

Technology and Livelihood Education

Home Economics - Cookery

Quarter 0 - Module 4

Calculating Cost Production



TLE Cookery – Grade 8
Alternative Delivery Mode
Quarter 0 – Module 4: Calculating Cost Production
First Edition, 2020

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Secretary: Leonor Magtolis Briones
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Development Team of the Module

Writer: Nerie D. Contreras

Editor: Geraldine F. Vergas

Reviewers: Elizabeth A. Bautista, Ruby C. Limen, Ma. Ligaya C. Azarcon, Lorna L. Estal,
Leonila J. Floria, Virginia T. Mahinay

Layout Artists: Mark Ian K. Domosmog, Eljun A. Calimpusan

Management Team: Francis Cesar B. Bringas, Isidro M. Biol, Josephine Chonnie M. Obseñaries
Maripaz F. Magno, Minerva T. Albis, Imee R. Vicariato, Genevieve S. Verceles,
Corazon F. Adrales

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Department of Education – Caraga Region

Office Address: Teacher Development Center
J.P. Rosales Avenue, Butuan City, Philippines 8600
Tel. No./Telefax: (085) 342-8207/ (085) 342-5969
E-mail Address: caraga@deped.gov.ph

**Technology and
Livelihood Education
Home Economics - Cookery
Quarter 0 -Module 4
Calculating Cost Production**

Introductory Message

This Self-Learning Module (SLM) is prepared so that you, our dear learners, can continue your studies and learn while at home. Activities, questions, directions, exercises, and discussions are carefully stated for you to understand each lesson.

Each SLM is composed of different parts. Each part shall guide you step-by-step as you discover and understand the lesson prepared for you.

Pre-tests are provided to measure your prior knowledge on lessons in each SLM. This will tell you if you need to proceed on completing this module or if you need to ask your facilitator or your teacher's assistance for better understanding of the lesson. At the end of each module, you need to answer the post-test to self-check your learning. Answer keys are provided for each activity and test. We trust that you will be honest in using these.

In addition to the material in the main text, Notes to the Teacher are also provided to our facilitators and parents for strategies and reminders on how they can best help you on your home-based learning.

Please use this module with care. Do not put unnecessary marks on any part of this SLM. Use a separate sheet of paper in answering the exercises and tests. And read the instructions carefully before performing each task.

If you have any questions in using this SLM or any difficulty in answering the tasks in this module, do not hesitate to consult your teacher or facilitator.

Thank you.



What I Need to Know

This module was designed and written to better perform mensuration and calculations. It will help the learner master the nature of mensuration and calculation. The scope of this module will be used in many different learning situations. The language used recognizes the diverse vocabulary level of learners. The lessons are arranged to follow the standard sequence of the module. But the order of teaching or using can be changed to correspond with the textbook and references you will be using.

The module has only one Learning Outcomes which has one lesson on it.

LO 4: Calculate cost of productions

- Lesson 1 – Compute Cost of Production

After going through this module, you are expected to:

- 4.1 Discuss principles of costing
- 4.2 Compute cost of production properly.



What I Know

Direction: Choose the letter of the best answer. Write the letter of the correct answer in your activity notebook

1. It is classifying, recording, an appropriate allocation of expenditure for the determination of the costs of products or services.
 - A. costing
 - B. buying
 - C. purchasing
 - D. calculating
2. Labor, supplies, wages are examples of?
 - A. indirect cost
 - B. period cost
 - C. imputed cost
 - D. fixed cost
3. What tool of food costing which is based on a standard recipe.
 - A. up-to-date ingredient cost
 - B. recipe cost sheet
 - C. standard recipe
 - D. calculated cost
4. The tool of food costing in which the current price is the basis of costing?
 - A. up-to-date ingredient cost
 - B. recipe cost sheet
 - C. standard recipe
 - D. calculated cost
5. A tool of food costing for recording data and all information about the recipe such as current unit cost, actual ingredient cost and cost per portion.
 - A. up-to-date ingredient cost
 - B. recipe cost sheet
 - C. standard recipe
 - D. calculated cost
6. Which of the following is the third step in calculating recipe cost?
 - A. Divide the total recipe cost by the number of portion to get the cost per portion.
 - B. Compute the actual cost of each ingredient.
 - C. Add actual cost of each ingredient to get the total recipe cost.
 - D. Indicate the latest purchase cost of each ingredient based on a current price list.
7. What is the actual cost of two kilos *malagkit* rice if the purchased cost is P65.00 per kilo?
 - A. 130.00
 - B. 135.00
 - C. 140.00
 - D. 145.55

8. What is the actual cost of 1/4 kilo oil if the purchased cost is P60.00/kilo?
- A. 5.00
 - B. 10.00
 - C. 15.00
 - D. 20.00
9. What is the selling price of each *puto* if the total cost is P100.00 and the total yield is 20 pieces?
- A. 5.00
 - B. 7.50
 - C. 10.00
 - D. 12.50
10. What is the selling price of Biko if the total cost is P160.00 and the total yield is 24 slices?
- A. 10.00
 - B. 20.00
 - C. 30.00
 - D. 40.00
11. What is the percent mark-up of doughnut if the purchased price is 5.00 and the selling price is 7.00?
- A. 20%
 - B. 25%
 - C. 35%
 - D. 45%
12. What is the percent mark-up of suman if the purchased price is 7.00 and the selling price is 10.00?
- A. 43%
 - B. 44%
 - C. 45%
 - D. 46%
13. What is the selling price of carrot cake if the total food cost is 175.00 and the percentage mark up 25%?
- A. 220.75
 - B. 219.75
 - C. 218.75
 - D. 217.75
14. How much is the selling price of *Yema* Cake if the total cost is 385.00 and the percentage mark up 25%?
- A. 509.00
 - B. 510.00
 - C. 511.00
 - D. 512.00
15. How much is the selling price of Chocolate Moist Cake if the total cost is 500.00 and the percentage mark-up is 30%?
- A. 650.00
 - B. 700.00
 - C. 750.00
 - D. 800.00

Lesson**1****Compute the Cost of Production**

In this lesson, you will be able to define costing, know the principles of costing, calculate and compute the expenses to be incurred in cooking either at home or in school.

***What's In***

Can you recall the topic that we had discuss last week? What was it all about? As a sort of review, please answer the activity below.

Activity 1

Directions: Give the substitute of the following common ingredients. Write the answer in your activity notebook.

Common Ingredients	Substitute
1. 1 cup butter	
2. 1 whole egg	
3. 1 tsp. allspice	
4. 1 tsp. juice	
5. 1 small onion	



What is It

How did you calculate the selling price, the total sales, and the net profit of the good that you sell? This time, please read and understand the discussion of the topics below.

Costing is the classifying, recording and appropriate allocation of expenditure for the determination of the costs of products or services, and for presentation of suitably arranged data for the purposes of control, and guidance of management.

Different Ways to Categorize Costs

- Fixed and Variable Costs
- Direct and Indirect Costs
- Product and Period Costs
- Controllable and Uncontrollable Cost
- Out-of-pocket and Sunk Costs
- Incremental and Opportunity Costs
- Imputed Costs

Food costing is important to know as it has a direct effect on the profitability of a restaurant. It is the cost of your ingredients and does not include other costs, such as labor and overheads. Food costing is an essential tool in determining whether food costs targets are being met.

On Basic Recipe Costing

Understanding the basics of recipe costing is important so that you can:

- Know how much food cost is incurred on each recipe. This gives you a clear view of how much you can earn per dish.
- Understand how to properly price your dishes to achieve a target profit.
- Study the way your competitor prices their dishes against an industry benchmark.
- Know when to reduce a recipe cost. If you keep up to date with your costing and see that you are going beyond your target cost percentage, you can easily plan how to reduce the costs.
- Find out each menu item's profit margin and decide which ones to promote through suggestive selling and promotion.

Food Costing Tools

The following tools and calculations are important in deriving your food costs:

- Standard Recipe: Costing based on a standard recipe makes it easy to compute food costs based on the servings that are needed
- Up-to-Date Ingredient Costs: Current prices should be the basis of costing, thus the need to do a price check from time to time
- Recipe Cost Sheet: For recording data and all information about the recipe such as current unit cost, actual ingredient cost and cost per portion

Calculating Recipe Cost

How do we apply numbers and costs to each Standard Recipe?

Step 1. Fill up the Recipe Costing Sheet with information based on the standard recipe to be based on a current price list.

Step 2. Indicate the latest purchase cost of each ingredient based on a current price list.

Step 3. Compute the actual cost of each ingredient

Step 4. Add actual cost of each ingredient to get the total recipe cost

Step 5. Divide the total recipe cost by number of portions to get the cost per portion.

Recipe Cost Sheet

For recording purposes, create a recipe cost sheet for each of your dishes. Here is an example.

Name of Recipe: Biko

Number of Portion: 24

Total Recipe Yield: 24 slices
(weight, volume, & Count)

Recipe Cost: 164.00

Cost/Portion:

Size per Portion: slice

Date Costed: December 24, 2020

Ingredients	Measure (weight/volume/count)	Purchase Cost	Actual Cost of Ingredients
Malagkit rice	1 kilo	60.00/kilo	60.00
Brown sugar	1/2 kilo	50.00/kilo	25.00
Grated coconut	1 kilo	48.00/kilo	48.00
Pineapple crushed	1 can	26.00/can	26.00
margarine	1/4 cup	16.00/cup	4.00
		Total:	P164.00

Using the above calculated expenses in cooking Biko, find the cost of a slice of Biko if you were able to make 24 slices.

Use the formula:

$$\text{Selling Price} = \frac{\text{Total Expenses (TE)} + 1/2 \text{ of TE}}{\text{Number of Yields}}$$

$$\text{SP} = \text{P } 10.25$$

- How much will be the total Sales if all the Biko are sold? 246.00
- If the Total Cost is deducted from total sales, how much will be your net profit? 82.00

Mark Up – is the difference between how much an item cost you and how much you sell that item. It is your profit per item sold.

Percent Mark Up – this is done by dividing the peso mark up by the cost

$$\text{P } 3.00$$

$$\text{P } 7.00 = 0.43 \text{ or } 43\%$$

Example:

Selling Price	-	Cost Price	=	Peso Mark-up	% Mark up
P 10.00	-	P 7.00	=	P 3.00	43%

Selling Price

Once you have your food costs, you can figure out the selling price of your dishes.

The basic formula is:

$$\text{Selling Price} = (\text{Food Cost} + \text{Labor Cost} + \text{Overhead Cost}) + \text{Profit}$$

Your selling price should include all costs plus the profit you would like to earn.

What Should the Food Cost Percentage of Your Selling Price Be?

To compute the selling price, we need the food cost to only be a certain percentage of the selling price.

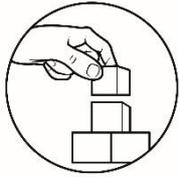
The amount varies from one restaurant section to another, and is influenced by other costs, such as labor, overhead, and target profit. It generally falls within the profit of 30 to 45%.

Food Costing in Practice

Here is an example to show how to find the selling price of a dish:

- A restaurant has a target food cost percentage of 33%.
- Their newest recipe was calculated to have a food cost of 25.00 per portion.
- Applying the 33% rule, the target selling price = 25.00 divided by 0.33 = 75.75

Given this number, the restaurant can decide on the final selling price considering other factors such as competition, volume and labor costs.



What's More

To enrich your understanding of what you have read, please answer the activities. If there are things not clear to you, you can ask your elder siblings or parents for assistance.

Activity 1

Directions: Complete the following table by computing the Peso Mark-up and the Percent Mark-up.

Items	Buying Price	Selling Price	Peso Mark-Up	% Mark-Up
Banana Cake	175.00	350.00		
Carrot Cake	185.00	375.00		
Chocolate Cake	395.00	650.00		
Yema Cake	385.00	650.00		
Red Velvet Cake	450.00	550.00		

Activity 2

Directions: Compute the Selling Price of the following food items using the 43% mark up. Write your answer in the activity notebook.

Food Item	Unit Cost per Piece	Selling Price per Piece
Maja Blance	5.00	
Palitaw	6.00	
Bitsobitso	4.00	
Suman	7.50	
Biko	8.00	



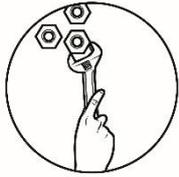
What I Have Learned

After the learners go through the lesson, the learners are asked to write about what they have learned for the week.

Activity

Directions: Copy the table and answer the questions in your activity notebook.

Questions	Answers
1. What is costing and mark up?	
2. What are the different ways to categorize mark up?	
3. What are food costing tools?	
4. What are steps in calculating recipe cost?	
5. How do you compute the selling price?	



What I Can Do

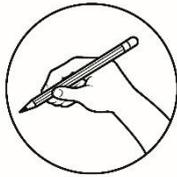
Activity

Directions: In cooking Palitaw the following are the basic ingredients. Calculate the expenses to be incurred using the four basic operations, addition, subtraction, multiplication and division.

- 2 cups ground Malagkit
- 1/4 cup sesame seeds
- 1 cup water
- 1 cup sugar
- 1 cup grated coconut

Complete the table below with the above data. Make your own estimated unit price of the above items as being observed by you in the market.

Ingredients	Measure (weight/volume/count)	Purchase Cost	Actual Cost of Ingredients



Assessment

Direction: Choose the letter of the best answer. Write the letter of the correct answer in your activity notebook.

- Which of the following is the third step in calculating recipe cost?
 - Divide the total recipe cost by the number of portions to get the cost per portion.
 - Compute the actual cost of each ingredient.
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For inquiries or feedback, please write or call:

Department of Education
Bureau of Learning Resources (DepEd-BLR)

Ground Floor, Bonifacio Bldg., DepEd Complex
Meralco Avenue, Pasig City, Philippines 1600

Telefax: (632) 634-1054; 634-1072; 631-4985

Email Address: blr.lrqad@deped.gov.ph *blr.lrpd@deped.gov.ph