

Adult Day Care Food Allergy Fact Sheet



Shellfish Allergies

Shellfish is the most common food allergy reported by adults, and it affects approximately 2.9% of adults in the United States (roughly 8.2 million people). However, there are two types of shellfish: crustaceans (crab, lobster, shrimp, crawfish, and prawn) and mollusks (clams, mussels, squid, snails, oysters, and scallops). Crustacean shellfish are considered the most allergenic. Many people that are allergic to one type of shellfish can also be allergic to other types of shellfish. For this reason, people may be advised to avoid all shellfish. Shellfish allergy usually develops in early adulthood and is considered life-long.

What are the symptoms of an allergic reaction?

Knowing the symptoms of an allergic reaction can save a participant's life. One or more allergic symptoms can occur and can be mild to severe. Symptoms can happen within a few minutes or up to a few hours after the food allergen is eaten. Participants can display different symptoms, even if they have the same allergy (e.g., one participant with a shellfish allergy may have trouble breathing when exposed to shellfish while a different participant with a shellfish allergy vomits after consuming it). Each time a participant has a reaction, the symptoms may be different.

It is also important to know the symptoms of an allergic reaction as there is a possibility that a participant may have a reaction yet not have a known food allergy. As shown in the following chart, the Food Allergy Research and Education (FARE) organization details how a variety of symptoms can appear in the body.

Mild Symptoms	Severe Symptoms
• Gut: mild nausea or discomfort (stomach pain, abdominal cramping) • Mouth: itchy; odd taste; slight, dry cough • Nose: itchy, runny nose; sneezing; congestion • Skin: a few hives (reddish, swollen, itchy areas on the skin), mild itch (sometimes in the ear canal)	• Body: lightheadedness, fainting or loss of consciousness, anaphylaxis • Gut: repetitive vomiting or severe diarrhea • Heart: pale; turning blue; faint, weak, or “thready” pulse; dizziness; chest pain; drop in blood pressure • Lung: shortness of breath, wheezing, repetitive cough, difficulty breathing • Mouth: significant swelling of the tongue or lips • Psychological: feeling something bad is about to happen, sense of impending doom, anxiety, confusion, feeling weak • Skin: many hives over the body, widespread redness, eczema • Throat: tight, hoarse, trouble breathing/swallowing, swelling



What is anaphylaxis?

Anaphylaxis is a severe allergic reaction with a rapid onset that may cause difficulty breathing and death. It may disrupt breathing and blood circulation. An anaphylactic reaction usually occurs within minutes of being exposed to an allergen, but in some rare instances, it can occur a couple of hours later. Symptoms of anaphylaxis include:

- Difficulty breathing, constriction of airways, tightness of the throat, hoarse voice
- Drop in blood pressure (e.g., pale, weak pulse, confusion, dizziness, fainting, weakness, loss of consciousness)
- Feeling of doom
- Gastrointestinal symptoms (e.g., abdominal pain, nausea, vomiting, diarrhea, cramping)
- Rapid pulse, cardiac arrest
- Shock (i.e., drop in blood pressure and narrowing of airways)
- Skin symptoms (e.g., hives, swelling)
- Swollen lips



What foods contain shellfish?

Participants with a shellfish allergy should check with their healthcare professional (such as their physician) to determine what type(s) of shellfish they should avoid (crustaceans and/or mollusks). It is important for all adult care staff preparing and serving food to read all food labels to check for shellfish. The following chart lists items that could contain shellfish and should be avoided.

Crustaceans

- Barnacle
- Crab
- Crawfish (crawdada, crayfish, or ecrevisse)
- Krill
- Lobster (langouste, langoustine, Moreton bay bugs, scampi, tomalley)
- Prawn
- Shrimp (crevette, scampi)

Mollusks

- Abalone
- Clam (cherrystone, geoduck, littleneck, Pismo, quahog)
- Cockle
- Cuttlefish
- Limpet (lapas, opihi)
- Mussel
- Octopus
- Oyster
- Periwinkle
- Scallop
- Sea cucumber
- Sea urchin
- Snail (escargot)
- Squid (calamari)
- Whelk (Turban shell)

Shellfish Foods and Dishes

- Bouillabaisse
- Ceviche (shrimp)
- Cioppino (fish and shellfish stew)
- Clam chowder
- Egg rolls
- Jambalaya
- Moqueca
- Paella
- Run Down
- Seafood curry
- Seafood extracts (crab or clam)
- Seafood fried rice or noodles
- Seafood stir-fry
- Shrimp paste
- Sushi/sashimi

Other Foods, Products, and Ingredients That May Contain Shellfish

- Clam extract/juice
- Crab extract
- Cuttlefish ink
- Fish sauce (may be made from krill)
- Fish sticks or portions
- Fish stock (may be labeled fish bouillon or fumet)
- Glucosamine (also a dietary supplement)
- Gumbo
- Imitation crab/seafood, surimi (often contains crab or shellfish components)
- Oyster sauce
- Soy sauce
- Worcestershire sauce

Where are shellfish located on food labels?

Food labels that are regulated by the U.S. Food and Drug Administration (FDA) follow the regulations of the *Food Allergen Labeling and Consumer Protection Act* (FALCPA). FALCPA requires that the major eight food allergens are listed on the label in one of three ways in the ingredient list: (1) using the common name, (2) common name written in parenthesis after the ingredient, or (3) in a “contains” statement. In 2021, the *Food Allergy Safety, Treatment, Education, and Research Act* (FASTER) was passed into law. This act expands what is considered a major allergen that has to be declared on a food label from eight to nine by adding sesame as a major allergen. This law will take effect in January 2023, but manufacturers may begin incorporating sesame as a major allergen in the ingredient list on their food labels before this date.

Crustacean shellfish is considered by FALCPA to be one of the major eight food allergens. FALCPA requires that the specific type of crustacean shellfish (for example, crab, lobster, or shrimp) be declared on the food label.

How egg rolls that contain shrimp, a crustacean shellfish, must follow FALCPA regulation and could be labeled in the ingredient list in different ways as shown in the following examples (bold is used for illustrative purposes only).

Label 1

INGREDIENTS: FILLING INGREDIENTS – cabbage, shrimp, onion, water, carrots, celery, textured vegetable protein [soy flour, zinc oxide, niacinamide, ferrous sulfate, salt, sugar, spice, natural flavor, corn syrup solids, and citric acid]. WRAPPER INGREDIENTS – enriched wheat flour [wheat flour, niacin, reduced iron, thiamine mononitrate (vitamin B1), riboflavin (vitamin B2)], water, modified food starch, cottonseed oil, egg, salt, sodium benzoate, corn starch (use for dusting). Fried in cottonseed and/or canola oil.

Contains: **Shrimp**

Label 2

INGREDIENTS: FILLING INGREDIENTS – cabbage, **shrimp**, onion, water, carrots, celery, textured vegetable protein [soy flour, zinc oxide, niacinamide, ferrous sulfate, salt, sugar, spice, natural flavor, corn syrup solids, and citric acid]. WRAPPER INGREDIENTS – enriched wheat flour [wheat flour, niacin, reduced iron, thiamine mononitrate (vitamin B1), riboflavin (vitamin B2)], water, modified food starch, cottonseed oil, egg, salt, sodium benzoate, corn starch (use for dusting). Fried in cottonseed and/or canola oil.

Mollusks are not considered a major allergen by FALCPA, so ingredient information for this type of shellfish may not be fully disclosed on the label. Because mollusks are not required to be labeled the same way that crustaceans are labeled, special care must be taken when reading labels for different types of shellfish.



Adult Day Care Food Allergy Fact Sheet

Shellfish Allergies

A food label for oyster sauce containing oysters, a mollusk shellfish, is not required to follow FALCPA regulations but is required to list ingredients by their usual and common names.

INGREDIENTS: water, sugar, salt, oyster extractives (oyster, water, salt), modified corn starch, caramel color.

If there is uncertainty about whether a food product contains a type of shellfish that the participant must avoid, call the manufacturer for more information, or do not serve the food.

Labels also should be checked for warnings such as “may contain shellfish,” “produced on shared equipment with shellfish,” or “produced in a plant that uses shellfish in other products.” Foods with these advisory statements should be avoided because they may contain a small amount of shellfish due to cross-contact.

For example, pouched tuna may or may not contain shellfish depending on other products that may also be made in that facility. A pouched tuna product could be labeled like below (bold is used for illustrative purposes only).

INGREDIENTS: tuna, sunflower oil, water, vegetable broth, salt, spices
CONTAINS: Tuna; **Produced in a facility that also produces shellfish.**

How should adult day care employees check and manage food labels?

Adult day care sites have a variety of procedures for preparing and serving food. All staff who prepare and serve food should be trained to read product labels and recognize

food allergens in the ingredient list. Because food labels change from time to time, adult day care staff should check labels for shellfish and shellfish ingredients for every product each time it is received. If the label does not provide clear information, then the manufacturer must be contacted for clarification or a different product should be used. The Centers for Disease Control and Prevention (CDC) recommends that food labels for every product that is served to a participant with food allergies be kept for a minimum of 24 hours afterward in case of a reaction. If the product is saved for later use as leftovers, keep labels for 24 hours after all product has been served or discarded.

What documentation is needed to make substitutions for participant meals?

When menu substitutions or modifications for a participant with food allergies are outside of the Child and Adult Care Food Program (CACFP) meal pattern, a medical statement from a State licensed healthcare professional, such as a general practice physician, registered nurse, or allergist, is required. Refer to the *Modifications to Accommodate Disabilities in the Child and Adult Care Food Program and Summer Food Service Program* on the USDA website for information on the required content of the medical statement. Adult day care sites can also contact their State agencies and sponsors for information. For more information about what is required in the medical statement, refer to ICN's *Adult Day Care Food Allergy Fact Sheet – Common Questions: Adult Day Care Directors*.



If there is uncertainty about the statement, or if it does not provide enough information, contact the State licensed healthcare professional (as permitted by the participating adult, family, caregiver, or guardian) for clarification. However, the adult day care staff should not delay in providing a meal modification and a safe environment (i.e., prevent exposure to known allergens) while awaiting clarification of the medical statement. Staff should follow the portion of the medical statement that is clear and unambiguous to the greatest extent possible while obtaining the additional information or amended statement.

What substitutes can be used for shellfish in participant meals?

Making menu substitutions for shellfish is usually easily done because it can be replaced with common protein entrées. However, shellfish-based ingredients in condiments and sauces may be a concern in adult day care sites. If shellfish or entrées containing shellfish as an ingredient are used on the menu, make sure another entrée that does not contain shellfish can be selected for that meal. This approach will minimize the need to prepare special recipes or to make menu substitutions.

The following chart lists common menu items that may be used as safe alternatives to items that contain shellfish. Adult day care staff should always read ingredient lists on food labels carefully, even for foods that do not generally 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 (e.g., 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 Child and Adult Care Food Program (CACFP) meal pattern requirements. Please visit <https://www.fns.usda.gov/cacfp/meals-and-snacks> for more information.

†Always review the ingredient list on a food label to verify ingredients and check for possible cross-contact (look for advisory statements or contact manufacturer).



Are there any special concerns with cross-contact when preparing food for participants with shellfish allergies?

Yes. Cross-contact is a concern for all allergens, but there are specific concerns related to shellfish allergies. Deep-fat frying is not an allowable method of cooking at an adult day care site, but if shellfish is pan-fried or sautéed, the cooking oil can become contaminated. If you have participants with shellfish allergies, no food for this participant should be cooked in the same oil that was used for cooking shellfish or shellfish products. Cross-contact also can occur from utensils and grills.

Is there a need to worry about shellfish exposure if the site does not serve shellfish?

Yes. Shellfish can be an ingredient in some common sauces and condiments, such as soy sauce and Worcestershire sauce, so it is still important to read ingredient lists on food labels to ensure safety. Shellfish is sometimes used as an ingredient in fish products, so be sure to check the food label for shellfish.



References

- American College of Allergy, Asthma & Immunology. (2018, January 29). *Anaphylaxis*. <https://acaai.org/allergies/anaphylaxis>
- Centers for Disease Control and Prevention. (2013). *Voluntary guidelines for managing food allergies in schools and early care and education programs*. www.cdc.gov/healthyyouth/foodallergies/
- Food Allergy Research & Education. (n.d.). *Anaphylaxis*. <https://www.foodallergy.org/resources/anaphylaxis>
- 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. (2020). *Food allergy facts and statistics in the US*. <https://www.foodallergy.org/resources/facts-and-statistics>
- Food Allergy Research & Education. (2020). *Your food allergy field guide*. <https://www.foodallergy.org/resources/field-guide-english>
- 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>

- Food Allergy Research & Education. (n.d.). *Recognizing and responding to a reaction*. <https://www.foodallergy.org/resources/recognizing-and-responding-reaction>
- Food Allergy Research & Education. (n.d.). *Recognizing and treating reaction symptoms*. <https://www.foodallergy.org/resources/recognizing-and-treating-reaction-symptoms>
- Gupta, R.S., Warren, C.M., Smith, B.M. (2019). Prevalence and severity of food allergies among US adults. *JAMA Network Open*. 2(1):e185630. doi:10.1001/jamanetworkopen.2018.5630
- Mayo Clinic. (2019, September 14). *Anaphylaxis*. <https://www.mayoclinic.org/diseases-conditions/anaphylaxis/symptoms-causes/syc-20351468>
- Mayo Clinic. (2020, June 19). *Shellfish allergy: Symptoms & causes*. <https://www.mayoclinic.org/diseases-conditions/shellfish-allergy/symptoms-causes/syc-20377503>
- U.S. Department of Agriculture. (2016, November 29). *Adult meal pattern*. https://fns-prod.azureedge.net/sites/default/files/cacfp/CACFP_adultmealpattern.pdf
- U.S. Department of Agriculture. (2017, June 22). *Modifications to accommodate disabilities in the Child and Adult Care Food Program and Summer Food Service Program*. <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/IngredientsPackagingLabeling/FoodAllergens/default.htm



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. (2021). *Adult day care food allergy fact sheet – shellfish 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.

© 2021, Institute of Child Nutrition, The University of Mississippi, School of Applied Sciences

09/09/2021

