

FOOD ALLERGY FACT SHEET

Milk Allergies

What age group is most likely to have a milk allergy?

Two to five percent of children under the age of three have a milk allergy, and cow's milk allergy is the most common cause of allergic reactions in young children. This allergy is usually outgrown in the first few years of life, so it is more common in infants and young children than in adults.

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?

Milk allergies can cause a range of symptoms that occur within a few minutes to a few hours after exposure. Milk rarely causes anaphylaxis, which is a life-threatening allergic reaction.

Immediate symptoms of a milk allergy might include:

- Hives (urticaria)
- Wheezing
- Vomiting

Symptoms that may take more time to develop include:

- Loose stools, which may contain blood
- Diarrhea
- Abdominal cramps
- Coughing or wheezing
- Runny nose
- Watery eyes
- Itchy skin rash, often around the mouth
- Colic in babies

What foods contain milk?

Individuals 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 non-dairy products and processed foods contain casein and whey (the proteins in milk). Reading food labels is important to eliminate exposure to ingredients that contain milk. Below is a list of products that contain milk and should be avoided.

- Butter
- Cheese (all types)
- Cottage cheese
- Cream
- Cream cheese
- Curds
- Custard
- Half and half
- Ice cream
- Margarine
- Milk
- Nougat
- Pudding
- Sour cream
- Yogurt



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How is milk located on food labels?

Food labels regulated by the U.S. Food and Drug Administration (FDA) follow the regulations of the Food Allergen Labeling and Consumer Protection Act (FALCPA) by listing the top eight allergens on the label in plain language either in the ingredient list or in a “contains” statement.

For example, hot dog buns that contain milk could be labeled in either of the ways shown in the examples below (bold is used for illustrative purposes only):

Label 1	Label 2
<p>INGREDIENTS: Enriched flour, Water, High fructose corn syrup, Egg, Soybean oil, Whey, Yeast, Sugar, Wheat gluten, Soy flour</p> <p>Contains: Milk, Soy, Egg, Wheat</p>	<p>INGREDIENTS: Enriched flour, Water, High fructose corn syrup, Egg, Soybean oil, Whey (Milk), Yeast, Sugar, Wheat gluten, Soy flour</p>

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.” These foods should be avoided as the product may contain trace amounts of milk protein due to cross-contact.

All child nutrition staff should be trained how to read product labels and recognize food allergens. Because food labels change from time to time, child nutrition staff should check labels for milk and milk ingredients for every product each time it is purchased. If the label does not provide clear information, then the manufacturer must be contacted for clarification or a different product should be used. Labels should be maintained for a minimum of 24 hours for every product served to a child with food allergies in case of a reaction.

Ingredients That Do Not Contain Milk

Listed below are some ingredients that may be confused with ingredients that do contain milk, but these ingredients do **not** contain milk and need not be restricted by someone 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

What substitutes can be used for milk in student meals?

For children without a disabling milk allergy, USDA allows schools the option to offer a nondairy beverage substitute that is nutritionally equivalent to fluid milk when a written request is made by a physician or parent/legal guardian. The milk substitute offered to a child also must supply additional nutrients specified in the program regulation (7 CFR 210.10(m)(3)). More information is provided in the Common Questions section at the end of this fact sheet.

When a child’s milk allergy is life-threatening, it is considered to be a disability. In such a case, the program regulation (7 CFR 210.10(g)) requires the school to provide the milk substitute specified by a licensed physician. The child’s parent or legal guardian must provide the school with a medical statement signed by a licensed physician before a milk substitute can be provided. Refer to the manual *Accommodating Children with Special Dietary Needs in the School Nutrition Programs: Guidance for School Foodservice Staff* on the USDA web site (www.fns.usda.gov/cnd/Guidance/special_dietary_needs.pdf) for information on the required content of the physician’s 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.



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When planning menus, consider current food choices offered to determine if a student who cannot consume milk may select a reimbursable meal 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 children with milk allergies. The chart below lists common menu items that may be used as safe alternatives to items that contain milk. Child nutrition staff should always carefully read labels, even for foods that generally do not contain milk.

Common Menu Items That May Contain Milk	Possible Substitutes or Alternatives That Do Not Typically Contain Milk*
Breaded products (for example, chicken nuggets or patties, fried zucchini or okra)	Non-breaded products (for example, grilled chicken patty)
Bread, muffins, bagels, and other bread products	Tortillas, homemade bread products made without milk
Butter	Dairy-free margarine
Crackers (some varieties)	Dairy-free crackers, some chips
Biscuits	Rolls or breadsticks made without milk
Casseroles containing milk, cheese, butter, or sour cream	Homemade casseroles with dairy-free margarine, soy sour cream**, soy cheeses
Cheese and any menu items that contain cheese in any form	Soy cheese** or menu items without cheese (for example, a hamburger instead of a cheeseburger)
Ready-to-eat cereals (some varieties)	Dairy-free cereals
Mayonnaise- or cream-based salad dressings	Oil and vinegar-based salad dressings
Pudding	Soy pudding**
Yogurt	Soy yogurt**
Processed soups (some varieties, especially cream or milk based soups)	Homemade soups without milk
Processed meats (hot dogs, luncheon meats, sausages)	100% beef, chicken, pork, etc.
Pasta (some varieties)	Rice, couscous, barley, beans, legumes
Prepared baked goods (cookies, cakes, quick breads)	Homemade baked goods without milk or dairy (angel food cake, oil-based cookies and cakes)
Chocolates and candies	Dairy-free chocolates
Ice cream and frozen yogurt	Sorbet, ices, soy ice cream

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

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

Baking Substitutions

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.



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Common Questions

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 symptoms of lactose intolerance are nausea, bloating, diarrhea, gas, and cramps. Lactose intolerance is not life-threatening. Schools may offer lactose-free milk as part of the reimbursable meal without a written request. Those with lactose intolerance often can drink small amounts of milk and can usually consume other dairy products such as cheese and yogurt without symptoms. Milk allergy, in contrast, is a reaction to the proteins (rather than the sugar) in milk and is an immune response.

Is a milk allergy a disability?

A life-threatening milk allergy is considered a disability and child nutrition staff is required to provide milk substitutes, as prescribed by a licensed physician. Non life-threatening milk allergies and lactose intolerance are not disabilities and the school may choose whether or not to make accommodations.

Is a physician's statement required for a milk substitution?

If a student has a life threatening milk allergy, a physician's statement is required in order to provide a substitute beverage for the milk. For a non-disabling milk allergy, schools choosing to provide a substitute beverage for the milk may accept a written substitution request from a parent or legal guardian as well as from a medical authority, as recognized by the State agency that administers the child nutrition programs. Schools are not required to grant substitution requests for a milk allergy that is not considered a disability.

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

A child with a true milk allergy will not be able to consume any dairy products, including cheese and yogurt. On the other hand, children with lactose intolerance may be able to consume some types of cheese and yogurt without experiencing adverse effects.

Can juice be substituted for milk?

No. Children with non-disabling milk allergies may only be offered a nondairy beverage that is nutritionally equivalent to fluid milk. Juice is not nutritionally equivalent to milk. However, if the milk allergy is a disability, a juice substitution written in the physician's orders must be followed.

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

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.

If a product is labeled "dairy-free" or "non-dairy", 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 "non-dairy" states that the product can include milk proteins and still be labeled "non-dairy". Consequently, ingredient labels should always be checked for the presence of milk even if one of these terms is used on the packaging.



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For More Information

- Food Allergy & Anaphylaxis Network, Milk Allergy <http://www.foodallergy.org/page/milk-allergy>
- Food Allergy Initiative, Milk Allergy <http://www.faiusa.org/?page=milk>
- National Digestive Diseases Information Clearinghouse, Lactose Intolerance <http://digestive.niddk.nih.gov/ddiseases/pubs/lactoseintolerance/>
- U.S. Food and Drug Administration, Food Allergens <http://www.fda.gov/Food/FoodSafety/FoodAllergens/default.htm>

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