

Adult Day Care Food Allergy Fact Sheet



Wheat Allergies

A wheat allergy is an immune system reaction to one of the four proteins found in wheat: glutenin, albumin, globulin, and gliadin. Roughly, 2.4 million people in the United States have a wheat allergy. Wheat allergies occur in approximately 0.4% of adults.

What are the symptoms of an allergic reaction?

Knowing the symptoms of an allergic reaction can save a participant's life. One or more allergic symptoms can occur and can be mild to severe. Symptoms can happen within a few minutes or up to a few hours after the food allergen is eaten. Participants can display different symptoms, even if they have the same allergy (e.g., one participant with a wheat allergy may have nausea when exposed to wheat while a different participant with a wheat allergy gets hives after consuming it). Each time a participant has a reaction, the symptoms may be different.

It is also important to know the symptoms of an allergic reaction as there is a possibility that a participant may have a reaction yet not have a known food allergy. As shown in the following chart, the Food Allergy Research and Education (FARE) organization details how a variety of symptoms can appear in the body.

Mild Symptoms	Severe Symptoms
<ul style="list-style-type: none">• Gut: mild nausea or discomfort (stomach pain, abdominal cramping)• Mouth: itchy; odd taste; slight, dry cough• Nose: itchy, runny nose; sneezing; congestion• Skin: a few hives (reddish, swollen, itchy areas on the skin), mild itch (sometimes in the ear canal)	<ul style="list-style-type: none">• Body: lightheadedness, fainting or loss of consciousness, anaphylaxis• Gut: repetitive vomiting or severe diarrhea• Heart: pale; turning blue; faint, weak, or “thready” pulse; dizziness; chest pain; drop in blood pressure• Lung: shortness of breath, wheezing, repetitive cough, difficulty breathing• Mouth: significant swelling of the tongue or lips• Psychological: feeling something bad is about to happen, sense of impending doom, anxiety, confusion, feeling weak• Skin: many hives over the body, widespread redness, eczema• Throat: tight, hoarse, trouble breathing/swallowing, swelling

What is anaphylaxis?

Anaphylaxis is a severe allergic reaction with a rapid onset that may cause difficulty breathing and death. It may disrupt breathing and blood circulation. An anaphylactic reaction usually occurs within minutes of being exposed to an allergen, but in some rare instances, it can occur a couple of hours later. Symptoms of anaphylaxis include:

- Difficulty breathing, constriction of airways, tightness of the throat, hoarse voice
- Drop in blood pressure (e.g., pale, weak pulse, confusion, dizziness, fainting, weakness, loss of consciousness)
- Feeling of doom
- Gastrointestinal symptoms (e.g., abdominal pain, nausea, vomiting, diarrhea, cramping)
- Rapid pulse, cardiac arrest
- Shock (i.e., drop in blood pressure and narrowing of airways)
- Skin symptoms (e.g., hives, swelling)
- Swollen lips



What foods contain wheat?

Individuals with wheat allergies cannot consume products that contain wheat in any form. Those responsible for preparing and serving food 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 chart contains some products that may contain wheat.

Common Varieties and Forms of Wheat		
<ul style="list-style-type: none"> • Bulgur • Couscous • Durum • Einkorn • Emmer 	<ul style="list-style-type: none"> • Farina • Farro • Freekeh (wheat harvested when young and green – commonly found in Middle Eastern diets) 	<ul style="list-style-type: none"> • Kamut® • Semolina • Spelt • Triticale (wheat and rye hybrid plant)
Wheat Flours		
<ul style="list-style-type: none"> • All-purpose • Enriched • Graham • High-gluten 	<ul style="list-style-type: none"> • High-protein • Instant • Pastry • Self-rising 	<ul style="list-style-type: none"> • Soft wheat • Steel ground • Stoneground • Whole wheat
Wheat Ingredients		
<ul style="list-style-type: none"> • Hydrolyzed wheat protein • Vital wheat gluten • Wheat bran • Wheat germ/meat 	<ul style="list-style-type: none"> • Wheat germ oil • Wheat gluten • Wheatgrass • Wheat malt 	<ul style="list-style-type: none"> • Wheat protein isolate • Wheat sprouts • Wheat starch • Whole wheat berries
Wheat Ingredients		
<ul style="list-style-type: none"> • Bagels • Baked goods (e.g., brownies, cakes, cookies, cupcakes, pies) • Baking mixes • Bread and bread products • Bread crumbs and batter 	<ul style="list-style-type: none"> • Cereals (some varieties) • Chips and pretzels • Club wheat • Crackers/cracker meal • Donuts • Flour tortillas • Matzoh/matzo/matzah/matza and matzoh meal 	<ul style="list-style-type: none"> • Muffins • Pancakes • Pasta and pasta products • Pastries • Rolls • Waffles

Dishes, Foods, and Products That May Contain Wheat

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| <ul style="list-style-type: none"> • Beverages (e.g., root beer and powder-based drink mixes) • Breaded meat, poultry, and fish • Candy/chocolate • Condiments/sauces (e.g., barbeque sauces, glazes, ketchup, marinades, marinara, mustard, salad dressings, soy sauce, Worcestershire sauce, some vinegars) • Glucose syrup | <ul style="list-style-type: none"> • Gravies and sauces thickened with flour or starch (roux) • Ice cream • Meat and poultry packaged with broth • Natural flavorings • Potato chips • Processed meats (e.g., hot dogs, luncheon meats; meat, poultry, or fish with fillers) • Pudding | <ul style="list-style-type: none"> • Seitan (vegetarian meat substitute) • Soup, broths • Starch (gelatinized, modified, vegetable) • Stir-fried dishes • Surimi (imitation crab or seafood) • Turkey patties • Vegan “chicken” products • Vegan meat substitutes • Vegetable gum • Yogurt |
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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 in the ingredient list: (1) using the common name, (2) common name written in parenthesis after the ingredient, or (3) in a “contains” statement. In 2021, the *Food Allergy Safety, Treatment, Education, and Research Act* (FASTER) was passed into law. This act expands what is considered a major allergen that has to be declared on a food label from eight to nine by adding sesame as a major allergen. This law took effect on January 1, 2023.

How barbeque sauce that contains wheat could be labeled in the ingredient list in different ways is shown in the following examples (bold is used for illustrative purposes only).

Label 1

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)

Contains: **Wheat**

Label 2

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)

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.” Foods with these advisory statements should be avoided as the product may contain a small amount of wheat due to cross-contact.

For example, bouillon cubes may or may not contain wheat depending on the recipe, which could be labeled like the following (bold is used for illustrative purposes only).

INGREDIENTS: salt, monosodium glutamate, hydrolyzed soy protein, sugar, yeast, sodium bicarbonate, natural flavors, spices, beef stock

Contains: Soy

May contain wheat

How should adult day care employees check and manage food labels?

Adult day care sites have a variety of procedures for preparing and serving food. All staff who prepare and serve food should be trained to read product labels and recognize food allergens in the ingredient list. Because food labels change from time to time, adult day care 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 manufacturer must be contacted for clarification or a different product should be used. The Centers for Disease Control and Prevention (CDC) recommends that food labels for every product that is served to a participant with food allergies be kept for a minimum of 24 hours afterward in case of a reaction. If the product is saved for later use as leftovers, keep labels for 24 hours after all product has been served or discarded.

What documentation is needed to make substitutions for participant meals?

When meal modifications for a participant with food allergies are outside of the Child and Adult Care Food Program (CACFP) meal pattern, a medical statement from a State licensed healthcare professional or registered dietitian* is required. Refer to the *Modifications to Accommodate Disabilities in the Child and Adult Care Food Program and Summer Food Service Program* on the USDA website for information on the required content of the medical statement. Adult day care staff can also contact their State agencies and sponsors for information. For more information about what is required in the medical statement, refer to ICN’s *Adult Day Care Food Allergy Fact Sheet – Common Questions: Adult Day Care Directors*.

*The USDA *Final Rule - Child Nutrition Programs: Meal Patterns Consistent With the 2020-2025 DGAs* defines a State licensed healthcare professional as an individual authorized to write medical prescriptions under State law. The rule also allows registered dietitians to submit medical statements for meal modifications for participants with disabilities. Registered dietitians are not required to have a State license. CACFP operations are required to implement this change by October 1, 2025.

If there is uncertainty about the statement, or if it does not provide enough information, contact the State licensed healthcare professional or registered dietitian (as permitted by the participating adult, family, caregiver, or guardian) for clarification. However, the adult day care staff should not delay in providing a meal modification and a safe environment (i.e., prevent exposure to known allergens) while awaiting clarification of the medical statement. 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.

What substitutes can be used for wheat in participant 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 the ingredient lists on food labels carefully to ensure that wheat flour is not an ingredient or that it is not produced in a facility that also processes wheat.

Wheat Alternatives		
• Amaranth	• Cornmeal	• Quinoa
• Arrowroot	• Millet	• Rice
• Barley	• Oat	• Rye
• Buckwheat	• Potato	• Sorghum
• Chickpea	• Potato Starch	

When planning menus for participants 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. Adult day care staff should always carefully read the ingredient list on food labels, even for foods that do not generally contain wheat.



Menu Items & Condiments That May Contain Wheat*	Possible Substitutes*†
Bread, bagels, biscuits, muffins, pancakes, waffles, and other wheat flour-based products*	Bread products made with a non-wheat flour (such as almond flour, amaranth flour, buckwheat flour, chickpea flour, corn meal, oat flour, potato starch, rice flour, tapioca flour), corn tortillas
Breaded products (such as chicken nuggets or fish sticks)	Non-breaded products (such as grilled chicken patties)
Breakfast cereals	Oatmeal, cream of rice, puffed rice, or other cereals made from corn, oats, or rice to which no wheat has been added
Crackers, pretzels	Corn chips
Meatloaf and meatballs	100% beef, pork, poultry, fish, or shellfish; beans, peas, or legumes
Mixed dishes containing soups, bread crumbs, or sauces thickened with flour or starch	Mixed dishes without wheat derivatives
Pasta	Rice, rice noodles, other non-wheat pasta, polenta
Processed meats	“All meat” hot dogs or luncheon meats prepared without wheat flour fillers or wheat derivatives
Salad dressings, soy sauce	Condiments without wheat derivatives
Vegetable or legume soups	Vegetable or legume soups without wheat derivatives
Yogurt, cottage cheese	Yogurt or cottage cheese without wheat derivatives; milk

*All meals claimed for reimbursement must meet the Child and Adult Care Food Program (CACFP) meal pattern requirements. Please visit <https://www.fns.usda.gov/cacfp/meals-and-snacks> for more information.

†Always review the ingredient list on a food label to verify ingredients and check for possible cross-contact (look for advisory statements or contact manufacturer).

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?

It depends. 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 in the ingredient list on the food 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.

References

Academy of Nutrition and Dietetics. (2009). *Celiac disease (CD) guideline 2009*.

<https://www.andean.org/topic.cfm?cat=3677>

Academy of Nutrition and Dietetics. (2018). *Celiac disease*.

<https://www.andean.org/topic.cfm?menu=5279>

American College of Allergy, Asthma & Immunology. (2018, January 29). *Anaphylaxis*.

<https://acaai.org/allergies/anaphylaxis>

Centers for Disease Control and Prevention. (2013). *Voluntary guidelines for managing food allergies in schools and early care and education programs*. www.cdc.gov/healthyyouth/foodallergies/

Food Allergy Research & Education. (n.d.). *Anaphylaxis*.

<https://www.foodallergy.org/resources/anaphylaxis>

Food Allergy Research & Education. (n.d.). *Recognizing and responding to a reaction*.

<https://www.foodallergy.org/resources/recognizing-and-responding-reaction>

Food Allergy Research & Education. (n.d.). *Recognizing and treating reaction symptoms*.

<https://www.foodallergy.org/resources/recognizing-and-treating-reaction-symptoms>

Food Allergy Research & Education. (n.d.). *Wheat allergy*. <https://www.foodallergy.org/living-food-allergies/food-allergy-essentials/common-allergens/wheat>



- Food Allergy Research & Education. (2020). *Food allergy facts and statistics in the US*.
<https://www.foodallergy.org/resources/facts-and-statistics>
- Food Allergy Research & Education. (2020). *Your food allergy field guide*.
<https://www.foodallergy.org/resources/field-guide-english>
- Food Allergy Research & Education. (2021, April 23). *With the stroke of President Biden's pen, FASTER Act for sesame labeling becomes law*. <https://www.foodallergy.org/media-room/stroke-president-bidens-pen-faster-act-sesame-labeling-becomes-law>
- Gupta, R.S., Warren, C.M., Smith, B.M. (2019). Prevalence and severity of food allergies among US adults. *JAMA Network Open*. 2(1):e185630. doi:10.1001/jamanetworkopen.2018.5630
- Mayo Clinic. (2019, September 14). *Anaphylaxis*.
<https://www.mayoclinic.org/diseases-conditions/anaphylaxis/symptoms-causes/syc-20351468>
- Mayo Clinic. (2020, August 23). *Wheat allergy*.
<https://www.mayoclinic.org/diseases-conditions/wheat-allergy/symptoms-causes/syc-20378897>
- Thompson, T. (2008). *The gluten-free nutrition guide*. New York: McGraw-Hill.
- U.S. Department of Agriculture. (2016, November 29). *Adult meal pattern*. https://fns-prod.azureedge.net/sites/default/files/cacfp/CACFP_adultmealpattern.pdf
- U.S. Department of Agriculture. (2017, June 22). *Modifications to accommodate disabilities in the Child and Adult Care Food Program and Summer Food Service Program*. <https://www.fns.usda.gov/modifications-accommodate-disabilities-cacfp-and-sfsp>
- U.S. Food and Drug Administration. (2018, July 16). *Food Allergen Labeling and Consumer Protection Act of 2004 (FALCPA)*. <https://www.fda.gov/Food/GuidanceRegulation/GuidanceDocumentsRegulatoryInformation/Allergens/ucm106187.htm>
- U.S. Department of Agriculture, Food and Nutrition Service. (2024, April 25). *Final rule - Child nutrition programs: Meal patterns consistent with the 2020-2025 DGAs*. <https://www.fns.usda.gov/cn/fr-042524>
- U.S. Food and Drug Administration. (2021, May 5). *Food allergies*.
<https://www.fda.gov/food/food-labeling-nutrition/food-allergies>
- U.S. Library of Congress. (2021). *Summary: S.578 – FASTER Act of 2021*. <https://www.congress.gov/bill/117th-congress/senate-bill/578?q=%7B%22search%22%3A%5B%22S.+578%22%5D%7D&s=1&r=1>
- Xu, Y.Y., Jiang, N.N., Wen, L.P., Li, H., Yin, J. (2019). Wheat allergy in patients with recurrent urticaria. *The World Allergy Organization Journal*. 12(2):100013. doi:10.1016/j.waojou.2019.100013

For More Information



Food Allergy Research & Education

www.foodallergy.org

Institute of Child Nutrition

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

www.fda.gov/Food/IngredientsPackagingLabeling/FoodAllergens/default.htm

This project was funded using U.S. Department of Agriculture grant funds.

This project was funded using U.S. Department of Agriculture grant funds. This institution is an equal opportunity provider.

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Suggested Reference Citation:

Institute of Child Nutrition. (2024). *Adult day care food allergy fact sheet – wheat allergies*. University, MS: Author.

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09/30/2024

