



FOD 2190 Teacher Overview

Grains, Legumes, Pulses, Nuts and Seeds



Program Overview

- Curriculum Linked
- Lesson plan for the module
 - Designed to run over six classes
 - Recipe for each class
- PowerPoint for each class
 - Links in notes pages for content references and background information
 - Activities to test for knowledge and have fun!
- Exam included – one for students and one with answer key
- Rubrics for labs and student self-reflection
- All resources available in Google Classroom



Day 1 Agenda

- Overview of nuts, seeds and grains
- Exploring whole and refined grains
- Let's Bake! Hiker's Cookies
- Cool Canadian stats and let's talk a bushel!
- Exploring Canadian grains (videos)
 - wheat
 - oats
 - barley

Suggested Recipe for Day 1 Concepts

Check out this amazing [Hiker's Cookies](#) recipe from Alberta Pulse Growers.

- features multiple grains, nuts & seeds
- make as a cookie or bar for breakfast or snack on-the-run

Complete Recipe Reflections after making the cookies.



Day 2 Agenda

- It's game time! Do you know your legumes from nuts and seeds?
- Exploring legumes and pulses
- Let's Cook! Mighty Marinara Sauce with Pasta or Pasta e Fagioli
- Canadian and Alberta grown pulses and legumes

Recipe Suggestions for Day 2 Concepts

Check out these vegetarian pasta recipes featuring pulses!

- [Mighty Marinara Sauce](#) that we will pair with spaghetti
- [Pasta e Fagioli](#) with fettuccine.
- Both recipes have been created by Alberta Pulse Growers.

Complete Recipe Reflections after making these recipes.



Day 3 Agenda

- Why are grains, legumes, nuts & seeds so popular?
- Historical Trivia Time
- Let's Cook! Bean Enchiladas
- Cultural use of grains, legumes, nuts and seeds



Suggested Recipe for Day 3 Concepts

Check out this fun [Bean Enchiladas](#) recipe from Alberta Pulse Growers!

- The bean & rice filling is very versatile - use it to make the Bean Enchiladas or [Bean Burritos](#)

Complete Recipe Reflections after making the enchiladas

Day 4 Agenda

- Tips for buying, storing and preparing grains, legumes, pulses, nuts & seeds
- How grains, legumes, pulses, nuts and seeds are produced safely
- Optional Let's Cook: Prairie Black Bean, Lentil & Grain Salad
- Cost breakdown activity

Bonus Activity: Cost Breakdown

Look online or visit a nearby grocery store to find the following:

Product	Cost and amount of item	Cost/100 g	Ranking from best price (1) to most expensive (7)
Extra lean ground beef			
Chickpeas, dried			
Chickpeas, can			
Boneless skinless chicken breast			
Lentils, dried			
Lentils, canned			
Rump Roast			

Bonus Activity: Cost Breakdown

Look online or visit a nearby grocery store to find the following:

Product	Cost and amount of the item	Cost/100 g	Ranking from best price (1) to most expensive (7)
Bulgar			
White rice			
Wild rice			
Pearl barley			
White flour			
Whole grain flour			
Corn meal			

Cost Breakdown Questions



Which protein and grain source was:

- Most affordable?
- More expensive?
- Most sustainable? (Think back to everything you have learned and watched so far).

What did you learn from this activity?



Optional Let's Cook! Prairie Black Bean, Lentil & Grain Salad

Who is Hungry!?!

Let's take a break and make [Prairie Black Bean, Lentil & Grain Salad](#) from Alberta Pulse Growers.

Complete Recipe Reflections after making the salad.

Day 5 Agenda

- Health Benefits, Macronutrients and Micronutrients in Grains, Seeds, Legumes and Nuts
- Micro and Macronutrient Function in Our Bodies
- A Word on Protein, Fibre and Gas!
- Exploring Sensitivities and Allergies
- Are You Getting Enough? Food label Activity
- Last Cooking Tips for Grains, Seeds, Pulses, Legumes and Nuts

Finding Nutrients on Food Labels

Nutrient information is found on food labels.

finding nutrients

Food labels are an important part of learning about foods. Food labels provide basic information about the nutrients inside foods so that you can learn more about them.

 What do you notice about these labels? What is similar? What is different?

Choose three food labels to compare. Use at least one of the pulse labels.

Explore these similarities and differences by filling in their nutrient values in the chart provided on page 18.

These food labels are samples of labels you will find on most food products! Find some of your own labels for other types of foods, like fruits, juices, meats, eggs, other dairy products or different types of cereals.

Cooked Chickpeas		
Nutrition Facts		
Serving Size 100 grams (½ cup/125 mL)		
Amount	% Daily Value	% valeur quotidienne
Calories/ Calories 141		
Fat/ Lipides 2 g	3%	
Saturated/ saturés 0.2 g	1%	
Trans/ trans 0 g		
Cholesterol 0 mg	0%	
Sodium/ Sodium 6 mg	0%	
Carbohydrate/ Glucides 24 g	8%	
Fibre/ Fibres 4 g	14%	
Sugars/Sucres 4 g		
Protein/ Protéines 8 g		
Vitamin A/ Vitamine A	0%	
Vitamin C/ Vitamine C	2%	
Calcium/Calcium	4%	
Iron/ Fer	18%	

Dry Peas		
Nutrition Facts		
Serving Size 100 grams (½ cup/125 mL)		
Amount	% Daily Value	% valeur quotidienne
Calories/ Calories 118		
Fat/ Lipides 0 g	1%	
Saturated/ saturés 0 g	0%	
Trans/ trans 0 g		
Cholesterol 0 mg	0%	
Sodium/ Sodium 2 mg	0%	
Carbohydrate/ Glucides 21 g	7%	
Fibre/ Fibres 8 g	33%	
Sugars/Sucres 3 g		
Protein/ Protéines 8 g		
Vitamin A/ Vitamine A	0%	
Vitamin C/ Vitamine C	1%	
Calcium/Calcium	1%	
Iron/ Fer	7%	

Cooked Lentils		
Nutrition Facts		
Serving Size 100 grams (½ cup/125 mL)		
Amount	% Daily Value	% valeur quotidienne
Calories/ Calories 150		
Fat/ Lipides 0.5 g	1%	
Saturated/ saturés 0 g	0%	
Trans/ trans 0 g		
Cholesterol 0 mg	0%	
Sodium/ Sodium 5 mg	0%	
Carbohydrate/ Glucides 25 g	9%	
Fibre/ Fibres 4 g	14%	
Sugars/Sucres 0 g		
Protein/ Protéines 12 g		
Vitamin A/ Vitamine A	0%	
Vitamin C/ Vitamine C	2%	
Calcium/Calcium	2%	
Iron/ Fer	15%	

Cereal		
Nutrition Facts		
Serving Size 28 grams (½ cup/125 mL)		
Amount	% Daily Value	% valeur quotidienne
Calories/ Calories 120		
Fat/ Lipides 1 g	2%	
Saturated/ saturés 0.2 g	1%	
Trans/ trans 0 g		
Cholesterol 0 mg	0%	
Sodium/ Sodium 170 mg	7%	
Carbohydrate/ Glucides 23 g	8%	
Fibre/ Fibres 3 g	11%	
Sugars/Sucres 5 g		
Protein/ Protéines 3 g		
Vitamin A/ Vitamine A	0%	
Vitamin C/ Vitamine C	0%	
Calcium/Calcium	2%	
Iron/ Fer	30%	

Plain 2% Greek Yogurt		
Nutrition Facts		
Serving Size 100 grams (½ cup/125 mL)		
Amount	% Daily Value	% valeur quotidienne
Calories/ Calories 80		
Fat/ Lipides 2 g	3%	
Saturated/ saturés 1 g	5%	
Trans/ trans 0 g		
Cholesterol 10 mg	3%	
Sodium/ Sodium 35 mg	1%	
Carbohydrate/ Glucides 5 g	2%	
Fibre/ Fibres 0 g	0%	
Sugars/Sucres 2 g		
Protein/ Protéines 10 g		
Vitamin A/ Vitamine A	4%	
Vitamin C/ Vitamine C	0%	
Calcium/Calcium	10%	
Iron/ Fer	0%	

Milk Chocolate Bar		
Nutrition Facts		
Serving Size 43 grams (4 squares)		
Amount	% Daily Value	% valeur quotidienne
Calories/ Calories 220		
Fat/ Lipides 13 g	20%	
Saturated/ saturés 8 g	40%	
Trans/ trans 0.1 g		
Cholesterol 10 mg	3%	
Sodium/ Sodium 35 mg	1%	
Carbohydrate/ Glucides 25 g	8%	
Fibre/ Fibres 1 g	4%	
Sugars/Sucres 24 g		
Protein/ Protéines 3 g		
Vitamin A/ Vitamine A	0%	
Vitamin C/ Vitamine C	0%	
Calcium/Calcium	8%	
Iron/ Fer	8%	

Fusilli Pasta

FUSILLI		
Valeur nutritive		
pour environ 1/6 du paquet (85 g)		
Calories 300	% valeur quotidienne*	
Lipides 1.5 g	2 %	
saturés 0.3 g	2 %	
+ trans 0 g		
Glucides 61 g	11 %	
Fibres 3 g	1 %	
Sucres 1 g		
Protéines 11 g		
Cholestérol 0 mg		
Sodium 3 mg	1 %	
Potassium 175 mg	4 %	
Calcium 10 mg	1 %	
Fer 0.5 mg	3 %	
*5% ou moins c'est peu, 15% ou plus c'est beaucoup		
Ingrédient : Semoule de blé dur.		
Contient : Blé.		
Ce produit est fabriqué sur de l'équipement qui fabrique des produits contenant des œufs.		
*Fait au Québec avec des ingrédients canadiens.		
Questions ou commentaires?		
1-844-948-0861		
BARILLA CANADA INC.		
MARKHAM, ONTARIO L3R 5Y8		

Food Label Challenge

- Choose 3 foods from the previous slide.
- Explore the similarities and differences by filling in their nutrient values in the chart.
- Answer the questions beside the chart.

food label challenge



	Label 1	Label 2	Label 3
Calories			
Total Fat			
Saturated Fat			
Cholesterol			
Sodium			
Total Carbohydrate			
Fibre			
Sugars			
Protein			
Vitamin A			
Vitamin C			
Calcium			
Iron			

➡ Which of these foods has the most iron? Which has the least?

.....

.....

➡ Which of these foods has the most protein? Which has the least?

.....

.....

➡ If you ate all three of these foods in one meal, how much fibre would you eat? How do you know this?

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.....

.....

➡ If you ate all three of these foods in one meal, how much protein would you eat? How do you know this?

.....

.....

.....

Day 6 Agenda

- Catch-up Day
- Let's Cook! Coconut Chickpea Curry and Lentil Naan
- Complete Self Reflection for labs

Let's Cook!

Let's take everything we have learned and make:

- [Coconut Chickpea Curry](#)
- [Lentil Naan](#)

Both recipes have been created by Alberta Pulse Growers.

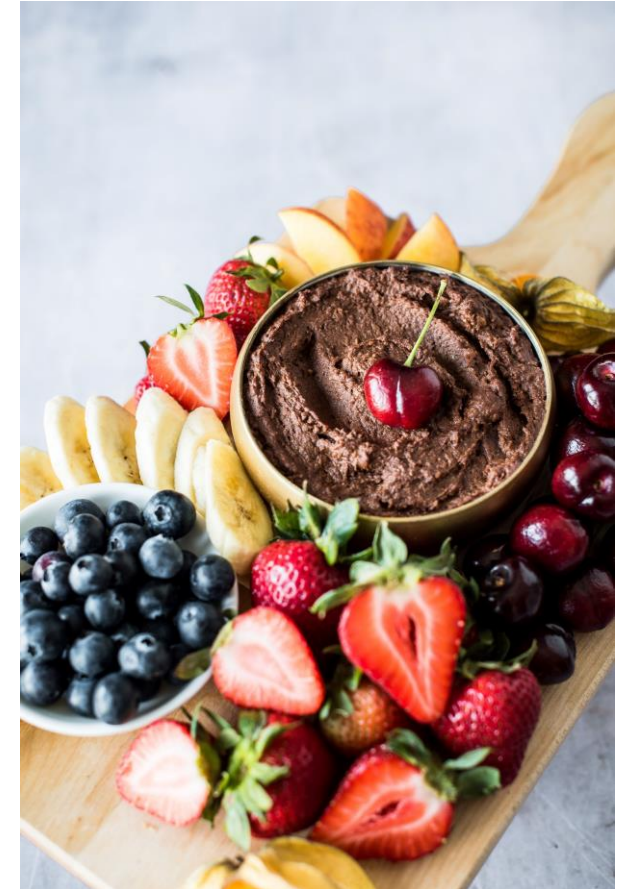
Complete Recipe Reflections after making these recipes.



More Recipe Ideas

No Bake Recipes

- Pina Colada White Bean Smoothie
- Cocoa Cookie White Bean Smoothie
- Black Bean & Corn Salsa
- Chickpea Hummus
- Lentil Salsa
- Masala Chickpea Spinach & Mango Salad
- Chocolate Chickpea Dip
- Kitchen Sink Lentil Energy Bites



More Recipe Ideas

Breakfast

- Black Bean Breakfast Burritos
- Black Bean Egg Bites

Snacks

- Chocolate Chickpea Dip
- Pizzalicious Poppers

Baking

- Black Bean Brownies
- Cranberry Orange Muffins
- Lentil Pumpkin Chai Muffins



More Recipe Ideas

Salads

- Black Bean Protein Bowl
- Chickpea Pasta Salad
- Chickpea, Spinach, Paneer Salad
- Green Split Pea Salad with Rice & Cranberries
- Lemony Chickpea & Cucumber Salad
- Lentil Salad Rolls
- Pulses Pasta Salad

Hot Snacks & Entrees

- Crispy Chickpea Poppers
- Hoisin Turkey & Lentil Lettuce Wraps
- Beans & Rice Master Mix
- Lemony Lentil & Veggie Pasta Bake
- Easy Lentil Ragu
- Chicken & Lentil Fried Rice
- Handy Dandy Hand Pies

Classroom Support Program

- \$25 gift card* per 25 students to purchase pulses (dry or canned pulses) from Loblaws stores such as Superstore, Extra Foods or No Frills Foods
*Limits apply
- One copy for the teacher of *Pulses on every plate, Baking with Pulses, 5 things to do with canned pulses*
- One pulse variety poster illustrating the different types of pulses
- Print resources for students on request (see list on order form)
- For more information and to apply, check out our website at
 - <https://albertapulse.com/senior-high-school-programs-and-resources/>
 - or use the QR code to access the application form



FOD 2190

All FOD 2190 resources available on APG Website

- Lesson Plans
- PowerPoint presentations for each day
- Rubrics, self-assessment
- Exam for students and answer key for teacher

<https://albertapulse.com/senior-high-school-programs-and-resources/>

Thank you!

For more information, questions or to book a teacher PD day:

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