



## **Education**

### **Wheat Allergy**

#### **What is a wheat allergy?**

A wheat allergy is a reaction by your child's immune system to the proteins found in wheat. Our immune systems normally respond to bacteria or viruses that attack the body. With a food allergy, the body's immune system attacks harmless things, such as the substances found in wheat. Wheat is among the 8 foods that are responsible for most food allergies in children. The other foods include milk, soy, peanuts, tree nuts (such as walnuts and cashews), eggs, fish, and shellfish.

#### **What are the symptoms of an allergic reaction to wheat?**

If you think your child is allergic to wheat or any other food, it is important to get a diagnosis from your health care provider or allergist. Allergic reactions to wheat usually begin within minutes or a few hours after eating or inhaling wheat (flour). There are 4 types of protein found in wheat, (albumin, globulin, gliadin, and gluten). Your child may be allergic to any one of these proteins. Oats, rye, and barley also contain gluten and may cause symptoms. Ask your health care provider if your child needs to avoid these grains as well.

Common symptoms include:

- Skin reactions such as eczema, hives, swelling (typically eyelids and mouth)
- Abdominal cramps, nausea, vomiting
- Asthma, hay fever (runny or stuffy nose, itching eyes, sneezing).

Although rare, it is possible to have an allergic reaction called anaphylactic shock. This is a serious reaction that is sudden, severe, and can involve the whole body. It can cause swelling of the mouth and throat, dangerously lower blood pressure, and trouble breathing. This type of reaction is a medical emergency. It is treated with epinephrine (a medicine that is given by injection). Usually parents or caregivers of children who have severe allergic reactions carry their own shot kits, just in case of emergency.

#### **How will this affect my child's diet?**

The only treatment for a child with a wheat allergy is to completely avoid wheat and foods that contain wheat. Wheat is found in hundreds of foods such as most bread products, pastas, and items made with flour. Many processed foods contain flour-based thickeners. You will need to change the way you shop and prepare foods.

The first step is to learn to read labels and become familiar with ingredients that contain milk or dairy products. Always ask about ingredients if you are not sure. Study the lists below to learn more about foods and ingredients to watch out for.

#### **Foods that contain wheat**

- Most breads, cakes, cookies, and pastries
  - Bread crumbs
  - Pasta
  - Couscous
  - Many breakfast cereals
  - Kamut (cereal grain)
  - Crackers
  - Enriched flour
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- Whole wheat flour
- Graham flour
- Wheat (bran, germ, malt, starch, gluten)
- Semolina
- Spelt
- Farina
- Durum
- Bulgur
- Cracker meal
- Gluten (one of the wheat proteins)
- High-gluten flour; high-protein flour
- Vital gluten.

### **Foods/ingredients that often contain wheat (check the label or ask)**

- Modified food starch
- Gelatinized starch
- Hydrolyzed vegetable protein
- Natural flavorings
- Soy sauce
- Vegetable gum or vegetable starch.

You will need to prepare more meals from scratch using whole natural foods. Wheat-free food products, such as bread and pancake mixes, noodles, and substitute flours such as potato, rice, soy, and corn are often available in health food markets and the natural foods section of grocery stores. There are also Web sites where you can buy specialty foods online (such as <http://www.allergygrocer.com>). To be on the safe side, buy products that have an 800 number for you to call and ask about ingredients.

### **How do I avoid cross contamination?**

Cross contamination can be a problem when trying to avoid wheat. Wheat can come in contact with other foods during processing and in preparation, even if not included in the recipe. At home, use separate cutting boards, bowls, and utensils and label all food containers.

### **Restaurant Meals**

- When dining out, the waiter or waitress about the allergy. Order simple dishes without sauces unless you're sure there is no wheat in them.
- Make sure the food preparation equipment, such as food processors, cutting boards, pans, and utensils are not used for recipes containing wheat or wheat flours as well as for other recipes.
- Avoid deep fried foods, such as French fries. They are often cooked in the same oil as "breaded" items.
- Avoid Chinese, vegetarian dishes, and seafood salads. Meat substitutes or imitation crab products may contain wheat.

### **How can I provide my child with a healthy diet that tastes good?**

Your child can still have a nutritionally complete diet as well as continue to enjoy some kid favorites. The primary nutrients found in wheat are carbohydrate, protein, niacin, zinc, magnesium, and fiber, as well as fortification with folic acid and iron. Your child can get all these nutrients from other foods, but there is a risk for not getting enough B vitamins. Other sources of B vitamins include dark leafy vegetables, bananas, asparagus, oranges, peanuts, and other fortified grains such as corn meal and rice flours. Ask your health care provider or dietitian if your child should take vitamin supplements.

### **How do I modify recipes?**

Most recipes can be modified to fit a wheat-free diet. There are several good wheat-free or gluten-free cookbooks and web sites with recipes. The Gluten Free Gourmet series by Betty Hagman and Wheat-Free Recipes & Menus by Carol Fenster include excellent recipes and information about substitutions. The Gluten Free Mall at <http://www.GlutenFreeMall.com> offers many specialty food products. Organizations such as the Food Allergy and Anaphylaxis Network (<http://www.foodallergy.org>), The Celiac Foundation (<http://celiac.org>) and the Celiac Sprue Association (<http://www.csaceliacs.org>) also have wheat-free recipes and cookbooks. Wheat allergy and celiac disease are not the same, but people with both conditions must avoid wheat products.

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## How can I keep my child safe at school?

- Teach your child not to eat foods unless they are safe. Even young children can grasp this concept, especially once they have gotten sick after eating a particular food).
- Prepare your child's lunch at home.
- Talk with teachers and the school administrator regarding your child's needs. Ask teachers to keep an eye out and explain the situation to other children if needed.
- Have the teacher call you if there is a special event or party planned so that you can bring a few modified treats that your child enjoys and can share with other kids.
- Make a card that lists foods and ingredients that should be avoided and give one to the teacher. The card can also be helpful to older children in making decisions when out with friends.

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