

Cost Recipes

Costing your recipe is one of the most important steps in the preparation process. Without knowing how much a product will cost you to make, there is no way to plan your pricing or predict revenues.

Menu Costing

The importance of this topic should not be underestimated. It is essential to be aware of your food costs to plan for the financial future of your business and set prices for your menu.

The [Costing Spreadsheet](#) used in this example was provided by Diana Cortes, the owner of Dou Bakehouse in Lakeland, FL. Open and download the file to edit it. We will run through a detailed example of costing a chocolate chip cookie recipe from inventory list to final item cost.

Inventory List

To begin this process, open a spreadsheet and list all ingredients, including minor ingredients like salt, pepper, and spices, needed for a recipe. It is important to ensure that every component is considered. Over time, these minute expenses can add up.

Sourcing Products

Armed with your ingredient list, the next step is determining where you will purchase these items. Over the course of your business, your food cost will change. As you are starting out, you may not have access to large scale distributors that would lower food cost.

For Catapult Members: We have developed a list of local suppliers used by the businesses in our space. Reach out to the kitchen manager for this list.

Calculating Ingredient Yields

It is important to determine each product's yield. For example, if you are buying a stalk of celery, the entire product is not usable, as you will most likely not use the celery leaves or base of the celery in the recipe. That is also applied to meat products. If you receive a whole beef tenderloin from a supplier, what percentage of that product will end up on a plate, after trimming and portioning the tenderloin?

To find common ingredient yields, use tools like this reference sheet from U.S. Foods, linked [here](#), or base yield off your product experience. Yields are essential for accurate costing and purchasing. Developing a formula for these amounts is key.

Ingredient Prices

As you assemble the first iteration of your food costing, begin with the prices based on where you will source at the beginning of your business. Though these prices are not representative of what you hope to pay in the long term, it is important to understand what these costs are now. In the spreadsheet provided, they can be edited easily in the future.

Ingredient Master List

Now, begin adding your ingredients to the master list in the spreadsheet. This list will include all ingredients used in all recipes, not just one recipe.

Note: In this excel sheet, all white cells must be filled in by hand. Pink cells are auto generated formulas.

INGREDIENT MASTERLIST								
Code	Ingredient	Brand	Price per case	Units per case	Purveyor	grs/units	Cost per Gr	Last Updated
ch	Chocolate Chips	Barry Callebaut	\$75.75	25 lbs	Chefs Warehouse	11340	\$0.0067	08/25
but	Butter	Plugra	\$3.83	1 lb	Chefs Warehouse	454	\$0.0084	08/25
eg	Eggs	Eggland's Best	\$4.70	18 eggs	Sam's Club	18	\$0.2611	08/25
ve	Vanilla Extract	Leilsen-Massey	\$35.50	4 oz	Restaurant Depot	120	\$0.2958	08/25
fl	Flour	King Arthur	\$26.00	50 lbs	Chefs Warehouse	22680	\$0.0011	08/25
wwf	Whole Wheat Flour	King Arthur	\$21.50	25 lbs	Chefs Warehouse	11340	\$0.0019	08/25
bs	Baking Soda	Argo	\$7.85	10 lbs	Chefs Warehouse	4536	\$0.0017	08/25
bp	Baking Powder	Argo	\$8.32	10 lbs	Chefs Warehouse	4536	\$0.0018	08/25
ws	White Sugar	Domino	\$18.63	25 lbs	Sysco	11340	\$0.0016	08/25
dfs	Dark Brown Sugar	Domino	\$11.37	10 lbs	Sysco	4536	\$0.0025	08/25
ks	Kosher Salt	Diamond	\$27.32	25 lbs	Chefs Warehouse	11340	\$0.0024	08/25
cb	Cookie Boxes	All Paper USA	\$13.80	100 boxes	Amazon	100	\$0.1380	08/25
ls	Label Stickers	MOO	\$35.73	500 stickers	MOO	500	\$0.0715	08/25
rib	White & Red Ribbon	Generic	\$15.95	100 yards	Hobby Lobby	100	\$0.1595	08/25

- **Code:** Create a short, unique code for each ingredient. This code will be used to reference the ingredient easily on the recipe sheet.
- **Ingredient:** List the ingredient with any specific details needed.
- **Brand:** Track the brand of the ingredient to keep costs consistent.
- **Price per Case:** This is the amount you paid for the entire case of product.
- **Units per Case:** Record the size of the product in a standard unit of measure such as pounds or ounces. Some products will need to be recorded as each unit, such as eggs or boxes in this example.

- **Purveyor:** It is important to know where the product was purchased because different purveyors may have different prices.
- **Grams per Units:** Calculate the number of grams in the entire package. For easy conversions, use this [Google converter](#).
- **Cost Per Gram:** This is an autogenerated cell in the sheet. It will tell you how much each gram of product costs. This is the amount that will be used in the recipe sheet to calculate total product costs.
- **Last Updated:** Food prices change regularly. Keep costing accurate by updating prices as they change.

Standardizing Recipes

If you do not have a recipe written for a product, it is important to take the time at this stage in the process to formalize exactly what is needed for each recipe. Creating a standardized recipe can help deliver a consistent customer experience for your guests.

We find that weight measurement is the most effective tool for accurate food costing. To find common conversions from cups to grams, use tools like [convert-to.com](#) or [aqua-calc.com](#). Using weight measurement ensures that the recipe is easily repeatable, and it is also easy to manipulate the yield result to produce an exact quantity of a recipe.

Once that list of ingredients by weight is completed, then list out the yield of the stated recipe (i.e., 24 cookies, 7 sandwiches, etc.). If this yield is inconsistent, there is an opportunity to create a standard with portioning tools such as a scoop or weight measurement. Standardizing the inputs and yields for recipes will pave the way for consistency in food cost and consistency in customer experience.

Recipe Example Sheet

Now you are ready to cost your recipe. Start by entering your company name and the recipe name at the top of the page.

Below the recipe name, you will enter your recipe's yield. Starting in the yellow cell, enter the number of units this recipe will make. Under "Unit of Measurement" in the green cell, enter the unit of the recipe. This can be plates, sandwiches, cups of soup, etc.

COMPANY NAME				
Recipe Name			Unit of Measurement	
	Yield			
Code	Qty	Ingredient	Price per Gram	Total
end		0	\$0.0000	\$0.0000
end		0	\$0.0000	\$0.0000
end		0	\$0.0000	\$0.0000
end		0	\$0.0000	\$0.0000
end		0	\$0.0000	\$0.0000
end		0	\$0.0000	\$0.0000
end		0	\$0.0000	\$0.0000
end		0	\$0.0000	\$0.0000
end		0	\$0.0000	\$0.0000
end		0	\$0.0000	\$0.0000
Subtotal				\$0.0000
Error Margin			5%	\$0.0000
Total Ingredient Cost				\$0.0000
			Cost per Each	\$0.0000
			Sell Price	
			%	#DIV/0!
			Last Revision:	ADD DATE

In the code column, enter the code from the ingredient master list for each ingredient in the recipe. This will pull the information entered in the master list. Next, enter the quantity needed for this recipe using the unit of measure from the master list page. Add more ingredient rows as needed, making sure to copy the formulas down to the new rows. Fill in the code "end" to the last row to signal to the sheet that you are done entering ingredients. Now that both the code and quantity columns are filled in, the sheet will auto populate the ingredient name, price per gram, and total columns. Next, decide on a margin of error. This is the amount that may be left behind when scraping bowls, tasting for seasoning, etc. Generally, this is between 2% and 5%. Now the sheet has populated the total ingredient cost with your chosen error margin.

The "cost per each" cell will divide the total ingredient cost by the yield of the recipe that was entered in the yellow cell. Enter the amount you sell each unit for in the sell price row. Now the sheet will auto calculate your food cost percentage.

Food Cost Percentage

A food cost percentage is the ratio between the amount of money spent on the inputs (ingredients, packaging, time, etc.) to the revenue those inputs generate when sold.

A common practice in the food service industry is to have the upper limit of a food cost set at **30% of an item's sale price**. In this sheet, you can adjust the sale price until you reach a food cost percentage of at or below 30%. Food cost percentage is a helpful tool when controlling costs and setting prices.

Example Recipe

In the example to the right, this chocolate chip cookie recipe makes 75 cookies, and each cookie is packaged individually in a box with a sticker and a ribbon. It costs the bakery \$1.21 to make each cookie and they sell them for \$4.50 each. This gives them a 27% food cost to leave room for their kitchen rent, labor, and overhead expenses.

Bakery				
Chocolate Chip Cookies				
				Unit of Measurement
Yield		75 Cookies		
Code	Qty	Ingredient	Price per Gram	Total
ch	2250	Chocolate Chips	\$0.0067	\$15.03
bs	50	Baking Soda	\$0.0017	\$0.09
ks	30	Kosher Salt	\$0.0024	\$0.07
ws	1000	White Sugar	\$0.0016	\$1.64
dbs	1500	Dark Brown Sugar	\$0.0025	\$3.76
eg	20	Eggs	\$0.2611	\$5.22
ve	80	Vanilla Extract	\$0.2958	\$23.67
fl	2800	Flour	\$0.0011	\$3.21
but	1700	Butter	\$0.0084	\$14.34
cb	75	Cookie Boxes	\$0.1380	\$10.35
ls	75	Label Stickers	\$0.0715	\$5.36
rib	22.5	White & Red Ribbon	\$0.1595	\$3.59
end		0	\$0.0000	\$0.00
Subtotal				\$86.33
Error Margin				5% \$4.32
Total Ingredient Cost				\$90.65
Cost per Each				\$1.2086
Sell Price				\$4.50
%				26.86%

Sub Recipes

When you create each element of a final product from scratch, it will be helpful to use sub recipes. These are simply recipes within recipes. For example, a salad recipe may have a scratch-made dressing. In this case, instead of listing every dressing ingredient in the salad recipe, you can cost the dressing separately and add that final cost to the ingredient master list. Now, when you use that dressing in a different salad, you can pull the cost directly from the ingredient master list instead of entering each ingredient again.

Common Pitfalls to Avoid When Costing

In the process of costing, beware of common pitfalls to avoid:

- Pricing using sales prices or special/one-time deals
- Leaving out product components
 - Packaging: to-go bags, stickers, etc.
 - Sub-ingredients: sauces, condiments, etc.
- Not accurately calculating yields
- Not adhering to consistent portion sizes
- Not including labor costs in cost of production

Further Reading

Food costing is a topic that is essential for operational success in the food industry. For further reading, look at the resources below:

- [Basic Kitchen and Food Service Management](#) by the B.C. Open Textbook Project, a free learning resource, covers trade math, inventory control, food costing, labor costing, and budget and business planning. Specifically, in the realm of food costing, this resource takes a deeper dive into the topic to provide a more robust overview.
- [Airtable](#) offers a free [Food Costing Calculator](#) using their software, which is a cloud-based spreadsheet-database hybrid. In this tool, Airtable provides space for tracking vendor information, ingredient database, and costed recipes.
- [Recipe Cost Calculator](#) offers recipe costing, pricing tools, inventory tracking, and nutrition labels for a monthly fee. Use their free version for the first 5 recipes and then pay between \$12.50 and \$30.00 per month for added features.
- This [How to Calculate Food Cost](#) guide walks through examples of food costing situations.
- Toast's [How to Calculate Food Cost Percentage Guide](#) includes a free download of their Restaurant Cost Control Guide.