ALL ABOUT FOOD ALLERGY



Lesson plans and instructional activities

Module 1

Learning experience: About food allergy

Setting the context: In this module, students are building knowledge and skills about food allergy.

Learning outcomes: Explain what food allergy is and how it impacts your body's immune system (understanding)

Pre-module assessment: Before teaching this module

- Introduce the KWL chart to students (see page 6 of the Introduction to the program and assessments). Either individually on their own sheet or together as a class, have students start the "KW" portion of the chart
- Have students complete the K and W of the K-W-L Chart to identify what they know about food allergy and what they want to know prior to this program
- You may choose to discuss what students recorded or wait until the post-module recap

The KWL chart is a part of each module and can be built upon if you choose.

2 Set-up

Refer to the "All about food allergy" presentation

Present Module 1 of the presentation: slides 4 to 11, with corresponding notes to help you teach each slide

- Slide 4 Module 1: About food allergy
- Slide 5 Let's talk about food allergy
- Slide 6 Most common food allergens
- Slide 7 Caroline's food allergies
- Slide 8 Food allergy vs food intolerance
- Slide 9 Your immune system
- Slide 10 Watch the "What is food allergy?" video
- Slide 11 How IgE antibodies work



Activity 1 - Ahas and huhs/impact of food allergy on the body

- Comprehension of the "<u>What is food allergy?</u>" video (link: <u>foodallergycanada.ca/Video1</u>)
- This short, animated video features a leading Canadian paediatric allergist and immunologist who walks through what food allergy is and what happens to the body's immune system when you have this medical condition
- Time: 5-10 minutes

Set-up

• You will have shown students the "What is food allergy?" 2-minute video when you presented the PowerPoint presentation for this module

Description

- Summarize how food allergy impacts your immune system by having students write down:
 - -1 or 2 "ahas" (something they learned)
 - -1 or 2 "huhs" (things they still have questions about)
 - Have students form groups or partnerships to share and discuss the food allergy impacts that they have identified and/or;
 - Share and discuss with the class the impacts identified either individually or as a group/partnership

Activity 2 - Common food allergens activity sheet

- Understanding common food allergens and which foods contain them this prompts students to explore the different types of foods that usually include allergens, some may be surprising!
- Time: 5-10 minutes

Set-up

- Print off the "Common food allergens" activity sheet from page 12 of this document for each student; it is also a fillable form
- This sheet has two columns, one with a common food allergen, and the one for possible food items containing the allergen is blank
- The answer key to this activity sheet is on pages 13-14 of this document

Description

- Students form groups of two to three and fill in ideas of food items that often contain the allergen listed
- Students can also explore foods online and look up ingredients for this exercise or cut and paste foods from flyers (or print from online) that they think have allergens. For example, you can divide the class into groups, with each group having one or two allergens. The group who picks milk as an allergen, for example, can cut and paste foods that would typically contain milk

Post-module assessment: After teaching this module

After the lessons and activities have been completed for this module, refer to the KWL chart and have students complete the "L" portion of the chart.

- Ask students to identify what they discovered from any of their
- "want to know" thoughts and what they learned from this module
- Recap and discuss



Module 2

Learning experience: About allergic reactions and anaphylaxis

Setting the context: In this module, students are building knowledge and skills around allergic reactions and anaphylaxis.

Learning outcomes:

- Being able to explain allergic reactions and anaphylaxis (understanding)
- Recognize signs and symptoms of anaphylaxis (understanding)
- Demonstrate how to treat anaphylaxis (applying)

Pre-module assessment: Before teaching this module

- Introduce the title of this Module
- Either individually on their own sheet or together as a class, have students add to the "KW" portion of the chart for what they know about allergic reactions and anaphylaxis and what they want to know prior to starting this module
- You may choose to discuss what students recorded or wait until the post-module recap

The KWL chart is a part of each module and can be built upon if you choose.

2 Set-up

Refer to the "All about food allergy" presentation

Present Module 2 of the presentation: slides 12 to 24.

- Slide 12 Module 2: About allergic reactions and anaphylaxis
- Slide 13 When an allergic reaction happens
- Slide 14 What is anaphylaxis?
- Slide 15 Can smelling a food cause a reaction?
- Slide 16 Watch the "What is anaphylaxis?" video
- Slide 17 Signs and symptoms
- Slide 18 Treating anaphylaxis
- Slide 19 Epinephrine auto-injector
- Slide 20 Let's practice (watch the video on how to use an epinephrine auto-injector)
- Slides 21-22 5 steps for treating anaphylaxis
- Slides 23-24 Body position is important



Activity 1 - Ahas and huhs/recognizing and treating anaphylaxis

- Comprehension of the "What is anaphylaxis?" video (link: foodallergycanada.ca/Video2)
- This short, animated video features a leading Canadian paediatric allergist and immunologist who walks through what symptoms can appear during anaphylaxis, the most serious type of allergic reaction, and how it's treated with a medicine called epinephrine
- Time: 5-10 minutes

Set-up

• You will have shown students the "What is anaphylaxis?" 4-minute video when you presented the PowerPoint presentation for this module

Description

- Summarize how to recognize and treat anaphylaxis by having students write down:
 - -1 or 2 "ahas" (something they learned)
 - -1 or 2 "huhs" (things they still have questions about)
 - Have students form groups or partnerships to share and discuss the food allergy impacts that they have identified and/or;
 - Share and discuss with the class the impacts identified either individually or as a group/partnership

Activity 2 - Demonstration of an epinephrine auto-injector

Prior to this activity: It would be ideal to obtain a free auto-injector training device. You can order one for free from <u>epipen.ca</u>. Or, you can ask families to provide theirs. You may also be able to obtain one from your local pharmacy.

Note: you can also use something else as a training device as an alternative, such as a washable marker with a cap.

• Demonstration of the proper use of an epinephrine auto-injector for treating anaphylaxis (training devices or alternatives, like a washable marker, are needed for this activity)



• Time: 10 minutes

Set-up

- You will have ordered a free auto-injector training device, asked families to provide theirs or have alternatives like a washable marker
- You will have shown students the "How to use an epinephrine auto-injector" 2-minute video when you presented module 2
- Explain that auto-injector training devices do not have a needle or medication like "real" epinephrine auto-injectors
- Explain that there are step-by-step instructions on the device that can be followed

Description

• Students pair up to take turns demonstrating how to properly use the devices OR one student can demonstrate proper use at the front of the class and the other students can each take turns doing the same

Activity 3 - Signs and symptoms activity sheet

- Understanding signs and symptoms
- Time: 5-10 minutes

Set-up

- Print off the "Signs and symptoms" activity sheet from page 15 of this document for each student
- This sheet has the symptoms blanked out for the students to fill in; it is also a fillable form
- The answer key to this activity sheet is on page 16 of this document

Description

- Students form groups of two to three and fill in the blanks of symptoms that may appear under each body system
- Refer to the answer key for correct answers

Activity 4 - Treating anaphylaxis video/skit

• Understanding the 5 steps for treating anaphylaxis

• Time: 20-30 minutes

Set-up

- Present students with options of making a "How to treat anaphylaxis" video including the 5 steps, or performing a skit
- Students will need a tablet to record themselves for the video option

Description

• Students share their videos with the class or perform their skits for the class

Bonus: Share the videos from your class or the videos of the skits with us to be entered into a draw of **\$100 for your classroom**. If you choose to share your video with Food Allergy Canada, please check that you have obtained all necessary approvals to ensure the privacy of participating students.

Find more details on how to enter at foodallergycanada.ca/AAFAprogram.

4 Post-module assessment: After teaching this module

After the lessons and activities have been completed for this module, refer to the KWL chart and have students complete the "L" portion of the chart.

Ask students to identify what they discovered from any of their "want to know" thoughts and what they learned from this module
Recap and discuss



Module 3

Learning experience: Managing food allergy

Setting the context: In this module, students are building knowledge and skills around managing food allergy.

Learning outcomes:

- Demonstrate how to read a food label (applying)
- Explain what cross-contamination is and how it can happen (understanding)
- Demonstrate how to discuss food allergy with others (applying)

Pre-module assessment: Before teaching this module

- Introduce the title of this Module
- Either individually on their own sheet or together as a class, have students add to the "KW" portion of the chart for what they know about managing food allergy and what they want to know prior to starting this module
- You may choose to discuss what students recorded or wait until the post-module recap

The KWL chart is a part of each module and can be built upon if you choose.

2 Set-up

Refer to the "All about food allergy" presentation

Present Module 3 of the presentation: slides 25 to 34.

- Slide 25 Module 3: Managing food allergy
- Slide 26 How does someone manage food allergy?
- Slide 27 Anaphylaxis Emergency Plan
- Slide 28 Know what is in the food you eat
- Slide 29 When making food
- Slide 30 Ask questions
- Slide 31 Wash hands and clean up
- Slide 32 Be ready for a reaction
- Slide 33 Talk about it...
- Slide 34 How Caroline managed food allergies



Activity 1 - Reading food labels

Prior to this activity: Ask students to bring in a food label which includes an ingredient list, a "Contains" statement, and a "May contain" statement OR a picture of a label OR print a picture from online sources at home or at school. Examples of labels include those found on cereal, crackers, cookie boxes, pasta like macaroni and cheese, and bagel/bread bags. Consider the diversity of your classroom when asking students to bring in food label so that the food labels reviewed reflect what your students see regularly in their home and at school.



- Review of food labels to identify food allergens, a key practice for managing food allergy
- Time: 5-10 minutes

Set-up

• Refer to the food labels or pictures of labels that students have brought in, or their pictures printed from online sources at home or school

Description

- Review labels to identify food allergen(s) in the ingredient list, "Contains" statement and "May contain" statement
- Ask students to find any priority food allergens listed in these labels optional: you can separate students into groups according to the allergens they find
- Ask if someone had a milk, or egg, or peanut allergy, which foods could they eat from the ones brought into the classroom.
- Ask what foods someone could eat if they had more than one food allergy, like milk and sesame, or wheat and egg, or fish and tree nuts for example (pick any two or three of the priority food allergens you like) pile the foods in the centre of the classroom for students to see how limited the food options may be for someone with food allergy



Activity 2 - Discussion on cross-contamination scenarios

- Review of cross-contamination and how to reduce the risk of it, an essential practice for managing food allergy
- Time: 5-10 minutes

Set-up

- Show these two short and fun videos on the dos and don'ts for avoiding cross-contamination to visually reinforce the PowerPoint slides:
 - 1. "Double Dipping" 35 seconds (link: foodallergycanada.ca/Video3)
 - 2. "No Picking" 20 seconds (link: foodallergycanada.ca/Video4)
- Present three scenarios for determining whether it's safe to eat/drink if you have a food allergy and possible solutions these can be written on cards:

Scenario 1: Your friend comes over after school and offers you a granola bar without a wrapper.

Answer: Do not eat the granola bar or ask for one with a wrapper so the label can be read.

Scenario 2: At basketball practice, your teammate wants to share the last sports drink with you. You have read the label and it does not contain any of your allergens.

Answer: Do not drink from the same sports drink container as your friend, they may have eaten something you are allergic to before drinking from it. If it's an unopened container, you can pour it into a separate drink bottle you've brought to practice, and then give the container to your friend to drink.

Scenario 3: You forgot a spoon in your lunch and your friend says you can use theirs after they finish with it. **Answer:** Do not use the spoon. Instead, get one from the supply of disposable forks/spoons from your teacher. If there are none, do not eat the item or get creative and eat it without a spoon!

Note: These scenarios are examples only, you can create other scenarios based on the needs of your students, school, and community.

Description

- Students can pair up to discuss these three scenarios and then share with the class or with another pair (think-pair-share)
- Additional ideas: students can create their own scenarios in groups and share them with the class, or perform them as skits in front of the class

Activity 3 - Discussion on managing food allergy/what others can do

- Review of how to talk about food allergy and managing safely
- Time: 5-10 minutes

Set-up

- Ask students the question: How can you stay safe if you have a food allergy and what can others do?
- Answers should include content from the PowerPoint slides, like reading food labels, asking questions about ingredients and how food is prepared, reducing cross-contamination by having separate utensils, cutting boards, etc., washing hands, not sharing food, cleaning surfaces, and supporting those with food allergy, such as talking about food allergy, knowing the signs of anaphylaxis, and how to use an epinephrine auto-injector

Description

• Students can pair up and practice talking about it (turn and talk)

4 Post-module assessment: After teaching this module

After the lessons and activities have been completed for this module, refer to the KWL chart and have students complete the "L" portion of the chart.

• Ask students to identify what they discovered from any of their "want to know" thoughts and what they learned from this module

Recap and discuss

Module 4

Learning experience: Being a food allergy ally

Setting the context: In this module, students are building knowledge and skills around being a food allergy ally.

Learning outcomes:

- Discover what it is like to live with a food allergy (applying)
- Explain ways to support those with food allergy (understanding)
- Build empathy on managing food allergy (being a good citizen)
- Ways to support the community (being a good citizen)

1 Pre-module assessment: Before teaching this module

- Introduce the title of this Module
- Either individually on their own sheet or together as a class, have students add to the "KW" portion of the chart for what they know about allergic reactions and anaphylaxis and what they want to know prior to starting this module
- You may choose to discuss what students recorded or wait until the post-module recap

The KWL chart is a part of each module and can be built upon if you choose.

2 Set-up

Refer to the "All about food allergy" presentation

Present Module 4 of the presentation: slides 35 to 43.

- Slide 35 Module 4: Being a food allergy ally
- Slide 36 Imagine what it's like
- Slide 37 Take a listen
- Slide 38 Walk in my shoes
- Slide 39 Bullying and food allergy
- Slide 40 Think about it...
- Slide 41 Be a food allergy ally
- Slide 42 How to be a food allergy ally
- Slide 43 What can you do to help?



Activity 1- Adoption of food allergy for a day

Prior to this activity: Divide the students into three groups, pick a priority food allergen for each group, and have students avoid eating the assigned allergen for one day. The slips on page 17 can be shared with parents/guardians in advance to explain what students are required to do in regards to this activity. If there are students in your class with food allergy, determine if they would like to stick with the allergens they are avoiding, choose something entirely different, or participate in some other way, like helping give tips to the class in terms of how to avoid allergens.



- Discuss the adoption of a food allergy and how to safely manage it
- Time: 5-10 minutes

Set-up

- Have the students sit with their groups
- Ask them these questions: What was it like to have a food allergy? Did it change your ideas on what others with food allergy go through? What challenges did you face?

Description

• Students can talk about it in their groups and then share with the class

Activity 1 - Adoption of food allergy for a day - Variation

Adapt this activity to involve discussion only (no eating/drinking). Divide students into groups and select a priority food allergen for each group. Provide different scenarios for each group to act out, where they need to consider what is safe to consume in each scenario. For example, one scenario could be a pizza party, another scenario could be a sports team outing with a potluck, another scenario could be a birthday celebration in the classroom with cupcakes, etc. Students can then act out their scenarios within their groups and present them to the class. A class discussion can follow where students express how they felt having the allergy and how it was to navigate the scenarios.

Prior to the activity: Ask students to bring in food labels which include an ingredient list OR a picture of a label OR print a picture from online sources at home or at school.



Activity 2 - Allergy-friendly food drive

- Host an allergy-friendly food drive
- Time: 20-30 minutes (plus time in selecting a local food bank and delivering the items)

Set-up

- Decide which priority food allergens to focus on for the drive
- Ask students to bring in a product that does NOT contain the allergen(s)
- Have students form groups and divide the collected products amongst the groups by allergen
- Download more information and materials at foodallergycanada.ca/FoodDrive

Description

- Ask students to read the labels of the collected products to confirm that the priority food allergen(s) are not one of the ingredients
- Take the collected products and arrange for the donation to a local charity

Activity 2 – Allergy-friendly food drive Variation – Establish partnerships for allergy-friendly food donations

- Set up partnerships between local grocery stores, food banks and your classroom
- Time: 20-30 minutes (plus time for student ambassadors to call/meet with grocers or food banks)

Set-up

- Decide which priority food allergen(s) to focus on for donations
- Identify grocery stores that serve the local community where the students reside
- Identify local food banks that would benefit from an allergy-friendly food donation partnership

Description

- Brainstorm the details that will be important for grocers and food banks to know. This could include, but is not limited to:
 - How often can donations be collected from partner grocers?
 - What times of the year are important for food banks?
 - What is the best way to receive donations? (see note below)
- Either as a whole class or breaking down into smaller groups, create a communication plan/script for each food bank and grocer identified
- Designate student ambassadors (one from each group and/or chosen from the whole class) to contact each grocery or food bank to approach about a partnership for allergy-friendly food donations and assign a timeline
- After the expected timeline, have each student ambassador report on their results and feedback and what next steps may need to be taken

Note: Both food banks and grocers often have partnerships developed for year-round donations of common, nonperishable foods but may not have considered food allergy or allergy-friendly foods in their plans. Speaking with local food banks and grocers to understand any current partnerships prior to beginning this activity with your students is advised. Additionally, food banks often appreciate donations of store credit or gift cards rather than food items so that they may purchase products that specifically meet the requirements of clients with special dietary needs. This may be an important part of the discussion when performing this activity.

4 Post-module assessment: After teaching this module

After the lessons and activities have been completed for this module, refer to the KWL chart and have students complete the "L" portion of the chart.

- Ask students to identify what they discovered from any of their "want to know" thoughts and what they learned from this module
- Recap and discuss

Module 1 Common food allergens activity sheet

Common food allergen		Examples of foods that often contain the allergen
Pear	nut	
	e nuts Imonds, ts)	
Sesa	ame	
Milk		
Egg		
Fish		
(like lo & Mo	staceans bster, shrimp) olluscs callops, clams)	
Soy		
Whe Triti	at & cale	
Mus	tard	

Module 1 Common food allergens answer key - page 1

The following are possibilities, this is not an exhaustive list.

Common food allergen	Examples of foods that often contain the allergen		
Peanut	 Asian cuisine (like curries, egg rolls, pad thai, satay, sauces, soups) Baked goods (like cakes, cookies, donuts, energy bars, granola bars, pastries) Candies (like chocolates and chocolate bars) Cereals, granola Ice cream and frozen desserts Snack food like chips, popcorn, trail mix 		
Tree nuts (like almonds, walnuts)	 Baked goods (like cakes, cookies, crackers, donuts, granola bars, pastries and pies) Candies (like chocolates and chocolate bars) Cereals, granola, muesli Ice cream, gelato, frozen desserts Snack food like chips, popcorn, snack mixes, trail mix 		
Sesame	 Hummus Tahini Baked goods (like hamburger buns, breads, bagels, cookies, flatbreads) Dressings, gravies, marinades, salads, sauces, soups Falafel Flavoured rice, noodles, soups Granola and muesli Snack food like chips, pretzels, rice cakes 		
Milk	 Butter, butter flavour, ghee, margarine Baked goods and baking mixes Buttermilk, cream, dips, salad dressings, sour cream, spreads Cereals, cookies, crackers Cheese, cheese curds Chocolate Desserts like custards, frozen yogurts, ice creams, puddings Meats like deli meats, hot dogs, sausages Pizza Soups, soup mixes Yogurt 		
Egg	 Baked goods and baking mixes Battered/fried foods Candy, chocolate Cream-filled pies Creamy dressings, salad dressings, spreads Desserts Meat mixtures like hamburgers, hot dogs, meatballs, meatloaf Pasta Quiche Soups and broths 		

Module 1 Common food allergens answer key - page 2

The following are possibilities, this is not an exhaustive list.

Fish	 Deli meats, hot dogs Dips, spreads, imitation crab/lobster meat Combination foods like fried rice, paella, spring rolls Fish mixtures Gelatin, marshmallows Pizza toppings Salad dressings Soups Sushi Fried foods (from contaminated frying oil) Worcestershire sauce BBQ sauces
Crustaceans (like lobster, shrimp) & Molluscs (like scallops, clams)	 Dips and spreads Combination foods like fried rice, paella, spring rolls Salad dressings Soups Sushi Fried foods (from contaminated frying oil)
Soy	 Baked goods and baking mixes like breads, breadcrumbs, cereals, cookies Chili, pastas, stews, taco filling, tamales Chocolate candies and chocolate bars Cooking spray, margarine, vegetable oil Dressings, gravies, marinades Frozen desserts, soy ice cream, soy pudding, soy yogurt Meats like burgers, meat substitutes, patties, wieners Sauces like soy, teriyaki and Worcestershire Snack food like candy, candy bars, popcorn, energy bars Soups, broths and soup mixes, miso soup Spreads, dips, mayonnaise Vegetarian meat substitutes
Wheat & Triticale	 Baked goods (like breads, cakes, cereals, cookies, crackers, donuts, muffins, pasta, baking mixes) Pie fillings, puddings, snack foods Prepared ketchup and mustard Salad dressings Sauces like chutney and tamari Candy, chocolate bars
Mustard	 Chips and pretzels Fish sauce and fish paste Pickles Salad dressing Sauces (like barbecue, curry, pesto) Sausage Seasonings Soups

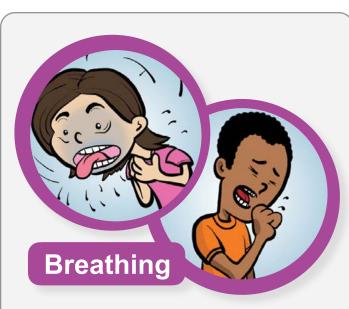
Module 2 Signs and symptoms activity sheet



Images courtesy of <u>Kids' CAP</u>

Module 2 Signs and symptoms answer key





coughing, wheezing, shortness of breath, chest pain or tightness, throat tightness, hoarse voice, nasal congestion or hay fever-like symptoms (runny, itchy nose and watery eyes, sneezing), trouble swallowing, choking feeling





paler than normal skin colour/ blue colour, weak pulse, passing out, dizziness or lightheadedness

Module 4 Activity 1: Slips for parents/guardians



For parents/guardians:

Each student in our class will be adopting a food allergy for a day as part of their education on health and well-being of self and others. With this activity, students will gain an understanding of what can be done to manage food allergy and how to support those with food allergy. Students have been divided into groups and assigned a food allergen.

On ______, they need to avoid eating their assigned allergen for the day through the strategies they have learned in class, such as reading food labels, being careful to avoid cross-contamination when making food, and washing their hands before and after eating. Students will have an opportunity to talk about their experiences with their group, and then share information with the class.

The allergen your child has been assigned is _____

Thank you for your support.



2

For parents/guardians:

Each student in our class will be adopting a food allergy for a day as part of their education on health and well-being of self and others. With this activity, students will gain an understanding of what can be done to manage food allergy and how to support those with food allergy. Students have been divided into groups and assigned a food allergen.

On ______, they need to avoid eating their assigned allergen for the day through the strategies they have learned in class, such as reading food labels, being careful to avoid cross-contamination when making food, and washing their hands before and after eating. Students will have an opportunity to talk about their experiences with their group, and then share information with the class.

The allergen your child has been assigned is _____

Thank you for your support.

ALL FOOD ALLERGY

For parents/guardians:

Each student in our class will be adopting a food allergy for a day as part of their education on health and well-being of self and others. With this activity, students will gain an understanding of what can be done to manage food allergy and how to support those with food allergy. Students have been divided into groups and assigned a food allergen.

0n ____

_____, they need to avoid eating their assigned allergen for the day

through the strategies they have learned in class, such as reading food labels, being careful to avoid cross-contamination when making food, and washing their hands before and after eating. Students will have an opportunity to talk about their experiences with their group, and then share information with the class.

The allergen your child has been assigned is _____

Thank you for your support.