

Milk Allergies

Milk is one of the nine major allergens in the United States. Together, they cause about 90% of all food-related allergic reactions. Many proteins in milk can cause an allergic reaction. There are two main categories of proteins in milk:

- Casein proteins found in the solid part, or "curd" (part of milk that curdles)
- Whey proteins found in the liquid part of milk (what remains after milk curdles)

This fact sheet will discuss how to manage milk allergies in a family child care.

How are children affected by milk allergies?

In the United States, milk allergies are the most common food allergy among infants and young children. Roughly 2.5% of children under the age of three have a milk allergy, but most children outgrow it.

What foods contain milk?

Children with a milk allergy need to follow a completely milk-free diet to avoid possible reactions. Removing fluid milk and other dairy products such as cheese from the diet is obvious, but many nondairy products and processed foods contain milk proteins. Reading food labels is important to prevent exposure to ingredients that contain milk. The following charts list products that generally 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 (queso, nacho cheese, Rotel® dip)
- · Coffee creamer
- · Condensed milk
- · Cottage cheese
- · Cream cheese
- Crème fraiche
- Curds
- Custard

- · Evaporated milk
- Ghee
- · Half and half
- · Heavy cream
- Ice cream, ice milk, sherbert
- Kefir (fermented milk drink)
- Lactose-free milk (Lactaid®)
- · Malted milk
- Milk (all forms –
 acidophilus, cultured,
 derivative, dried, fat-free,
 low-fat, milk fat, non-fat,
 pasteurized, protein, skim,
 sour, sweetened, whole,
 1%, 2%)

- 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, frozen, all varieties)

*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.





Dairy Ingredients			
 Anhydrous butter oil Anhydrous milk fat (AMF) Butter acid Butter ester Butter extract Butter fat Butter flavor Butter oil Butterfat 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 	
Milk Protein Ingredients			
Casein	Whey		
Ammonium caseinateCalcium caseinate	 Acid whey Cured whey	 Sweet dairy whey Whey	
CaseinCasein hydrolysate/ hydrolyzed casein	Delactosed wheyDemineralized wheyLactalbumin	 Whey protein Whey protein concentrate Whey protein hydrolysate/	
 Iron caseinate Magnesium caseinate	Lactalbumin phosphateLactoferrin	hydrolyzed whey • Whey protein isolate	



• Potassium caseinate

• Sodium caseinate

• Zinc caseinate

• Lactoglobulin

• Powdered whey

· Reduced mineral whey

• 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, stocks
- Buns (some restaurants butter buns)
- Candy (caramel, chocolate, nougat)
- · Flavored chips
- Flavorings (artificial butter, caramel, natural)

- Foods fortified with protein
- Granola mixes (butter)
- · High protein flour
- Instant potatoes
- Luncheon meats, hot dogs, sausages (may use casein as a binder)
- Margarine
- Milk/cheese substitutes (soy-based, nut-based, 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)
- Simplesse® (fat substitute)
- Tuna (may contain casein, pouch and canned)

Many items may not contain milk but may be produced in a facility where milk is processed or used as an ingredient. As a result, cross-contact with milk may occur. Cross-contact is the accidental transfer of allergens to an allergen-free food or surface. Do not give a food to a child with a milk allergy that is labeled with an advisory statement such as being produced or manufactured in a facility with milk.

Some ingredients may be confused with ingredients that do contain milk. The listed items do not contain milk and do not need to be restricted for a child with a milk allergy:

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



What are some ways to substitute milk in meals?

The following chart lists common menu items that may be used as safe substitutions to items that contain milk. Always carefully read ingredient lists, even for foods that do not usually contain milk.

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

^{*}All meals and snacks claimed for reimbursement must meet the Child and Adult Care Food Program (CACFP) meal pattern requirements. Please visit www.fns.usda.gov/cacfp/meals-and-snacks for more information. For children with food allergies, providers are required to provide meal modifications as stated in the child's medical statement signed by a State licensed healthcare professional. Meal modifications may require providing meals and snacks that do not meet CACFP meal pattern requirements. These meals are reimbursable as long as there is a medical statement on file documenting the necessary accommodations. Providers may choose to accommodate food-related disabilities without a signed medical statement if the meal modifications still meet the meal pattern requirements. Refer to the *Family Child Care Food Allergy Fact Sheets – Accommodating Children with Food Allergies* for more information.

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



[†]Always review the ingredient list to verify ingredients and check for possible cross-contact.

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

Be aware that a product that is labeled "dairy-free" or "nondairy" may not be safe for a person with milk allergies. The term "dairy-free" does not have a Food and Drug Administration (FDA) regulated definition, so there is no guarantee 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." Therefore, food labels should always be checked for the presence of milk even if one of these terms is used on the packaging.

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 confused for food allergies. Lactose intolerance is caused by a person's lack of lactase, the enzyme that breaks down the sugar (lactose) found in milk. Common symptoms of lactose intolerance are nausea, bloating, diarrhea, gas, and cramps. Lactose intolerance is not life-threatening. Lactose-free milk can be offered as part of a 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. A child with a true milk allergy will not be able to consume any dairy products, including cheese and yogurt.



References

- 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*. https://www.cdc.gov/healthyyouth/foodallergies/
- Food Allergy Research & Education. (2020). *Facts and statistics*. https://www.foodallergy.org/resources/facts-and-statistics
- Food Allergy Research & Education. (2020). *Your guide to food allergy*. https://www.foodallergy.org/resources/field-guide-english
- Food Allergy Research & Education. (2021). 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
- Food Allergy Research & Education. (n.d.). *Milk allergy*. https://www.foodallergy.org/living-food-allergies/food-allergy-essentials/common-allergens/milk
- Institute of Agriculture and Natural Resources Food Allergy Research and Resource Program. (n.d.). Dairy-free and non-dairy?.
 - https://farrp.unl.edu/resources/gi-fas/opinion-and-summaries/dairy-free-and-non-dairy-f
- Institute of Child Nutrition. (2020, June 23). Food allergies for schools: Milk allergies. https://www.theicn.org/foodsafety
- Mayo Clinic. (2020, June 12). *Milk allergy*. https://www.mayoclinic.org/diseases-conditions/milk-allergy/symptoms-causes/syc-20375101
- U.S. Department of Agriculture, Food and Nutrition Service. (2013, July 16). *Nutrition standards for CACFP meals and snacks*. https://www.fns.usda.gov/cacfp/meals-and-snacks
- U.S. Department of Agriculture, Food and Nutrition Service. (2017, June 22). *Modifications to accommodate disabilities in CACFP and SFSP*. 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. 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

For More Information

Food Allergy Research & Education www.foodallergy.org

Institute of Child Nutrition www.theicn.org/foodsafety

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

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. (2022). *Family child care food allergy fact sheets – 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.

© 2022, Institute of Child Nutrition, The University of Mississippi, School of Applied Sciences

03/01/2022

