

Adult Day Care Food Allergy Fact Sheet



Fish Allergies

Salmon, tuna, and halibut are the fish most likely to cause allergic reactions, but it is recommended that individuals with any fish allergies avoid all fish. The term “fish” encompasses all species of finned fish, which can cause severe allergic reactions in approximately 1% of the adult population. The protein from the fish flesh is most likely to cause an allergic reaction, but fish gelatin and fish oil should be avoided as they may also cause a reaction. Shellfish, although highly allergenic as well, are not in the same family as finned fish. A person who has a fish allergy may be able to tolerate shellfish. Fish allergies are more common in adults than children and are considered to be life-long in 90% of the diagnosed cases.

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 fish allergy may have trouble breathing when exposed to fish while a different participant with a fish allergy vomits after consuming it). Each time a participant has a reaction, the symptoms may be different.

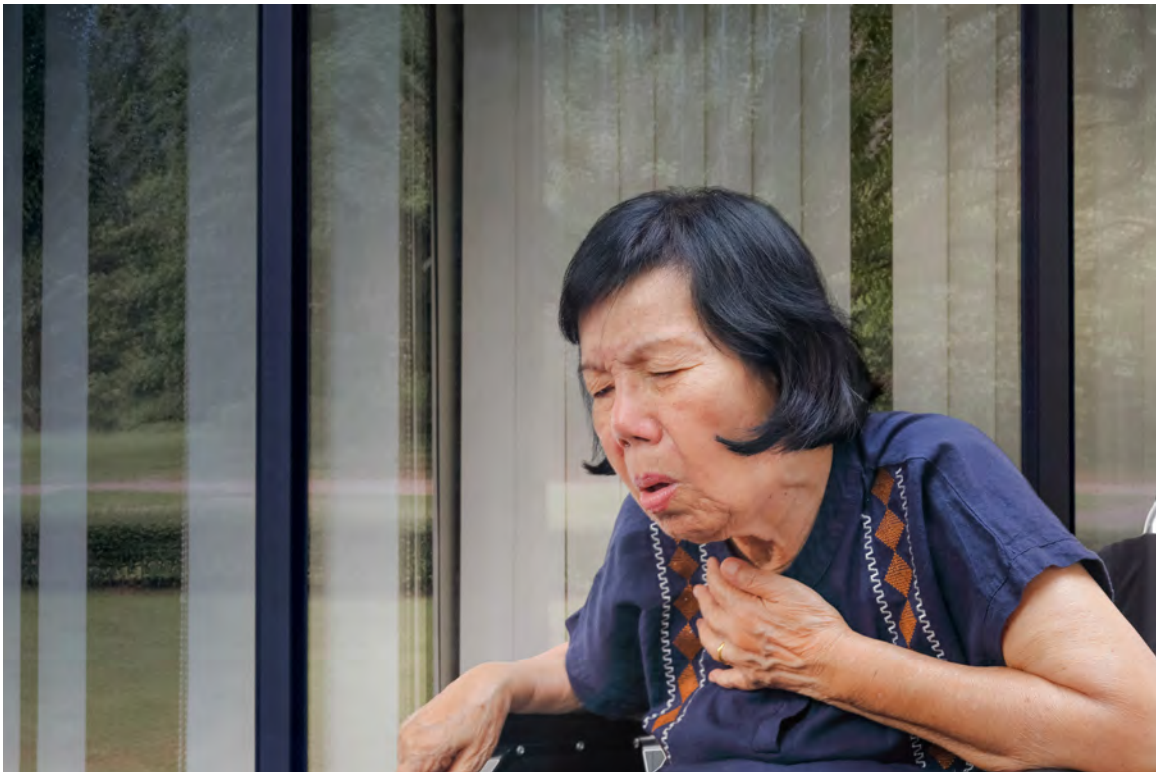
It is also important to know the symptoms of an allergic reaction as there is a possibility that a participant may have a reaction yet not have a known food allergy. As shown in the following chart, the Food Allergy Research and Education (FARE) organization details how a variety of symptoms can appear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

Participants with a fish allergy usually need to avoid all finned fish. Always read the ingredient list on the food label, check for allergen information, and consider cross-contact before serving any food to a participant with a fish allergy. The following chart lists products that may contain fish and should be avoided.

Fish Foods and Ingredients		
• Bouillabaisse • Ceviche (made with finned fish) • Cioppino (fish and shellfish stew) • Fish curry • Fish eggs (caviar, roe) • Fish filet • Fish fried rice	• Fish gelatin, made from the skin and bones of fish (aka kosher gelatin) • Fish oil • Fish sauces (Nam pla or Nuoc mam) • Fish sticks or nuggets • Fish stir-fry	• Fish stock (fish bouillon or fumet) • Gelfite fish • Imitation crab/seafood, surimi (usually made from pollock) • Run Down • Sushi/sashimi
Other Foods, Products, and Ingredients That May Contain Fish		
• Barbecue sauce (may contain Worcestershire sauce) • Caesar salad and dressing (contains anchovies)	• Deep-fried items (risk of cross-contact) • Egg rolls • Gumbo	• Items fortified with EPA or DHA (omega-3 fatty acids derived from fish/fish-oil products) • Paella • Worcestershire sauce (contains anchovies)

Where is fish located on food labels?

Food labels that are regulated by the U.S. Food and Drug Administration (FDA) follow 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.

FALCPA also requires the type of fish (for example, bass, flounder, cod) to be declared. This means that although fish is one of the eight major allergens, the label may not say “fish” but will state the name of the specific type of fish. The following list shows some of the common names of fish.

- | | |
|-------------|-------------|
| • Anchovies | • Perch |
| • Bass | • Pike |
| • Catfish | • Pollock |
| • Cod | • Salmon |
| • Flounder | • Scrod |
| • Grouper | • Snapper |
| • Haddock | • Sole |
| • Hake | • Swordfish |
| • Halibut | • Tilapia |
| • Herring | • Trout |
| • Mahi-mahi | • Tuna |

How fish sauce that contains anchovies (a type of fish) could be labeled in the ingredient list in different ways is shown in the following examples (bold is used for illustrative purposes only).

Label 1

INGREDIENTS: Anchovy extract, salt, pure cane sugar

Contains: **Anchovy**

Label 2

INGREDIENTS: **Anchovy extract**, salt, pure cane sugar

Labels also should be checked for warnings such as “may contain fish,” “produced on shared equipment with fish,” or “produced in a plant that uses fish in other products.” Foods with these advisory statements should be avoided as the product may contain a small amount of fish due to cross-contact. U.S. Department of Agriculture (USDA)-regulated foods (namely meat, poultry, and egg products) are not required to follow FALCPA labeling regulations but may do so voluntarily. Only common or usual names of the ingredients are required to be identified on these labels.

For example, ranch dressing may or may not contain fish depending on what other salad dressings, like Caesar, are run on the same line. The ranch dressing could be labeled like below (bold is used for illustrative purposes only).

INGREDIENTS: Vegetable oil (soybean), water, sugar, salt, buttermilk, egg yolk, natural flavors, spices

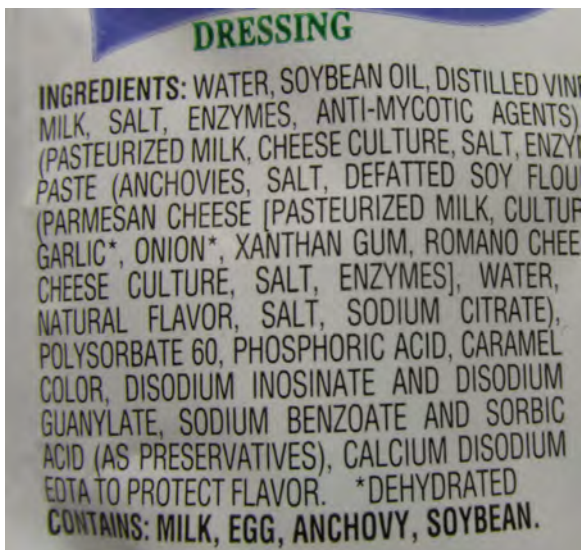
Contains: Milk, egg, soy

Produced on equipment that also handles fish products.



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 fish and fish 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 staff 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 fish in participant meals?

When planning menus for participants with fish allergies, consider current food choices offered to determine if a reimbursable meal can be selected from foods offered that do not contain fish. This approach will minimize the need to prepare special recipes or to make menu substitutions. The chart below lists common menu items that may be used as safe alternatives to items that contain fish. Adult day care staff should always carefully read the ingredient list on labels, even for foods that generally do not contain fish.

Menu Items & Condiments That May Contain Fish*	Possible Substitutes*†
Caesar salad dressing (contains anchovies), Worcestershire sauce (contains anchovies), fish sauce	Dressings and sauces that do not contain fish (e.g., Italian, honey mustard, ranch)
Curry, fried rice, or stir-fried dishes with fish or fish sauce	Curry, fried rice, or stir-fried dishes without fish or fish sauce
Fish fillet	Beef, pork, poultry, or shellfish; beans, peas, or legumes
Fish sticks or nuggets	Chicken nuggets or patties
Tuna salad	Chicken, turkey, or egg salad

*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).

A participant became ill after eating fish but did not test positive for fish allergies. How is that possible?

When scombroid species of fish—such as tuna, mackerel, skipjack, bonito, and bluefish, among others—are not held at proper temperatures, bacteria produce a toxin called histamine. This histamine from the contaminated fish can mimic the histamine produced in the body during an allergic reaction. Scombroid poisoning produces symptoms similar to those present in the body during an allergic reaction: flushing, sweating, headache, dizziness, nausea, rash or hives, diarrhea, and abdominal cramps. When serving scombroid fish, it is important to purchase it from a reputable vendor and maintain cold holding temperatures (at 41 °F or below). These histamines are not destroyed by freezing or cooking.

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

Cross-contact is a concern for all allergens, but there are a few specific concerns related to fish allergies. Deep-fat frying is not an allowable method of cooking at an adult day care site, but if fish is fried or sautéed in a pan, the cooking oil can become contaminated. If you serve participants with fish allergies, you should never cook other food in the same oil that was used for cooking fish. Additionally, fish proteins can become airborne in steam from cooking, so caution should be used to prevent cross-contact.

References

- American College of Allergy, Asthma & Immunology. (2018, January 29). *Anaphylaxis*. <https://acaai.org/allergies/anaphylaxis>
- Asthma and Allergy Foundation of America. (2019, March 21). *Fish allergies*. <https://acaai.org/allergies/types/food-allergies/types-food-allergy/fish-allergy>
- 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/
- Davis, C.M., Gupta, R.S., Aktas, O.N., Diaz, V., Kamath, S.D., & Lopata, A.L. (2020). Clinical Management of Seafood Allergy. *The Journal of Allergy and Clinical Immunology: In Practice*. 8(1):37-44. doi:10.1016/j.jaip.2019.10.019
- Food Allergy Research & Education. (n.d.). *Anaphylaxis*. <https://www.foodallergy.org/resources/anaphylaxis>
- Food Allergy Research & Education. (n.d.). *Fish allergy*. <https://www.foodallergy.org/living-food-allergies/food-allergy-essentials/common-allergens/fish>
- 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>
- 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>
- 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



- International Food Information Council Foundation. (2009). *Functional foods fact sheet: Omega-3 fatty acids*.
https://www.foodprocessing.com/assets/Media/MediaManager/IFIC_Omega3FactSheet.pdf
- Kids Health from Nemours. (2018, August). *Fish allergy*.
<https://kidshealth.org/en/parents/fish-allergy.html>
- Mayo Clinic. (2019, September 14). *Anaphylaxis*.
<https://www.mayoclinic.org/diseases-conditions/anaphylaxis/symptoms-causes/syc-20351468>
- Ridolo, E., Martignago, I., Senna, G., & Ricci, G. (2016, October). Scombroid syndrome: It seems to be fish allergy but ... it isn't. *Curr Opin Allergy Clin Immunol*. 16(5):516-521. doi:10.1097/ACI.0000000000000297
- 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>
- Zuberbier, T. (2016, July). *Fish allergies*. European Centre for Allergy Research Foundation.
<https://www.ecarf.org/en/information-portal/allergies-overview/fish-allergy/>

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

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