

**The Cost of Protein**  
**Grade Levels: Middle School & High School Introductory Level**

**Objectives**— Students will:

- use formula to compute cost per serving of protein entrees.
- use math skills with 100% accuracy.

**Resources:**

- *The Cost of Protein* activity
- *The Cost of Protein* – ANSWER KEY
- Calculator

**The Cost of Protein**

Activity will take 15 – 20 minutes for students to complete. Demonstrate calculating the cost per serving for students by using the Boneless Butterfly Pork Chop example.

An optional activity to enhance learning would have students visit a grocery store and create another version of *The Cost of Protein* activity. Use four different protein foods found in the meat, poultry & fish department. An answer key will be developed showing how each answer was calculated.

### The Cost of Protein

**Instructions:** Here are four different lean protein foods that you could buy at most grocery stores. Which is the best deal? Since the protein foods are packaged in different sized amounts it is necessary to figure the cost per serving. The first example is figured for you. Cost per serving = total cost of package divided by number of ounces X 4.

EXAMPLE - Boneless Butterfly Pork Chop

Net Wt/Ct	Unit Price	Total Price
0.77	\$5.39/lb	\$4.15

- Figure the total number of ounces in package - Keep in mind there are 16 ounces in a pound.  
 $16 \text{ ounces} \times 0.77 \text{ Net Wt} = 12.32 \text{ ounces in package}$
- Divide total price by number of ounces in package  
 $\$4.15 / 12.32 \text{ ounces} = 0.336$  (which is 34 cents per ounce)
- We will be figuring cost of 4 ounce serving so multiply cost per ounce by 4  
 $.34 \text{ cents} \times 4 = \$1.36$  per serving of boneless butterfly pork chop

### Now It Is Your Turn – Show Your Work On The Back – See Example Above

Ham Steak			Fresh Tilapia Fillets			Stuffed Chicken Breast–Cordon Bleu		
Net Wt/Ct	Unit Price	Total Price	Net Wt/Ct	Unit Price	Total Price	Net Wt/Ct	Unit Price	Total Price
2.28	\$3.49/lb	\$7.96	0.64	\$8.99/lb	\$5.75	1.49	\$5.99/lb	\$8.93

### Rank Order According to Cost Per Serving

Highest Cost Per Serving	Second Highest Cost Per Serving	Third Highest Cost Per Serving

**The Cost of Protein-  
 ANSWER KEY**

Ham Steak

Net Wt/Ct	Unit Price	Total Price
2.28	\$3.49/lb	\$7.96

1. 16 ounces X 2.28 Net Wt = 36.48 ounces in package
2. \$7.96 divided by 36.48 ounces = 0.218  
(which is 0.22 cents per ounce)
3. .22 cents X 4 = \$0.88 per serving

Fresh Tilapia Fillets

Net Wt/Ct	Unit Price	Total Price
0.64	\$8.99/lb	\$5.75

1. 16 ounces X .64 Net Wt = 10.24 ounces in package
2. \$5.75 divided by 10.24 ounces = 0.56 cents per ounce
3. .56 cents X 4 = \$2.24 per serving

Stuffed Chicken Breast–Cordon Bleu

Net Wt/Ct	Unit Price	Total Price
1.49	\$5.99/lb	\$8.93

1. 16 ounces X 1.49 Net Wt = 23.84 ounces in package
2. \$8.93 divided by 23.84 ounces = 0.374  
(which is 37 cents per ounce)
3. 0.37 cents X 4 = \$1.48 per serving

**Rank Order According to Cost Per Serving**

Highest Cost Per Serving	Second Highest Cost Per Serving	Third Highest Cost Per Serving
Fresh Tilapia Fillet \$2.24	Stuffed Chicken Breast \$1.48	Ham Steak \$0.88