

The Scoop on Gluten

IN THE PAST FEW YEARS, gluten has come under the spotlight. Gluten-free diets are all the rage. Left and right we hear the terms “wheat allergy, celiac disease and gluten intolerance or sensitivity,” but these conditions are often misunderstood. One explanation for the rise in gluten sensitivity may be related to modern high yield wheat production. The hybrid “dwarf” wheat commonly used today has higher protein content than wheat eaten in our grandparent’s generation.

What is Gluten Anyway?

Despite gluten’s common association with wheat, the two are not synonymous. Gluten is a protein present in grass-type grains, such as wheat, barley, and rye; it gives dough its stretchy and sticky texture. Gluten is also found in grain products like couscous, bulgur, farina, spelt and triticale. It is commonly found in prepared foods like pasta, bread, crackers, and

cookies. Gluten can also be found in less obvious places, like broths, imitation seafood, marinades, soy sauce, matzo, cereals, French fries, processed lunch meats and frozen meat products such as meatballs.

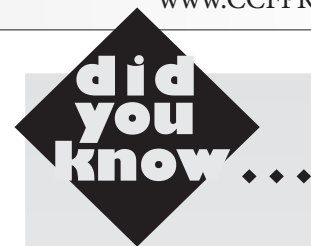
Wheat Allergy, Celiac Disease or Gluten Sensitivity



Allergy to wheat is one of the top 8 food allergies in the United States. Wheat allergies are not common in adults, and most children will outgrow their wheat allergies at an early age. Symptoms include a rash, wheezing, lip swelling, diarrhea and abdominal pain. It is rare for children with a wheat allergy to also be allergic to other cereal grains such as rice, oats and barley.

Celiac disease is not an allergy and it is not outgrown. It is a serious auto-immune condition that damages the small intestine causing destruction of microscopic,

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- ▶ Studies show children in child care participating in the Child and Adult Care Food Program (CACFP) receive meals that are nutritionally superior to meals children receive in homes not participating in CACFP.
- ▶ Americans will spend an estimated \$7 billion this year on foods labeled gluten-free.
- ▶ Approximately 60 million people purchased at least one gluten-free product in the past year.
- ▶ The \$1.7 billion gluten-free market is growing 20 percent per year.
- ▶ Eating monounsaturated fats (nuts, olive oil, avocados) can keep your mind sharp while saturated fats (butter, mayonnaise, cream cheese) can cause your memory to deteriorate.

Sources: California Food Policy Advocates, Mintel Market Research Firm, Wall Street Journal, glutenfreeliving.com, Annals of Neurology

Quotable Quotes

“*Hors d’oeuvres: A ham sandwich cut into forty pieces.*”

— Jack Benny

INSIDE:

- ◆ Shopping Gluten-Free
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The Scoop on Gluten

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finger-like projections, called villi, which line the intestinal walls. The damage to the lining of the intestines prevents the body from absorbing essential nutrients needed to grow and thrive, resulting in malnutrition. Celiac disease has a genetic component and is rare, about 1% of the U.S. population has celiac disease.

Non-celiac gluten sensitivity, the stepchild of celiac disease, is somewhat milder and more difficult to diagnose. Gluten sensitivity may affect 6% or more of the population. Gluten sensitivity is time-dependent and dose-dependent; meaning that when you are first exposed to foods with gluten and how much you are exposed to, influences the body's ability to tolerate it. In infants and children, the most common symptoms of gluten intolerance are bloating, diarrhea, abnormal stools, eczema, dental problems and poor growth. Children may also suffer from agitation and mood swings, headaches and extreme fatigue. Although there is no conclusive evidence, there is ongoing research into the possible link between gluten sensitivity and autism spectrum disorders and attention deficit hyperactivity disorder (ADHD).

Avoiding Gluten Intolerance

While the causes of food intolerances are difficult to identify, there may be ways to avoid their onset. For gluten, in particular, it is extremely important to delay the introduction of cereal grains until infants are 4 to 6 months of age. Children who are introduced to gluten before four months are five times more likely to develop sensitivity to gluten. Breast-feeding can also protect infants from developing gluten sensitivity.

Does My Child Have a Problem with Gluten?

A blood test is taken to look for the presence of immunoglobulin E (IgE) to diagnose celiac disease. If a blood panel comes up negative for celiac disease, it is still possible to have sensitivity to gluten. There are two kinds of tests available for gluten sensitivity, and fortunately, neither requires blood to be drawn. Stool testing for antibodies and salivary testing for antibodies are both easy and painless tests for children. An elimination diet, in which gluten is completely excluded from the diet, may also be suggested. If symptoms decrease or disappear and reappear when gluten is reintroduced, then it is probably safe to assume that there is gluten sensitivity.

Living Gluten-free

Although eliminating gluten from the diet may seem tedious, eating gluten-free can be a healthy lifestyle change. The best news is that a gluten free diet can include all the many delicious, healthy foods that are naturally gluten free. Fresh vegetables, fruit, nuts, seeds, beans, legumes, fish, animal proteins, eggs, dairy products, rice, corn, soy, millet, quinoa, buckwheat, amaranth and flax are all gluten free foods and rich sources of vitamins, minerals and nutrients that are essential for health. Many highly processed foods like sugary cereals, cookies, crackers, and granola bars, which commonly contain gluten, are good things to eliminate from our diets anyway.

Reading labels carefully is an important part of eating a gluten-free diet. Living gluten-free can support long-term health in all people with celiac disease and gluten sensitivity.

— *Martina Barrera-Hernandez*
(Senior Project, Las Lomas HS)



KIDS' HEALTH & SAFETY

Shopping Gluten-Free

AN ENORMOUS MARKET HAS BEEN CREATED promoting gluten-free prepared foods; in fact, 60 million gluten-free products are consumed in the U.S. each day! However, it is not necessary to purchase these foods, as there are many delicious and nutritious foods which are naturally free of gluten. It is critical to read all labels carefully for wheat, barley, rye, triticale, oats (unless gluten-free), malt, brewer's yeast, modified food starch and dextrin. Oats are naturally gluten-free, however can be contaminated with wheat during growing and processing. It is generally recommended to avoid oats unless they are specifically labeled gluten-free. Cross contamination can occur during food manufacturing when shared equipment is used to process gluten containing foods. Check labels for a statement such as, "may contain", "processed on shared equipment" or "processed on equipment used to process wheat".



- **Fruits and Vegetables:** All fresh products should be safe. Watch out for pre-packaged fruit and vegetable products (including frozen and canned goods) with added ingredients, which may contain gluten or be subject to cross-contamination.
- **Meats and Fish:** Fresh meats, poultry, fish and eggs, with no added ingredients, are safe if they're kept away from gluten cross-contamination at the store. Pre-packaged and frozen products, such as sausages, lunch meats and breaded items may contain gluten. Several manufacturers label processed meat products gluten-free, look for these.
- **Beans:** Beans, legumes, nuts and seeds are all naturally gluten-free. If these are bought canned or processed always check labels for added ingredients.

- **Milk and Dairy Products:** Fresh plain milk, butter, plain yogurt and many cheeses are gluten-free. Some other products found in the dairy section, such as tapioca pudding, are gluten-free. Some ice creams are gluten-free and some are not—check label for ingredients.

- **Grains, Breads, Snacks, Cereals and Pastas:** Rice, corn, millet, quinoa, buckwheat and amaranth

are all gluten-free. Hot and cold cereals made exclusively from these grains, are also gluten-free. With few exceptions, any processed foods in these categories should be specifically labeled "gluten-free." Most grocery stores carry a few of these gluten-free staples, but you may find the best selection online.

- **Prepared Foods:** Only buy frozen dinners or frozen pizzas specifically marked "gluten-free" — some larger supermarkets carry a nice selection. Many canned soups contain gluten, so check the ingredients. Ethnic food sections in supermarkets frequently contain some prepared foods that are gluten-free.
- **Baking Mixes and Supplies:** Any baking mix you purchase should be specifically labeled "gluten-free." Most baking supplies, such as baking soda, sugar and cocoa, are considered gluten-free, but check ingredients to make certain.
- **Condiments, Sauces and Spices:** Check ingredients and/or call manufacturers to determine what's gluten-free and what's not. Heinz ketchup and French's yellow mustard are considered gluten-free, and there are multiple gluten-free options for tomato sauce and salad dressing. Don't buy soy sauce unless it's specifically labeled "gluten-free."

— Adapted from Jane Anderson about.com

Apple Oatmeal

Apple juice	1 ¾ cups
Oats, quick cooking	1 cup
Apple, cored and chopped	1 large
Cinnamon	½ tsp
Salt (optional)	½ tsp

1. Combine all ingredients in a medium, microwave safe bowl. Place in microwave, uncovered and cook on high for about 2 minutes.
2. Stir and let cool for 1 minute before serving

Yield: 3 servings

Meets requirement for grains/breads and fruit/vegetable at breakfast or snack

— *Champions for Change*

BBQ Turkey in Pepper Shells

Turkey, ground	¾ pound
Onion, peeled and chopped	1
Green bell pepper, seeded, chopped	1
Diced tomatoes	(14½-ounce) can
Black beans, drained and rinsed	1 (15 ounce) can
Barbecue sauce	½ cup
Garlic powder	1 tsp
Bell peppers (any color)	4

1. Brown ground turkey in a medium skillet over medium-high heat until no longer pink; drain excess fat. Add onion and cook until tender, about 5 minutes. Add all remaining ingredients except the whole bell peppers; simmer for 10 minutes over medium heat.
2. Cut the whole bell peppers in half lengthwise and remove the seeds. Place in a microwave safe dish with a small amount of water. Cover and microwave bell peppers on high until crisp-tender, about 5 minutes. Remove peppers from the dish and place on a large plate. Spoon hot turkey mixture in pepper shells and serve.

Yield: 8 servings

Meets requirement for fruit/vegetable and protein/meat alternate

— *Champions for Change*

Download your free recipe booklet of low cost, easy-to-make recipes at: www.cachampionsforchange.cdph.ca.gov/en/Recipes.php

Activity Corner PAPER PLATE APPLE CRAFT

This adorable apple craft uses a paper plate and introduces children to healthy eating. Include an apple tasting at snack time or have apples on the day's menu.

Materials:

- paper plate
- red & green paint
- paintbrush
- black paint or marker
- scissors
- glue

OPTIONAL: You can substitute real apple seeds for the painted ones.

Instructions:

1. Cut leaf shapes off of opposite sides of the plate.
2. Paint the leaf shapes green and set aside to dry.
3. Paint the edges (top and bottom) of the plate red.
4. Paint or draw seed shapes onto the center of the plate.
OR - Glue real apple seeds into the center of the plate.
5. Let all the pieces dry.
6. Glue the leaf shapes to the top of the plate to make your apple!



— *DLTK's Crafts for Kids*

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Food Funny Q: What bird is with you at every meal?
A: A swallow!