



# Module 5: Fast Food at Home UNIT 5: COOKING ON A BUDGET Grades 3 - 5



## 3rd - 5th Grade:

### Introduction to the Unit:

In this unit, you'll explore how to use leftovers and bulk up recipes beyond fresh meat using less costly, but very nutritious canned goods.

#### Pre-assessment:

Introduction

The best college students are recognized by being listed on The Dean's List; certain beans and legumes are tops in nutrition, earning them a spot on "The Beans List." Rich in fiber, protein, and B vitamins, they help fight heart disease and improve digestion.

The Beans List Activity

Instructions:

On the following page, match the "Bean Bank" words with the images.





#### **Bean Bank:**

- Kidney Beans
- Black Beans
- Pinto Beans
- Lentils
- Navy Beans
- Peas
- Soybeans
- Peanuts
- Chickpeas











# **Bean Images:**











#### The Beans List Questions

Check your answers to the activity using "The Beans List Answer Key" (found at the end of this lesson on page 24) and then answer these questions:

- 1. How many beans were you familiar with based on the images and/or names?
- 2. Which beans do you enjoy eating?
- 3. What other kinds of beans might you like to try?





## **Purpose:**

Students will discover how incorporating more beans into their diet will increase the color, texture, nutrients, and flavor of what they eat while saving money at the grocery store. Some students may initially think they do not like beans, they will soon discover how many different varieties exist. From black to red to white and the teeny tiny lentil in between, students will learn about purchasing the most cost-effective beans and how to maintain an up-to-date pantry inventory. This way, they'll be ready to cook with these and other shelf-stable foods whenever the mood strikes, starting with a tasty chicken chili in this lesson.

# **Student Learning Outcomes for the Unit:**

- ▶ Students will expand their knowledge of which legumes are available to enjoy.
- ▶ Students will learn that legumes and beans are healthy meal additions.
- ▶ Students will decipher food items' shelf tags when grocery shopping to compare costs.
- ▶ Students will see which pantry items are better to keep on hand for cooking and eating well.
- ▶ Students will learn how to maintain a pantry inventory and use it to form a shopping list.
- ► Students will select a bean-based recipe they want to try and prepare a bean chili for dinner.

# National Agricultural Literacy Outcomes Plants and Animals for Food, Fiber & Energy, Theme 2

A. Discuss similarities and differences in food, clothing, shelter, and fuel sources among world cultures

## Food, Health & Lifestyle, Theme 3

- A. Describe the necessary food components of a healthy diet using the current dietary guidelines
- D. Explain the costs associated with producing and purchasing food
- E. Explain the practices of safe food handling, preparation, and storage
- G. Identify food sources of required food nutrients





# **Vocabulary Words:**

- ▶ **Legumes and beans:** legumes are plants that grow in pods. Beans are edible seeds that are part of the legume family. Legumes are considered both protein and vegetable foods in the USDA MyPlate. They are low in fat and high in protein, fiber, vitamins, and minerals
- ▶ **Shelf tag:** a label to identify a product, its proper placement in a store, and its cost
- ▶ **Sodium:** an element found in salt, helpful in flavoring and preserving canned foods when kept at reasonable levels
- ▶ Shelf-stable: foods that last for long periods of time without spoiling
- ▶ Pantry: a small room for storing shelf-stable food items
- ▶ **Inventory:** a list of contents

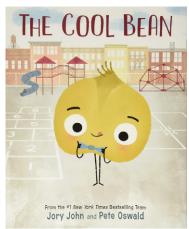
#### **Materials Needed:**

- ▶ Paper and Writing Utensil
- Ingredients and supplies for the White Chicken Chili recipe

# Activity 1: Read the book *The Cool Bean* by Jory John and Pete Oswald

As you read, think about what makes the "cool" beans so cool. Pause after reading each page to look at the illustrations, point out important features, and think about big ideas. Notice the way the different bean characters look, as well. After reading, answer these questions:

- 1. Describe the way the different bean characters look.
- 2. Have you noticed any beans in your kitchen that look like the beans you see in the book?
- 3. What is happening with the main character's emotions at the start of the story? Why?
- 4. In the end, what did the main character decide really made those beans so cool?



https://youtu.be/Mttk4HMpUCY

Check your answers with, "The Cool Bean Answer Key," at the end of this lesson on page 25.



# Activity 2: Shelf Tag, You're It

Another cool factor that beans and legumes have is lower costs when compared to other main-dish proteins like beef and poultry. They can be quite affordable and last for a long time in the pantry, saving your wallet from waste, too.

It is important to know how to compare prices though since there are many varieties from which to choose, even within one variety of bean. Learning how to read what's known as a "shelf tag" in the grocery store can help you identify the best value.

On the following pages, view the video screenshots and read the narration of "Grocery Shopping: Read Grocery Store Shelf Tags to Save Time & Money".





# Grocery Shopping: Read Grocery Store Shelf Tags to Save Time & Money

Also available online at: https://youtu.be/-9VuDeVMA7w



If you're looking to get a deal ...



rather than looking at the full retail, what we recommend is reading the shelf tags.







And you can quickly determine what the best price is.

For instance, this brand here is 13.3 cents an ounce,





and this price is 8.3 cents an ounce for about the same quality.





We're going to save 40% ...





by buying the store brand versus the name brand.



And we figured that out really quickly without even using a calculator by looking at the price tags.





Cost matters, but so do recommended daily values of sodium (commonly called salt), especially when it comes to canned foods. Canned foods, like beans, can be loaded with sodium and added sugars. Learning how to read what's known as a "food label" on a product in the grocery store can help you compare labels and choose between different food options. If everything looks similar, examine which product has lower sodium, added sugars, and saturated fat amounts. That will be the healthier purchase.

Pro tip: Drain canned beans and rinse them with water to help eliminate even more added sodium.

On the following pages, view the video screenshots and read the narration of "Teaching Kids How to Read Food Labels - First with Kids - Vermont Children's Hospital". Pediatrician, Dr. Lewis First of the Vermont Children's Hospital, teaches you how to read food labels.

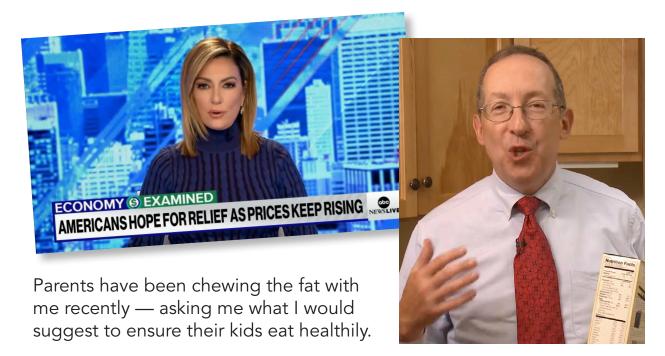




# Teaching Kids How to Read Food Labels

First with Kids | Vermont Children's Hospital

Also available online at: https://youtu.be/-9VuDeVMA7w





I can certainly offer some suggestions, but when parents offer those suggestions to their kids, they will probably say no.







So, a better idea, parents, is to teach your kids how to read food labels.

That's right - food labels!



Food labels are required by the Food and Drug Administration and the Department of Agriculture.



They tell you and your child how many calories are in a given food and what the average serving size should be to give a healthy portion to your child.





They also tell you what healthy and unhealthy nutrients are in the food, such as cholesterol, saturated fats, salt, and added sugars.





When your child takes a look at a food label and compares one food to another, they're ensuring themselves ...



that they can get the recommended amount of:

- 20-30% fats per day,
- 10-20% protein, and of course,
- the rest in carbohydrates, starches, and natural sugars ...



minimizing the amounts of saturated fats.



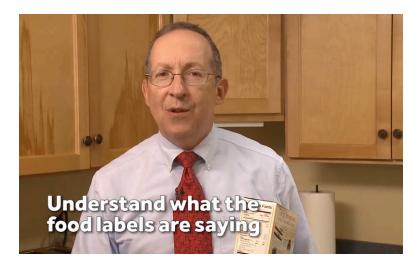




When your kids compare labels, they're making smarter choices.



And when they make smarter choices, they're eating healthy.



It's important that your kids also understand what food labels are really saying.







So, suppose a food product says 25% reduced fat.



In that case, they should look at the food label, compared to another food, and make sure that's a reduction in saturated fats.



Also, they can ensure that what's been lost in fat isn't being made up for in added artificial sugars.







In addition, if your child is allergic to a particular food or ingredient, check the food label.



If that ingredient is in a food, and your child doesn't realize it — yikes!



But, by checking that food label, they will avoid an unnecessary allergic reaction.







Hopefully, tips like this will be easy to digest when recommending that your kids pay attention to food labels.



This is pediatrician, Dr. Lewis First, reminding you to always be first with your kids.



# **Activity 3: Visual Pantry Inventory**

Because they last for so long when stored in kitchen pantries, canned, and dried beans are helpful to keep on hand. That way, when you need a hearty protein for a meal, you're ready to cook. Maintaining a list of what you have and what you need is helpful. It is best to have healthier shelf-stable items stored as well for more nutritious meal prep.

- Use the infographic, "Healthy Pantry Staples to Keep in Your Kitchen," based on a registered nurse's input from the article, 28 Healthy Pantry Staples to Keep in Your Kitchen (Taste of Home website https://www.tasteofhome.com/article/healthy-pantry-staples-kitchen/) to help you check your own pantry stock or inventory.
- Use the list under the infographic to identify what you have in your kitchen.
- Put a checkmark by the item if you have it. If you do not have it, put an "X" next to it.
- This can function as a shopping list next time your family visits the store.





# Activity 4: Chopped Challenge: Beans for Breakfast? Legumes for Dessert?

Once you have a pantry well-stocked with healthy staples like beans, it is easier to find recipes that make the most of such ingredients. You can just add a few extra items to your shopping list, and you'll be on your way. Did you know you can even find delicious and nutritious sweets and morning treats to make that use beans? Well, you can.

• View the following recipes from the "USDA Bean Basics Toolkit" to find a breakfast recipe or dessert recipe you'd like to try making.

# **Crispy Split Pea Avocado Toast**

Serves: 1

#### **Ingredients:**

- ½ cup dried green split peas
- 1 tsp oil
- 1 piece whole wheat bread
- 1 avocado
- 1/8 tsp red pepper flakes
- Salt and pepper (to taste)

#### **Directions:**

- 1. In a medium bowl, cover the split peas with water. Let them soak for at least 2 hours before making the avocado toast.
- 2. After the split peas have soaked, heat the oil in a small skillet over medium-high heat.
- 3. Drain the split peas and add them to the preheated pan. Cook until crispy, about 3-5 minutes.
- 4. While the split peas are cooking, toast the bread and scoop out the avocado. Mash the avocado in a small bowl and stir in the red pepper flakes and salt and pepper to taste.
- 5. Stir half of the split pea mixture into the avocado mixture.
- 6. Spread on the toast and top with the remaining split peas.

Recipe adapted from Pulses (<u>www.pulses.org</u>).

### **Cocoa Bean Smoothie**

Serves: 1

#### **Ingredients:**

- 1 tbsp cocoa powder
- 1 ripe banana, peeled
- ½ cup canned black beans, rinsed
- 1/3 cup low-fat milk
- 2 tsp honey
- 3 ice cubes

#### **Directions:**

- 1. Put all ingredients in a blender and mix well for 1-2 minutes.
- 2. Serve chilled.

Recipe adapted from Edamam (www.Edamam.com).

# **Southwest Black Bean and Egg Muffins**

Serves: 6

#### **Ingredients:**

- 1 cup fillings
  - o any cooked vegetables
  - o cooked black beans
- 1/2 cup cheese
- Salt and pepper
- 12 eggs

#### **Directions:**

- 1. Preheat the oven to 350 degrees. Spray the muffin tin with cooking spray.
- 2. Whisk the eggs until combined. Season with salt and pepper. Stir the fillings into the eggs.
- 3. Divide evenly among the muffin tin. You can also fill the bottoms of the muffin tins with the fillings and pour the eggs over top.
- 4. Bake for 20-25 minutes until cooked through.
- 5. Wait 5-10 minutes before removing them from the tin.

Recipe adapted from Simply Recipes (www.simplyrecipes.com).



## **Chickpea Bark**

Serves: 4

#### **Ingredients:**

- 1 ½ cups canned, drained chickpeas
- 1 cup dark chocolate chips
- 1 tablespoon oil
- Oil spray (as needed)

#### **Directions:**

- 1. Preheat oven to 400°F.
- 2. Line a baking tray with waxed paper and lightly grease with preferred oil or use an oil spray.
- 3. Add chickpeas to tray and drizzle with preferred oil.
- 4. Roast in the oven for 25 minutes or until crunchy.
- 5. Let cool on the tray.
- 6. In a microwave-safe bowl, add dark chocolate chips and coconut oil.
- 7. Microwave for 30 seconds, stir then microwave again. Repeat until the chocolate melts.
- 8. In a large bowl, combine the roasted chickpeas and dark chocolate then pour onto a lined baking tray.
- 9. Place in the freezer to set for 20-30 minutes.

Recipe adapted from Pulses (www.pulses.org).

#### **Lentil Brownies**

Serves: 8

#### **Ingredients:**

- 4 large eggs
- 2 cup of sugar
- 1 cup of vegetable oil
- 2 teaspoon vanilla extract
- ½ cup plus 2 tablespoons cocoa
- 1 teaspoon salt
- 1 ½ cup flour
- 1 cup of chocolate chips
- ½ cup large dried lentils (Do not soak)
- 1 cup small marshmallows

#### **Directions:**

- 1. Preheat oven to 350 degrees F.
- 2. Rinse the lentils. Then, in a large pot, simmer the lentils in 1½ cups of water for 5-20 minutes until tender. Then continue to boil them for another 40 minutes. Drain the lentils and set aside for later.
- 3. In a large bowl, beat the eggs and sugar until well mixed.
- 4. Add in the oil and vanilla and stir well.
- 5. In a different bowl, sift the sugar, cocoa, flour, and salt. Add to the sugar and egg mixture. Stir well
- 6. Stir in the chocolate chips, cooked lentils, and marshmallows.
- 7. Bake in a greased pan for 35 minutes.



- Then, write down all the ingredients you will need, leaving off any you already discovered you have during the pantry inventory (Activity 3).
- Share this recipe and shopping list with an adult in your home so that you can get to cooking and enjoying all that beans have to offer.

Reference: "The Bean Basics Toolkit," USDA https://fns-prod.azureedge.us/sites/default/files/resource-files/Bean Basics Toolkit.pdf

# **Activity 5: What's Cooking? White Chicken Chili**

Canned beans are wonderful starters for many main dishes. From soups to salads and everything in between, they pair well with rice, pasta, and tortillas. With so many kinds, it's easy to vary the desired texture, flavor, color, and cuisine as well. Adding beans to a main meal increases your nutrition with plenty of protein, fiber, and essential vitamins.

A recipe sure to satisfy your entire family is "White Chicken Chili" (from the "USDA Bean Basics Toolkit"). You can easily swap out different kinds of beans for the ones listed and even use canned chicken instead of fresh. Toppings are the fun part: cheese, avocado, green onions, sour cream, Greek yogurt, limes, hot sauces, cilantro... Take your pick. Corn bread or tortilla chips and some tropical fruit (fresh or canned in 100% fruit juice) pair nicely with this for a full meal.

#### White Chicken Chili

Serves: 6

#### Ingredients:

- 2 tablespoon oil
- 2 teaspoon garlic powder
- 1 onion, finely chopped
- 1/2 teaspoon pepper, black
- 1 can (4 oz) green chilies, drained, diced
- 2 teaspoon cumin, ground
- 3 cups great northern beans, cooked
- 1 1/2 cup chicken (cooked, cubed)
- 1 can chicken broth (14.5 oz can)
- 1/2 cup Monterey Jack cheese, shredded

#### **Directions:**

- 1. In a large saucepan, heat oil. Add onion and cook until tender
- Add green chilies, beans (do not drain), chicken broth, garlic powder, pepper, ground cumin, and chicken. Bring to a boil
- 3. Reduce heat and simmer for 10 minutes or until desired thickness
- 4. Serve hot, topped with cheese.

Recipe adapted from Nebraska Nutrition Education Program Nebraska SNAP-Ed.

STEMsationalAg.com | mtsu.edu/chhs | Cooking on a Budget | Grades 3 - 5





#### **Post Assessment:**

Now that you know how to examine a shelf tag, compare the two rows of canned black beans in the activity, "Can You Compare Cans?"

#### Instructions:

- Below are two images of groups of canned beans.
- Which product would you purchase from each of the two images?
- Consider value in terms of price, consumer reviews, and nutrition.
- Discuss your choices with classmates and a teacher or an adult at home.
- Check your answers on page 25.

#### Image 1: Left to Right

- Great Value Walmart Brand Black Beans (4.5 Stars) = 4.7 cents per ounce
- Bush's Best Brand Black Beans (4.5 Stars) = 8.5 cents per ounce
- Great Value Walmart Brand No Salt Added Black Beans (4.5 Stars) = 4.7 cents per ounce



\$0.72 4.7 e/ez Great Value Black Beans, 15.25 ez Can \*\*\*\* 307 Save with #=5 DUNCES BUSH'S
Black Beans
Frieda Norms

+ Add

\$1.28 R5 c/or RUSH'S Black Beans, Canned Beans, 15 Oz



\$0.72 47 c/cz Great Value,No Salt Added, Black Beans, 15.25 Oz Can





#### Image 2: Left to Right

- Bush's Best Brand Reduced Sodium Black Beans (5 Stars) = 8.5 cents per ounce
- GOYA Brand Black Beans (4.5 Stars) = 8.6 cents per ounce
- Bush's Best Brand Seasoned Recipe Black Beans (5 Stars) = 8.5 cents per ounce





Bush's Reduced Sodium, Plant-Based Protein, Black Beans, 15 oz Can

\*\*\*\* 66



\$1,33 8.6 ¢/oz

Goya Black Beans, 15.5 Oz

\*\*\*\* 104

Save with W+1



\$1.28 8.5 ¢/oz

BUSH'S Seasoned Recipe Black Beans Can, 15 oz

\*\*\*\*\*

## The Beans List Answer Key

- 1. Chickpeas
- 2. Lentils
- 3. Peas
- 4. Kidney Beans
- 5. Black Beans
- 6. Soybeans
- 7. Pinto Beans
- 8. Navy Beans
- 9. Peanuts



# The Cool Bean Answer Key

- 1. They vary in color, shape, and size. Colors include green, dark red, light red, and off-white. Some are short and round; others are tall and curved.
- 2. Look in your kitchen and see if you have any beans that are in the book. Do you see any kidney beans, pinto beans, or any other kind of beans?
- 3. He noticed his bean friends were gaining qualities and skills to make them stand out in special ways that he was not. He felt left out and uncool.
- 4. Their kindness with others!

# **Post-Assessment Answer Key**

- Row 1 Suggested Answer: They are equal in reviews. The two store brand cans are less costly than the name brand. Between the two, the no salt added is the better choice nutritionally since you can add salt yourself to control sodium levels.
- Row 2 Suggested Answer: The Bush's Best brands have better reviews than the GOYA brand and are slightly lower in cost. Between the two, the reduced sodium will have less salt added than the seasoned version. You can also add seasonings on your own and more salt as desired to control sodium levels. This makes it the better choice.