

Facts about Food Allergies

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Objectives

- To be able to define a food allergy and a food intolerance
- To identify the common food allergies
- To learn how to prevent and manage a food allergy

Overview

- What is a Food Allergy?
- Common Food Allergies
- Prevention and Management
- Resources
- Summary
- Questions

What Is a Food Allergy?

- An adverse reaction of the body's immune system to specific proteins in a food
 - First exposure:
 - The body's immune system responds by making antibodies called Immunoglobulin E (IgE)
 - Second exposure:
 - IgE antibodies recognize the allergen
 - Immune response is triggered that can result in a severe allergic reaction

Symptoms of a Food Allergy

- Symptoms are commonly found in the following areas:
 - **Skin:** hives, swelling (lips, tongue), itching, redness
 - **Respiratory:** coughing, wheezing, shortness of breath, chest pain
 - **Gastrointestinal:** nausea, pain/cramps, vomiting, diarrhea
 - **Cardiovascular:** pale skin, dizziness, shock, fainting
- Allergic reactions can be mild to severe (anaphylaxis)

Diagnosis

- Food allergies are often diagnosed by a doctor or allergist
 - Review medical and family history
 - Skin prick test (most common)
 - Other tests = blood test (for allergen-specific serum IgE), oral food challenge
- About 6% of children and 4% of adults have a physician-diagnosed food allergy

Who is at higher risk for having a food allergy?

- Risk factors for developing a food allergy:
 - **Age:** More common in children than adults
 - **Family history:** Parent or sibling has a food allergy
 - **Another food allergy:** If you have a food allergy, you're at greater risk for developing another
 - **Related medical conditions:** You have asthma, eczema, or hay fever

Most Common Food Allergies

- The 10 most common food allergies are:

- Egg
- Milk
- Wheat
- Soy
- Mustard

More
common in
children



- Peanut
- Tree Nuts
- Fish
- Shellfish
- Sesame

More likely
to continue
into
adulthood



- Also known as priority food allergens for food labeling purposes

What is a Food Intolerance?

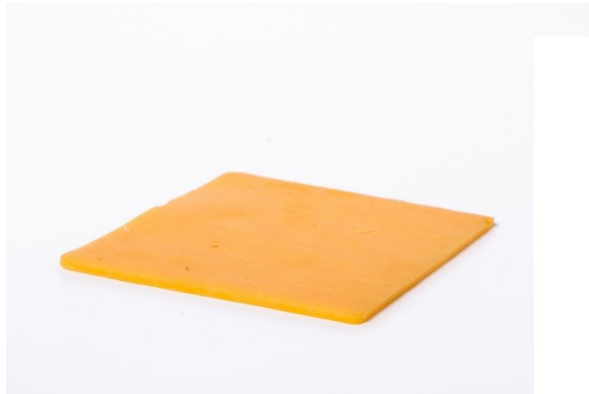
- A food sensitivity that does not involve the body's immune system
- Likely caused by an inability to digest or absorb certain foods
- May have symptoms similar to a food allergy
 - Abdominal pain, bloating, and diarrhea
- Example:
 - Lactose Intolerance = unable to break down lactose (a sugar found in milk)

Common Food Allergies



Milk Allergy

- Most common food allergy among children
- Allergic reaction to milk proteins, casein and whey
- May react to other animal milks (have a protein similar to cow's milk)
- Milk is found in:
 - Butter
 - Cheese
 - Yogurt
 - Baked goods
 - Cream-based Soups
 - Infant formula



Substitutions for Milk

- Those with a milk allergy need to completely avoid milk and milk products
- Tips:
 - Use fortified soy beverage instead of milk
 - Use applesauce instead of yogurt
 - Use broth-based soups instead of cream-based soups
 - Use canned coconut milk instead of cream

**Is a milk allergy and
lactose intolerance
the same?**



Milk Allergy vs Lactose Intolerance

- Lactose intolerance is **not** the same as a milk allergy

Milk allergy:

- Immune response to the protein in milk
- Must completely avoid all foods that contain milk

Lactose intolerance:

- Gastrointestinal response when the body cannot break down lactose (a sugar in milk)
- May be able to have small amounts of milk
 - Small amounts of milk with meals
 - Low-lactose foods such as cheese and Greek Yogurt
 - Lactose-free milk and yogurt

Egg Allergy

- Allergic reaction to proteins in egg whites and/or yolks
- Egg is found in:
 - Desserts
 - Whipped toppings
 - Pasta, noodles
 - Battered/fried foods
 - Mayonnaise
 - Creamy dressings



Substitutions for Egg

- Those with an egg allergy must avoid all food and products that contain egg
- Tips:
 - Bake with mashed banana, yogurt or applesauce
 - Use mustard instead of mayonnaise as a spread
 - Use vinegar-based dressings instead of creamy dressings

Wheat Allergy

- Wheat allergies are common in children and may be outgrown
- Wheat can be found in:
 - Breads and baked goods
 - Crackers
 - Cereals
 - Children's play dough
 - Pasta noodles
 - Sauces and salad dressings
 - Deli and processed meats



Substitutions for Wheat

- Those with a wheat allergy must avoid all foods that contain wheat.
- Wheat grain substitutes include rice, quinoa, corn and oats
- Tips:
 - Use rice noodles instead of pasta
 - Use rice cakes or rice crackers instead of crackers
 - Use rice- or corn-based breakfast cereals
 - Use wheat-free bread

**Is Celiac disease
the same as a
wheat allergy?**



Celiac Disease vs Wheat Allergy

- Celiac disease is **not** the same as a wheat allergy

Wheat allergy:

- Abnormal immune response to wheat proteins
- Must avoid wheat, but may tolerate other grains like barley and rye

Celiac disease:

- Genetic disease where the protein gluten damages the lining of the small intestine
- Avoid gluten (found in wheat, rye, barley and other grains)

Peanut Allergy

- Peanuts are a type of legume, like peas and beans, and are not the same as tree nuts
- Peanuts can be found in:
 - Baked goods
 - Cereals
 - Sauces, salad dressings
 - Candies
 - Peanut oil
 - Snack foods (e.g., trail mix, granola bars)



Substitutions for Peanuts

- Those with a peanut allergy must avoid all food and drinks that contain peanuts
- Tips:
 - Try sunflower seed or soy-based spreads instead of peanut butter
 - Try hummus (made from chickpeas) as a spread
 - Look for peanut-free cereals and granola bars
 - Try popcorn or pretzels as a snack

Tree Nut Allergy

- Common tree nuts include almonds, cashews, walnuts, hazelnuts, and chestnuts
 - Coconut is not considered a tree nut
- Tree nuts may be found in:
 - Baked goods
 - Cereals
 - Chocolate-nut spreads
 - Candies
 - Snack foods (e.g., trail mix, granola bars)
- Peanuts and tree nuts may be processed in the same facility = risk of cross-contamination



Prevention and Management

Preventing Food Allergies

- For infants at high risk of food allergy, reduce risk by:
 - Exclusively breastfeeding until 6 months of age
 - Introducing commonly allergenic foods (particularly for egg and peanut) at around 6 months of age based on developmental readiness for food
 - Continuing to breastfeed for its immunological and developmental benefits



The New vs the Old Guideline

What's new?

- Previous guidance: there is *no need to delay* the introduction of commonly allergic foods beyond 6 months of age
- New direction: the *intentional* introduction of commonly allergenic foods at around 6 months of age

Why?

- For high-risk infants, exposure to allergens is a medical intervention for the purpose of preventing a food allergy and not for nourishment

Preventing Food Allergies

- Introduce commonly allergenic foods one at a time and wait 2 days between new foods to gauge reaction
- Tips for Feeding:
 - Serve age-appropriate textures (e.g. for young infants, dilute smooth peanut butter in water)
 - Offer a small part of the food on the tip of a spoon
 - Wait 10 minutes
 - Watch infant for at least 2 hours after feeding for any signs of an allergic reaction
 - If tolerated, offer the food a few times a week to maintain tolerance

Managing Food Allergies

- There is no cure for food allergies
- Prevent an allergic reaction by staying away from food and drinks containing the specific food allergen
- Strategies include:
 1. Reading food labels
 2. Avoiding cross-contamination
 3. For those at risk of anaphylaxis, carrying an Epi-pen

1. Reading Food Labels

- In Canada, the priority food allergens are always included on the label of prepackaged foods
- Food allergens will appear in the ingredient list OR in a “Contains” statement that follows the list

Ingredient List

INGREDIENTS: WHEAT FLOUR, ROLLED OATS,
BROWN SUGAR, SOYBEAN OIL, WHEY (MILK),
ALMOND, HONEY, SALT, NATURAL FLAVOUR.

OR

“Contains” Statement

INGREDIENTS: WHEAT FLOUR, ROLLED OATS,
BROWN SUGAR, SOYBEAN OIL, WHEY,
ALMOND, HONEY, SALT, NATURAL FLAVOUR.

CONTAINS WHEAT, OAT, SOY, MILK, ALMOND.

1. Reading Food Labels

- Ingredient List

INGREDIENTS

ENRICHED WHEAT FLOUR, CHOCOLATE CHIPS (SUGAR, UNSWEETENED CHOCOLATE, COCOA BUTTER, DEXTROSE, MILK INGREDIENTS, SOY LECITHIN), MODIFIED PALM OIL, BROWN SUGAR, SUGAR/GLUCOSE-FRUCTOSE, BAKING SODA, BAKING POWDER, LIQUID WHOLE EGG, SALT, NATURAL FLAVOUR.

- “Contains” Statement

INGREDIENTS

WHEAT FLOUR, SUGAR, ROLLED OATS, SHORTENING (VEGETABLE, MODIFIED PALM), SEMISWEET CHOCOLATE CHIPS (SUGAR, UNSWEETENED CHOCOLATE, DEXTROSE, COCOA BUTTER, SOY LECITHIN), COCONUT (WITH SULPHITES), RAISIN PASTE, BAKING SODA, SALT, SOY LECITHIN, CINNAMON, GINGER POWDER, NATURAL FLAVOUR. CONTAINS: WHEAT, OATS, SOY, SULPHITES.

1. Reading Food Labels

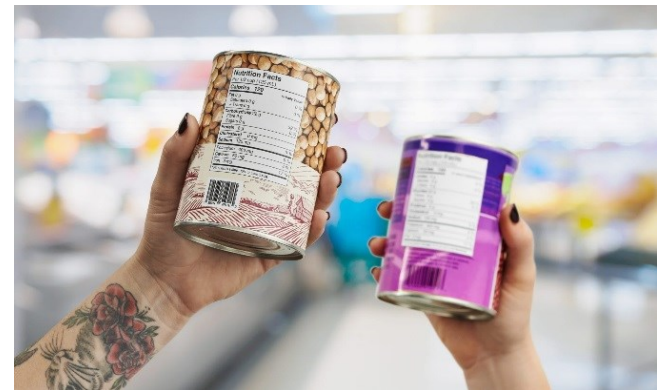
- Food manufacturers can have voluntary labelling statements such as:
 - “May contain”
 - “Free from” statements such as “peanut free” or “milk free”

INGREDIENTS

WHEAT FLOUR, WHEAT GERM, CANOLA OIL, COCONUT OIL, WHOLE WHEAT FLOUR, SUGAR, SALT, WHEY POWDER, AMMONIUM BICARBONATE, HYDROLYZED SOYA PROTEIN, BAKING SODA, PROTEASE, PENTOSANASE. CONTAINS: WHEAT, SOYA AND MILK. MAY CONTAIN MUSTARD SEEDS AND SESAME SEEDS. BAKED IN A NUT FREE/PEANUT FREE FACILITY.

1. Reading Food Labels

- Read the ingredient list and precautionary statements every time - sometimes the ingredients of a product change
- Avoid foods with statements such as “May Contain”
- Review any “Free from” statements
- Read labels on non-food products such as vitamins and pet food, as they can contain allergens
- Do not buy packaged foods without an ingredient label



2. Avoiding Cross-Contamination

- Cross-contamination can happen when a food allergen accidentally gets into another food or object
- Examples:
 - In the factory through shared production lines
 - During food preparation when dishes, utensils or cooking surfaces are not properly cleaned
 - Transferred by hand to another food. For example, when making a cheese pizza and then a dairy-free pizza, and hands are not washed in between
 - At the grocery store through shared scoops for bulk bins

2. Avoiding Cross-Contamination

- Tips:

- Avoid buying food from bulk bins
- Wash hands before and after making meals
- If a food has touched an allergen, do not serve it, even if the allergen has been removed
- Read food labels carefully
 - Look for “May Contain” statements related to possible cross-contamination

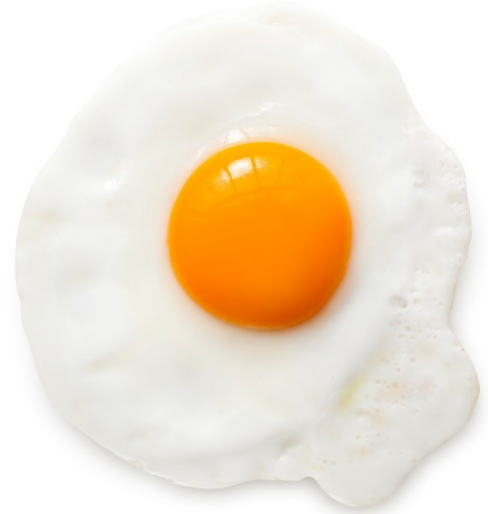


3. Carry an EpiPen

- Epinephrine is the only medication that can stop an allergic reaction from progressing
- Must be administered as soon as symptoms of a severe allergic reaction appear
- You can buy an epinephrine auto-injector (EpiPen) without a prescription in Canada
 - Pharmacists are able to recommend EpiPens
- Claims for EpiPens are accepted under NIHB

Food Allergy - Myth or Fact?

Only the top priority allergens (like peanuts, egg, milk, fish for example) cause life-threatening reactions.



The Facts

- The top priority food allergens account for most of the food allergies, but any food can trigger an allergic reaction.
- For example, there can be allergies to:
 - Certain fruits and vegetables
 - Spices (e.g., garlic, cinnamon)
- **Bottom Line:** When it comes to food allergies, don't assume that only one of the top allergens can trigger a reaction



Food Allergy - Myth or Fact?

Cooking food at a high temperature will kill the protein and I won't be allergic to it



The Facts

- Cooking does not reliably destroy food allergens
- Foods are complex mixtures and they respond to heat differently. For example:
 - Certain people with milk allergy can consume milk safely when the allergen is partly destroyed by heating (e.g., baked in a bun or muffin)
 - Other allergens, such as peanut, are not affected by heat
- **Bottom Line:** You can't cook all the allergens out of a food. Cooking doesn't ensure safety for people with food allergies.



Resources

1. Online courses at Allergyaware.ca:

- Anaphylaxis in Schools
- Anaphylaxis in the Community
- Anaphylaxis in Child Care Settings

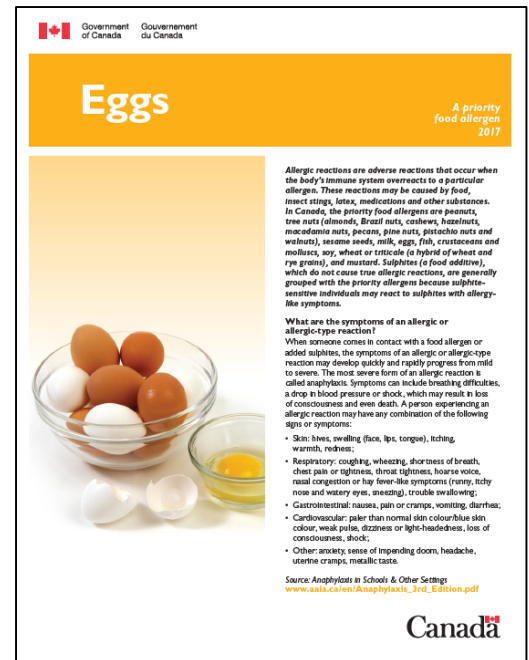
Visit: <https://www.allergyaware.ca/courses/>



2. Health Canada

- Information on Priority Food Allergens and Food Allergen Labelling

Visit: <https://www.canada.ca/en/health-canada/services/food-allergies-intolerances.html>



Resources

3. Food Allergy Canada

- Information on Food Allergy Basics and Living with Allergies
- Professional Resources
 - Healthcare, Educators, Food services

Visit: <https://foodallergycanada.ca/>



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Food Allergy Canada is a non-profit organization dedicated to helping Canadians with food allergies live with confidence.

Resources

3. Kids with Food Allergies website

- Recipes

Visit: <https://www.kidswithfoodallergies.org/page/recipes-diet.aspx>

The screenshot shows the 'Kids with Food Allergies' website interface. At the top, there's a header with the logo, navigation links (Home, About KFA, Living With Food Allergies, Recipes & Diet, Research, Get Involved, Latest News, Community), and buttons for 'GET SUPPORT' and 'DONATE'. Below the header, the 'Recipes & Diet' section is highlighted. The main content area features a 'RECIPE SEARCH' form with fields for 'Keywords', 'Without Ingredients', 'Sort by' (Top-Rated, Recently Added), and 'Category' (All Categories). There are also checkboxes for allergens to avoid: Milk, Peanut, Egg, Soy, Tree Nut, Gluten, Wheat, Fish, Shellfish, and Sesame. A 'SEARCH' button is at the bottom right.

KIDS WITH FOOD ALLERGIES
A Division of the Asthma and Allergy Foundation of America

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Search: ☒ Resources ☐ Recipes ☐ Community
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RECIPE SEARCH

Keywords:

Without Ingredients:

Sort by: ☐ Top-Rated ☐ Recently Added

Category:

Show only recipes that are FREE of:

☐ Milk ☐ Peanut ☐ Egg ☐ Soy ☐ Tree Nut

☐ Gluten ☐ Wheat ☐ Fish ☐ Shellfish ☐ Sesame

SEARCH

Summary

- Food allergies and food intolerances are not the same
- Introducing solid foods at around 6 months of age may have a role in preventing food allergy in high-risk infants
- Choose allergen-free foods by reading food labels
- Be aware of sources of cross-contamination

Thank you!

Questions?

