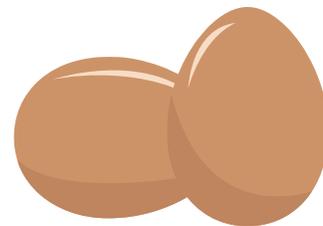


Child Care Center Food Allergy Fact Sheet

EGG ALLERGY

What Is Egg Allergy?

Egg allergy is a potentially life-threatening immune system reaction to the proteins in chicken egg white and/or egg yolk. It is one of the most prevalent food allergies in children under five years of age. Most children with an egg allergy will outgrow it.



Avoiding Eggs

A child with an egg allergy cannot eat chicken eggs in any form. They may also be allergic to goose, duck, turkey, or quail eggs. Sometimes a child with an egg allergy can eat egg cooked into a flour-based baked food.

If you have a child with an egg allergy in your care, you need to be aware of foods and products that may contain eggs 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 egg-based dishes and ingredients, egg protein ingredients, and dishes, foods, and products that may contain eggs. It is important to read all food labels to check for egg ingredients. Take extra care when reading food labels for egg proteins, as they are not commonly known and are often used in unexpected products.

Egg-Based Dishes

- Fried eggs
- Hard-boiled eggs
- Poached eggs
- Scrambled eggs

Egg-Based Ingredients

- Dried eggs
- Egg solids
- Egg substitute (for example, Eggbeaters®)
- Egg wash
- Egg whites
- Egg yolk
- Powdered eggs
- Raw eggs
- Whole eggs

Egg Protein Ingredients

- Albumin
- Apovitellin
- Globulin
- Livetin
- Lysozyme
- Ovalbumin
- Ovoglobulin
- Ovomucin
- Ovomuroid
- Ovotransferrin
- Ovovitelia
- Ovovitellin
- Silicalbuminate
- Vitellin

Dishes, Foods, and Products That May Contain Egg

- Artificial flavorings
- Baked goods (breads, cakes, cookies, crackers)
- Breaded products
- Fat substitute (for example, Simplese®)
- French toast
- Ice cream
- Gelato
- Lecithin
- Marshmallows
- Marzipan
- Mayonnaise
- Mayonnaise-based salad dressings (including Caesar dressing)
- Meatloaf and meatballs
- Meringue/meringue powder
- Natural flavorings
- Nougat
- Pancakes
- Pasta (egg noodles)
- Pretzels
- Processed meats
- Pudding and custard
- Sauces
- Soufflés
- Specialty coffee drinks (eggs can be used in the foam or topping)
- Strata/stratta
- Surimi seafood
- Waffles

Reading Food Labels

Foods regulated by the U.S. Food and Drug Administration (FDA) are required to 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 **“Egg”**
- 2) Providing the common or usual name of an allergen in parentheses after a lesser-known name of an allergenic ingredient **“Albumin (Egg)”**
- 3) Using a “Contains” statement following or next to the ingredient list **“Contains Egg”**

Food labels often contain an advisory statement following the ingredients list. This statement is NOT mandatory and is not regulated in terms of the wording that should be used. Examples include:

“May contain egg.”

“Manufactured on equipment that also processes egg.”

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 a food allergen comes into contact with another food, transferring the allergens 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.

Food Label Example

The following ingredient list is for frozen, pre-made pancakes. Notice how wheat, milk, and egg are listed. Many food manufacturers will include a “Contains” statement to be extra clear about the allergens present in their foods. However, this is not required if the allergens are listed with their usual, common names. Always read the ingredients list!

Ingredients: Water, **Whole Wheat Flour**, Enriched Flour (**Wheat Flour**, Niacin, Ferrous Sulfate, Thiamin Mononitrate, Riboflavin, Folic Acid), Sugar, Canola Oil. Contains less than 2% of: Leavening (Potassium Bicarbonate, Sodium Aluminum Phosphate, Baking Soda, Monocalcium Phosphate), **Nonfat Milk**, Rice Syrup, Grape Juice, Whole Grain Yellow Corn Flour, Modified Corn Starch, Salt, Modified Potato Starch, **Egg White**, Dextrose, Fructose, Beet Juice Concentrate And Paprika Extract Added Color, Natural Flavor, Cellulose Gum, Citric Acid.

Contains: Wheat, Milk, and Egg.

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.

*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.

Menu Modifications

A medical statement from a state-licensed healthcare professional is required when substitutions or accommodations for a child with a food allergy are outside of 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>) for more information.

When planning a menu for a child with an egg allergy, consider your current menu items to determine if you can create a reimbursable meal or snack free of egg. 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.

The following table lists safe alternatives to common menu items that contain egg:

Menu Items & Condiments That May Contain Eggs*	Possible Substitutes*†
Bread, bagels, biscuits, muffins, pancakes, waffles and other bread products	Egg-free bread, French-type bread, tortillas, egg-free pancakes
Breaded products (such as chicken nuggets or fish sticks)	Non-breaded products (such as grilled chicken patties)
Mayonnaise-based salad dressings	Mustard, vinegar, and Italian dressing
Meatloaf and meatballs	Hamburger (made without egg)
Pasta	Egg-free noodles, rice, couscous, barley
Processed meats (such as chicken nuggets)	100% beef, pork, poultry, fish or shellfish; beans, peas or legumes
Pretzels (some soft varieties)	Hard pretzels, saltines, corn chips, egg-free bread

*All meals and snacks claimed for reimbursement must meet the CACFP meal pattern requirements. Please visit <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 egg.

Baking Substitutions

The following ingredients can be used to replace one to three eggs in a recipe:

2 Tbsp cornstarch, arrowroot flour, or potato starch = 1 egg

1 Tbsp soy powder + 2 Tbsp water = 1 egg

1 Tbsp soy milk powder + 1 Tbsp cornstarch + 2 Tbsp water = 1 egg

1 banana = 1 egg in cakes

1 Tbsp milled flax seed + 3 Tbsp cold water = 1 egg

1 tsp gelatin + 3 Tbsp cold water + 7 tsp boiling water, chilled and beaten = 1 egg

2 Tbsp water + 1 Tbsp oil + 2 tsp baking powder = 1 egg

3 Tbsp aquafaba* = 1 whole egg

*Aquafaba is the liquid from canned chickpeas or beans.

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.”

Common Symptoms of an Allergic Reaction

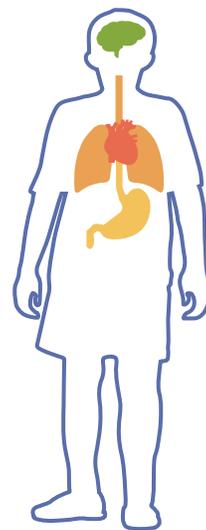
Body System	Symptoms
Skin	Hives, swelling (face, lips, tongue), itching, warmth, redness
Respiratory (breathing)	Coughing, wheezing, shortness of breath, chest pain or tightness, throat tightness, trouble swallowing, hoarse voice, nasal congestion, or hay fever-like symptoms (sneezing; runny or itchy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

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 an 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 if it will become severe. Document and communicate with 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.



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

- 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/healthyschools/foodallergies/pdf/20_316712-A_FA_guide_508tag.pdf
- Food Allergy Canada. (n.d.). *Reaction signs and symptoms*. <https://foodallergycanada.ca/food-allergy-basics/preventing-and-treating-allergic-reactions/reaction-signs-and-symptoms/>
- Food Allergy Research & Education. (n.d.). *Egg allergy*. <https://www.foodallergy.org/living-food-allergies/food-allergy-essentials/common-allergens/egg>
- 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>
- Kids With Food Allergies. (2015, February). *Egg allergy*. <https://www.kidswithfoodallergies.org/egg-allergy.aspx>
- Simons, F. E. R., & Sampson, H. A. (2015). Anaphylaxis: Unique aspects of clinical diagnosis and management in infants (birth to age 2 years). *Journal of Allergy and Clinical Immunology*, 135(5), 1125–1131. <https://doi.org/10.1016/j.jaci.2014.09.014>
- 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). *Food allergen labeling and consumer protection act of 2004 (FALCPA)*. <https://www.fda.gov/food/food-allergensgluten-free-guidance-documents-regulatory-information/food-allergen-labeling-and-consumer-protection-act-2004-falcpa>

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>

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 more information and 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). *Child care center food allergy fact sheet – egg allergy*. 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

10/01/2021