Sesame is one of the nine major allergens in the United States. It is the most common seed to cause allergic reactions that affect an estimated 1.6 million people. Only about 20%–30% of children with a sesame allergy will outgrow it. As a result, there is a moderately high chance for sesame allergies to be lifelong. Roughly 4 out of 5 people with a sesame allergy have other food allergies such as peanut, tree nut, egg, and milk. Adult day care sites should be mindful that participants with food allergies can potentially be allergic to more than one food.

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 reaction symptoms can occur and 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 sesame allergy may have trouble breathing when exposed to sesame while a different participant with a sesame allergy gets nauseated 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.

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

Sesame is used in various ways in foods such as oils, flavorings, spices, pastes, and seeds. Sesame can also be found in common household items such as pet food, medications, nutritional supplements, perfumes, and cosmetics (e.g., hair products, soaps, lotions, skin creams, and lip glosses). The following chart lists some food products that may contain sesame.
**Sesame Allergies**

### Common Names of Sesame

- Anjonjoli
- Benne, benne seed, beniseed
- Gingelly
- Sesame oil*
- Sesamum indicum*
- Simsim
- Til or Teel

*The scientific name for sesame, Sesamum indicum, may be used on labels of non-food items. Some examples include cosmetics, medications, nutritional supplements, and pet foods.

### Sesame Ingredients

- Sesame flour
- Sesame meal
- Sesame oil*
- Sesame paste
- Sesame powder
- Sesame seed
- Sesamin
- Sesamol
- Sesamolin

*Sesame oil is usually unrefined or unfiltered, and consuming it can cause an allergic reaction.

### Dishes, Foods, and Products That May Contain Sesame

- Baked goods (such as bagels, bread, breadsticks, hamburger buns, and rolls)
- Baba ganoush
- Candy, confection
- Chips (such as bagel chips, pita chips, and tortilla chips)
- Crackers (such as melba toast and sesame snap bars)
- Dressings, gravies, marinades, and sauces
- Falafel
- Goma dofu/gomadofu
- Gomasio (sesame salt)
- Granola
- Herbs and herbal drinks
- Halva/halvah/halwah
- Hummus
- Margarine
- Muesli
- Natural flavorings
- Noodles
- Pasteli
- Pretzels
- Processed meats/sausages
- Protein and energy bars
- Rice
- Rice cakes
- Risotto
- Sesame salt
- Shish kabobs
- Snack mix
- Soups
- Spices/spice blends
- Stews
- Stir-fry
- Sushi
- Tahini
- Tempeh
- Turkish cake
- Veggie burgers
Where is sesame listed on food labels?

Food labels regulated by the U.S. Food and Drug Administration (FDA) follow the Food Allergen Labeling and Consumer Protection Act (FALCPA) regulations. FALCPA regulates how the major eight food allergens (egg, fish, milk, peanuts, shellfish, soy, tree nuts, and wheat) are listed on the label. These allergens must be listed 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. In 2021, Congress passed the Food Allergy Safety, Treatment, Education, and Research Act (FASTER). 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 on their food labels before this date. Contact the food manufacturer if there is any uncertainty about whether a food contains sesame.

The following ingredient list is for a whole grain sesame seed bun. Notice how sesame is listed. Many food manufacturers will include a “Contains” statement to clearly define the allergens present in their foods. However, this is not required if the allergens are listed with their usual, common names (bold is used for illustrative purposes only).

<table>
<thead>
<tr>
<th>Label 1</th>
<th>Label 2</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>INGREDIENTS:</strong> Water, Whole wheat flour, Enriched wheat flour (Wheat Flour, Niacin, Reduced iron, Thiamine mononitrate, Riboflavin, Enzyme, Folic Acid), Sugar. Contains 2% or less of Yeast (Yeast, Sorbitan monostearate, Ascorbic acid), Sesame seeds, Sesame bean oil, Salt, Monoglycerides with ascorbic acid and citric acid (antioxidants), Fumaric acid, Calcium propionate (Preservative), Calcium sulfate, Enzymes, Wheat starch, Ascorbic acid. <strong>Contains Wheat, Sesame.</strong></td>
<td><strong>INGREDIENTS:</strong> Water, Whole wheat flour, Enriched wheat flour (Wheat Flour, Niacin, Reduced iron, Thiamine mononitrate, Riboflavin, Enzyme, Folic acid), Sugar. Contains 2% or less of Yeast (Yeast, Sorbitan monostearate, Ascorbic acid), <strong>Sesame seeds, Sesame bean oil,</strong> Salt, Monoglycerides with ascorbic acid and citric acid (antioxidants), Fumaric acid, Calcium propionate (Preservative), Calcium sulfate, Enzymes, Wheat starch, Ascorbic acid.</td>
</tr>
</tbody>
</table>

Also, check labels for advisory statements such as “may contain sesame,” “produced on shared equipment with sesame,” or “produced in a plant that uses sesame in other products.” Sesame seeds often become “electrostatic.” This causes them to cling to charged surfaces such as other foods, making it difficult to prevent cross-contact. Cross-contact is when one food allergen comes into contact with another food, transferring the allergens to the new food. Avoid foods with advisory statements because the product may contain a small amount of sesame due to cross-contact.
For example, whole grain bread may or may not contain sesame depending on the recipe but may be baked on a production line with bread that does. The whole grain bread could be labeled like below (bold is used for illustrative purposes only):

**INGREDIENTS:** Whole wheat flour, Water, Enriched wheat flour, Honey, Yeast, Salt, Sunflower seeds, Flaxseed, Oats, Wheat bran.
Contains: Wheat
Produced on equipment that also handles sesame.

**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. Train all staff who prepare and serve food to read product labels and recognize food allergens. Because food labels change from time to time, staff should check labels for sesame and sesame ingredients in every product each time it is received. If the label does not provide clear information, the center must contact the manufacturer for clarification or use a different product. The Centers for Disease Control and Prevention recommends keeping labels for every product served to a participant with food allergies 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. Contact a State agency or sponsor for more recommendations for managing and keeping labels.

**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 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, clarification of the medical statement should not delay the adult day care staff from providing a meal modification. 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 sesame in participant meals?

When planning menus for participants with sesame allergies, consider current food choices offered to determine if a reimbursable meal can be selected from foods offered that do not contain sesame. 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 substitutions for items that contain sesame. Adult day care staff should always read labels carefully, even for foods that generally do not contain sesame.

<table>
<thead>
<tr>
<th>Menu Items That May Contain Sesame*</th>
<th>Possible Substitutes*†</th>
</tr>
</thead>
<tbody>
<tr>
<td>Bagels, bread, breadsticks, hamburger buns, and rolls</td>
<td>Bagels, bread, breadsticks, hamburger buns, and rolls without sesame seeds</td>
</tr>
<tr>
<td>Crackers, pretzels</td>
<td>Crackers, pretzels without sesame seeds</td>
</tr>
<tr>
<td>Dressings, gravies, marinades, and sauces</td>
<td>Dressings, gravies, marinades, and sauces that do not contain sesame oil or sesame seeds</td>
</tr>
<tr>
<td>Granola, muesli</td>
<td>Granola or muesli without sesame seeds</td>
</tr>
<tr>
<td>Main or side dish with baba ganoush, hummus, or tahini</td>
<td>Main or side dish without baba ganoush, hummus, or tahini</td>
</tr>
<tr>
<td>Pasta, rice, or stir-fried dishes</td>
<td>Pasta, rice, or stir-fried dishes without sesame seeds</td>
</tr>
<tr>
<td>Processed meats</td>
<td>100% beef, pork, poultry, fish, or shellfish; beans, peas, or legumes</td>
</tr>
<tr>
<td>Soups or stews</td>
<td>Soups or stews without sesame seeds</td>
</tr>
</tbody>
</table>

*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 food label to verify ingredients and check for possible cross-contact (look for advisory statements or contact manufacturer).
Sesame Allergies

References


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


Sesame Allergies


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/food-labeling-nutrition/food-allergies