

SCHOOL FOOD ALLERGY FACT SHEET

Fish Allergies

Which fish are most likely to cause allergic reactions?

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. The protein from the fish flesh is most likely to cause an allergic reaction, but fish gelatin and fish oil (which is often less refined and may contain traces of fish protein) 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, so 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.

What are the symptoms?

Fish allergy symptoms can include:

- Hives
- Eczema, red spots
- Swelling
- Itchy, watery, swollen eyes
- Upset stomach
- Vomiting
- Diarrhea
- Cramps
- Nasal congestion
- Wheezing, coughing
- Trouble breathing, shortness of breath
- Hoarseness
- Throat tightening

A severe reaction to fish can lead to anaphylaxis.

Anaphylaxis

- Constriction of airways (swollen throat or a lump in the throat making breathing difficult)
- Abdominal pain and cramping
- Rapid pulse

- Shock (a severe drop in blood pressure felt as dizziness, lightheadedness, or loss of consciousness)

What foods contain fish?

Individuals with a fish allergy usually need to avoid all finned fish. Be mindful of Asian foods, which are often flavored with fish sauce; in addition, fish products are often used as ingredients in other ethnic cuisines, such as African, Chinese, Indonesian, Thai, and Vietnamese. A person with a fish allergy should use extreme caution when eating these foods or should completely avoid them. Seafood restaurants should also be avoided because the possibility of cross-contact is very high. It is important that child nutrition staff read all food labels to check for fish or fish ingredients. The following is a list of products that contain fish and should be avoided.

Products or Ingredients with Fish

- All finned fish (for example, anchovies, bass, catfish, cod, flounder, grouper, haddock, hake, halibut, herring, mahi mahi, perch, pike, pollock, salmon, scrod, sole, snapper, swordfish, tilapia, trout, and tuna)
- Barbecue sauce (may contain Worcestershire sauce)
- Breaded fish sticks and fish fillets
- Bouillabaisse
- Caesar salad and Caesar dressing
- Caponata (a Sicilian eggplant relish)
- Fish gelatin, made from the skin and bones of fish
- Fish oil
- Fish sauces (for example, Thai fish sauce or nam pla)
- Fish sticks
- Furmet (fish sauces)
- Imitation fish or shellfish (for example, surimi, sea legs, or sea sticks)
- Sushi
- Worcestershire sauce



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Where is fish 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)*. In 2021, the *Food Allergy Safety, Treatment, Education, and Research Act (FASTER)* added sesame as a major allergen. This law took effect on January 1, 2023. FALCPA requires that the major food allergens are listed on the label in one of three ways: (1) using the common name, (2) common name written in parenthesis after the ingredient, or (3) in a “contains” statement. FALCPA also requires the type of fish (for example, bass, flounder, cod) to be declared. This means that although fish is one of the nine major allergens, the label may not say “fish” but will state the name of the specific type of fish. For example, fish sauce that contains anchovies (a type of fish) could be labeled in either of the ways shown in the examples below (bold is used for illustrative purposes only):

Label 1	Label 2
INGREDIENTS: Anchovy extract, Salt, Pure cane sugar	INGREDIENTS: Anchovy extract , Salt, Pure cane sugar
Contains: Anchovy	

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.

All child nutrition staff should be trained to read food labels and recognize food allergens.

Because food labels change from time to time, staff should check labels for fish and fish ingredients for every product every 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 labels be maintained for a minimum of 24 hours for every product after it is served to a child with food allergies in case of a reaction. If the product is kept as leftovers, be sure to keep the labels for 24 hours after all product is used up or discarded.

What substitutes can be used for fish in student meals?

When meal modifications for a student with food allergies are outside of the meal pattern, a medical statement from a State licensed healthcare professional or registered dietitian is required. A State licensed healthcare professional is defined as an individual authorized to write medical prescriptions under State law. Registered dietitians are allowed to submit medical statements for meal modifications for students with disabilities even if they do not have a State license. Refer to the manual *Accommodating Children with Disabilities in the School Meal Programs: Guidance for School Food Service Professionals* on the USDA website for information on the required content of the medical statement.

If there is uncertainty about the statement, or if it does not provide enough information, contact the household or State licensed healthcare professional or registered dietitian (as permitted by the family) for clarification. However, clarification of the medical statement should not delay the child nutrition department from providing a meal modification. Child nutrition 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.



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When planning menus for children 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 meal modifications. The following chart lists common menu items that may be used as safe alternatives to items that contain fish. Child nutrition staff should always carefully read labels, even for foods that generally do not contain fish.

Common Menu Items/Ingredients That May Contain Fish	Possible Substitutes or Alternatives That Do Not Typically Contain Fish*
Asian foods (for example, egg rolls, tempura, sushi)	Asian foods made without fish or fish sauce, other ethnic foods
Fish products (for example, baked fish, fish sticks)	Beef, veal, pork, ham, chicken, turkey, lamb; or beans/peas and legumes
Caesar salad and Caesar dressing (contain fish ingredients, anchovies); tuna salad	Salad and salad dressings that do not contain fish
Worcestershire sauce (may contain anchovies) and fish sauce	Condiments that do not contain fish

*Always check the ingredient label to verify ingredients and check for potential cross-contact.

Common Questions

Someone I know 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 to maintain cold holding temperatures. These histamines are not destroyed by freezing or cooking.

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

Cross-contact is a concern for all allergens, but there are a few specific concerns related to fish allergies. Frying is not a recommended method of cooking in schools and child care centers, but if fish is fried, the cooking oil can become contaminated. If you serve children 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.



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References

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For More Information

Food Allergy Research and Education
<http://www.foodallergy.org>

ICN Food Allergy Resources
<http://www.theicn.org/foodsafety>

U.S. Food and Drug Administration
Food Allergens
<http://www.fda.gov/Food/IngredientsPackagingLabeling/FoodAllergens/default.htm>

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