

Intro to Food Costing

Why is it important and how do you do it?

Food Costing

- Food is a business, if you want to maximize your profits you need to know what you are spending
- If you don't know what you are spending you can't know what to charge
- We will learn several formulas, but fear not, while food costing can be tedious and math is not everyone's forte, there are Excel templates available and a lot of online help – you don't have to reinvent the wheel, you just need to understand how a wheel works

Learning Objectives

- To identify and explain key concepts in food costing & cost control
- To perform and explain how to perform basic food costing calculations, finding usable yield percentage, and differentiating as-purchased and edible portions
- To estimate selling price based on basic food costing calculations

Why is Food Costing Important?

- A critical part of a chef's job is to manage kitchen expenditures.
- Food costing impacts the financial health of a food business.
 - It affects purchasing decisions and relationships with vendors.
 - It affects menu pricing.

Keys to Managing Food Costs

- **Recipe standardization**
 - Consistent product
 - Ensures all cooks can produce the same dish in the same manner
- **Tracking costs of product**
 - Costs of purchases
 - After-fabrication costs
- **Determining appropriate menu prices**



Standardized Recipes

What is a standardized recipe?

- A recipe that has been **developed, tested, and proven to:**
 - Produce a consistent product using the same ingredients
 - Yield a given amount or number of portions from a single preparation

Key Features of Standardized Recipes

- Key Features of Standardized Recipes
 - ✓ **Standard Units of Measure**
 - ✓ **Ingredients** are listed in the order they are used
 - ✓ **Recipe Procedures** is thorough and clearly stated
 - ✓ Recipe includes **portion size** and/or **total recipe yield**

Why is Avocado Toast so Expensive, even at \$10

- Food Cost - \$3.50 (based on a \$2.75 avocado, and .75 for 2 slices of organic bread, and that is assuming avocados haven't been hit by inflation or supply issues)
- Labor Cost - \$3.00 (based on a labor cost estimate of 30% of your income)
- Rent - \$1.20 (based on 9% rent, plus 3% for gas/lights/water/wifi/trash/compost)
- Other costs – \$1.50 (15 % operating costs of printing services, advertising, insurance, workers comp, office equipment, repairs and maintenance, janitors, HR, and the other things needed to run a restaurant)
- Total - \$9.20
- Profit per sale– 80 CENTS (and this doesn't even include tax)

Analyzing Food Cost



Terms to Know

As Purchased (AP): The state of the product when it is delivered; before fabrication.

Fabrication: the process of taking a product from the “as purchased” state to its usable state (ex. Butchering). A **fabricated** product is one that has been “broken down” for use in a recipe.

*Note: **scrap & trimmings** are a natural result of the fabrication process.*

Yield Test

A **Yield Test** is performed during the fabrication process to discover *how much of purchased product can actually be served to guests*.

Critical factors in determining a product's yield:

1. The amount received → **AP weight**
2. The fabricated amount → **EP weight**

Usable Yield Percentage

Usable Yield Percentage is the result of the yield test expressed as a percentage:

$$\text{Usable Yield \%} = \left(\frac{\text{Edible Portion Weight}}{\text{As Purchased Weight}} \right) \times 100$$

Calculating Usable Yield Percentage

Delivery weight of oranges: 2 Kg
 Price: \$1.80/kg
 After fabrication: 1000 g of scrap
 200 g of trimmings
 800 g of segments for service

What is the usable yield % for the oranges?

$$\frac{\text{Edible Portion Weight}}{\text{As Purchased Weight}} \times 100 =$$

$$\left(\frac{0.8 \text{ kg}}{2 \text{ kg}} = 0.4 \right) \times 100 = 40\%$$

As Purchased (AP) Cost per Unit

Example: The chef purchased a total of 2 kg. of oranges for a total of \$3.60.

What is the AP cost per unit of measure?

$$\text{AP cost per unit} = \frac{\text{Total AP Cost}}{\text{Total Quantity Purchased}}$$

$$\frac{\text{Total Purchase: } \$3.60}{\text{Total Quantity: } 2 \text{ kg}} = \$1.80 \text{ per kg}$$

Edible Portion (EP) Cost

Edible Portion Cost (EP Cost): real cost of portion served to guest – this amount reflects value lost to scrap and trimmings

$$\text{Edible Portion Cost} = \frac{\text{AP Cost}}{\text{Usable Yield \%}}$$

Note: failure to reflect proper usable yield amounts in costing will have a direct impact on the bottom line!

Calculating EP cost

One way of calculating edible portion cost is to calculate it for the TOTAL PURCHASE, as in this example from our orange purchase...

$$\begin{array}{l} \text{AP Cost:} \\ \text{Usable Yield:} \end{array} \quad \frac{\$3.60}{40\%} = \$9.00$$

Conclusion: Although the chef only paid \$3.60, after product loss is factored in, the actual IMPACT to the restaurant is \$9.00.

The financial health of the business depends on recognizing this difference in the pricing structure.

EP Cost per unit

When costing a specific recipe, the **EP Cost** must be expressed as a per unit figure.

The **Edible Portion Cost Per Unit** must reflect a unit of measure common to the amount in the recipe.

$$\text{EP Cost per unit} = \frac{\text{EP Cost for Total Purchase}}{\text{Total Quantity Purchased}}$$

Following our previous example,

$$\begin{array}{l} \text{EP Cost (total purchase):} \\ \text{Total Quantity Purchased:} \end{array} \quad \frac{\$9.00}{2 \text{ kg}} = \$4.50/\text{kg}$$

EP Cost per unit

Conclusion:

Knowing the EP cost is **\$4.50 per kg** allows the chef to calculate that a **50 g. (0.05 kg)** serving of orange segments, will **IMPACT** the restaurant **\$0.23 per serving**.

$$\$4.50 \times 0.05 \text{ kg} = \$0.23/\text{ serving}$$

Q Factor

Q-Factor: A markup added to the cost of a recipe. It should reflect the cost of seasonings and other small-percentage cost items.

Examples: Salt, pepper, & seasonings
 Dry herbs & spices
 Oil for sautéing
 Minimal ingredients (with a low AP)
 To-go containers & small service items

Note: This can be expressed as a dollar amount or a percentage markup in the price of each dish on menu

Q factor continued (don't worry about this, but it needs to be mentioned)

Calculating an actual **Q-factor** requires specific financial data from the businesses monthly or quarterly records.

$$\text{Q factor} = \frac{\text{Total Cost of Q Items During a Period of Time}}{\text{Gross Food Sales During a Period of Time}}$$

Note: In many circumstances these figures are obtained from the business managers, not the kitchen records.

Determining Total Recipe Cost

1. Ensure the recipe is written in **common units of measure**.
2. Determine **AP cost per unit** for each ingredient.
3. Determine **Usable Yield %** for all ingredients.
4. Calculate **EP cost per unit** for each ingredient.
5. Multiply EP cost per unit by the recipe amount to determine **total cost for each ingredient**.
6. Add all ingredient EP costs to determine **subtotal** for the recipe.
7. Determine Q-factor percentage then add to the subtotal to find the **Total Recipe Cost**.

For Example Recipe for Orange Panna Cotta

• Heavy Cream	\$1.71
• Vanilla Paste	\$3.64
• Sugar	\$0.20
• Gelatin	\$0.45
• Buttermilk	\$1.66
• Orange Segments	\$3.60 (from our example above)
• TOTAL	\$11.26

Q factor

- If we are assuming the Q factor we use at our restaurant is 5%,

$$\$11.26 \times 5\% = \$ 0.56$$

Thus the total Recipe Cost is \$11.82

We have determined that the recipe makes 16 servings

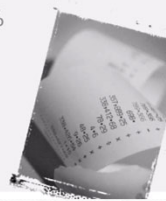
So the Per Portion Cost is \$0.74. ($11.82/16$)

Food Cost Percentage

WHAT: A figure which is usually determined by management during budget periods (quarterly or annually)

WHY: It provides a guideline for making purchasing decisions and setting menu prices

Typically, **food cost** can range from 25% to 35% (depending on the type of business, dish, etc.)



Determining the Base Selling Price of a Dish

$$\text{Estimated Selling Price} = \frac{\text{Total Recipe Cost per Portion}}{\text{Target Food Cost}}$$

This price is used as the minimum base selling price. Actual selling price is based on other considerations such as...

- Product mix of menu (variety of other dishes)
- Restaurant overhead
- Market tolerance (what diners will pay for a meal of similar quality)

Example

The total recipe cost per portion of our Orange Panna Cotta is \$.74

If our target food cost is 25% :

$\$.74 / .25 = \2.96 This is the MINIMUM menu price of the dish

Food Costs

In actuality, some foods will have higher food costs than others, while some will be almost pure profit.

For instance, coffee, soda (particularly fountain soda), soups, and ALCOHOL will all have very low food costs and a much higher PROFIT MARGIN

Other foods – usually the big ticket items such as rack of lamb, lobster, scallops – will have much higher food costs and a much lower profit margin

The “art” of food costing is figuring out a comprehensive and complete menu that makes sense internally and in the market you are trying to fit into – as compared to other food outlets in your area which are vying for the same clientele