

It's All About the Big Mac: A Lesson in Food Allergies and Food Insecurity



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Disclosures

- I have no financial disclosures or conflicts of interest related to the material in this presentation.
- I received permission from my son, MJ, to use his story and pictures.
- Much of the information in this presentation is learned knowledge from experience.
- I do not endorse any products mentioned in this presentation.

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Objectives

1. Identify the major food allergens and their prevalence in the United States.
2. Describe how food insecurity and food allergens affect a person's day-to-day life, including anxiety, depression, and isolation.
3. Recall that food is medicine and can provide alternative nutrition for food-insecure and food-allergy patients.
4. Describe the differences between food allergies and food intolerances.

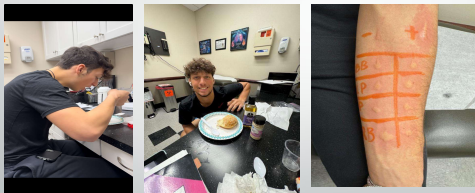
Our Food Allergy Story

- Permission from my son to share our story.
- Multiple Food Allergies
- Multiple scratch and oral food challenges
- Product guides, food substitutes, ingredient lists

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Our Food Allergy Story



Egg Oral Challenge, Sesame Oral Challenge, and bean scratch testing

Food Allergy Testing

- Once you suspect a food allergy, contact a provider for testing
- Blood Test IgE testing
- Scratch testing
- Intradermal testing

(Food Allergy Research & Education, 2025)

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Food Allergy Prevalence

- 33 Million People in the United States have Food Allergies
- One in ten people has at least one food allergy
- 40% of children have more than one food allergy
- Black and Hispanic children are more likely to have food allergies than white non-Hispanic children.
- Food allergies are a life-threatening medical condition

(Food Allergy Research & Education, 2025)

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The Nine Major Food Allergens

1. Milk
2. Eggs
3. Fish-cod, flounder, bass
4. Shellfish: shrimp, crab, lobster
5. Tree Nuts: almonds, walnuts, pecans
6. Peanuts
7. Wheat
8. Soybean
9. Sesame



* There are more allergens than these, but these are the most prevalent.

(U.S. Food and Drug Administration, 2025)

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The Big Mac- What food allergies do you see and don't see in this picture?



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Food Allergy versus Food Intolerance

Food Allergies

- Our body's immune system overreacts, producing antibodies of the Immunoglobulin E (IgE) type.
- These antibodies can then cause an anaphylactic reaction (shortness of breath, throat closure, lip and tongue swelling, hives, itchiness, and the feeling that something bad may happen).
- An allergic reaction can happen immediately after consuming an allergen.
- The key to preventing a reaction to food allergies is simply avoiding allergens.
- Food allergies are life-threatening

Food Intolerance

- A food intolerance takes place in the digestive system, where one is unable to break down the food properly.
- This may be attributed to several factors, including enzyme deficiencies, sensitivity to food additives, or reactions to naturally occurring chemicals present in food.
- Examples of food intolerant foods are lactose, gluten, and fructose. People with food intolerances develop gas, diarrhea, headache, vomiting, fatigue, and agitation.
- These symptoms typically appear within hours to days after consuming a food item that causes intolerance
- Food intolerances are not life-threatening.

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Food Allergies and Food Insecurity

- Food insecurity affects people with food allergies, too
- Twenty-one percent of children who have food allergies are also food insecure.
- Food substitutes are expensive.
- Gluten-free products are 2-3 times the cost of regular food
- Egg substitutes can be made from potato starch (EWW)
- Cultural considerations

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Oral Allergy Syndrome

- I can eat cooked apples or peaches but not fresh....
- A contact allergic reaction that occurs upon contact of the mouth and throat with raw fruits or vegetables and some nuts.
- Worsens during pollen season-Birch tree, grasses, ragweed pollens, and Mugwort pollen.
- Usually resolves quickly.
- Mild reactions: itchy mouth, tingly lips, throat irritation.

(American Academy of Asthma Allergy & Immunology, 2026)

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Oral Allergy Syndrome

- Ensure you are not allergic to the fruit, vegetable, or nut, Not just the pollen.
- Use canned fruits and vegetables or wash and peel food.
- Talk with your Provider about allergies, worsening symptoms, or you develop hives, vomiting or difficulty breathing



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Social Isolation, Anxiety, and Loneliness in Social Settings due to Food Allergies

- Children, especially, can be embarrassed by their food allergies
- Children are often isolated at "allergy tables."
- Anxiety is real when having to ask for special orders and product lists, and hoping the food comes out safe.
- Depression-not being able to have what everyone else is having at a party or event.
- Feeling left out of activities is isolating.
- The fear of eating something one is not supposed to.

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What Can We Do as Case Managers?

- Educate our patients and families with food allergies
- Teach and Reinforce an Allergy Action Plan
- Use of Epinephrine
- Empower the patient and family to advocate for product guides at restaurants.
- Read ingredient lists for potential allergens
- Food substitutes and food as medicine
- **Educate! Educate! Empower! Educate!**

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Educate Patients and Families on Food Allergies

- Provide resources such as Food Allergy & Research Education (FARE)
- Encourage the patient and family to join support groups
- Utilize the knowledge of the patient's provider
- Encourage Communication with providers and anyone involved in the patient's care.

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Develop an Allergy Action Plan

- Outlines the recommended treatment plan in case of an allergic reaction.
- Includes a physician's signature and emergency contact information
- Ensure the action plan is easily accessible (Nurse at school, with your EPI-PENS)
- The action plans outline severe and mild symptoms as well as how to use the most common epinephrine pens.
- [Food Allergy & Anaphylaxis Emergency Care Plan - FoodAllergy.org](https://www.foodallergy.org)

(Food Allergy Research & Education, 2025)

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Signs of anaphylaxis



- Airway**
- Shortness of breath.
 - Breathing difficulties.
 - Being unable to swallow.



- Skin**
- Hives.
 - Redness.
 - Itchy rash.
 - Swelling.



- Stomach**
- Cramps.
 - Diarrhea.
 - Nausea and vomiting.



- Heart**
- Drop in blood pressure.
 - Increased heart rate.
 - Weak pulse.
 - Feeling faint.

Cleveland Clinic

(The Cleveland Clinic, 2026)

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Educate on the Use of Epinephrine

- Epinephrine is used for Anaphylactic reactions (shortness of breath, throat closure, lip and tongue swelling, hives, and the feeling that something bad may happen)
- Epinephrine IS the #1 Medication for Anaphylaxis Reactions, NOT Antihistamines
- Educate patients on the use of their prescribed epinephrine using the teach-back method.
- Encourage the patient and family to teach others how to use the epinephrine.
- If your patient is having an allergic reaction, administer epinephrine and call 911
- Most people need more than one dose of epinephrine
- Try not to forget your epinephrine on vacations and work trips. Narcan is usually available, not epinephrine.

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Epinephrine Options

- All come with 2 doses, and these doses should always be together.
- **neffy®** Intranasal Epinephrine by ARS Pharma
- **AUVI-Q®** -Auto injectors that talk you through administering
- **EpiPen®** and **EpiPen Jr®** by Viatris formerly Mylan
- Generic Epinephrine-**Authorized Generic of Adrenaclick®** by Amneal Pharmaceuticals and **EpiPen®** and **EpiPen Jr®** by Teva Pharmaceuticals

(Food Allergy Research & Education, 2026).

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Ingredient Lists and Product Guides

- Ingredients states contain –eggs, wheat, etc.
- Look for non-common names such as albumin (egg)
- Many allergens are bolded on the ingredient list
- Fun-size candy bars vs. regular-size



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Ingredient Lists and Product Guides

- “May may contain,” or “processed in a facility,” or processed on the same belt or equipment.”
- Peanut-free or egg-free are unregulated statements
- Ask for produce guides at restaurants and ice cream parlors
- Advocate handwashing, cleaning areas, and changing gloves in restaurants

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Ingredient Lists in Non-Food Items.

- Playdough may contain gluten
- Birdseed –sunflower and sesame seeds
- Pet food- a pet may then lick your face and hands
- Bath products may contain milk
- Bean bags may contain nut shells or beans
- Latex-avocado, kiwi, bananas, chestnuts
- Again, creating the habit of reading food labels.
- Make your own playdough or bean bags



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Food is Medicine

- Encourage a yes and no list of foods for food allergies
- Encourage fresh fruits and vegetables if there are no allergies
- Encourage healthier options than store-bought replacements
- Bean substitutes of cauliflower or mushrooms
- Egg substitutes for baking: applesauce, bananas, yogurt, if not allergic to dairy
- Cultural considerations –explore options for everyday dishes

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Emergencies happen more often than you think.

- Accidental ingestion of allergens happens (Michael's bean story)
- Happens when parents are not paying attention
- Delayed allergy reactions are real.
- When traveling, pack your Epi-pens. Airplanes don't carry EPI-PENS!

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Alpha-Gal Syndrome "Red Meat Allergy"

- IgE-mediated food allergy that begins with a tick bite
- Alpha-gal is introduced by the saliva of a tick that initiates an immune response
- Includes pork, lamb, or beef
- Reactions are usually delayed 3-8 hours after eating.
- Treated as any other food allergy.



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Well, He tried the Big Mac.....



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His Thoughts...

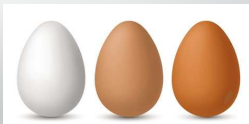


EHH

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Question 1

- Are eggs a dairy product?



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Question 2 True or False?

You can always be sure that food allergies are listed on an ingredient list.

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Question 3
True or False?

Everyone out grows food allergies.

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Question 4
True or False?

Food insecurity is less common in people with food allergies.

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Question 5
True or False?

Food intolerances are treated the same way as a food allergy.

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Question 6

What is the number one recommended medication for anaphylaxis?

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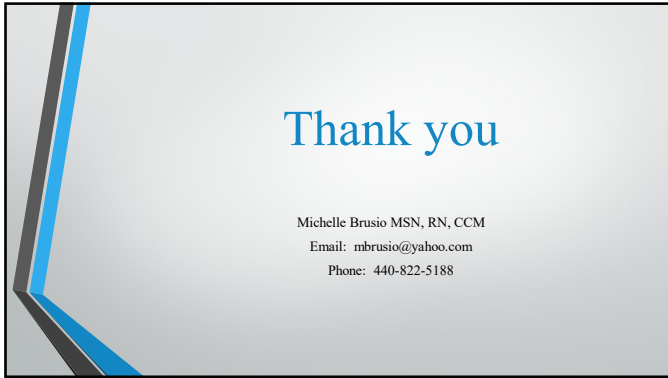
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Questions???

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