



ELEMENTARY SCHOOL

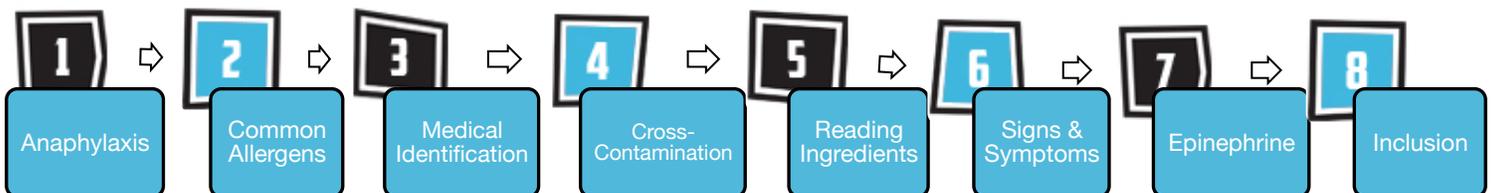
ALLERGY AWARENESS CHALLENGE

WITH  Food
Allergy
Canada

Teacher Lesson Plan

“Know Allergies? Prove it!”

Intermediate (Grades 7-8)



Topic 1: What is Anaphylaxis?

Key Learning Points:

- 1) People with food allergies are just like everybody else, but have to avoid certain foods.
- 2) Many people have food allergies and that is normal.
- 3) Allergic reactions can be much more serious than environmental allergies/sneezing.
- 4) The immune system is responsible for allergic reactions.
- 5) People with serious food allergies can get very sick if they eat the foods that they are allergic to. This serious life-threatening allergic reaction is called anaphylaxis and requires hospitalization.
- 6) People can get allergies when they are young or old, and we don't know why people get them, or lose them.

Suggested Materials: Food Allergy Spelling Bee

Activity: Discussion

Questions and Explanations

- 1. Do you know someone with a food allergy? What are they allergic to?**
 - a. Help students understand that this is a problem that affects everyone (e.g. classmates, adults, siblings, teachers, doctors, athletes etc.).
- 2. Can you guess what anaphylaxis means?**
 - a. It is a potentially life-threatening allergic reaction.
- 3. What do you think it would feel like to live with a life-threatening food allergy? What precautions would you need to take?**
 - a. Wash hands before and after eating.
 - b. Avoid cross-contamination with your food allergens.
 - c. Tell friends/family about your allergies and how they can help you.
 - d. Read ingredient lists and ask about ingredients at restaurants.
 - e. Carry your epinephrine auto-injector (e.g. EpiPen[®]) at all time.
- 4. Why would food allergies be considered an “invisible disorder”**
 - a. One cannot tell that a person has food allergies just by looking at them. It is a condition that affects those with food allergies in their daily life but not necessarily yours. However, if someone with a food allergy encounters one of their allergens, their immune system will release chemicals

resulting in an allergic reaction. Therefore, it is important for you to know the signs and symptoms of an allergic reaction and how to respond.

5. Start a brainstorm on what systems of the body are responsible for what activities.

- a. What system is responsible for breathing?
 - i. The respiratory system
- b. What system is responsible for the blood circulating in the body?
 - i. The circulatory system
- c. What system is responsible for digesting food?
 - i. The digestive system
- d. What system is responsible for keeping us safe against disease and harmful bacteria?
 - i. The immune system

6. Why is the immune system important?

- a. It helps us stay safe and healthy by identifying and fighting foreign intruders like germs and bacteria.

7. Why do you think the immune system is responsible for allergic reactions?

- a. It treats certain foods as foreign invaders and releases histamine in an attempt to attack them. This results in symptoms of an allergic reaction or anaphylaxis.

8. How do you think people get food allergies and are they contagious?

- a. Scientists do not exactly know why some people get food allergies and others do not. There is a lot of research being done to the cause of allergies, however there is currently no cure. Reiterate that this is why it is so important why we all learn how to help keep those with allergies safe.

Topic 2: Common Allergens

Key Learning Points:

- 1) People can be allergic to many things, including foods, medicine, insect stings, and latex.
- 2) People can be allergic to more than one thing. Some have multiple allergies that are all serious.
- 3) Allergens can be ingredients in other foods (e.g. milk in butter).
- 4) Peanuts and tree nuts are separate allergens, as are fish and shellfish.
- 5) Introduce celiac disease as a condition where people cannot eat wheat.
- 6) Introduce lactose intolerance as a condition similar to a milk allergy, but with less severe symptoms and affecting the digestive system.

Suggested Materials: Name that Nut Worksheet

Activity: Discussion

Questions and Explanations

- 1) What do you think the top 10 most common food allergies are in Canada?**
 - a. Peanut, tree nut, egg, milk, seafood, soy, wheat, sesame, mustard and sulphites.
- 2) Are peanuts the most serious allergy of all?**
 - a. No, all allergens can be serious and cause anaphylaxis.
- 3) What's the difference between a peanut and a tree nut?**
 - a. They are two separate allergens. Someone can be allergic to one, but not the other. Unlike tree nuts, peanuts are classified as a legume.
 - b. Tree nuts include almonds, Brazil nuts, cashews, hazelnuts, hickory nuts, macadamia nuts, pecans, pine nuts, pistachios and walnuts.
- 4) Is lactose intolerance the same as a milk allergy?**
 - a. Allergies affect a different system in the body – the immune system. Intolerances are generally associated with the digestive system and cause gastro-intestinal symptoms.
- 5) Other than food, what can people be allergic to?**
 - a. Medicine, latex, environmental triggers, and insect stings.

6) Is it possible to be allergic to exercise?

- a. Not technically, however some people have what is called “exercise induced anaphylaxis” which is reaction caused by the combination of certain foods with exercise shortly afterwards.

7) What are the foods students are allergic to at our school? What rules do we have in place to help keep everyone with allergies safe?

- a. Remind students of policies that are in place and why they are important to follow.
- b. Rule suggestions:
 - i. Safe eating practices in the classroom (review and specific seating arrangements).
 - ii. Wash hands after eating.
 - iii. Know the signs and symptoms of an allergic reaction.
 - iv. Know how to respond to an allergic reaction.
 - v. Know where a student carries their auto-injector.
 - vi. Know how to use an auto-injector.

Topic 3 - Medical Identification

Key Learning Points:

- 1) Medical bracelets and necklaces can be used to show what someone is allergic to.
- 2) In addition, they are used to show other health conditions (diabetes, asthma, epilepsy).
- 3) They come in different shapes and styles.
- 4) They are important to wear at all times if you have allergies.
- 5) People can have trouble breathing and speaking during an allergic reaction, which is why medical bracelets or necklaces can be so important.

Suggested Materials: Discussion

Activity: Design a Bracelet and visit www.medicalert.ca

- Visit www.medicalert.ca - show the students the different bracelets, necklaces and other options available and learn about the importance of them for various conditions.

Questions and Explanations

- 1) Why is medical I.D. important for someone with food allergies?**
 - a. Severe symptoms may prevent them from telling someone what is wrong. (e.g. difficulty breathing/speaking). Paramedics are trained to look for medical identification during an emergency.
- 2) In what situations would medical I.D. be particularly useful?**
 - a. Examples could be: with others who aren't aware of your allergies, travelling, and when alone. However, it's important that they always be worn.
- 3) What other health conditions can be shown on a medical bracelet?**
 - a. Diabetes, asthma, epilepsy are a few examples.
- 4) If you were to design your own bracelet, what would it look like? What helpful features would it have?**

Topic 4: Cross-Contamination

Key Learning Points:

- 1) Know what foods that are okay/not okay for our classroom.
- 2) Washing our hands with soap and water is best for getting food off –not sanitizer.
- 3) Know what cross-contamination is, and how it can be avoided (washing hands, keeping food on own plates/trays).
- 4) Food crumbs are not only on hands, but also on desks, trays and even faces.
- 5) Food is always meant to stay in the room where we eat lunch.

Suggested Materials: What is Cross-Contamination Worksheet

Activity: Discussion

Questions and Explanations

- 1) **What do you think cross-contamination is?**
 - a. Cross-contamination can happen when a small amount of a food allergen comes in contact with another food accidentally, or when it is present in saliva, on a surface or on an object. This small amount of an allergen could cause an allergic reaction.
- 2) **Can you think of examples where this could happen?**
 - a. Buffet with shared tongs, a knife “double dipping” in both peanut butter and jam, shared cutting boards, an allergen being scraped off (e.g. nuts off a salad or mayonnaise off of toast), shared cutlery/dishes, and pots and pans not washed properly with soap and hot water. Even kissing poses a risk which can be minimized by brushing your teeth.
- 3) **Should we wash our hands before, or after we eat? Or both? Why?**
 - a. Optimal is both before and after eating to keep ourselves, and others safe and healthy.
- 4) **Should we wash our hands with hand sanitizer or soap and water?**
 - a. Soap and water is best at removing food proteins from our hands.
- 5) **Why should we always eat our food in the room we eat lunch?**
 - a. We do not want food crumbs in places we expect to be safe (e.g. the classroom or gymnasium)
- 6) **Why should we never share food at school?**
 - a. It’s difficult to know what is in our food. What’s safe for one person may not be safe for another, thus our food should be kept to ourselves.

Topic 5: Reading Ingredients

Key Learning Points:

- 1) Learn the different types of information that product labels contain.
- 2) Ingredient lists can have special treatment for allergens (e.g. bold terms).
- 3) A peanut free logo doesn't cover a tree nut allergy or other allergens.
- 4) Products that say "may contain" products are not worth the risk.
- 5) Always read ingredient lists even if purchased before as ingredient lists can change.

Suggested Materials: Ingredient List Detective

Activity: Discussion & "Check a Label" Activity:

- **Check a Label homework assignment:** Ask children to find a product at home with at least two common allergens on the ingredient list. Ask them to report what the product was, and what common allergens were inside. Review the next day.

Questions and Explanations

- 1) **What are examples of things you would find on a product label (e.g. a box of cookies).**
 - a. Nutritional info, ingredient list, "best before" date and precautionary labels (e.g. "may contain" statements).
- 2) **Have you ever read an ingredient list before? Are they easy to read?**
- 3) **Does a peanut free logo on a package mean it's okay for anyone to eat with a peanut and tree nut allergy?**
 - a. No, remember that tree nut allergy is different than a peanut allergy. People can be allergic to one or the other, or both.
- 4) **Who would someone with allergies talk to if they wanted to get a safe meal at a restaurant? What type of questions would they ask?**
 - a. They could ask the wait staff, chef, or manager questions such as "do you know if this meal contains "x", or would there be a chance cross-contamination could occur in the kitchen?"
 - b. It is worthwhile to ask if they can provide a menu or list that show which allergens are in menu dishes.
 - c. If not comfortable with dishes on the menu, can a customized allergy-safe meal be made?

- 5) **What do you think would be all of the ingredients in a pizza? Are there any common allergens in it?**
- Wheat, dairy, possibly seafood (such as shrimp and anchovies).
- 6) **When a product says, “may contain” an allergen, why do you think it is not worth the risk for someone with food allergies to eat?**
- Unless you call the manufacturer directly, it’s hard to know what the level of risk would be. It’s best to not take the chance. When in doubt, do without.
 - Don’t make assumptions about food, as it’s difficult to know what exactly is inside.

Topic 6: Symptoms of an Allergic Reaction

Key Learning Points:

- 1) Learn that allergic reactions are very serious, potentially resulting in anaphylaxis.
- 2) Recognize the different symptoms of an allergic reaction.
- 3) When someone gets sick with an allergic reaction, it's an emergency.
 - a. Speak up and get an adult right away.
 - b. Support your friends to tell others about their allergies and where they carry their epinephrine auto-injector.

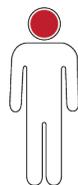
Suggested Materials: Symptoms of an Allergic Reaction

Activity: Discussion

Questions and Explanations

- 1) **Have you ever had, or seen someone have an allergic reaction? What did you do?**
- 2) **Where can allergic reactions happen?**
 - a. Anywhere. They can occur at school, restaurants, home, travelling etc.
- 3) **What are some of the signs of an allergic reaction?**
 - a. Cover all of the signs and symptoms with this hand "Think FAST" chart:

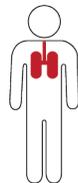
THINK "FAST"



Face
itching,
redness,
swelling



Stomach
pain,
vomiting,
diarrhea,
nausea



Airway
trouble breathing,
coughing, wheezing,
trouble swallowing
and speaking



Total body
hives, rash,
weakness, paleness,
sense of doom, loss
of consciousness

Other: dizziness, pale/blue colour

- 4) **Who could you tell if you saw someone feeling really sick and needed help?**
 - a. An adult (teacher, nurse), friend or other.

- 5) Why should you never keep an allergic reaction a secret? Why do you think someone might feel tempted to not tell anyone and go off alone?**
- Remind students that reactions worsen quickly and it's important to get help from an adult right away.
 - Sometimes people might feel embarrassed if they are experiencing all of these strange symptoms. They also may not want to feel like a burden by asking for help from others. Always encourage your friends with allergies to tell you if they ever feel symptoms.
- 6) What phone number would you call in an emergency? What would you say on the phone?**
911. Paramedics recommend that you use the word “anaphylaxis” on the phone so they are prepared when arriving at the scene.
- 7) What is the name of the medicine that should be used to treat an anaphylactic reaction?**
- Epinephrine – more commonly known as the brand EpiPen®.
 - It must be given right away upon first signs of anaphylaxis as symptoms can worsen very quickly.

Topic 7 - Epinephrine

Key Learning Points:

- 1) Epinephrine is an important medicine that can help with an allergic reaction.
- 2) It can commonly be referred to as an EpiPen[®]. They all have the same medicine inside – epinephrine.
- 3) They are not a toy and should never be played with.
- 4) It should be used upon the first signs of anaphylaxis and can help save a life.
- 5) Two doses should be carried in case the first dose does not help subdue the reaction.

Suggested Materials: Order the Emergency Procedure

Activity: Discussion & Demonstrating an Auto-Injector

- **Demonstrating an Auto-Injector** – If an auto-injector trainer is available, show the class what it looks like and how it is used.

Questions and Explanations

- 1) **What are examples of medicines that people need because of their health?**
 - a. Puffers for asthma.
 - b. Pills for certain conditions.
 - c. Epinephrine for anaphylaxis.

- 2) **Why do we wear helmets, seatbelts, and wear equipment during some sports? How is carrying a medicine like epinephrine similar?**
 - a. We use these to stay protected and minimize risk. Epinephrine also protects you when you need it. It's best to have it than not.

- 3) **What exactly is an epinephrine auto-injector (e.g. EpiPen[®])**
 - a. It is a needle, which is why we take them seriously and never play with them. They have one dose of medicine inside called epinephrine, which could help save a life during an anaphylactic reaction. EpiPen[®] is currently the most common known brand of epinephrine auto-injectors.

- 4) **How do you think epinephrine works to help with an allergic reaction?**
 - a. It helps in three important ways:
 - i. Tightens up blood vessels, which reduces swelling.
 - ii. Helps airways open up by relaxing muscles around the lungs.
 - iii. Prevents the release of further allergic chemicals.

5) What do you think the proper steps would be to handle an emergency involving a severe allergic reaction?

- a. Step 1 – Use epinephrine
- b. Step 2 – Call 911
- c. Step 3 – Use a second dose if reaction is getting worse
- d. Step 4 – Travel to the hospital in an ambulance

Note that using epinephrine is the first step. It is very important that it is used right away to treat an anaphylactic reaction as symptoms can worsen very quickly.

6) Why should people with allergies always carry at least two doses? Where should they keep them?

- a. Sometimes a reaction can be quite severe and need extra medicine to treat it.
- b. It's important the medicine is carried with them at all times. Either in a pouch, backpack, pocket or purse.

7) Should someone with food allergies eat food if they don't have their epinephrine auto-injector with them?

- a. No, it's not worth the risk.

8) What do you think it would be like to carry one around with you everywhere you go? Would it be easy? Why do you think that some people may unfortunately choose not to have it on them? What would affect that decision?

- a. It can be difficult, especially if people carry it in different places (e.g. sport bag, backpack, purse etc.). If others tease someone about their auto-injector, it makes it harder to carry it and draw unwanted attention. It is so important to support those with food allergies as this medicine can help save their life.

9) If you ever saw one lying on the ground, should you ever touch it?

- a. Never. Report it to a teacher right away. It is possible that someone dropped it and it's important that an adult solves the problem as it contains a needle inside.

10) After someone uses adrenaline/epinephrine, where should they go and why?

- a. They need to go to a hospital right away. Sometimes a reaction can get worse after using epinephrine. That's why it's so important to be looked at by doctors at a hospital to make sure the allergic reaction is gone.

Topic 8 - Inclusion

Key Learning Points:

- 1) We are all different in many ways.
- 2) Being different is what makes us all special, and altogether a stronger group.
- 3) People can be different because of food allergies, but they are still like everyone else.
- 4) People with food allergies can do everything that anyone else can do.
- 5) Food allergies are never a reason to exclude someone.
- 6) How we can be good friends to someone with or without a food allergy.

Suggested Materials: Allergy Awareness Pledge

Activity: Discussion, Circle of Differences, Instant Show & Tell

- **Circle of Differences** – In a circle, ask everyone to say one unique thing about themselves that makes them special (e.g. a unique hobby, interest, challenge).
- **Instant Show & Tell** - Ask students to pick to “show and tell” about something that they have on them. Whether it be certain shoes, a bracelet, a scar from a camping trip, and why it is important to them.

Classroom Discussion Questions:

- 1) **What’s something that makes you unique?**
- 2) **How does it make someone feel if they were teased for being different?**
 - a. It’s hurtful and frustrating when others tease about something that you cannot control. We are all different. Remind students about respective policies and punishments.
- 3) **Why do you think people tease/bully? Is it fair?**
- 4) **How can being different be a good thing?**
 - a. Our differences can help make our teams stronger by having different perspectives and views. If everybody were the same, there would not be much variety in life. Think of a football team and all of the different skills needed to be a successful team.

- 5) **How does it feel if someone does not invite you to a party or to hang out?**
- Remind students that this can often happen because of differences. Although you are not forced to hang out with anyone, be conscious of how it feels if you were in that position yourself. Remember to treat others the way you want to be treated.
- 6) **Pretend that a box of cookies was being given to the entire group, and you were not able to eat one.**
- What was it like to not have a cookie and watch everyone else indulge?
- 7) **What can we do at school to make sure everyone with food allergies are safe and feel included? At classroom celebrations? During lunchtime?**
- Remind students of related school policies.
 - Try to create non-food related activities and rewards.
 - Celebrate with non-food items (books, games).