

Adult Day Care Food Allergy Fact Sheet



Milk Allergies

Approximately 6.1 million people in the United States report having an allergy to cow's milk. An estimated 75% of children will outgrow their milk allergy. However, there is a rising concern of adult-onset cases (approximately 2% of adults). Among all adults with food allergies, one in four reported their first allergic response when they were 18 years or older. Avoiding milk is necessary for those who have a physician-confirmed diagnosis.

Many proteins in milk can cause an allergic reaction. There are two main categories of proteins in milk:

1. Casein – proteins found in the solid part or curd (part of milk that curdles)
2. Whey – proteins found in the liquid part of milk (what remains after milk curdles)

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 milk allergy may have nausea when exposed to milk while a different participant with a milk 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

- **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)

Severe Symptoms

- **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 milk?

Participants with a milk allergy need to follow a completely milk-free diet to avoid possible reactions. Eliminating fluid milk and other dairy products such as cheese from the diet is obvious, but many nondairy products and processed foods contain casein and whey (the proteins in milk). Reading the ingredient list on food labels is important to eliminate exposure to ingredients that contain milk. The following chart lists products that contain milk and should be avoided.

Dairy Products

- Butter (salted, spray, unsalted, whipped)
- Buttermilk (blends, solids, sweet cream buttermilk powder)
- Cheese (all types)
- Cheese food, imitation cheese
- Cheese dip/sauce/spread (e.g., queso, nacho cheese, Rotel® dip)
- Coffee creamer
- Condensed milk
- Cottage cheese
- Cream cheese
- Crème fraiche
- Curds
- Custard
- Evaporated milk
- Ghee
- Goat's milk protein is similar to cow's milk protein and may cause a reaction in milk-allergic individuals. It is not a safe alternative.
- Half and half
- Heavy cream
- Ice cream, ice milk, sherbet
- Kefir (fermented milk drink)
- Lactose-free milk (Lactaid®)
- Malted milk
- Milk from other animals (goat, sheep)*
- Powdered milk (dried)
- Pudding
- Quarg/quark (fresh soft cheese)
- Rennet, rennet casein
- Ricotta cheese
- Sour cream (all varieties)
- Skyr (Icelandic cultured dairy product)
- Whipping cream
- Yogurt (Greek, regular, and frozen, all varieties)

Dairy Ingredients

- Anhydrous butter oil
- Anhydrous milk fat (AMF)
- Butter acid
- Butter ester
- Butter extract
- Butterfat
- Butter flavor
- Butter oil
- Dairy product/ butter solids
- Dehydrated yogurt
- Diacetyl
- Galactose
- Lactate solids
- Lactic acid starter culture
- Lactic yeast
- Lactitol monohydrate
- Lactose
- Lactulose
- Milk derivative
- Milk fat
- Milk protein
- Milk protein hydrolysate
- Milk powders (full cream, nonfat, skim, whole),
- Milk solids (dried, nonfat, paste, sour, whole)
- Nisin
- Protein hydrolysate
- Recaldent™
- Sour cream solids
- Sour milk solids
- Tagatose
- Yogurt powder

*Goat's milk protein is similar to cow's milk protein and may cause a reaction in milk-allergic individuals. It is not a safe alternative.



Milk Protein Ingredients		
Casein	Whey	
• Ammonium caseinate • Calcium caseinate • Casein • Casein hydrolysate/ hydrolyzed casein • Iron caseinate • Magnesium caseinate • Potassium caseinate • Sodium caseinate • Zinc caseinate	• Acid whey • Cured whey • Delactosed whey • Demineralized whey • Lactalbumin • Lactalbumin phosphate • Lactoferrin • Lactoglobulin • Powdered whey	• Reduced mineral whey • Sweet dairy whey • Whey • Whey protein • Whey protein concentrate • Whey protein hydrolysate/ hydrolyzed whey • Whey protein isolate • Whey solids
Dishes, Foods, and Products That May Contain Milk		
• Baked goods (breads, cakes, cookies, crackers) • Breeding on processed meat and poultry products • Broths and stocks • Buns (some restaurants butter buns) • Candy (caramel, chocolate, nougat) • Commercial liquid supplements • Enteral nutrition/tube feeding products • Fat substitute	• Flavored chips • Flavorings (artificial butter, caramel, or natural) • Foods fortified with protein • Granola mixes (butter) • High protein flour • Instant potatoes • Luncheon meats, hot dogs, or sausages (may use casein as a binder) • Margarine	• Milk/cheese substitutes (soy-based, nut-based, or rice-based dairy products, possible cross-contact) • Nondairy products (may contain casein) • Protein powder (may contain whey or casein) • Shellfish (may be dipped in milk to reduce fishy odor) • Tuna (may contain casein, pouch, and canned)

Allergens are not always present in these foods. Always read the labels and contact the manufacturer if unsure about a product's ingredient.

Where is milk 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 will take effect in January 2023, but manufacturers may begin incorporating sesame as a major allergen in the ingredient list on their food labels before this date.

How hot dog buns that contain milk 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: Whole wheat flour, water, high fructose corn syrup, egg, soybean oil, whey, yeast, sugar, soy flour
Contains: **Milk**, Soy, Egg, Wheat

Label 2

INGREDIENTS: Whole wheat flour, high fructose corn syrup, egg, soybean oil, **whey (milk)**, yeast, sugar, soy flour

Labels also should be checked for warnings such as, “may contain milk,” “produced on shared equipment with milk,” or “produced in a plant that uses milk in other products.” Foods with these advisory statements should be avoided as the product may contain trace amounts of milk protein due to cross-contact.

For example, granola bars may or may not contain milk depending on the recipe, but could be made on the same equipment of a recipe that does contain milk. The granola bar could be labeled like below (bold is used for illustrative purposes only):

INGREDIENTS: Water, eggs, tapioca flour, starch, oats, canola oil, baking soda, guar gum

Contains: Egg

Baked in a gluten-free facility that uses nuts, dairy, and soy.

Listed are some ingredients that may be confused with ingredients that contain milk, but these ingredients do not contain milk and do not need to be restricted for a participant with a milk allergy:

- Calcium lactate
- Calcium stearoyl lactylate
- Cocoa butter
- Cream of tartar
- Lactic acid (however, lactic acid starter culture may contain milk)
- Oleoresin
- Sodium lactate
- Sodium stearoyl lactylate

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 milk and milk 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 substitutes can be used for milk for participants with a milk-related disability, such as a milk allergy?

When a participant has a milk-related disability, as determined by a State licensed healthcare professional, the program regulation [7 CFR 226.20 (g)] requires the adult day care site to provide the milk substitute specified by the healthcare professional. When menu substitutions or modifications for a participant with food allergies are outside of the Child and Adult Care Food (CACFP) meal pattern, the participating adult, family, caregiver, or guardian must provide the center with a medical statement signed by a State licensed healthcare professional, such as a general practice physician, registered nurse, or allergist. Refer to the *Modifications to Accommodate Disabilities in the Child and Adult Care Food Program and Summer Food Service Program* on the U.S. Department of Agriculture (USDA) website for information on the required content of the medical statement. Adult day care sites 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*.

If there is uncertainty about the statement, or if it does not provide enough information, contact the State licensed healthcare professional (as permitted by participating adult, family, caregiver, or guardian) for clarification. However, clarification of the medical statement should not delay the adult day care staff from providing a meal modification and a safe environment (i.e., prevent exposure to a known allergen) 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 milk for participants without a milk-related disability, such as a milk preference?

Adult day care sites have the option to offer a milk substitute for participants who do not have a milk-related disability. Nondairy beverage substitutions for those without a milk-related disability are served at the discretion and the expense of the site and must be in accordance with CACFP regulations at 7 CFR 226.20(g)(3). This is an allowable expense. If the substitute is used to fulfill the milk requirements of the CACFP Adult meal pattern, milk substitutes must be nutritionally equivalent to fluid milk and meet the nutritional standards for fortification of calcium, protein, vitamin A, vitamin D, and other nutrients to levels found in cow's milk. Nondairy milk substitutes that are nutritionally equivalent to milk may be served in place of milk to adults with medical or special dietary needs without a medical statement.

For a participant to receive a nondairy beverage, the participating adult, family, caregiver, or guardian must provide a written request. Since the milk substitution is due to a non-disability reason and can be accommodated within the established meal pattern, U.S. Department of Agriculture, Food and Nutrition Service (USDA, FNS) does not require a medical statement. However, your State agency or sponsoring organization may still require a medical statement. Check with your State agency about food allergy requirements. Furthermore, even if not required by the State agency, adult day care sites may still choose to request a written medical statement from a State licensed healthcare professional in support of a request for a modification within the program's meal pattern. Adult day care sites will be reimbursed for a non-disability modified meal that is within the meal pattern, regardless of whether they have obtained a written medical statement. Adult day care staff must inform the State agency of any sites opting to provide milk substitutes and must ensure those milk substitutions meet USDA, FNS nutrient requirements. Refer to the USDA CACFP adult meal pattern for more information about milk requirements.



What substitutes can be used for milk in participant meals?

When planning menus, consider current food choices offered to determine if a participant who cannot consume milk may select a reimbursable meal or snack from foods offered that do not contain milk proteins. This approach will minimize the need to prepare special recipes or to make menu substitutions for participants with a milk allergy. The following chart lists common menu items that may be used as safe alternatives to items that contain milk. Adult day care staff should always carefully read the ingredient list on food labels, even for foods that generally do not contain milk.

Menu Items & Condiments That May Contain Milk*	Possible Substitutes*†
Bread, bagels, biscuits, muffins, pancakes, waffles, and other bread products	Bread products made without milk; tortillas
Breaded products (such as chicken nuggets or fish sticks)	Non-breaded products (such as grilled chicken patties)
Breakfast cereals	Dairy-free breakfast cereals
Butter	Dairy-free margarine
Cheese and any menu items that contain cheese	Imitation cheese (including soy, almond, and other vegan cheeses); menu items without cheese
Crackers (some varieties)	Dairy-free crackers, corn chips, pretzels
Mayonnaise or cream-based salad dressings	Oil and vinegar salad dressings
Mixed dishes containing milk, cheese, butter, or sour cream	Mixed dishes without milk, cheese, butter, or sour cream
Pasta (some varieties)	Pasta without milk; barley, beans, couscous, legumes, rice, quinoa
Processed meats	100% beef, pork, poultry, fish, or shellfish; beans, peas, or legumes
Vegetable or legume soups	Vegetable or legume soups without dairy
Yogurt, cottage cheese	Soy yogurt**

*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.

**Soy products are common substitutes for milk products, but soy also is a common allergen.

†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).

What are some baking substitutions for milk?

Water or fruit juice can be substituted in equal amounts for milk in baking and cooking. For example, use 1 cup of water in place of 1 cup of milk.

How does lactose intolerance differ from a milk allergy?

Food intolerances can sometimes be mistaken for food allergies. Lactose intolerance is caused by a deficiency of lactase, the enzyme that breaks down the sugar (lactose) found in milk into its digestible components. Common digestive symptoms of lactose intolerance are nausea, bloating, diarrhea, gas, and cramping. Lactose intolerance is not life-threatening. Adult day care sites may offer lactose-free milk as part of the reimbursable meal without a written request. Those with lactose intolerance may be able to eat small amounts of foods that contain milk as an ingredient and consume other dairy products such as yogurt without experiencing symptoms. This will vary based upon the individual. Milk allergy, in contrast, is a reaction to the proteins (rather than the sugar) in milk and is an immune response rather than a digestive problem.

Is a milk allergy a disability?

Yes. Any food-related disability will officially be determined by a State licensed healthcare professional, but a milk allergy will generally be considered a disability. The *Americans with Disabilities Act* states a broad interpretation of a disability, and it is reasonable to expect that any type of milk allergy and lactose intolerance may be considered disabilities. Adult day care staff are required to provide the milk substitute prescribed in a medical statement from the State licensed healthcare professional.

Is a medical statement required for a milk substitution?

It depends. If a participant has a milk-related disability (such as a milk allergy), a medical statement is required to provide a substitute beverage that does not meet FNS nutrient requirements for milk. Regardless if the milk substitution cannot be met within the meal pattern, a substitution must be provided for a documented disability.

For participants without a milk-related disability, sites may choose to provide a substitute beverage for milk. Sites may accept a written substitution request from a participating adult, family, caregiver, or guardian, or State licensed healthcare professional. Any milk substitution in a non-disability situation must be nutritionally equivalent to fluid milk. Sites are not required to grant substitution requests for participants without milk-related disabilities but are encouraged to consider ethnic and religious preferences when providing a fluid milk substitution. Contact your State agency or sponsoring organization to identify appropriate substitutions.

Can a participant have a milk allergy and still consume cheese?

No. A participant with a milk allergy will not be able to consume any dairy products, including cheese and yogurt. On the other hand, participants with lactose intolerance may be able to consume some types of cheese and yogurt without experiencing adverse effects.

Can juice be substituted for milk?

It depends. Participants without milk-related disabilities may only be offered a nondairy beverage that is nutritionally equivalent to fluid milk. For these participants, juice may not be substituted for milk. For a participant with a milk-related disability, follow what is written in the medical statement.

Is goat's milk a safe alternative to cow's milk for participants with food allergies?

No. It is not a safe alternative. Goat's milk protein is similar to cow's milk protein and may cause a reaction in individuals with a milk allergy.

If a product is labeled "dairy free" or "nondairy," is it safe for a person with milk allergies?

No. The term "dairy free" does not have an FDA-regulated definition, so there is no assurance that the product does not contain milk proteins. The FDA definition of "nondairy" states that the product can include milk proteins and still be labeled "nondairy." Consequently, ingredient lists should always be checked for the presence of milk even if one of these terms is used on the packaging.

Can those with a milk allergy tolerate heated milk or baked products containing milk?

It depends. Some people with a milk allergy do not react to thoroughly heated fluid milk or products containing extensively heated milk or milk products. There may be occasions wherein a State licensed healthcare professional has determined that a participant can tolerate thoroughly heated milk; these circumstances should be communicated in the medical statement.

References

- American College of Allergy, Asthma & Immunology. (2018, January 29). *Anaphylaxis*. <https://acaai.org/allergies/anaphylaxis>
- Asthma and Allergy Foundation of America. (n.d.). *Milk allergy*. <http://www.kidswithfoodallergies.org/page/milk-allergy.aspx>
- 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.). *Milk allergy*. <https://www.foodallergy.org/living-food-allergies/food-allergy-essentials/common-allergens/milk>
- 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. (2020). *Food allergy facts and statistics for the U.S.* <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>
- Kim, J.S., Nowak-Węgrzyn, A., Sicherer, S.H., Noone, S., Moshier, E.L., & Sampson, H.A. (2011). Dietary baked milk accelerates the resolution of cow's milk allergy in children. *Journal of allergy and clinical immunology*. 128(1):125-131.e2. doi:10.1016/j.jaci.2011.04.036
- Mayo Clinic. (2019, September 14). *Anaphylaxis*. <https://www.mayoclinic.org/diseases-conditions/anaphylaxis/symptoms-causes/syc-20351468>
- Mayo Clinic. (2020, June 12). *Milk allergy*. <https://www.mayoclinic.org/diseases-conditions/milk-allergy/symptoms-causes/syc-20375101>
- 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. Department of Agriculture. (2016, July 14). *Nutrition requirements for fluid milk and fluid milk substitutions in the Child and Adult Care Food Program, questions and answers*. https://fns-prod.azureedge.net/sites/default/files/cacfp/CACFP17_2016os.pdf
- U.S. Department of Agriculture. (2017). *Updated Child and Adult Care Food Program meal patterns: Child and adult meals*. https://fns-prod.azureedge.net/sites/default/files/cacfp/CACFP_MealBP.pdf
- 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. 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>
- Warren, C., Stankey, C., Jiang, J., Blumenstock, J., Smith, B., & Gupta, R. (2018). Prevalence, severity, and distribution of adult-onset food allergy. *Annals of Allergy, Asthma & Immunology*. 121(5): S14-S14. doi:10.1016/j.anai.2018.09.041

For More Information

Food Allergy Research & Education
www.foodallergy.org

Institute of Child Nutrition
www.theicn.org/foodsafety

The National Institute of Diabetes and Digestive and Kidney Diseases
Lactose Intolerance
www.niddk.nih.gov/health-information/digestive-diseases/lactose-intolerance

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.

The USDA is an equal opportunity provider, employer, and lender.

The University of Mississippi is an EEO/AA/Title VI/Title IX/Section 504/ADA/ADEA employer.

For the nondiscrimination statement in other languages: <https://www.fns.usda.gov/cr/fns-nondiscrimination-statement>

Except as provided below, you may freely use the text and information contained in this document for non-profit or educational use with no cost to the participant for the training providing the following credit is included. These materials may not be incorporated into other websites or textbooks and may not be sold.

Suggested Reference Citation:

Institute of Child Nutrition. (2021). *Adult day care food allergy fact sheet – milk allergies*. University, MS: Author.

The photographs and images in this document may be owned by third parties and used by the University of Mississippi under a licensing agreement. The University cannot, therefore, grant permission to use these images. Please contact **helpdesk@theicn.org** for more information.

© 2021, Institute of Child Nutrition, The University of Mississippi, School of Applied Sciences

09/09/2021

