Gluten 101

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The gluten free diet is most commonly used for individuals suffering from celiac disease. Celiac disease is a condition that causes damage to the villi of the small intestines resulting in abdominal pain, nausea, and vomiting after ingesting products containing gluten. Although the gluten free diet is traditionally used as a treatment for celiac disease, it is also used for people who have non-celiac gluten sensitivity. These individuals have adverse reactions to gluten but do not have celiac disease. Recently, it has become popular for individuals to adopt the gluten-free diet into their lifestyle even if they can tolerate gluten.



Gluten is a protein found in wheat, barley, and rye. It is composed of glutenin and gliadin and contrary to its name, the gluten allergy or

intolerance is most commonly a result of the gliadin rather than the glutenin. Many people have decided to adopt a gluten free diet for various reasons. Many avoid gluten to promote weight loss or for the variety of claimed health benefits. However, there is no scientific evidence that gluten free eating, without the presence of Celiac disease or non-celiac gluten sensitivity, is beneficial.

If you do need to eat gluten free, there are still many available foods. Because gluten is only found in certain grains, there are a variety of foods that are naturally gluten free such as fruit, vegetables, cheese, beans, lentils, and meat. Meat that is breaded, however, is not gluten free. There are quite a few acceptable grains that do not contain any gluten as well. These items include amaranth, corn, quinoa, teff, millet, rice, wild rice, buckwheat, and sorghum. Some of these items, for example quinoa, are also good sources of protein.



Gluten free eating can be difficult due to cross-contamination. This means that gluten from another source contaminated the gluten free food. In order to prevent this occurrence, equipment, utensils, and hands must be thoroughly cleaned. There are also many products that are gluten free themselves but are processed in plants that also process wheat products. This is a cross-contamination hazard and must be avoided. Foods such as oats and oatmeal, instant hot chocolate, seasoned rice mixes, salad dressings, soy sauce, and teriyaki sauce are common cross-contaminated foods.

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Gluten free eating can also be difficult because many processed foods contain gluten, even if the ingredients listed on the food label do not include wheat, rye, or barley. Common processed foods that may contain gluten are: beer, candy, lunch meat, hot dogs, French fries, imitation fish, vegetables in sauce, and potato chips. Avoid foods if the ingredients "modified food starch", or "malt" are included on the food label. Check with the manufacturer if you are unsure whether or not a product is gluten free.

The gluten free diet has become more popular as a result of celiac disease and preferred lifestyle. In either case there are plenty of food options for the person wishing to consume gluten free foods.

Honey-Almond Cake (adapted from EatingWell March/April 2009)

Ingredients

1 ½ cups Toasted Almonds (toast by baking whole or sliced almonds, at 350 degrees, for 8-10 minutes)

4 large eggs at room temperature, separated

½ cup honey

1 tsp vanilla extract

½ tsp baking soda

½ tsp salt

Directions

- Preheat oven to 375 degrees.
- Process toasted almonds in food processor or blender until finely ground, like flour. Beat egg volks, vanilla, baking soda, and salt in large mixing bowl, at medium speed, until well combined. Add the almond flour and beat on low until combined.
- In another bowl, beat 4 egg whites on medium speed until very foamy and doubled in volume. Do not beat until stiff enough to hold peaks. Gently fold egg white into batter until just combined.
- Coat 9 inch spring form pan with cooking spray. Spread parchment paper in the bottom of pan and spray with cooking spray again. Scrape batter into pan.
- Bake the cake until golden brown, approximately 25 minutes. Let pan cool for 10 minutes. Run a knife around the edge of pan and gently remove side ring. Let cake cool completely.
- Just before serving, sprinkle with ¼ cup sliced almonds. Makes 12 slices.

Nutrition Facts

180 calories, 8 g fat (1 g sat fat), 60 mg cholesterol, 170 mg sodium, 22 g carbohydrate, 3 g dietary fiber, 18 g sugar, 6 g protein

If you'd like to learn more about eating gluten free, please contact a registered dietitian. An RD will be able to help you eliminate gluten from your diet while ensuring you get all of the vitamins and nutrients you need. You can also read articles on celiac disease and gluten-free eating at www.eatright.org/celiac.



Alessandra is currently a Dietetic Intern at WVU Healthcare and plans to become a registered dietitian. As the nation's food and nutrition experts, registered dietitians are committed to improving the health of their communities. To find a registered dietitian in your area, visit www.eatright.org and click on "Find a Registered Dietitian."