Child Care Center Food Allergy Fact Sheet

SHELLFISH ALLERGY

What Is Shellfish Allergy?

Shellfish allergy is a potentially life-threatening immune system reaction to the proteins in crustaceans (crab, lobster, prawns, shrimp) and/or mollusks (clams, mussels, oysters, scallops, snails, squid). Among shellfish, crustaceans cause a greater number of allergic reactions. Generally, a reaction occurs when shellfish are eaten. In some cases, a reaction occurs when shellfish are touched or when shellfish proteins are inhaled through steam when cooked. Shellfish allergy can develop at any age and is usually lifelong.



Avoiding Shellfish

A child allergic to one type of shellfish is often advised to avoid all shellfish due to *cross-contact*. Cross-contact is when one food allergen comes into contact with another food, transferring the allergens to the new food. In some cases, a reaction occurs when shellfish are touched or when shellfish proteins are inhaled through steam when cooked.

If you have a child with a shellfish allergy in your care, you need to be aware of foods and products that may contain shellfish 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 shellfish, shellfish foods and dishes, and other shellfish products and ingredients. It is important to read all food labels to check for shellfish or shellfish ingredients.

| | S | hellfish | |
|--|---|--|--|
| Crustaceans | | | Mollusks |
| BarnaclesCrabCrawfish/CrayfishKrill | LobsterPrawnsShrimp | Clams Cuttlefish Mussels Octopi *Note: The Federal gover be fully disclosed on pro | Oysters Scallops Snails (escargot) Squid (calamari) ment does not require mollusks to duct labels. |

Shellfish Foods, Products, and Dishes

- Bouillabaisse
- Ceviche
- Cioppino
- Clam chowder
- Clam extract/juice
- Crab extract
- Egg rolls
- Gumbo
- Jambalaya
- Moqueca

- Oyster sauce
- Paella
- Run Down
- Seafood curry
- Seafood fried rice
- Seafood stir-fry
- Shrimp paste
- Sushi/sashimi

Other Products that May Contain Shellfish

- Fish sauce (may be made from krill)
- Fish stock (may be labeled fish bouillon or fumet)
- Imitation crab (does not contain crab meat, but often contains crab or shellfish components)
- Surimi seafood (does not contain shellfish meat, but often contains crab or shellfish components)



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 "Lobster"
- 2) Providing the common or usual name of an allergen in parentheses after a lesser-known name of an allergenic ingredient "Lobster Stock Concentrate (Lobster, Salt)"
- 3) Using a "Contains" statement following or next to the ingredient list "Contains Lobster"

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 shellfish."

"Manufactured on equipment that also processes shellfish."

Foods with an *advisory statement* should be avoided as the product may contain a trace amount of a particular allergen due to cross-contact. However, 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.

Crustacean Food Label Example

The following ingredient list is for surimi seafood. Notice how shellfish, as well as fish, egg, wheat, and soy allergens are listed. Many, but not all, 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: Fish Protein (Alaska Pollock and/or Whiting), Water, Egg Whites, Sugar, Wheat Starch, Mirin (Corn Syrup, Fermented Rice Extract, Water, Salt), Potato Starch, Modified Corn Starch, Wheat Flour, Contains less than 2% of the following: Sorbitol, Soybean Oil, Salt, Natural and Artificial Flavors (Hydrolyzed Soy Protein, Crab Extract), Potassium Chloride, Soy Lecithin, Sodium Tripolyphosphate, Tetrasodium Pyrophosphate, Color Added, Carmine Color.

Contains: Fish (Alaska Pollock, Whiting), Egg, Wheat, Crustacean Shellfish (Blue Crab), and Soy.

Mollusk Food Label Example

The following ingredient list is for oyster sauce. Recall that mollusks are not considered a major allergen by FALCPA. Therefore, ingredient information for this type of shellfish may not be fully disclosed. Mollusks, such as oysters, will still be listed in the ingredients list, but a disclaimer that it is a type of shellfish is not required.

Ingredients: Water, Sugar, Salt, Oyster Extractives (Oyster, Water, Salt), Modified Corn Starch, Caramel Color.

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 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) for more information on using medical statements.

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

| Menu Items & Condiments That May Contain Shellfish* | Possible Substitutes*† |
|---|--|
| Curry, fried rice, or stir-fried dishes with seafood, fish sauce, or oyster sauce | Curry, fried rice, or stir-fried dishes without seafood, fish sauce, or oyster sauce |
| Fish sticks or nuggets | Chicken nuggets or patties |
| Jambalaya or paella | Jambalaya or paella made without shellfish, other rice dishes without shellfish |
| Salad dressing, fish sauce, oyster sauce | Dressings and sauces that do not contain shellfish |
| Shellfish (such as crab, lobster, shrimp) | Beef, pork, poultry, or fish; beans, peas, or legumes |
| Surimi seafood | Beef, pork, poultry, or fish; beans, peas, or legumes |

^{*}All meals 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 shellfish.

Follow your center's policies for handling food allergies. It is recommended to have a written care plan developed by the parents and the child's health care provider if the child has a known food allergy. The written care plan should include the steps to follow if the child has a reaction. Consider posting lists of allergens around the center, particularly in food preparation areas. Staff who deal directly with food preparation, meal service, and/or children need to be informed of whom in the center has allergic concerns. This communication should be handled with discretion to protect the privacy of affected children.

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 <u>breathing</u> or <u>blood pressure</u>, 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.



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.). *Shellfish allergy*. https://www.foodallergy.org/living-food-allergies/food-allergy-essentials/common-allergens/shellfish
- 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
- 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 – shellfish 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