What Is Milk Allergy?

Milk allergy is a potentially life-threatening immune system reaction to the proteins in cow's milk. It is often confused with lactose intolerance, a condition characterized by an inability to digest the lactose (a sugar) in milk. Unlike an allergy, lactose intolerance is not life-threatening. Milk allergy is the most common food allergy in infants and very young children. Most children outgrow milk allergies by the time they are two or three years old.

Avoiding Milk and Dairy

A child with a milk allergy cannot drink milk or consume dairy products, such as yogurt and cheese. The proteins in cow’s milk are similar to other domestic mammals, such as goats, sheep, and buffalo; therefore, milk and dairy products from these animals should also be avoided.

Nondairy products and processed foods often contain dairy ingredients and various forms of casein and whey, the two major proteins in milk. Reading food labels to find these hidden ingredients is important to eliminate exposure to milk.

If you have a child with a milk allergy in your care, you need to be aware of foods and products that may contain milk to prevent a reaction. This includes foods in your menu as well as foods and products that staff and children may bring into the center. The following tables list the most common dairy products, dairy ingredients, milk protein ingredients, and dishes, foods, and products that may contain milk. It is important to read all food labels to check for milk and dairy ingredients. Take extra care when reading food labels for milk proteins, as they are not commonly known and are often used in unexpected products.

### Dairy Products

- Butter (all forms)
- Cheese (all types)
- Cheese dip/sauce/spread
- Coffee creamer
- Condensed milk
- Cottage cheese
- Cream cheese
- Crème fraîche
- Curd
- Custard
- Dried milk
- Evaporated milk
- Ice cream
- Pudding
- Ghee
- Half and half
- Heavy cream
- Ice cream
- Kefir
- Malted milk
- Milk (all forms, including all fat and flavored varieties)
- Powdered milk
- Pudding
- Sherbet
- Sour cream
- Skyr
- Quarg/quark
- Whipping cream
- Yogurt (all varieties)

### Dairy Ingredients

- Anhydrous butter oil
- Anhydrous milk fat (AMF)
- Butter acid
- Butter ester
- Butter oil
- Butterfat
- Dairy product solids
- Dehydrated yogurt
- Diacetyl
- Galactose
- Lactate solids
- Lactic acid
- Lactic acid starter culture
- Lactic yeast
- Lactitol monohydrate
- Lactose
- Lactulose
- Milk derivative
- Milk fat
- Milk protein
- Milk protein hydrolysate
- Milk solid pastes
- Milk solids
- Nisin
- Protein hydrolysate
- Recaldent™
- Sour cream solids
- Tagatose
- Yogurt powder
Milk Protein Ingredients

**Casein**
- Ammonium caseinate
- Calcium caseinate
- Casein
- Casein hydrolysate
- Hydrolyzed casein
- Iron caseinate
- Magnesium caseinate
- Potassium caseinate
- Sodium caseinate
- Zinc caseinate

**Whey**
- Acid whey
- Cured whey
- Demineralized whey
- Hydrolyzed whey
- Lactalbumin
- Lactalbumin phosphate
- Lactoferrin
- Lactoglobulin
- Powdered whey
- Reduced mineral whey
- Sweet dairy whey
- Whey
- Whey powder
- Whey protein
- Whey protein concentrate
- Whey protein hydrolysate
- Whey protein isolate
- Whey solids

Dishes, Foods, and Products That May Contain Milk

- Artificial butter flavor
- Baked goods (breads, cakes, cookies, crackers)
- Breading on processed meat and poultry products
- Broths and stocks
- Candy (caramel, chocolate, nougat)
- Canned tuna (may contain casein)
- Deli meats
- 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)
- Milk substitutes (soy-based, nut-based, or rice-based dairy products, possible cross-contact)
- Protein powder (may contain whey or casein)
- Rice cheese
- Shellfish (may be dipped in milk to reduce fishy odor)
- Simplesse® (fat substitute)
- Soy cheese

Reading Food Labels

Foods regulated by the U.S. Food and Drug Administration (FDA) must follow the Food Allergen Labeling and Consumer Protection Act of 2004 (FALCPA). FALCPA requires food manufacturers to list the nine* major allergens and ingredients containing those allergens on the ingredient list of a food label in one of three ways:

1) Using their common or usual name “Milk”

2)Providing the common or usual name of an allergen in parentheses after a lesser-known name of an allergenic ingredient “Diacetyl (Milk)”

3)Using a “Contains” statement following or next to the ingredient list “Contains Milk”

Food labels often contain an advisory statement following the ingredients list. This statement is NOT mandatory nor regulated in terms of the wording that should be used. Examples include:

“May contain milk.”

“Manufactured on equipment that also processes milk.”

Foods with an advisory statement should be avoided as the product may contain a trace amount of a particular allergen due to cross-contact. Cross-contact is when one food allergen comes into contact with another food, transferring the allergen to the new food. The absence of an advisory statement does not mean that the product has had no cross-contact with a particular allergen.

Food labels may also claim the product is free from a particular allergen. These claims are not regulated, and the product may be made in a facility where the allergen is present.

*The FASTER Act of 2021 declared sesame as the 9th major allergen. Food manufacturers are not required to list sesame and ingredients containing sesame on the ingredient list of a food label until January 1, 2023.
All child care staff should be trained to read food labels and recognize food allergens. Ingredients and manufacturing processes change over time, so staff should carefully read labels for potential allergens every time a product is purchased. If there is uncertainty about whether a food product contains a specific allergen, contact the manufacturer for clarification.

The Centers for Disease Control and Prevention (2013) recommends keeping labels of every product served to a child with food allergies for a minimum of 24 hours or as required by your State or local authority. If a product is kept as leftovers, be sure to keep the label for 24 hours after it is completely used or discarded.

### Menu Modifications

#### Foods That Contain Milk

A medical statement from a state-licensed healthcare professional is required when substitutions or modifications for a child with a food allergy are outside the meal pattern. Refer to the Modifications to Accommodate Disabilities in the Child and Adult Care Food Program and Summer Food Service Program memo on the USDA website ([https://www.fns.usda.gov/cn/modifications-accommodate-disabilities-cacfp-and-sfsp](https://www.fns.usda.gov/cn/modifications-accommodate-disabilities-cacfp-and-sfsp)) for more information on using medical statements.

When planning a menu for a child with an milk allergy, consider your current menu items to determine if you can create a reimbursable meal or snack free of milk. Meals and snacks that meet meal pattern requirements do not require a medical statement. This approach minimizes the need to make menu substitutions or prepare special recipes and reduces the burden on both providers and participants.

#### Fluid Milk

A medical statement from a state-licensed healthcare professional is required when a fluid milk substitution for a child with a milk allergy does not meet the nutritional standards of cow’s milk. A written request from a parent or guardian identifying a milk allergy as restricting the diet of the child is sufficient for a nondairy milk substitution that is nutritionally equivalent to milk. Your CACFP state agency may identify appropriate substitutions that meet the nutritional requirements. Refer to the Nutrition Requirements for Fluid Milk and Fluid Milk substitutions in the Child and Adult Care Food Program, Questions and Answers memo on the USDA website ([https://fnsprod.azureedge.net/sites/default/files/cacfp/CACFP172016os.pdf](https://fnsprod.azureedge.net/sites/default/files/cacfp/CACFP172016os.pdf)) for more information.
The following table lists safe alternatives to common menu items that contain milk:

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

*All meals claimed for reimbursement must meet the CACFP meal pattern requirements. Please visit [https://www.fns.usda.gov/cacfp/meals-and-snacks](https://www.fns.usda.gov/cacfp/meals-and-snacks) for more information. †Always review the food label to verify ingredients. Contact the manufacturer if there is uncertainty about whether a food product contains milk.

**Baking Substitutions**

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

An allergic reaction can be mild or severe. Symptoms of an allergic reaction can occur within minutes or a few hours of exposure to a food allergen. A child may experience different symptoms each time they have an allergic reaction. A history of mild reactions does not predict the severity of future reactions.

It may be difficult to determine when an infant or very young child is having an allergic reaction. They most likely do not understand what they are experiencing and may not have the language skills to tell you. Recognizing personality changes or when a child is looking unwell can offer important clues. Verbal children may say things like, “my mouth feels funny” or “my tongue is itchy.”

### Body System

<table>
<thead>
<tr>
<th>Body System</th>
<th>Symptoms</th>
</tr>
</thead>
<tbody>
<tr>
<td>Skin</td>
<td>Hives, swelling (face, lips, tongue), itching, warmth, redness</td>
</tr>
<tr>
<td>Respiratory (breathing)</td>
<td>Coughing, wheezing, shortness of breath, chest pain or tightness, throat tightness, trouble swallowing, hoarse voice, nasal congestion, or hay fever-like symptoms (sneezing; runny or itchy nose; red, itchy, or watery eyes)</td>
</tr>
<tr>
<td>Gastrointestinal (stomach)</td>
<td>Nausea, stomach pain or cramps, vomiting, diarrhea</td>
</tr>
<tr>
<td>Cardiovascular (heart)</td>
<td>Dizziness/light-headedness, pale/blue color, weak pulse, fainting, shock, loss of consciousness</td>
</tr>
<tr>
<td>Neurological (brain)</td>
<td>Anxiety, sense of “impending doom” (feeling that something really bad is about to happen), confusion, headache</td>
</tr>
</tbody>
</table>

A **mild reaction** is generally considered one bodily response to an allergen that does not impact breathing or blood pressure, such as localized hives, hay fever, or mild nausea.

A **severe reaction** is called **anaphylaxis**. It is potentially life-threatening and generally includes severe symptoms affecting two or more body systems. The most dangerous symptoms of anaphylaxis include **trouble breathing** (caused by swelling of the airways) and a **drop in blood pressure** (causing dizziness, light-headedness, feeling faint or weak, or passing out). A drop in blood pressure without other symptoms may also indicate anaphylaxis. Anaphylaxis can occur without hives.

Follow your center’s emergency medical plans for responding to allergic reactions and your state’s specific rules and regulations for child care providers when administering medications. Anaphylaxis **MUST** be treated promptly with an **injection of epinephrine** followed by **calling 911**.

Once an allergic reaction begins, there is no way to predict if it will remain a mild, isolated response or become severe. Document and communicate with the necessary staff and the child’s parents or guardians about their symptoms. Closely monitor the child for the next few hours in case the reaction intensifies. Be prepared to seek emergency care if needed.

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**Common Symptoms of an Allergic Reaction in Children Under 2 Years of Age**

- Noticeable change in the sound of their cry
- Drooling
- Spitting up food or drink after feeding
- Uncontrolled passing of stool or urine
- Behavioral changes
  - Irritability
  - Unexpectedly becoming very sleepy or difficult to wake up
  - Suddenly appearing very frightened
  - Emotionally upset
  - Wanting to be held or comforted
References


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


For More Information

Centers for Disease Control and Prevention
https://www.cdc.gov/healthyschools/foodallergies/index.htm

Food Allergy Research & Education
https://www.foodallergy.org

Institute of Child Nutrition
https://www.theicn.org/foodsafety

U.S. Food and Drug Administration
https://www.fda.gov/food/food-labeling-nutrition/food-allergies

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