



Culinary Institute of America

TECHNIQUE OF THE QUARTER: “KITCHEN CALCULATIONS”

Menus used in the dining room give both the waitstaff and guests important information about what your establishment offers, and your recipes give detailed instructions to aid kitchen staff in producing those menu items. More importantly, carefully designed menu and comprehensive recipes can assist the professional chef in streamlining kitchen operations and controlling costs.

The concepts explored in **“Kitchen Calculations”** are powerful tools that will improve efficiency and organization. We have designed each segment of the **“Kitchen Calculations”** toolkit to help you and your staff overcome some of the more common kitchen math challenges that directly affect your bottom-line.

Yield Percentage

Explore the various components of a yield test and learn how to identify the factors that might affect yield percentage.

Cost Calculations

Discover one of the most important elements in budgeting and predicting your finances.

Edible Portion Cost

Learn how cost affects purchasing and your recipe.

Recipe Costing

Uncover the importance of costing skills that will lead to greater profit in your operation.

YIELD PERCENTAGE

Yield Percent is a vital tool for determining how much of a product to purchase or used in a recipe. Calculating yield percentage is critical to placing an accurate food order. Improperly calculating your food order can result in having too much or too little of a given ingredient. Too much of an ingredient will put you in the situation of scrambling to create a new dish to entice your customers and use your excess product. On the flip-side, running short of an item or ingredient can only lead to disappointment for customers longing for your new "signature dish."

Determining the Yield Percentage of your recipes in advance will lead to greater efficiencies and a more productive operation. By utilizing the following formulas and tips, you and your staff will lower your food costs and create a healthier bottom-line.

AS-PURCHASED QUANTITY (APQ)

The weight, volume, or count of the product as it is received from the vendor. The cost of 50# bag of potatoes, before fabrication, is the as-purchased quantity or APQ.

EDIBLE PORTION QUANTITY (EPQ)

The weight, volume, or count of the product after it has been cleaned, peeled, or prepared (fabricated) and is ready for use. The word edible signifies the condition of the product as ready for use in the dish you are going to prepare within your operation.

Trim

The weight or volume of the waste. This factor can be determined mathematically as the difference between APQ and EPQ.

$$APQ - EPQ = \text{Trim}$$

Example: The edible portion of a cleaned bag of 50# of potatoes would be the EPQ and would weigh in at approximately 42.5 pounds.

$$50 \text{ lbs} - 42.5 \text{ lbs} = 7.5 \text{ lbs (trim)}$$

Tip: Not all trim is loss; if the trim is usable, then it is not loss. For example, if the potato peels can be used in a vegetable stock for soup, they would not be considered trim.

Utilizing the trim will make a kitchen run more cost-effectively; however, the value of the skins may be so small that it might not be worth allocating this cost to the ultimate recipe.

YIELD PERCENTAGE

The percentage of the as-purchased quantity that is edible. There are three major applications for yield percentage.

1. Computing the minimum amount to order

2. Recipe costing

3. Determining the maximum number of servings that a purchased amount will yield

$$\text{Yield Percentage Formula} = \text{Edible Portion Quantity} / \text{As-Purchased Quantity} \times 100$$

Example: Your operation has purchased 50 pounds of potatoes. Upon cleaning and peeling, there are 42.5 pounds remaining and 7.5 pounds of trim. We will use the **3-Step Process to Calculate Yield Percentage**.

1. Identify the EPQ and APQ

- APQ = 50 pounds (whole potatoes)
- EPQ = 42.5 pounds (cleaned and peeled potatoes)

2. Determine if the units are the same before calculating the yield percentage

- Both the APQ and EPQ are in pounds - if not, use the Bridge Method to calculate the units uniformly.

For example:

Converting teaspoons to tablespoons:

$$12 \text{ tsp} / 1 \times 1 \text{ tbsp} / 3 \text{ tsp} = 12/3 \text{ or } 4 \text{ tablespoons}$$

Converting tablespoons to cups:

$$12 \text{ tsp} / 1 \times 1 \text{ tbsp} / 3 \text{ tsp} = 12/3 \text{ or } 4 \text{ tablespoons}$$

$$4 \text{ tbsp} / 1 \times 1 \text{ cup} / 16 \text{ tbsp} = 4/16 = .25 \text{ cups or } \frac{1}{4} \text{ cup}$$

The Bridge Method results in 12 teaspoons or $\frac{1}{4}$ cup

3. Substitute the weights of the EPQ and APQ into the following formula

• **Yield Percentage** = EPQ/APQ or 42.5 pounds/50 pounds = **.85*100 = 85%**

Tip - Certain conditions may affect your yield percentage

- An employee's skill in cleaning the product will have an enormous effect on the yield percentage – skilled employees will not create as much waste
- The size of the product also has an effect on the yield percentage – cleaning smaller carrots will create more waste and a lower yield percentage
- The condition of the product has an effect on the yield – if your operation is not using the freshest products available, the yield percentage will be lower

Example - Steps for an Actual Yield Percentage: Carrots are used in the following example, but the same procedure holds true for all fruits and vegetables.

1. Purchase carrots

2. Weigh the carrots (APQ)

3. Clean the carrots (peel & trim ends)

4. Weigh the clean carrots (EPQ)

5. Using the APQ & EPQ weights, calculate the yield percentage using the Yield Percentage formula:

Yield Percentage = EPQ/APQ

Yield percentage is an extremely useful tool. However, in reality, there may not always be sufficient time to do an actual yield test. On the next page you will find a chart of **Approximate Yields of Fruits and Vegetables**. The chart provides a yield percentage of a sampling of items and information regarding as-purchased weight of certain fruits and vegetables.

Tip: The butcher's yield test is very similar to the yield test for fruits and vegetables. The main difference is that the trim created during the fabrication of meat and poultry has value, whereas in most cases, the trim created when you fabricate fruits and vegetables does not.

In order to prevent customers from feeling that they are somehow being cheated, there are a number of strategies you can employ. Offering two versions of the same dish, with different-sized portions (at different price points), is one method of determining interest. You're allowing customers to vote, in effect, on which portion size they prefer. After a few months, you can drop the less popular version from your menu.

Another important strategy in preserving value perception is artful presentation. Stuffing a meat, fish, or poultry item with vegetables or grains (or both) adds bulk, improves visual appeal, and increases the apparent portion size. Special knife cuts can be used to give the illusion that less is more. Cutting a salmon fillet on the bias before cooking, for instance,

APPROXIMATE YIELDS OF FRUITS & VEGETABLES

| APPROX. WGT/EA | ITEM | YEILD % | | APPROX. WGT/EA | ITEM | YEILD % |
|----------------|----------------------------|---------|--|----------------|---------------------------|---------|
| #2 each | Anise | 75 | | #2 each | Melons: | |
| | Apples | 76 | | | Cantaloupe | 50 |
| | Apricots | 94 | | | Casaba | 50 |
| | Artichokes | 48 | | | Cranshaw | 50 |
| | Asparagus | 56 | | | Honeydew, no rind | 60 |
| | Avocado | 75 | | | Watermelon, flesh | 46 |
| .44# each | Bananas | 68 | | | Mushrooms | 97 |
| | Beans, green/wax | 88 | | | Mustard Greens | 68 |
| | Beans, lima, in shell | 40 | | | Nectarines | 86 |
| | Beets, no tops | 76 | | | Okra | 78 |
| | Beets, with tops | 49 | | .33# bu | Onions, green (10-12) | 60 |
| | Beet greens | 56 | | | Onions, large | 89 |
| | Blackberries | 92 | | | Orange sections | 70 |
| | Blueberries | 92 | | .33# bu | Parsley | 76 |
| 1.5# bu | Broccoli | 61 | | | Parsnips | 85 |
| | Brussels sprouts | 74 | | | Peaches | 76 |
| 2.5# ea | Cabbage, green | 79 | | | Pears | 78 |
| | Cantaloupe, no rind | 50 | | | Peas, green, in the shell | 38 |
| | Carrots, no tops | 82 | | .33# ea | Peppers, green | 82 |
| | Carrots, with tops | 60 | | .19# ea | Peppers, fryers | 85 |
| 2# head | Cauliflower | 45 | | | Persimmons | 82 |
| 2# bu | Celery | 75 | | 4# ea | Pineapple | 52 |
| | Celery root (celeriac) | 75 | | | Plums, pitted | 85 |
| | Chard | 77 | | | Pomegranates | 54 |
| 26 oz ea | Coconut | 53 | | | Potatoes, red | 81 |
| | Collards | | | | Potatoes, chef | 85 |
| .58# ea | Cucumbers | 95 | | | Potatoes, sweet | 80 |
| 1.25# ea | Eggplant | 81 | | | Radishes, with tops | 63 |
| | Endive, chicory, escarole | 74 | | | Radishes, no tops | 85 |
| | Figs | 82 | | | Raspberries | 97 |
| | Fruit for juice* | | | | Rhubarb, no leaves | 86 |
| 16 oz | Grapefruit | 45* | | 3# ea | Rutabagas | 85 |
| 3.5 oz | Lemon | 45* | | | Salsify | 64 |
| 2.2 oz | Lime | 35* | | .03# ea | Shallots | 89 |
| 6.6 oz | Oranges, Fla. | 50* | | | Spinach | 74 |
| .125# ea | Garlic bulb (10-12 cloves) | 87 | | | Squash: | |
| | Grapefruit sections | 47 | | .#83 ea | Acorn | 78 |
| | Grapes, seedless | 94 | | 1.8# ea | Butternut | 52 |
| | Kale | 74 | | | Hubbard | 66 |
| | Kohlrabi | 55 | | .36# ea | Yellow | 95 |
| .75# bu | Leeks | 52 | | .58# ea | Zucchini | 95 |
| 2.25# head | Lettuce, iceberg | 74 | | | Strawberries | 87 |
| | Lettuce, leaf | 67 | | | | |

* the yield percentages of producing

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COST CALCULATIONS

Determining cost is one of the most important parts in budgeting and predicting. Most of the food items you receive from your suppliers are packed and priced using wholesale bulk sizes – crates, cases, bags, or cartons. However, in kitchen production, the quantity in the package may be used for several different menu items.

In order to allocate the proper prices to the recipes you are preparing, it is necessary to convert the price of the purchase package into unit prices – price per pound, each, dozen, quart, etc.

Applying the cost-per-unit formula is integral to a successful operation. If you do not calculate these formulas, you will not be able to properly estimate the cost of menu items in your kitchen. And ultimately, you will not be able to arrive at a selling price that will offer you a reasonable profit.

The following formulas and tips will assist you and your staff to determine the total costs of the dishes you are serving.

DETERMINING FOOD COST CONTROL

The price paid for goods is the as-purchased cost. Products, however, are purchased in many units. Therefore, it is necessary to determine the cost per unit (per smaller unit contained in the larger unit) to achieve the cost on an ingredient in a particular recipe.

Cost Per Unit: As-Purchased cost/Number of units

Example: The cost of a case of canned Italian plum tomatoes is \$18.78 and there are 6 cans in the case. The price per can is as follows:

$$\text{Cost Per Portion/Selling Price: } \$18.78/6 = \$3.13$$

From this information, you can calculate the price per can (per item). And, with the two values, price per can and the amount needed for the recipe can be calculated.

Tip: The cost per unit is essential when comparing pricing on different brands, or pricing from various suppliers, to determine the ultimate cost.

Example: Cost Per Unit

Supplier 1: Cost on a case of canned Chic Peas is \$9.29 and there are 16 (16 ounce) cans in the case. The price per can is as follows:

$$\text{Cost Per Portion/Selling Price: } \$9.29/16 = \$0.58$$

Supplier 2: Cost on a case of canned Chic Peas is \$12.29 and there are 24 (16 ounce) cans in the case. The price per can is as follows:

$$\text{Cost Per Portion/Selling Price: } \$12.29/24 = \$0.51$$

It may not have been apparent at first, but as you can see, quality being equal, there is a cost savings when dealing with supplier #2 on your Chic Pea orders. Depending upon your usage of this item, this could translate into a significant savings over the course of one-year.

Total Cost: Total cost in the foodservice industry is based on how much of a product is used for a particular recipe, not on what is purchased.

Calculating As-Purchased Cost: After the cost per unit has been calculated, the total cost formula needs to be applied to determine how much an ingredient in a particular recipe is costing your operation.

As-Purchased Cost = Number of Units x Cost per Unit

Example: Your operation's Chicken Tarragon recipe calls for 1-½ teaspoons of dried tarragon leaves. One tablespoon of tarragon weighs .08 ounces. Your operation purchases tarragon in 4-ounce jars for \$5.77 per jar. How much will the tarragon cost for this particular recipe?

To determine the cost of the tarragon, we will use the 7-Steps of Calculating As-Purchased Cost.

1. Determine the quantity you are costing

We need to determine the cost of 1 ½ teaspoons of tarragon

2. Identify the given as-purchased cost information

The purchase price of a jar of tarragon is \$5.77

3. Select the unit to be used for the as-purchased cost and the quantity (must be the same incremental unit)

Both the conversion and the cost are in ounces; ounces will be used to determine the cost

4. Perform the calculations necessary to convert the as-purchased cost and/or quantity to the unit chosen in step 3

Use the following formulas to determine the Quantity and As- Purchased Cost

Quantity:

$1.5 \text{ teaspoons} / 1 \times 1 \text{ tablespoons} / 3 \text{ teaspoons} = 1.5 / 3 \text{ or } .5 \text{ tablespoons}$

$5 \text{ tablespoons} / 1 \times .08 \text{ ounces} / 1 \text{ tablespoon} = .04 \text{ ounces}$

As-Purchased Cost: As-Purchased cost/Number of units

$\$5.77 / 4 \text{ ounces} = \1.4425 per ounce

5. Substitute these numbers into the as-purchased cost formula and multiply to find the As-Purchased cost

Use the following formula to find the Total Cost

Total Cost: Number of units/Cost per unit

$.04 \text{ ounces} \times \$1.4425 \text{ per ounce} = \$.0577$

6. Round to the next higher increment

\$.0577 rounds up to \$.06

7. Check your work to insure that your answer is reasonable

Tip: When solving for total cost, any related unit may be selected to solve for the equation. In the example above, teaspoons, tablespoons, ounces or pounds could have been chosen. It usually requires fewer calculations to convert to a weight value (ounces or pounds), and knowing the cost per ounce or per pound of a given ingredient is usually more useful due to the number of applications.

EDIBLE PORTION COSTS

There is a substantial amount of math involved in calculating the cost of ingredients you will be using in your kitchen. It is imperative that you and your employees master this skill so that you can correctly determine the costs of your menu items and ultimately their selling prices.

As we have learned, the cost of the fruits or vegetables you are using in the recipes you prepare in your operation must include the cost of the trim, or else you will underestimate the expenses.

The following are some basic formulas and tips to calculating edible portion costs, so your business can capitalize their kitchen costs.

AS-PURCHASED COST (APC)

The cost paid to your supplier for the non-fabricated (uncleaned) fruits or vegetables you purchase.

EDIBLE PORTION COST (EPC)

The cost per unit of the fabricated (cleaned) fruit or vegetable. The EPC accounts not only for the cost of the fabricated product but also for the cost of the trim.

Edible Portion Cost: As-Purchased Cost (APC)/Yield Percentage (in decimal form)

CALCULATING EDIBLE PORTION COST FOR INGREDIENTS WITH LESS THAN 100% YIELD

The following steps will allow you to calculate the edible portion cost for any ingredient that must be trimmed.

1. Replace the number of units with the **Edible Portion Quantity**
2. Replace the **Cost Per Unit** with the **Edible Portion Cost Per Unit**
3. Solve for the Total Cost

Total Cost Formula: $\text{Total Cost} = \text{EPQ} \times \text{EPC per unit}$

STEPS FOR CALCULATING THE TOTAL COST USING THE EDIBLE PORTION COST

The following steps will help you calculate total cost.

1. Calculate Edible Portion cost
2. Decide the unit to use and perform the calculations to convert the As-Purchased Cost (APC) to the unit
3. Find the Yield Percentage (Yield Percentage Formula = $\text{Edible Portion Quantity} / \text{As-Purchased Quantity} \times 100$)

Example: You are purchasing broccoli for a private party. In order to calculate the cost of the broccoli that will be served, the cost per pound must be determined. The broccoli was purchased by the bunch for \$1.08. Broccoli has a 61% yield and each bunch weighs 1.5 pounds. We will use the 5-Step Process to Calculate Edible Portion Cost.

1. Identify the given As-Purchased Cost (APC) information

The As-Purchased Cost is \$1.08 per bunch

2. Decide which unit of measure to use and perform the calculations necessary to convert the As-Purchased cost (APC) to this unit

The example is asking for the cost of broccoli per pound, therefore, we will use the cost-per-unit formula to calculate the cost per pound for broccoli

Cost Per Unit: As-Purchased Cost/Number of Units

$\$1.08/1.5 \text{ pounds} = \$.72 \text{ per pound}$

3. Find the Yield Percentage

The Yield Percentage for broccoli is given at 61%

4. Substitute the As-Purchased Cost and the Yield percentage into the Edible Portion Cost formula and calculate

The Yield Percentage for broccoli is given at 61%

Edible Portion Cost: As-Purchased Cost/Yield % (in decimal form)

$.72 \text{ per pound}/.61 = \$1.181 \text{ per pound, or } \1.19

5. Check your work to insure that your answer is reasonable

Tip: When a fruit or vegetable is bought already cleaned, the price will include the trim loss, extra packaging, and labor, among other costs. This makes the cost of a cleaned product greater than the cost of an uncleaned product, even though there are costs attached to fabricating the fruit or vegetable in-house.

Example: You are making pesto sauce for a chicken dish on your menu. You purchase basil in bunches. Each bunch weighs 2 ½ ounces and costs \$.79 per bunch. One tablespoon of basil weighs .09 ounces, and basil has a 56% yield. How much will 1 cup of cleaned, chopped basil cost for this recipe?

We will first calculate to determine the **Edible Portion Cost** and will then calculate to find the **Total Cost**.

1. Identify the given As-Purchased Cost (APC) information

The As-Purchased Cost is \$.79 per bunch

2. Decide which unit of measure to use and perform the calculations necessary to convert the As-Purchased cost (APC) to this unit

The example is asking for the cost of basil per ounce; therefore, we will use the cost-per-unit formula to calculate the cost per ounce of basil

Cost Per Unit: As-Purchased Cost/Number of Units

$\$.79/2.5 \text{ ounces} = \$.316 \text{ per pound}$

3. Find the Yield Percentage

The Yield Percentage for pesto is given at 56%

3. Find the Yield Percentage

The Yield Percentage for pesto is given at 56%

4. Substitute the As-Purchased Cost and the Yield percentage into the Edible Portion Cost formula and calculate

The Yield Percentage for pesto is given at 56%

Edible Portion Cost: As-Purchased Cost/Yield % (in decimal form)

$.316 \text{ per pound}/.56 = \$.5642 \text{ per ounce}$

5. Check your work to insure that your answer is reasonable

Since we have determined the Edible Portion Cost, we can now calculate for total cost and determine how much the cup of chopped basil will cost.

1. Calculate the Edible Portion Cost (EPC)

The EPC has been determined to be \$.5642 per ounce

2. Perform the calculations needed so that the EPQ and EPC are the same unit

The cost is in ounces, so using the Bridge Method, we will convert the cup of basil to ounces

$1 \text{ cup} / 1 \times 16 \text{ tablespoons} / 1 \text{ cup} = 16 \text{ tablespoons} / 1 \times .09 \text{ ounces} / .56 =$

1.44 ounces

3. Substitute the numbers in the Total Cost Formula

Total Cost: Edible Portion Quantity x Edible Portion Cost per Unit

$.144 \text{ ounces} \times \$.5642 \text{ per ounce} = \$.812$

4. Round any partial pennies up to the next higher cent

The cost of a cup of chopped fresh basil is \$.8124 or \$.82

5. Check your work to insure that your answer is reasonable

Tip: Many products have a 100% yield, such as flour, sugar, dried spices, wines, spirits, syrups, and processed foods. The **Edible Portion Cost** may still be computed for these products, but you would divide by 1 (the decimal form of 100%). And as a result, the **Edible Portion Cost** and the **As-Purchased Costs** are the same.

FINDING THE COST OF MEAT AND POULTRY

When determining the cost of the meat or poultry that you fabricate, the terminology changes. For meat and poultry, the terms **New Fabricated Cost** and **New Fabricated Price per Pound** are used instead of **Edible Portion Cost**.

The **New Fabricated Price Per Pound** recognizes the value of the trim that results from the fabrication process. Unlike fruits and vegetables, the trim for meat and poultry has a greater value, which needs to be accounted for when calculating the **New Fabricated Price Per Pound**.

New Fabricated Price per Pound = New Fabricated Cost/New Fabricated Weight

Example: You operation has purchased a rib that weighs 36.9 pounds. The fat weighed 8 pounds, the bones weighed 7.3 pounds, and the usable trim weighed 8.7 pounds. The entire rib was originally purchased for \$2.03 per pound, resulting in a **New Fabricated Weight** of \$2.03 per pound. **The As-Purchased Cost** was calculated by multiplying the **As-Purchased Weight** by the **As-Purchased** price per pound ($36.9 \times \$2.03 = \74.91).

We will use the following 4-Step Process to determine the **New Fabricated Price per Pound**.

1. To determine the value of the trim, check the current market prices with your purveyor

This example is based on the following prices:

- ✓ Fat = \$0.02 per pound
- ✓ Bones = \$0.46 per pound
- ✓ Usable Trim = \$2.45 per pound

2. The total trim value is calculated by multiplying the number of pounds by the number of pounds of each type of trim

| | | |
|--------------------------|---------------------------------|----------------|
| Fat: | \$0.02 per pound x 8 pounds = | \$.016 |
| Bones: | \$0.46 per pound x 7.3 pounds = | \$ 3.36 |
| Usable Trim: | \$2.45 per pound x 8.7 pounds = | \$21.32 |
| Total Trim Value: | | \$24.84 |

3. Determine the New Fabricated Cost

$$\text{Total Trim Value} - \text{As-Purchased Cost} = \$74.91 - \$24.84 = \$50.07$$

3. Determine the New Fabricated Price per Pound, but substituting the New Fabricated Cost and the New Fabricated Weight into the formula

New Fabricated Price per Pound:

New Fabricated Cost/New Fabricated Weight

$$\$50.07/12.9 = \$3.89 \text{ per pound}$$

This is the price you would use if you were costing a recipe with this particular fabricated meat as an ingredient.

RECIPE COSTING

Controlling food costs is imperative in the restaurant business. If costs are not controlled successfully, no matter how good your food may be or how many loyal customers you have, your business cannot survive.

Excellence in the culinary arts is just one of the many skills needed to be successful in the foodservice industry. The importance of recipe costing cannot be overlooked.

Recipe costing is the basis of good food cost control. The following are some basic formulas and tips to achieving a profitable bottom-line.

FOOD COST PERCENTAGE (FC%)

The percentage of the selling prices that pays for the ingredients. The formulas for the food cost percentage are:

Food Cost/Food Sales

or

Cost Per Portion/Selling Price

Example: The cost per portion of an appetizer is \$1.55, and you are charging \$6.95 per serving. The food cost percentage calculation is as follows:

Cost Per Portion/Selling Price: $\$1.55/\$6.95 = .22$ or **22%**

This indicates that 22% of the sales of your appetizer pay for ingredients used to make the dish. The other 78% accounts for the other expenses the operation incurs in making the appetizer – labor, utilities, rent, etc. – the remaining sales after expenses becomes your profit. You can also look at food cost as it relates to a dollar. If a recipe has a 40% food cost, then the food cost is \$0.40 for each \$1.00 of sales.

Tip: The food cost percentage for an operation is extremely important. It is one of the tools used by successful managers to evaluate profitability and menu items. Food cost for individual recipes:

- Determines the selling price
- Forms the basis for a strong cost control program

DETERMINING THE SELLING PRICE

Once you have calculated the recipe cost, the cost per portion can be calculated using the following formula:

Cost Per Portion: Total Recipe Cost/Number of Portions

Example: The total cost of a given entrée on your menu is \$28.56 and you are yielding 8 portions per recipe. The cost per portion calculation is as follows:

Cost Per Portion: $\$28.56/8 = \3.57

The cost per portion is then used to calculate the selling prices based on a desired food cost percentage:

Selling Price: Cost Per Portion/Food Cost Percentage (in decimal form)

Example: We have determined that the cost per portion is \$3.57 and the food cost percentage is 25% for your operations; the selling price would then be:

Cost Per Portion: $\$3.57 / .25 = \14.28

Tip: Determining food cost through the use of food cost forms and comparing it to the actual food cost, based on inventory, is a good method of making sure that your operation is running efficiently.

On the next two pages you will find a food cost form that you can incorporate into your operation along with a "cheat sheet" of formulas and other pertinent information you can share with your staff when calculating your menu items.

FOOD COST FORM

Menu Item _____ Date _____

Number of Portions _____ Size _____

Cost per Portion _____ Selling Price _____ Food Cost % _____

| Ingredients | Recipe Quantity (EP) | | | Cost | | | Total |
|-------------|----------------------|--------|-------|----------|---------|----------|-------|
| | Weight | Volume | Count | APC/Unit | Yield % | EPC/Unit | Cost |
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|---------------------------|---|
| MENU ITEM | The name of the recipe identified as accurately as possible, using a menu number if necessary. |
| DATE | The day, month, and year the cost was calculated. This can be important for later analysis. |
| NUMBER OF PORTIONS | The number of portions the recipe makes or yields. |
| SIZE | The portion size normally served. This applies to menu items and is generally given in the recipe; it is not calculated. |
| COST PER PORTION | The cost of each serving. It is the total recipe cost divided by the number of portions. |
| SELLING PRICE | Based on the food cost percentage allowed by the budget. It is the cost per portion divided by the food cost percentage (in decimal form). |
| FOOD COST % | An expression of food cost in relation to the selling price. It is the cost per portion divided by the selling price. |
| INGREDIENTS | All the food items that make up the recipe, including specific sizes or ID numbers. |
| RECIPE QUANTITY | This will be listed by weight, volume, or count depending on the recipe. The recipe quantity is usually the edible portion quantity with some exceptions. Recipe quantity is recorded in one of three ways: <ul style="list-style-type: none"> • Weight (pounds, ounces, grams, etc.) • Volume (cups, pints, tablespoons etc.) • Count (each, bunch, case, etc.) |
| APC/Unit | The as-purchased cost per unit is the current market price or the as-purchased price, and the unit upon which price is based. |
| YIELD % | Many foods are not purchased already cleaned, and with these, some waste (trim) is expected. The yield percentage is used to adjust the as-purchased cost to compensate for trim loss. |
| EPC/Unit | Edible portion cost per unit is the cost per unit of the fabricated fruit or vegetable. This cost accounts not only for the cost of the fabricated product but also for the trim loss. This is calculated by dividing the APC by the yield percentage. If there is no waste or trim, the yield percent column may be left blank. |
| TOTAL COST | The total cost of each ingredient used. |
| TOTAL RECIPE COST | The sum of all items in the total cost column. This represents the total estimated cost of the recipe. |