

FOOD ALLERGY FACT SHEET

Wheat Allergies

What is a wheat allergy?

Wheat allergy is an abnormal immune system reaction to one of the four proteins found in wheat: glutenin, albumin, globulin, and gliadin. Wheat allergies are more common in children, especially babies and toddlers. By age 12, about two-thirds of children with wheat allergies will outgrow it.

What are the symptoms?

Wheat allergy symptoms can range from mild to severe and can include:

- Swelling, itching, or irritation of the mouth or throat
- Hives, itchy rash, or swelling of the skin
- Nasal congestion
- Headache
- Itchy, watery eyes
- Difficulty breathing
- Digestive symptoms (cramps, nausea, diarrhea, or vomiting)
- Anaphylaxis
 - Swelling or tightness of the throat
 - Chest pain or tightness
 - Severe difficulty breathing
 - Trouble swallowing
 - Pale, blue skin color
 - Dizziness or fainting

Individuals with wheat allergies cannot consume products that contain wheat in any form. Child nutrition staff should become familiar with the types of food that may contain wheat so that extra care can be taken to avoid accidental exposure. The following is a list of some products that could contain wheat.

What foods contain wheat?

- Baking mixes
- Beverages, such as root beer and powder-based drink mixes
- Bread and bread products (bagels, muffins, rolls, pastries, donuts, pancakes, waffles)
- Bread crumbs
- Breaded meat, poultry, and fish
- Bulgur
- Cakes, cookies, pies, and other baked goods
- Cereals (some varieties)
- Chips and pretzels
- Chocolate
- Condiments (soy sauce, ketchup, mustard, Worcestershire sauce, salad dressings, barbecue sauces, marinades, glazes, some vinegars)
- Couscous
- Crackers and cracker meal
- Durum
- Einkorn
- Emmer
- Farina
- Farro
- Flour (all-purpose, enriched, graham, high-gluten, high-protein, instant, pastry, self-rising, soft wheat, steel ground, stone-ground, whole wheat)
- Flour tortillas
- Freekeh (wheat that is harvested while young and green) – commonly found in Middle Eastern diets
- Gravies and sauces thickened with flour or starch
- Hydrolyzed wheat protein
- Ice cream
- Kamut



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- Matzoh/matzo/matzah
- Meat or poultry packaged with broth
- Pasta and noodle products
- Processed entrees (meat, poultry, or fish with fillers; luncheon meats; hot dogs)
- Pudding
- Seitan (vegetarian meat substitute)
- Semolina
- Spelt
- Triticale (wheat and rye hybrid plant)
- Wheat (bran, gluten, grass, malt, sprouts, starch)
- Wheat germ/wheat meat
- Wheat germ oil
- Wheatgrass
- Wheat protein isolate
- Whole wheat berries
- Yogurt

Keep in mind wheat can also be found in:

- Asian dishes
- Candy
- Glucose syrup
- Sauces (mariana)
- Soup, including broth
- Starch (gelatinized, modified, vegetable)
- Surimi

Where is wheat located on food labels?

Food labels that are regulated by the U.S. Food and Drug Administration (FDA) follow the regulations of the *Food Allergen Labeling and Consumer Protection Act* (FALCPA). FALCPA requires that the major eight food allergens are listed on the label in one of three ways: (1) using the common name, (2) common name written in parenthesis after the ingredient, or (3) in a “contains” statement.

For example, barbeque sauce that contains wheat could be labeled in either of the ways shown in the following example (bold is used for illustrative purposes only):

Label 1	Label 2
<p>INGREDIENTS: water, high fructose corn syrup, brown sugar, vinegar, tomato juice, modified food starch, molasses, spice, salt, mustard flour, Worcestershire sauce (distilled white vinegar, water, molasses, high fructose corn syrup, salt)</p> <p>Contains: Wheat</p>	<p>INGREDIENTS: water, high fructose corn syrup, brown sugar, vinegar, tomato juice, modified food starch (wheat), molasses, spice, salt, mustard flour, Worcestershire sauce (distilled white vinegar, water, molasses, high fructose corn syrup, salt)</p>

Labels should also be checked for warnings such as “may contain wheat,” “produced on shared equipment with wheat,” or “produced in a plant that uses wheat in other products.” These foods should be avoided as the product may contain a small amount of wheat due to cross-contact.

All child nutrition staff should be trained to read product labels and recognize food allergens. Because food labels change from time to time, child nutrition staff should check labels for wheat and wheat ingredients for every product each time it is received. If the label does not provide clear information, then the school must contact the manufacturer for clarification or use a different product. It is recommended that labels be maintained for 24 hours for every product served to a child with food allergies in case of a reaction. If the product is saved for later use as leftovers, the labels should be kept for 24 hours after all product has been used up or discarded.



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What substitutes can be used for wheat in student meals?

Individuals on a wheat-restricted diet can eat a wide variety of foods, but the grain source must be something other than wheat. In planning a wheat-free diet, look for alternate grains such as amaranth, barley, corn, oat, quinoa, rice, rye, and tapioca.

There are many grains and flours that can be substituted for wheat. Special recipes must be used when making substitutions for wheat flour because all grains do not have the same properties. When baking from scratch, a combination of wheat-free flours usually provides the best outcome. Some breads made with non-wheat flours are available on the commercial market. However, because bread can contain blends of different types of flour, read labels carefully to ensure that wheat flour is not an ingredient.

Wheat Alternatives

- Amaranth
- Arrowroot
- Barley
- Buckwheat
- Chickpea
- Cornmeal
- Millet
- Oat
- Potato
- Potato Starch
- Quinoa
- Rice
- Rye
- Sorghum



When menu substitutions or accommodations for a student with a food allergy, that is considered a disability, are outside of the meal pattern, a medical statement from a state licensed healthcare professional is required. Life-threatening food allergies are considered disabilities. The Americans with Disabilities Act (ADA) requires a broad interpretation of a disability, and it is reasonable to expect that other types of food allergies may be considered disabilities, as determined by a state licensed healthcare professional, such as a licensed physician. Refer to the manual *Accommodating Children with Disabilities in the School Meal Programs: Guidance for School Foodservice Professionals* on the USDA website (<https://www.fns.usda.gov/2017-edition-accommodating-children-disabilities-school-meal-programs>) for information on the required content of the medical statement.

If there is uncertainty about the statement, or if it does not provide enough information, contact the household or physician (as permitted by the family) for clarification. However, clarification of the medical statement should not delay the child nutrition department from providing a meal modification. Child nutrition staff should follow the portion of the medical statement that is clear and unambiguous to the greatest extent possible while obtaining the additional information or amended statement.

When planning menus for children with wheat allergies, consider current food choices offered to determine if a reimbursable meal can be selected from foods that do not contain wheat protein. This approach will minimize the need to prepare special recipes or to make menu substitutions. The chart below lists common menu items that may be used as safe alternatives to items that contain wheat. Child nutrition staff should always carefully read labels, even for foods that do not generally contain wheat.

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Common Menu Items That May Contain Wheat	Possible Substitutes or Alternatives That Do Not Typically Contain Wheat*
Breaded products (for example, chicken nuggets or patties, fried zucchini, okra)	Non-breaded products (for example, grilled chicken patties)
Bread, muffins, bagels, biscuits, and other bread products	Breads made without wheat flour or wheat products: barley, potato, rye, pure corn, rice, arrowroot, and corn tortillas
Casseroles containing soups, bread crumbs, or sauces thickened with flour or starch	Casseroles, soups, and sauces without wheat products
Chocolate	Wheat-free chocolate or pure cocoa powder
Cottage and cream cheese (some varieties)	Cottage and cream cheese without wheat products
Condiments (for example, salad dressings, soy sauce, soy bean paste)	Salt, chili powder, flavoring extracts, herbs, nuts, olives, pickles, popcorn, peanut butter
Crackers and snack chips (some varieties)	Rye cracker, rice cakes
Ice cream and frozen yogurt	Water or fruit ices
Meatloaf and meatballs	Beef, pork, ham, chicken, turkey, or fish; beans and legumes
Pasta	Rice pasta/noodles, other non-wheat pastas, rice, and polenta
Prepared baked goods (for example, cookies, cakes, quick breads)	Oatmeal, arrowroot, rice, or rye cookies made without wheat products
Pretzels	Corn or potato snack chips
Processed meats	“All meat” hot dogs or luncheon meats prepared without wheat flour fillers or wheat products
Processed soups	Soup without wheat products
Wheat-based cereals	Oatmeal, cream of rice, puffed rice, or other cereals made from pure corn, oats, or rice to which no wheat has been added
Yogurt	Milk

*Always check the ingredient label to verify ingredients and check for potential cross-contact.



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Common Questions

Are kamut and spelt safe alternatives to wheat?

No. Both kamut and spelt are grains that are closely related to wheat, and they are not safe for people with wheat allergies.

Is modified food starch a safe ingredient for people with wheat allergies?

Modified food starch can be made using a variety of grain products, including wheat. If the product is made using wheat, then the term “wheat” must be clearly marked on the label. Always contact the manufacturer if there are any questions regarding an ingredient.

How is celiac disease different from a wheat allergy?

Celiac disease is an inherited, or genetic, autoimmune disorder characterized by sensitivity to the protein gluten. The immune system of a person with celiac disease incorrectly perceives gluten as harmful and, as a result, damages tissues of the small intestine when this protein is eaten. This immune response differs from an immunoglobulin E (IgE) mediated response that causes allergies.

Many of the nutrients found in food are absorbed in the small intestine. A damaged small intestine may be unable to absorb these nutrients properly. This malabsorption may cause a variety of unpleasant gastrointestinal symptoms, such as diarrhea and abdominal pain, as well as medical conditions such as bone disease and anemia.

Gluten-free diets followed by individuals with celiac disease are not the same as wheat-free diets followed by individuals with wheat allergies. Gluten is found in wheat, barley, and rye.



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For More Information

Food Allergy Research and Education
<http://www.foodallergy.org>

Institute of Child Nutrition
<http://www.theicn.org/foodsafety>

National Digestive Diseases Information Clearinghouse, Celiac Disease
<https://www.niddk.nih.gov/health-information/digestive-diseases/celiac-disease>

U.S. Food and Drug Administration
Food Allergens
<https://www.fda.gov/food/food-ingredients-packaging/food-allergens>

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