

Food Allergy Action Month: Food Allergy vs. Food Intolerance



Healthy Eating Tip of the Month May 2018

Top 8 Allergens:



1
Milk



2
Eggs



3
Fish



4
Shellfish



5
Peanuts



6
Tree
Nuts



7
Soy



8
Wheat/
Gluten*

What is a food allergy? What is food intolerance?

- **Food allergy:** The immune system overreacts to a food that is typically harmless. It creates an allergic antibody (IgE) to try to get the food out of the body.
IgE can be made by the body even if the food has been eaten frequently in the past (but this is unusual).
- **Food intolerance:** The immune system is not involved in the response and there is a problem digesting the food. The response is not as dangerous as an allergic reaction.

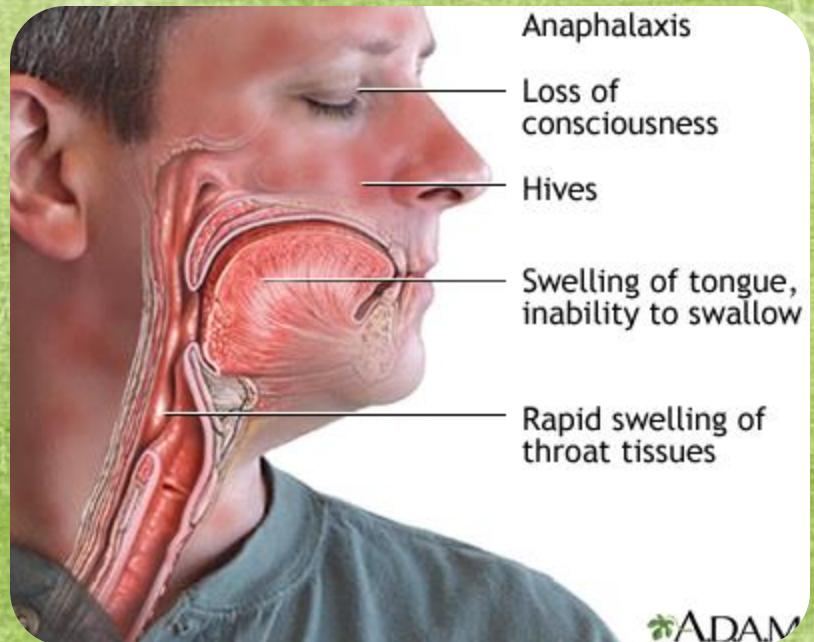
Symptoms of food allergy: happen rapidly-within 2 hours or less

Mild to moderate

- Hives (reddish, swollen, itchy areas on the skin)
- Eczema flare (a persistent dry, itchy rash)
- Redness of the skin, particularly around the mouth or eyes
- Itchy mouth or ear canal
- Nausea or vomiting
- Diarrhea
- Stomach pain
- Nasal congestion or a runny nose
- Sneezing
- Slight, dry cough
- Odd taste in mouth

Severe: swelling of lips, tongue, & throat blocks breathing

- Trouble swallowing
- Shortness of breath or wheezing
- Turning blue
- Drop in blood pressure (feeling faint, confused, weak, passing out)
- Loss of consciousness
- Chest pain
- A weak pulse
- Sense of “impending doom”



Symptoms of food intolerance: Can take up to 72 hours to see

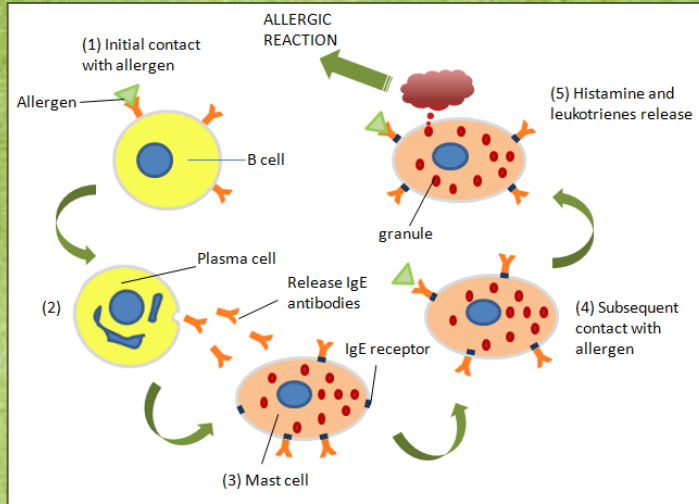
- Bloating
- Migraines
- Headaches
- Cough
- Runny nose
- Feeling under the weather
- Stomach ache
- Irritable bowel
- Hives

Common Food Intolerances:

- **Lactose**, a natural sugar found in milk, cheese, and other dairy products
- **Sulfites**, found in wines, pickled foods, and sodas
- **Gluten**, a protein in wheat, barley, rye, and some other grains
- **Caffeine**, in coffee, tea, soda, energy drinks
- **Salicylates**, natural chemicals that are produced by plants as a defense against environmental stressors like insects and disease; found in fruits, vegetables, teas, coffee, spices, nuts and honey
- **Fructose**, a natural sugar found in most fruits and also in high-fructose corn syrup
- **FODMAPs** (fermentable oligosaccharides disaccharides monosaccharides and polyols), these are carbohydrates that draw water into your intestine during digestion. They cause gas, bloating, and abdominal pain.
- Others include: MSG, yeast, eggs, food colorings, and sugar alcohols

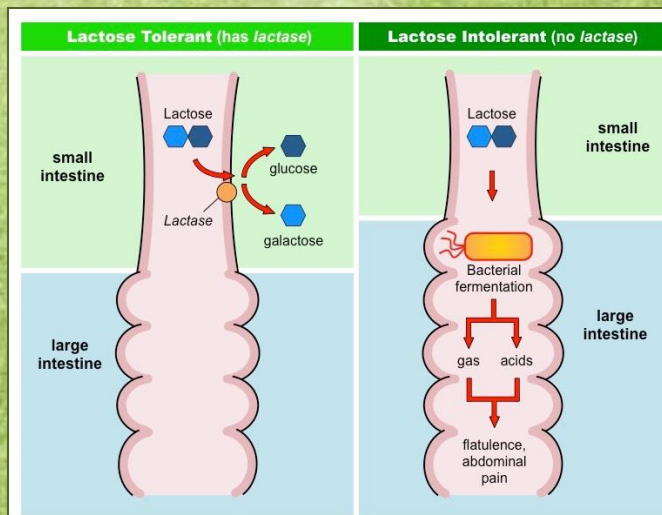
Example: Milk Allergy vs. Lactose Intolerance

- A milk allergy is when the immune system reacts to a protein contained in milk and initiates an immune response.



<http://ib.bioninja.com.au/standard-level/topic-2-molecular-biology/25-enzymes/lactose-intolerance.html>

- Lactose intolerance is the lack (or low level) of the enzyme lactase in the gut, which is needed to break down the sugar lactose, found in milk. When lactose is consumed, it passes through the intestine undigested, is fermented by bacteria, and causes unpleasant symptoms, which are discussed below.



<https://www.dogonews.com/2014/10/16/say-goodbye-to-peanut-allergies/page/5>

How to read a food label for milk allergens

Read product labels every time you purchase an item as ingredients may change without notification.

Food manufacturers are required to label foods that contain any of the top 8 food allergens (milk, eggs, fish, shellfish, tree nuts, peanuts, wheat, and soy).

Note: Manufacturers are **not** required by law to label allergens in **non-food items** (cosmetics, medications).



Look in the ingredients list

Or listed separately



Milk Allergy

Avoid foods that contain milk or any of these ingredients:

- Butter, butter fat, butter oil, butter acid, butter ester(s)
- Buttermilk
- Casein
- Casein hydrolysate
- Caseinates (in all forms)
- Cheese
- Cottage cheese
- Cream
- Curds
- Custard
- Diacetyl
- Ghee
- Half-and-half
- Lactalbumin, lactalbumin phosphate
- Lactoferrin
- Lactose
- Lactulose
- Milk (in all forms including condensed, derivative, dry, evaporated, goat's milk and milk from other animals, low-fat, malted, milkfat, non-fat, powder, protein, skimmed, solids, whole)
- Milk protein hydrolysate
- Pudding
- Recaldent^(R)
- Rennet casein
- Sour cream, sour cream solids
- Sour milk solids
- Tagatose
- Whey (in all forms)
- Whey protein hydrolysate
- Yogurt

Milk Allergy

Other Possible Sources of Milk- avoid these if your allergy is severe:

- Artificial butter flavor
- Baked goods
- Caramel candies
- Chocolate
- Lactic acid starter culture and other bacterial cultures
- Luncheon meat, hot dogs and sausages, which may use the milk protein casein as a binder. Also, deli meat slicers are often used for both meat and cheese products, leading to cross contamination.
- Margarine
- Non-dairy products, as many contain casein
- Nougat
- Shellfish is sometimes dipped in milk to reduce the fishy odor. Ask questions when buying shellfish.
- Tuna fish, as some brands contain casein
- Some specialty products made with milk substitutes (i.e., soy-, nut- or rice-based dairy products) are manufactured on equipment shared with milk.
- Many restaurants put butter on grilled steaks to add extra flavor. You can't see the butter after it melts.
- Some medications contain milk protein.
- *Allergens are not always present in these food and products, but milk protein can appear in surprising places. Again, read food labels and ask questions if you're ever unsure about an item's ingredients.*

Lactose Intolerance

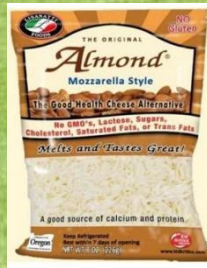
What causes lactose intolerance?

Some people are born with little or no enzyme lactase in their gut. In fact, lactose intolerance affects 15-75 % of all adults depending on race, food habits and gut health (1). Other causes are certain digestive diseases, such as Crohn's disease, ulcerative colitis, celiac sprue (an inherited disorder affecting the lining of the small intestine), inflammatory bowel diseases, and injuries to the small intestine (surgery or trauma) may reduce the amount of lactase available to process lactose properly. If the small intestine is injured, lactose intolerance may only be temporary and can go away after the intestine has healed.

- Avoid these products:
 - Whey
 - Caseinates
 - Nougat
 - Most cheeses (avoid soft cheeses)
 - Milk by-products
 - Casein
 - Dry milk solids
 - Lactose
 - Curds
 - Nonfat dry milk
 - Dry milk powder
- Also **avoid** items that state "**may contain milk**" on the food label. Depending on the severity of your symptoms, you may need to avoid or limit foods containing these ingredients.
- People with lactose intolerance **can eat the following** products because they contain little to no lactose: **aged hard cheeses (cheddar, Swiss, parmesan), yogurt (with live active cultures), butter, kefir, and goat's milk.**

Dairy-Free Alternatives

- Processed foods
 - Cream cheese: Daiya, Kite Hill, Tofutti, Go Veggie
 - Shredded cheese: Daiya, Lisanatti, So Delicious, Follow Your Heart
 - Cheese slices: Daiya, Field Roast, Go Veggie
 - Yogurt: Kite Hill, Almond Dream, Silk
 - Cheese blocks: Lisanatti, Daiya, Follow Your Heart
 - Ice cream: Ben and Jerry's, So Delicious, Almond Dream, Halo Top, Silk
 - Nut milks: Rice Dream, Blue Diamond, So Delicious, Silk, Ripple



- Others
 - Some recipe substitutions use nutritional yeast for cheesy sauces and as a substitute for parmesan cheese. Raw cashews that are soaked in water for a few hours, drained, and ground into a paste can substitute for cheese to make creamy sauces for pasta or vegetables.

Importance of Calcium in a Dairy-free/Dairy-restricted diet

- Calcium is needed for proper nerve function, muscle contraction, and healthy bones and teeth. In a dairy-free/restricted diet it is important to consider alternative sources of calcium, like plants.

Table 1. Recommended Dietary Allowance of calcium by age group

Age Group	Recommended Dietary Allowance (mg/day)
1–3 years	700 mg
4–8 years	1,000 mg
9–18 years	1,300 mg
19–50 years	1,000 mg
51–70 years, males	1,000 mg
51–70 years, females	1,200 mg
70+ years	1,200 mg
14–18 years, pregnant/breastfeeding	1,300 mg
19–50 years, pregnant/breastfeeding	1,000 mg

Source: Adapted from *Dietary Reference Intakes for Calcium and Vitamin D*, Institute of Medicine, National Academy of Sciences, November 2010.

- Here are some plant-based/alternative sources of calcium to help you get the recommended calcium!

Food	Serving size	Amount of calcium
Broccoli	1 cup chopped	43 mg
Kale	1 cup chopped	101 mg
Arugula	1 cup	125 mg
Garbanzo beans	½ cup	105 mg
White beans	½ cup	100 mg
Black beans	½ cup	147 mg
Chia seeds	1 tablespoon	80 mg
Blackstrap molasses	1 tablespoon	172 mg
Dried figs	2 figs	55 mg
Orange	1 medium fruit	65 mg
Almonds	1 ounce	75 mg
Almond butter	2 tablespoons	56 mg
Oatmeal	¾ cup	20 mg
Wheat bread	1 slice	20 mg
Tofu	½ cup	434 mg
Herring	3 ounces	48 mg
Soy milk	8 ounces	450 mg
Almond milk	8 ounces	450 mg

- For an example meal plan, you could have a smoothie with soy/almond milk and kale and toast with almond butter for breakfast, a salad with arugula and beans for lunch with a few figs and an orange, and tofu and stir-fry veggies for dinner and you would get about 1400 mg of calcium- over the recommended amount of 1000 mg!

References:

1. Food Allergy Research & Education. "Symptoms of an Allergic Reaction to Food." Accessed March 10, 2018 at: <https://www.foodallergy.org/life-with-food-allergies/food-allergy-101/symptoms-of-an-allergic-reaction-to-food>
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<http://www.med.umich.edu/pfans/services/tip.html>

For more information on allergies please visit
<https://medicine.umich.edu/dept/foodallergy/education-resources/food-allergy-resources>