

Mealtime Economics:

Exploring Meal Options from Freezer to Fridge

Dear Educator,
As young adults become independent consumers, they recognize the importance of healthy food choices, money management, and doing their part to reduce food waste.

This free program from The National Frozen & Refrigerated Foods Association (NFRA) and the curriculum specialists at Young Minds Inspired features three standards-based activities designed to help reinforce these skills, while raising awareness about the role frozen and refrigerated foods can play.

Share these materials with your colleagues, and please let us know your opinion of these learning materials by visiting ymiclassroom.com/feedback-mealtime. We look forward to receiving your comments.

Sincerely,



Dr. Dominic Kinsley
Editor in Chief
Young Minds Inspired



Questions? Contact YMI toll-free at 1-800-859-8005 or by email at feedback@ymiclassroom.com.

Target Audience

Grades 9-12

Program Components

The following materials are available at ymiclassroom.com/mealtime:

- This teacher's guide
- Three reproducible activity sheets in English and Spanish
- Standards alignment chart
- Online feedback form

Concepts & Skills

Meal planning	Reading informational text
Money management	Decision-making
Assess the benefits of frozen and refrigerated foods	Comprehension
Explore diverse food options	Collaboration
Learn how to be savvy shoppers	Math
	Compare and contrast values, budgets

How to Use This Program

Download, copy, and distribute the activity sheets. Students will need access to the internet to complete the activities and/or grocery store flyers and restaurant menus.

ACTIVITY 1 Three Meals for Four!

Part 1. In this activity students shop online in the frozen and refrigerated food aisles to plan a healthy, economical menu and shopping list for three meals — breakfast, lunch, and dinner — for a group of four. Remind students to read the “Servings per container” information on the Nutrition Facts labels to ensure that they have enough for four. Have them design each meal and calculate the cost on the activity grid.

Part 2. Next, have students use internet resources to determine the cost of three meals for a group of four at a restaurant. After students tally the cost, ask: *How does the cost of dining out compare to the cost of three meals for four people at home?*



Part 3. Have students calculate the average per person weekly cost of their home meals and compare those costs to the national average estimated by the USDA. Have students discuss their results. Explain that frozen foods keep their nutritional value longer, save time in the preparation process, and can be portioned to individual needs, which help to reduce food waste.

ACTIVITY 2

A World of Food Flavors: Think Frozen and Refrigerated!

In this activity, students discover that many of their favorite foods from around the world can be found in the frozen and refrigerated aisles. Pass out the activity sheet and have students work in teams to complete the investigations. Discuss their answers and the role frozen and refrigerated foods play in helping us enjoy a variety of cuisines and flavors.

Answers: Part 3: a) Mexico; b) China; c) Italy, England; d) Vietnam; e) India; f) Italy; g) France; h) U.S.; i) Italy; j) Many countries likely have their own versions; k) Greece.

ACTIVITY 3

Meal Math Shopping Challenge!

Create teams to complete this math activity. Review the answers in a class discussion, then have the teams create their own math challenge food shopping questions and exchange them with another team. To conclude, ask students to explain broad concepts they have discovered by completing these questions.

Answers: Part 1: 1. A unit price is a price based on a measurement, such as per pound or per serving, which enables shoppers to compare prices. **2.** Per ounce costs: \$0.215 per \$1.29, 6 oz pkg.; \$0.155 per \$4.99, 32 oz container. **3.** Depends on the type of fats and each person's sodium restrictions. Higher protein and lower salts and fats are considered healthier. **4.** Cost of food waste per week: \$120.48. To reduce food waste, the family could buy only what they need, replace fresh foods with frozen so that they can use only what they need and freeze the rest, plan a menu, etc. **5.** \$2.59. Depends upon the expiration date, amount to be used, and whether leftovers can be frozen for later use. **6.** Answers will vary. **Part 2:** Answers will vary.

Resources

- National Frozen & Refrigerated Foods Association – NFRAweb.org
- Easy Home Meals – EasyHomeMeals.com
- Program site – ymiclassroom.com/mealtime



Three Meals for Four!

The frozen and refrigerated aisles of a supermarket offer many delicious, nutritious, and economical meals we can create at home. In this activity, you will plan a menu and shopping list for three meals — breakfast, lunch, and dinner — for a family of four using only frozen and refrigerated foods, then compare the cost to eating at a restaurant.

PART 1 Use online resources to plan and price your meals. Start with the chart below to choose menu items for breakfast, then create similar charts on the back of this sheet to plan and price lunch and dinner. Look on the Nutrition Facts labels for “Servings per container”. Record the total cost for each meal and the average cost per person in the spaces below.

Breakfast items			
Servings per container			
Cost for four servings			

Total cost: Breakfast _____ Lunch _____ Dinner _____

Average cost per person Breakfast _____ Lunch _____ Dinner _____

PART 2 Now check online menus to price comparable meals for four people at local restaurants. (To keep things simple, ignore the cost of tax and tip.) Use this chart to compare the cost of dining out to the cost of your home meals using frozen and refrigerated foods.

Restaurant Meals	Total cost	Cost difference	Cost per person	Cost difference
Breakfast				
Lunch				
Dinner				

PART 3 Surprised by the difference? Take it one step further. Use the chart below to calculate the average weekly meal costs per person for a family of four shopping in the frozen and refrigerated food aisles. (To keep it simple, we’ll assume the same meals are served every day.)

Home Meals	Cost per person	x 7 = Cost per week
Breakfast		
Lunch		
Dinner		
Total Weekly Cost per Person		

Now find out how this cost compares to the national average as calculated by the U.S Department of Agriculture (USDA). Go to <https://fns-prod.azureedge.us/sites/default/files/resource-files/CostofFoodAug2023LowModLib.pdf>. Use the “Moderate cost plan” column to choose average weekly food costs for the four members of your imaginary family and add them together. Discuss in class how your frozen and refrigerated foods home meal plans compare to the national average costs.

Go to **EasyHomeMeals.com** to explore how you can build budget-conscious menus using frozen and refrigerated foods!



A World of Food Flavors: Think Frozen and Refrigerated!

Did you know that many of the foods and flavors from around the world that we enjoy at home can be found in the frozen and refrigerated food aisles at your supermarket?

PART 1 List three of your favorite foods from around the world and their country of origin.

Favorite Food	Country of Origin
1.	
2.	
3.	

PART 2 Now explore supermarket websites to find out which of your favorites are available ready-made in the frozen or refrigerated aisles, and which can be made at home with frozen or refrigerated ingredients. Put a check mark in the relevant columns.

Favorite Food	Available ready-made frozen or refrigerated	Ingredients available frozen or refrigerated
1.		
2.		
3.		

PART 3 Below are several foods from around the world. Write the country where each food item originated. Next, put a check mark next to the ones that are available ready-made in the frozen or refrigerated aisles or that can be made with frozen or refrigerated items.

Food	Country of Origin	Available ready-made frozen or refrigerated	Ingredients available frozen or refrigerated
a. Chicken Enchiladas			
b. General Tso Chicken			
c. Mac and Cheese			
d. Potstickers/Dumplings			
e. Tandoori Chicken			
f. Pizza			
g. Chicken Marsala			
h. Cheese dips/spreads			
i. Gelato			
j. Smoothie			
k. Tzatziki dip/sauce			

Go to **EasyHomeMeals.com** to explore how you can build budget-conscious menus using frozen and refrigerated foods!



Meal Math Shopping Challenge!

PART 1 Are you a savvy food shopper? Find out with this math challenge. Remember to make good dietary decisions, be budget conscious, and shop to reduce food waste. You can use the back of this sheet for your calculations.

1 What is a unit price? Why is it important when figuring out the value of a product and comparing it with other products in the same category?

2 Imagine that you are shopping for yogurt. Check the option you think offers the better value for a family.

- Individual 6-ounce yogurt that costs \$1.29
- 32-ounce container of yogurt that costs \$4.99

Now list some of the factors you considered to make your choice. For example, number of people in the family, the unit price, number of servings, potential for leftovers, expiration date, etc.

3 Here are three options for frozen chicken nuggets and key per serving nutrition facts for each one. Which option is most likely the healthier choice? Why?

- Option 1: 14 grams protein, 6 grams total fat, 600 mg (milligrams) sodium
- Option 2: 15 grams protein, 5 grams total fat, 550 mg sodium
- Option 3: 12 grams protein, 4 grams total fat, 800 mg sodium

4 Forty percent of food in the United States does not get eaten because it gets moldy in the fridge, gets damaged in processing, or doesn't look good enough to be put on display in markets. If this rate is applied to a moderate food budget for a family of four — \$301.20 a week — how much money could potentially be wasted in a week? \$ _____

How could a family reduce this potential food waste?

5 You have a coupon for “buy 2, get 1 free” of a product you eat occasionally. The cost of one is \$3.89. How much are you paying for each one if you take all three? \$ _____

What questions would you ask yourself to decide whether to purchase the items using the coupon?

6 You are creating a meal for six guests. You are using refrigerated and frozen foods because you had to shop earlier in the week and fresh foods would not last. Using the website [EasyHomeMeals.com/?s=healthy+recipes&source=main](https://www.easyhomemeals.com/?s=healthy+recipes&source=main), choose what you will serve as the entree, side dish, and dessert.

Entree: _____

Side Dish: _____

Dessert: _____

Now estimate the total cost of hosting the meal: \$ _____

PART 2 With your team, create three math challenge questions of your own to test your classmates' food shopping savvy.



Go to [EasyHomeMeals.com](https://www.easyhomemeals.com) to explore how you can build budget-conscious menus using frozen and refrigerated foods!