







Celiac Disease and Children

Updated May 2021

What is celiac disease?

Celiac disease is an autoimmune disorder that results from the response of the immune system to the ingestion of gluten, which is a protein found in wheat, barley, and rye. This immune response causes inflammation and damage to the small intestine that can ultimately lead to malnutrition and poor health. Celiac disease can be diagnosed at any age, starting in early childhood.

The genes responsible for the development of celiac disease are inherited; therefore it occurs at a significantly higher rate among first-degree relatives (parents, children, and siblings) of those who have the condition. The only treatment for celiac disease is lifelong adherence to a gluten-free diet. The removal of gluten from the diet is a highly effective treatment that allows the small intestine to heal, leading to normal absorption of nutrients.

Childhood is a crucial time for the overall growth and development of all body systems. If undiagnosed or untreated, celiac disease can cause malnutrition in children that may lead to inability to develop optimal bone mass, short stature, failure to thrive, anemia and delayed puberty, among other problems. It is important that when celiac disease is present, it be diagnosed as soon as possible, so that these potential health issues can be reversed or avoided through following a gluten-free diet.

Nutrients of concern:

Nutritional inadequacies may exist among children with celiac disease and can occur for a number of reasons. Primary causes are the inability to absorb certain nutrients due to damage of the small intestine (until the intestine has had a chance to heal), lower micronutrient content of some gluten-free grains, and lack of enriched grain products consumed on a gluten-free diet. Talk to your doctor or registered dietitian if you are concerned about potential nutritional deficiencies in your child. A dietitian can provide suggestions on gluten-free foods which contain nutrients of concern. If supplements are recommended, be sure to confirm that they are gluten-free.

For more information about the gluten-free diet, go to the Resources section of the GIG website, www.gluten.org.

Questions to ask your doctor:

Does my child have any nutritional deficiencies? Should he/she be taking any supplements? If so, for how long?

If one of my children has been diagnosed with celiac disease should I have my other children tested?

Are there symptoms
I should watch out
for in other family
members which could
be indications of
celiac disease?

GIG's Generation GF program is geared specifically to kids and offers support groups as well as a magazine just for kids: www.gluten.org/ community/kids/

Take realistic steps for your family:

- Educate yourself, your child, and the entire family about what it means to have celiac disease, and about the importance of a gluten-free diet as the treatment.
- Be sure everyone in the household is knowledgeable about sources of gluten: wheat, barley, rye, contaminated oats*, and the by-products and hybrids of these grains. Remember that gluten may be found in unexpected foods such as licorice, energy bars and processed meats.
- If some members of your household are continuing to eat gluten-containing foods, remember that cross-contamination is a common way that gluten finds its way into food. Even the smallest amount of gluten can cause damage to the small intestine without causing visible symptoms, so it is imperative to prevent cross-contamination.
 - Designate a separate area for gluten-free ingredients on an upper-shelf in the pantry and refrigerator.
 - If possible, assign one counter area to be used only for gluten-free food preparation.
 - Thoroughly clean cookware, cutting boards, plates, bowls, and utensils.
 - Buy separate condiments or put them in squeeze bottles so utensils do not crosscontaminate them.
- Reach out to national organizations that offer local support groups for kids and families, such as
 the Gluten Intolerance Group (GIG) at www.gluten.org. GIG's Generation GF program is geared
 specifically to kids and offers support groups as well as a magazine just for kids: www.gluten.org/
 community/kids/

Can my child still enjoy a socially active life?

Aside from the need to maintain a gluten-free diet, children with celiac disease are able to participate in traditional events as usual such as sports, band, academic clubs, and other hobbies. Always communicate with coaches, club sponsors, teachers and other parents about your child's need to avoid gluten. Consider exploring whether other children are gluten-free so both the kids and parents can have an informal support system.

What should I do about school lunches?

Communicate! Whether you choose to pack your child's meals or buy them at school, alert the principal, school nurse, and teachers about the importance of a gluten-free diet for your child. This will also come in handy if there is a special occasion, such as a birthday party where you will need to be alerted ahead of time if you need to provide an alternative dessert for your child.

If you would like to purchase meals from school, you will want to contact the cafeteria manager and/or the School District (Nutrition Services Department) to inquire further about the availability of a glutenfree menu. Some school cafeterias are equipped for allergen-free cooking and can provide daily options, whereas others have limited resources and will not be able to accommodate your child.

To have the most assurance that your child enjoys gluten-free meals while at school, preparing lunches at home is a good option. This can be an excellent hands-on opportunity to educate your child about eating gluten-free. Once they are familiar with the guidelines, let them try to plan their own menu. This will empower them, give them some freedom, and help them not to feel so restricted by their diet.

Kid-friendly gluten-free (GF) meal and snack ideas*:

Breakfast:

- · Yogurt with fruit and nuts
- Cold or hot cereal (made from puffed rice, quinoa, millet, amaranth, teff, or other GF grains) with banana, cooked apples, cinnamon, maple syrup, etc.
- Eggs, potatoes, and GF toast
- Smoothies: yogurt, cow/almond/soy/rice milk, nut butter, berries, banana, mango, or any fruit your child likes!
- · GF pancakes, waffles, or French toast

Lunch/Dinner:

- Sandwiches made with GF bread or wrapped in lettuce (green leaf, red leaf, butter lettuce work best)
- GF pasta and favorite sauce or chilled GF pasta salad
- · GF burrito with sweet potato, black beans, and brown rice
- Tacos, nachos, or quesadillas made with corn tortillas and favorite fixings
- Baked fish/chicken with GF macaroni and cheese

Snacks:

- · Applesauce, pudding, fresh fruit, GF muffin
- · Hard-boiled egg, cheese stick, yogurt, cottage cheese
- · Homemade trail mix with dried fruit, nuts and seeds
- Veggies: carrot, celery, jicama, red pepper, broccoli, and cauliflower
- Dipping ideas: nut butter (peanut, almond, cashew), hummus, ranchflavored yogurt, cream cheese, salsa, guacamole, and bean dip

*oats are inherently gluten-free, but are often cross-contaminated with wheat or barley during harvesting or processing. Only certified gluten-free oats should be consumed on a GF diet, and only after consultation with your physician or dietitian. This educational bulletin has been produced by the Gluten Intolerance Group of North America, a registered 501(c)3 organization. Learn more about GIG at www.gluten.org.

GIG is on a mission to make life easier for everyone living gluten-free.

This information is for educational purposes only. Consult your healthcare team when considering this information. This document may be reproduced for educational use. To request permission to reproduce this bulletin for any other purpose, contact:

Gluten Intolerance Group (GIG) 31214 - 124th Ave. S.E. Auburn, WA 98092-3667 Phone: 253-833-6655 Fax: 253-833-6675 customerservice@gluten.org

Advances in gluten-related disorders are fast-paced. If this document is more than 2 years old, please visit gluten.org for updated documents.