less frustrating) to use a cookbook. Following tried and true recipes at first will help you learn about the various flours, including their tastes and textures.

TIPS FOR INCORPORATING GLUTEN-FREE FLOURS AND STARCHES INTO FAVORITE FAMILY RECIPES

All Purpose Gluten-Free Flour

Find a prepared gluten-free baking mix to keep handy in your refrigerator. Several gluten-free manufacturers produce these mixes. These tried and true mixtures of gluten-free flours, starches and leavening agents can often be substituted with wheat flour on a one-for-one basis.

Flouring or Breading Meat and Fish

There are several companies that make gluten-free breadcrumbs, but you can also make your own gluten-free coating. Try commeal, potato or quinoa flakes or mixtures of gluten-free flours. Whirl some dry gluten-free bread or gluten-free com tortilla chips in a food processor until finely ground. Some people enjoy crumbled gluten-free waffles or gluten-free crisped rice. These are not usually sweetened and, when seasoned with salt, pepper, garlic powder, crushed red pepper flakes, etc., create a tasty, crunchy coating. Using crushed nuts as a topping is also a great way to increase the nutritional value of your dish.

Gravy

Use arrowroot starch as a thickener.

Pudding and Pie Filling

Try gluten-free starches such as comstarch, potato starch, tapioca or arrowroot.

Roux or White Sauce

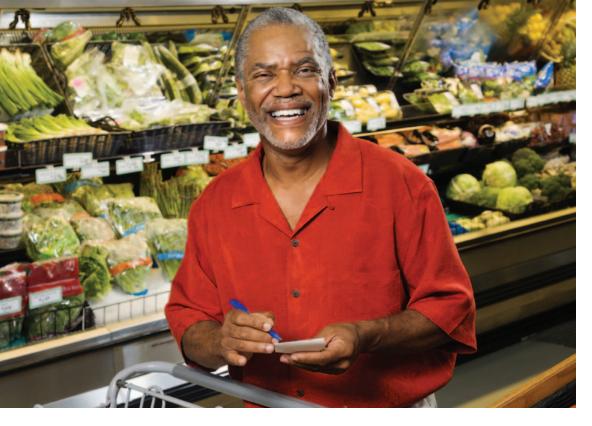
Use rice flour as you will likely find that bean and soy flours have too strong a taste.

Stuffing

Make your favorite recipe with gluten-free combread or gluten-free sandwich-style bread (homemade or store-bought), or experiment with rice stuffing.

The Growing Gluten-Free Market

The gluten-free packaged foods industry has been growing rapidly. In 2012, sales of gluten-free products exceeded \$12.4 billion (SPINS, 2012). Prepared gluten-free substitutes and mixes are now available for nearly all of your favorite gluten-containing foods. Even so, many people with celiac disease find that they enjoy freshly-baked breads, cookies, muffins and pie crusts. Learning to master gluten-free cooking and baking is also a great way to bring families together for quality time. Visit our Gluten-Free Recipe Boxes and Gluten-Free Recipe of the Week at www.BeyondCeliac.org/recipes.



WHERE TO PURCHASE GLUTEN-FREE FOOD

Grocery stores and food distributors nationwide are responding to the skyrocketing demand for gluten-free products. You likely will be able to find many products that are labeled gluten-free in your local grocery store.

Here are a few places where you can shop for gluten-free products. This is not a complete list, so feel free to explore other grocery stores and specialty shops in your area.

In Stores **Online**

ACME Markets: www.acmemarkets.com

Giant Food: www.giantfood.com

H-E-B: www.heb.com Hy-Vee: www.hy-vee.com

Ingles: www.ingles-markets.com

Publix Super Markets: www.publix.com

ShopRite: www.shoprite.com

Stop & Shop: www.stopandshop.com

Target: www.target.com

Trader Joe's: www.traderjoes.com Walmart: www.walmart.com Wegmans: www.wegmans.com

Whole Foods Market: www.wholefoodsmarket.com

Amazon.com GlutenFreeMall.com Vitacost.com

Many grocery and discount stores also offer online shopping and home delivery.

SPECIALTY GLUTEN-FREE MANUFACTURERS

Food manufacturers have responded to the call for the gluten-free products, and they're continuing to develop new foods to meet everyone's tastes and preferences. Many of these products can be purchased in stores or ordered straight from the manufacturer's website.

Looking for recommendations? Visit Beyond Celiac's Gluten-Free Hot Products blog, where we post reviews of new gluten-free products on a weekly basis (GlutenFreeHotProducts.com).

Here are just a few products you may find in your grocery store:

Bread: Rudi's Gluten-Free Bakery, www.rudisglutenfree.com; Udi's Gluten Free Foods, www.udisglutenfree.com

Breakfast Cereal: Arrowhead Mills, www.arrowheadmills.com; Attune Foods, www.attunefoods.com; Nature's Path, www.naturespath.com

Cookies: Enjoy Life, www.enjoylifefoods.com; Lucy's Cookies, www.drlucys.com; Tate's Bake Shop, www.tatesbakeshop.com

Crackers: Blue Diamond, www.bluediamond.com; Crunchmaster, www.crunchmaster.com; Mary's Gone Crackers, www.marysgonecrackers.com

Ethnic: Simply Asia, www.simplyasia.com

Flours and Grains: Arrowhead Mills, www.arrowheadmills.com; Authentic Foods, www.authenticfoods.com; Bob's Red Mill, www.bobsredmill.com

Gluten-Free Oats: Cream Hill Estates, www.creamhillestates.com; Gluten Free Harvest, www.glutenfreeoats.com

Snack Bars: Bakery on Main, www.bakeryonmain.com; KIND Healthy Snacks, www.kindsnacks.com; Glutino, www.glutino.com; Larabar, www.larabar.com

Pasta: Ancient Harvest, www.ancientharvest.com; DeBoles, www.deboles.com; Jovial Foods, www.jovialfoods.com





For weekly **gluten-free product reviews**:

www.GlutenFreeHotProducts.com

GLUTEN-FREE FOOD LABELING

Food Labeling 101

The gluten-free marketplace is booming and new gluten-free products are filling grocery shelves on a regular basis. Just as more gluten-free products have increasingly become available over time, so too has it become easier to identify gluten-free products from gluten-containing ones.

The key to gluten-free food safety is not only about learning how to identify glutencontaining ingredients by reading food labels, but it's also about understanding which food products have a high-risk for cross-contact with gluten.

As you begin your gluten-free journey, Beyond Celiac suggests some simple tips for navigating the grocery store:

- Stick to packaged and processed foods that have only a few simple ingredients—their labels are easier to read!
- When in doubt, purchase products that are labeled gluten-free.
- Look out for less-obvious sources of barley, specifically malt and brewer's yeast.
- Whenever possible, purchase naturally gluten-free grains, flours and starches that are labeled gluten-free and, also, preferably certified gluten-free by a third party.
- When foods containing "smoke flavor" aren't labeled gluten-free, verify its status with the food manufacturer.
- Noid poultry and meat products that do not list the source of dextrin or starch on the product label.
- Products labeled "wheat-free" are NOT necessarily gluten-free—remember to read all ingredients.
- Avoid purchasing from bulk bins—cross-contact can easily occur with scoops and gluten-containing items.
- Opting for fresh, whole foods that are naturally gluten-free instead of gluten-free packaged and processed foods is not only safer, but can be more nutritious too.

Food Labeling 201

While Beyond Celiac encourages all consumers to carefully read food and beverage labels before completing their gluten-free purchases, we trust you will find that it has never been easier to tell if a food product includes gluten-containing ingredients. Since 2004, the celiac disease community has made significant progress working with food manufacturers and the government to ensure that foods labeled gluten-free are truly safe to eat.

Labeling Requirements: The Food Allergen Labeling & Consumer Protection Act (FALCPA)

The Food Allergen Labeling and Consumer Protection Act (FALCPA) mandates that if a packaged food product regulated by the U.S. Food and Drug Administration (FDA) includes an ingredient that contains protein from any of the top eight allergens, the allergen must be named in either the ingredients list or a separate "Contains" statement immediately following or next to the ingredients list. The top eight allergens are milk, eggs, peanuts, tree nuts, fish, Crustacean shellfish, soy, and wheat.

This means that if you do not see the word "wheat" in the ingredients list or Contains statement of a packaged food product regulated by the FDA, none of the ingredients in that food product include wheat protein. Barley and rye are not considered to be top eight allergens, so they are not part of FALCPA.

FALCPA also required a federal standard to be set defining the term "gluten-free" and rules for using the term on product labels.

On August 2, 2013, the FDA announced that if a product bears the label "gluten-free," the food must contain less than 20 ppm gluten, as well as meet other criteria. The rule also applies to products labeled "no gluten," "free of gluten," and "without gluten." The labeling of food products as gluten-free is a voluntary action for manufacturers and manufacturers are not required to test for gluten.

Did you know? **The "gluten-free" labeling rule was a landmark event** that took 8+ years to finalize.

In addition to containing less than 20 ppm gluten, any product that carries a gluten-free claim must also meet other criteria. Either the product inherently does not contain gluten, such as a bag of raw carrots or bottle water, or meets the following criteria:

- Does **not** contain an ingredient that is a whole, gluten-containing grain (i.e. wheat, barley, rye or crossbred hybrids of these grains)
- Does **not** contain an ingredient that is derived from a gluten-containing grain and has **not** been processed to remove gluten (i.e. wheat flour)
- May contain an ingredient that is derived from a gluten-containing grain that has been processed to remove gluten (i.e. wheat starch) as long as the food product contains less than 20 parts per million (ppm) of gluten

The gluten-free labeling rule became effective on September 4, 2013 and manufacturers choosing to label products "gluten-free" will be required to comply with this regulation by August 5, 2014. While the regulation is voluntary, what's important to know is that any product that is labeled gluten-free must meet the FDA requirements—that accountability is key.

Other basic important information to know about food labeling requirements includes:

- The use of a "gluten-free" label does not replace or eliminate the need to comply with the mandatory allergen labeling which requires wheat to be listed as described above.
- A product whose label indicates the presence of wheat may be gluten-free if the wheat-containing ingredient (e.g. wheat starch) has been processed to remove gluten and results in a gluten content of less than 20 ppm. In such situations, the labeling must indicate that, "The wheat has been processed to allow this food to meet FDA requirements for gluten-free foods."

The new regulation also applies to dietary supplements, such as vitamins and minerals. The rule does not apply to:

- Foods regulated by the U.S. Department of Agriculture (USDA)
- Alcoholic beverages regulated by the Alcohol and Tobacco Tax and Trade Bureau (TTB)

Learn more about gluten and cosmetics—Visit

www.BeyondCeliac.org and search "Journal Article Sheds New Light on Gluten in Cosmetics"

- Prescription and over-the counter drugs
- Pet food
- Cosmetics

Label Reading

Consumers need to be aware that the use of a gluten-free label is optional, and non-labeled products may still be gluten-free. Reading the label to check ingredients remains an essential part of successfully managing the gluten-free diet.

If a product regulated by the FDA bears a "gluten-free" claim after August 5, 2014, it is considered to have met the FDA regulations of less than 20 ppm gluten and should be safe to eat.

Since manufacturers have until August 2014 to comply with the gluten-free food labeling rule, it is essential to read the ingredient label in its entirety, whether or not the product bears a "gluten-free" claim. Look for the following ingredients and these words in the ingredient list or 'Contains' statement:

🔰 Wheat 💮 Malt

Barley
Brewer's yeast

Rye Sye Oats (unless specifically labeled gluten-free)

The labeling requirements in FALCPA only apply to food products regulated by the FDA. Those products regulated by the U.S. Department of Agriculture (USDA) are not required to comply with FALCPA. The USDA regulates egg products, poultry products, meat products, and mixed food products that generally contain more than three percent raw meat or two percent or more cooked meat or poultry (e.g. soups, chilis, frozen entrees).

Even though USDA products are not required to comply with FALCPA, it's estimated that 80 to 90% of these products voluntarily comply. If there is any doubt about whether a USDA-regulated product is complying with FALCPA labeling, the following ingredients may be derived from wheat and need to be avoided or investigated: Starch, food starch, modified food starch and dextrin. It is important to note that in USDA-regulated products the single word starch can mean either "corn starch" or "wheat starch."

The USDA regulates certain

foods including egg products, poultry products, meat products and some mixed food products If you contact a food manufacturer to verify the source of an ingredient, specify the ingredients and the lot number of the food in question. State your needs clearly - be patient, persistent and polite.

Special Cautions

Because a strict, lifelong gluten-free diet is the only treatment for celiac disease, individuals with celiac disease must be aware of potential food products that carry an increased risk for cross-contact with gluten.

Naturally Gluten-Free Grains & Flours

Oats are not the only food product with an increased risk for cross-contact with wheat, barley or rye due to growing and manufacturing processes. Naturally gluten-free grains, flours and starches are also at an increased risk for cross-contact. Therefore, it is recommended that individuals with celiac disease should purchase naturally gluten-free grains, flours and starches that are labeled gluten-free. This recommendation also applies to mixed food products made with naturally glutenfree grains, flours, and starches, such as corn tortillas, buckwheat noodles and rice noodles.

Herbs and Spices

While individual herbs and spices are naturally gluten-free, recent research has found that some may be contaminated with small amounts of gluten-containing grain.

For example, it is possible that spices can be mixed with wheat flour or wheat starch to reduce costs. (If wheat-based ingredients are added to a spice or dried herb, U.S. food regulations require that wheat be included on the food label or the spice will be deemed misbranded.) It is also possible that spices and herbs may come into crosscontact with a gluten source during the manufacturing and packaging processes. However, in most cases, the researchers concluded that the trace amounts of gluten did not pose a health risk for individuals with celiac disease.

It is important to remember that herbs and spices are typically consumed in small quantities during an average meal and, therefore, detectable levels of gluten in a spice or herb are not very likely to pose a health risk for a person with celiac disease. If you have any questions regarding the steps a manufacturer of herb and spice products takes to decrease cross-contact with gluten, Beyond Celiac suggests that you contact the company directly. We also encourage you to stay up to date regarding the latest research in this particular area by visiting our website.

Allergen Advisory Statements

Allergen advisory statements are voluntary and not defined by any federal regulations. These types of statements generally refer to processing procedures and read something along the lines of "processed in a facility that also processes wheat." Because these statements are voluntary, some manufacturers use them while others do not. You may come across a product labeled gluten-free that also includes an allergen advisory statement for wheat.

Foods with allergen advisory statements for wheat that also are labeled gluten-free must comply with the FDA's gluten-free labeling rule. This means that if you come across a product labeled gluten-free that also includes the statement "processed in a facility that also processes wheat," the food is not mislabeled and must contain less than 20 ppm gluten, even when the source of gluten is from cross-contact.

How much is 20 ppm gluten?

Twenty parts per million means 20 milligrams out of 1 million milligrams (or 1 kilogram).

If a one-ounce slice of bread contains 20 ppm gluten, it contains approximately 1/2 milligram of gluten (0.56 milligrams). This is a very small amount.

Many celiac disease experts believe that up to 10 milligrams of gluten can be eaten each day without causing damage to the small intestine.



20 ppm is equivalent to less than a single drop in a gallon of liquid.



GLUTEN-FREE CERTIFICATION

As you walk through the grocery store, you'll see a lot of products labeled "gluten-free." Come August 5, 2014, those products should be following the FDA's gluten-free labeling rule, but how can you be sure?

Gluten-free certification is a process designed to protect consumers with glutenrelated disorders by confirming that a food, drink or supplement meets strict standards for gluten-free safety.

It assures consumers that there is third-party oversight confirming the legitimacy of the manufacturer's gluten-free claims. This is particularly important because the FDA gluten-free labeling rule does not require testing to confirm the gluten-free status of a product, nor does the rule outline best practices that manufacturers should be implementing throughout the entire production process.

There are several certifying bodies that offer gluten-free certification, and each has its own criteria to ensure safety for consumers. Typically, the criteria include testing the gluten content of the finished product. The current systems for gluten-free certification require a range of criteria for gluten-free products. Some promote products that contain less than 5 ppm, others set a testing threshold of 10 ppm and still others certify to the FDA standard of less than 20 ppm. Certification programs also have different standards when it comes to management systems, so transparency in the certification process is an important factor.

When looking to meet the FDA criteria, strong gluten-free manufacturing processes dictate that plants manage their ingredient sourcing, verification, transportation, storage and production systems to keep under a testing limit of 10 ppm throughout the process. Because testing methods can vary, this ensures that brands are not in danger of recall as natural slippage in the supply chain occurs. Certification provides an added level of assurance for consumers and an extra point of distinction for manufacturers because a true third-party certification process verifies that companies are managing their risks appropriately.

It's important to note that the proposed federal regulations for gluten-free labeling cover food products and supplements only. Some gluten-free certifications, on the other hand, will allow for medications and non-food products like cosmetics to be certified gluten-free. Again, this depends on the certifying body and its criteria.

In the grocery store, gluten-free certification makes it easier to identify safe and trusted products. Products that have been certified gluten-free will typically bear



a symbol on the label, so customers with celiac disease and other gluten-related disorders can quickly and easily recognize the symbol and know that the product has earned approval.

Beyond Celiac endorsed Gluten-Free Certification Program (GFCP)

Beyond Celiac endorses the Gluten-Free Certification Program (GFCP), originally created by the Canadian Celiac Association.

This alliance makes the GFCP the first North American program endorsed by leading celiac disease organizations both in the US and Canada.

The GFCP is a management system based certification. What this means is that the program does not rely solely on end-product testing to ensure safety, but examines the entire production process of the facility—from ingredient sourcing, employee training, to cleaning practices, cross-contact controls, operational management and, finally, an effective end-to-end testing plan.

The GFCP approves only those facilities and their products that continually meet strict, good manufacturing practices for gluten-free production. Certification audits are conducted annually by trained and approved, independent International Standard for Organization (ISO) accredited auditing companies. Products that earn certification bear Beyond Celiac's clear and easy-to-recognize certification trademark on their packaging.

By having a different entity involved in each major step of the certification process, the GFCP creates a system of checks and balances that eliminates any conflict of interest between the manufacturer's relationship with the program, its certifying bodies and/or Beyond Celiac. Learn more about the Beyond Celiac endorsed GFCP at www.gf-cert.org.

Other organizations that certify or approve gluten-free products include:

- Gluten-Free Certification Organization
- Celiac Support Association
- NSF International

Learn more about the Beyond Celiac endorsed Gluten-Free **Certification Program** at

www.qf-cert.org



Choose a GREAT Kitchen! Find restaurants trained in gluten-free safety at www.BeyondCeliac.org/kitchens

Just because you have celiac disease or non-celiac gluten sensitivity, doesn't mean you have to forgo dining out with your friends and family! Here are some suggestions to help streamline the process and minimize the chance of gluten exposure.

1. Make reservations, in person when possible.

Speaking with the chef and restaurant manager ahead of time to discuss your dietary restrictions can be really helpful for everyone involved. Stop in during off-peak times when you are more likely to have their full attention.

2. Review menus online.

Many restaurants post their menus online. Whether you have time to meet with a chef ahead of time or not, look over the online menu prior to eating out. This will help you to get ideas of what you want to order, and identify questions you have for the chef upon arrival. An increasing number of restaurants include gluten-free options among their offerings. Most restaurants do not mind if you choose different items from various menu options to create your own meal.

3. Ask about cross-contact.

Explain what cross-contact is and ask what precautions are taken to prevent it. Make sure the kitchen staff uses clean utensils, cutting boards, pots, pans, etc. when preparing your meal. If a grill is used, request that they place a barrier like aluminum foil between your food and the grill surface, or ask that your food be pan-grilled. If condiments are included, like mayo on a glutenfree sandwich, ask if the staff uses squeeze bottles or has a dedicated set of gluten-free condiments.

4. Ask about how food is prepared.

Items to be especially wary of include:

Soups and Broths

Grill 😭

Anything with a sauce

ltems that may be breaded or include breadcrumbs

French fries or other foods that may be cooked in a shared fryer

Soy sauce

Marinated meats

Rice made with stock

Remember to make sure croutons are not included with your salad and don't forget to avoid malt vinegar. Also, confirm that vegetables are cooked in a separate pot. Some restaurants cook them in the same water as used for pasta.

5. Build relationships with local chefs.

Frequent the same restaurants and make connections with the staff. They appreciate your patronage and truly want to please you, just as you value the security and comfort of a delicious, gluten-free meal!

6. Bring resources and information for chefs and restaurant staff.

Providing information about celiac disease and the gluten-free diet can be another helpful way to raise education and awareness, but never let this replace a personal conversation with any chef or restaurant manager.

7. Communication, compliments and kudos!

Follow up with a quick "thank-you" before leaving the restaurant to let the chef know you appreciate the extra efforts that went into accommodating your needs. A personal note highlighting the helpfulness of the staff is always welcomed. If you had an unpleasant meal, politely inform the manager or follow up with a letter.

8. Show your gratitude with a BIG tip.

Budget this into your expected costs of dining out. By getting to know the chefs and tipping well, you will guarantee exceptional service in the future. Over time, you will develop strong relationships with local restaurants and you will find that you can eat out safely with confidence!

9. Be polite and informative.

Even though celiac disease has become more common, many people still do not know about it. Be patient with chefs and waiters as you explain your needs. Do not be demanding or threatening with them, or they will be less willing to serve and accommodate you. Should there be a mistake or problem, try your best to be patient and understanding.

10. Ask questions.

If you do not understand the wording of how something is prepared, do not be afraid to ask. If your plate looks suspicious, it is fine to double check (or even triple check).

11. BYOB - Bring Your Own Backup!

Call and ask the restaurant if you are permitted to bring your own bread, pasta, crackers, etc. When providing your own additions to a meal, be sure to give the kitchen enough time and advanced notice to make it possible and convenient. Include cooking information so your meal is timed appropriately. And, just in case, pack a small emergency gluten-free snack stash (prepackaged nuts, crackers or cookies).

12. Have fun!

A diagnosis of celiac disease or non-celiac gluten sensitivity is not the end of social dining. It may seem like a burden and an inconvenience at first but, once you get the hang of it, you will be eating out in better style than you ever were before.



GLUTEN IN MEDICATIONS

Although people with celiac disease are generally focused on the food they eat, it is important to remember that it is possible to be exposed to gluten when taking medication.

Wheat may be used in medications as an inactive ingredient. Inactive ingredients include excipients, which help bind pills together. There are several types of excipients that drug companies may use. It is important to check with the manufacturer, your pharmacist or a reputable website such as www.glutenfreedrugs.com to be sure that the particular medication you are taking is free of gluten-containing ingredients.

Potential Concerns

Prescription and non-prescription medications do not have to comply with the Food Allergen Labeling and Consumer Protection Act (FALCPA). This

- means that wheat protein may be present in an ingredient and wheat does not need to be declared on the product label.
- Non-prescription medications include lists of both active and inactive ingredients on product packaging. However, consumers may not always be provided with the ingredients list of prescription medication. Ask your pharmacist for the package insert from the manufacturer.
- Starches and hydrolyzed starches may be ingredients in medications, and wheat may occasionally be used. Unfortunately, the source of the starch ingredient does not have to be named.
- Potential sources of gluten in medications are not well recognized by healthcare professionals and patients.
- Inactive ingredients (and their sources) used in medications may vary between the name-brand drug and generic variety.

Grain Sources of Starches Found in Medications

Corn (most common)

Potato

Tapioca

💜 Rice

Wheat (not often used)

Starch Ingredients Used in Medications Include:

Starch

Pregelatinized starch

Sodium starch glycolate

Maltodextrin

💜 Maltose

💜 Dextrates

Resource for checking if medication contains gluten: www.GlutenFreeDrugs.com. This list is maintained by Steven Plogsted, PharmD, a pharmacist at Nationwide Children's Hospital in Columbus, OH.

Sources for this section:

The chapter, "Gluten in Medications and Supplements" by Steven Plogsted, PharmD and Julie Edmonds, RPh in the book *Real Life with Celiac Disease* by Melinda Dennis, MS, RD, LDN, and Daniel Leffler, MD, MS.

www.drugs.com

US Department of Health and Human Services. US Food and Drug Administration. Code of Federal Regulations Title 21, Chapter 1, Subchapter C, Part 201.

Available at http://www.accessdata.fda.gov/scripts/cdrh/cfdocs/cfCFR/CFRSearch.cfm?CFRPart=201

REFERENCES

Academy of Nutrition and Dietetics Celiac Disease Toolkit. Academy of Nutrition and Dietetics, 2011

Academy of Nutrition and Dietetics' Evidence Analysis Library. Celiac Disease Evidence Analysis Library Project. Available at http://www.adaevidencelibrary.com/topic.cfm?cat=1403

Case, S. Gluten-Free Diet: A Comprehensive Resource Guide. Case Nutrition Consulting Inc., 2010.

Dennis, M, Leffler DA. Real Life with Celiac Disease. AGA Press, 2010.

Ludvigsson JF, et al. The Oslo definitions for coeliac disease and other terms. Gut. 2012; Epub ahead of print. US Department of Health and Human Services, Agency for Healthcare Research and Quality, National Guideline Clearinghouse. Diagnosis and Management of Celiac Disease. Available at http:// www.quideline.gov/syntheses/synthesis.aspx?id=36609

Riddle MS, Murray JA, Porter CK. The incidence and risk of celiac disease in a healthy US adult population. Am J Gastroenterol. 2012;107:1248-1255,

Rubio-Tapia A, Ludvigsson JF, Brantner TL, Murray JA, Everhart JE. The prevalence of celiac disease in the United States. Am J Gastroenterol. 2012; Epub ahead of print.

Thompson T. Academy of Nutrition and Dietetics' Gluten-Free Strategies for Clients with Multiple Diet Restrictions. Academy of Nutriton and Dietetics, 2011.

US Department of Health and Human Services, National Digestive Diseases Information Clearinghouse. Celiac Disease. Available at http://digestive.niddk.nih.gov/ddiseases/pubs/celiac/

US Food and Drug Administration. Federal Register Proposed Rule—72 FR 2795 January 23, 2007: Food Labeling; Gluten-Free Labeling of Foods. Available at http://www.fda.gov/Food/ LabelingNutrition/FoodAllergensLabeling/GuidanceComplianceRegulatoryInformation/ ucm077926.htm

US Food and Drug Administration. Center for Food Safety and Applied Nutrition. Food Allergen Labeling and Consumer Protection Act of 2004 (Title II of Public Law 108–282). August 2004. Available at http://www.fda.gov/downloads/Food/LabelingNutrition/FoodAllergensLabeling/ GuidanceComplianceRegulatoryInformation/UCM179394.pdf

RESOURCES AVAILABLE FROM BEYOND CELIAC

Symptoms Checklist

After submitting this simple online checklist, you will be able to download a printerfriendly form for your doctor that includes information on celiac disease testing. **www.BeyondCeliac.org/checklist**

BEYOND CELLAC awareness • advocacy • action

Getting Started Guide

Download this Guide online. www.BeyondCeliac.org/gettingstarted

Monthly e-Newsletter

Beyond Celiac produces a free monthly e-newsletter which covers a variety of topics, including health & wellness articles, food & lifestyle tips, gluten-free product reviews, recipes and news updates.

www.BeyondCeliac.org/subscribe

Free Webinars

Beyond Celiac hosts monthly webinars that provide gluten-free individuals and dietitians with valuable information and resources to help manage celiac disease and the gluten-free diet, as well as improve general health and wellness. Webinars are a free service to the community. www.BeyondCeliac.org/webinars

Non-Celiac Gluten Sensitivity

Find answers to frequently asked questions about non-celiac gluten sensitivity, with input from expert researchers. www.BeyondCeliac.org/celiac-deisease/non-celiac-gluten-sensitivity

Kids Central

Beyond Celiac's hosts a web portal for gluten-free kids and their parents, featuring family-friendly gluten-free recipes, personal stories and advice. **www.BeyondCeliac.org/kids**

Gluten-Free in College

College students face a unique set of challenges when living gluten-free on campus. This special web section includes blogs, articles and a digital magazine authored by students with gluten-related disorders. www.BeyondCeliac.org/college



Beyond Celiac has educated more than 530 medical providers and prompted downloads of its associated newsletter by more than 7,680 people. (July 2010-October 2013)



More than 1,000 people registered for GREAT KItchens

gluten-free training in the first year since the program was re-launched. (June 2012–November 2013)

Gluten-Free Labeling Updates

This section of Beyond Celiac's website includes the latest updates on gluten-free labeling regulations. Read FAQs and browse blog posts on this important topic in the gluten-free community. www.BeyondCeliac.org/FDA

Gluten in Medications

Current United States regulations do NOT require manufacturers to label the inactive ingredients in drugs. Learn all about the inactive ingredients in medications so you can stay safe when taking them. www.BeyondCeliac.org/ medications

GREAT Kitchens

Beyond Celiac offers comprehensive, online gluten-free training for foodservice professionals through the GREAT Kitchens program. Gluten-free training is also available for universities, colleges, schools and camps through the GREAT Schools, Colleges and Camps program. www.BeyondCeliac.org/GREAT

GREAT Pharmacists

Co-sponsored by Beyond Celiac and Pro-CE, GREAT Pharmacists is a free online continuing education course for pharmacy professionals. It is designed to help pharmacists better serve customers with celiac disease and other gluten-related disorders. Learning objectives include recognizing the signs and symptoms of celiac disease and identifying potential sources of gluten in medications.

www.BeyondCeliac.org/greatpharmacists

Primary Care CME

Physician education is an important part of the fight against undiagnosed celiac disease. Beyond Celiac's free online continuing education program teaches primary care providers how to detect, diagnose and manage celiac disease.

www.CeliacCMECentral.com

GET INVOLVED!

Dedicated volunteers, generous contributors, and involved community members are key players in the success of Beyond Celiac and its mission. Want to help us raise awareness and make gluten-free living easier? There are several ways you can get involved!

Donate

It really is true that no amount is too small—or too large. Please consider a donation to Beyond Celiac. Financial contributions support our educational initiatives and free patient resources, including this Guide.

www.BeyondCeliac.org/donate

Fundraise

Fundraising is an excellent way to support the cause while raising awareness at the same time. Sign up to create a personalized online fundraising page to share with your friends.

www.BeyondCeliac.org/volunteer

Distribute Educational and Awareness Materials

Help Beyond Celiac spread awareness of gluten-related disorders and get those who may have undiagnosed celiac disease tested and diagnosed. Distribute Beyond Celiac brochures at your local doctor's office, pharmacy, supermarket, health fairs or community event.

www.BeyondCeliac.org/volunteer

Advocate for Safe Gluten-Free Menus

Many restaurants now offer gluten-free options, but those meals aren't always safe. Encourage your favorite restaurants to get proper gluten-free training through Beyond Celiac's GREAT Kitchens program. www.BeyondCeliac.org/GREAT

Tell Your Doctor To Get Informed

Beyond Celiac offers a free online continuing medical education (CME) program to teach your doctors what they need to know about celiac disease and the gluten-free lifestyle. You can support the cause by encouraging your doctor to take the CME.

www.CeliacCMECentral.com

GLUTEN-FREE RECIPES

Get free access to hundreds of recipes at www.BeyondCeliac.org/recipes.

To date, Beyond Celiac has distributed **more than one million**

Celiac Disease Symptoms Checklist brochures.

FOLLOW BEYOND CELIAC













NOTES

Use this space to track important phone numbers, email addresses, reminders and your personal tips.



½ cup toasted pecans coarsely chopped

1½ cups of Arrowhead Mills Gluten Free All ½ cup fresh cranberries chopped Purpose Baking Mix

1 cup orange juice

1½ cups pumpkin purée

- 1. Pre-heat oven at 350°
- 2. Grease a 9×5 inch loaf pan
- 3. Mix all ingredients together in a medium size bowl and blend well.
- 4. Transfer batter to prepared loaf pan and bake in the center of the oven for 50-55 minutes or until tester comes out clean. Cool in pan for 10 minutes and turn out onto rack to cool completely before slicing

2 eggs

1/3 cup of canola oil



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Curried Squash Penne with Broccoli Florets

From Crystal Schlueter Makes 6 servings

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2 cups Imagine Organic No Chicken Broth

12 oz. DeBoles Gluten-Free Multigrain Penne

2 Tbsp. extra virgin olive oil

2 cloves garlic, minced

2 Tbsp. Arrowhead Mills Gluten-Free All

Purpose Baking Mix

1 cup Dream Original Enriched Rice Milk

1 cup cooked and pureed butternut squash

1 pinch ground nutmeg

1 pinch white pepper

¼ tsp. salt

¼ tsp. curry powder

2 cups frozen broccoli florets thawed

¼ cup chopped salted cashews

- 1. Bring a large pot of salted water to a boil with 2 cups of broth.
- 2. Add pasta & cook according to package directions. Drain and set aside.
- 3. Place a large saucepan over medium heat. Add oil and garlic. Cook for 30 seconds, then stir in baking mix. Stir just until combined, then whisk in milk.
- 4. Cook until slightly thickened, about 2 minutes, stirring constantly. Add squash, nutmeg, pepper, salt and curry powder. Stir until combined. Add broccoli & pasta. Cook until heated through. Sprinkle with cashews & serve.



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^{*}Select products are USDA Organic



^{**}Select products are Non-GMO verified



awareness • advocacy • action

Beyond Celiac advances widespread understanding of celiac disease as a serious genetic autoimmune condition and works to secure its early diagnosis and effective management. We empower our community to live life to the fullest, and serve as a leading and trusted resource that inspires hope, accelerates innovation and forges pathways to a cure.

BeyondCeliac.org offers free, comprehensive information and support materials for individuals and families affected by gluten-related disorders, as well as the foodservice and healthcare professionals who serve this population.

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