

Parity Assessment Methodology

The frozen food category is a multi-billion-dollar section of the grocery store, offering consumers myriad options for many foods, including entrees and side dishes. But how do these compare to homemade options in terms of nutrition, preparation and cook time and cost? An analysis comparing frozen foods to homemade options was designed to answer these questions. This compared popular entrees and side dishes on measures related to nutrient contributions to the percent daily value, total preparation and cook time and cost. Following is the methodology that was used for the analysis.



Recipe and Product Selection

Consumer purchase data was used to define the most popular frozen entrées and side dish categories. These were defined as meat lasagna, pepperoni pizza, cheese pizza, macaroni and cheese, and broccoli with cheese sauce. Consumer purchase data was again used to identify the top three selling brands for each category.

Comparable recipes were sourced via Allrecipes.com, an online recipe hub estimated to reach 50 million users monthly. Three top-rated (four stars or more) comparable recipes in each category were identified. When possible, [AllRecipes.com-tested recipes](#) were used. Some categories did not offer officially tested options. In these cases, recipes that are highly rated (4 stars or higher) but not officially tested by AllRecipes.com were used.

These included:

- [Cheese Sauce for Broccoli and Cauliflower](#)
- [Million Dollar Mac and Cheese](#)
- [Homemade Pepperoni Pizza](#). (This Recipe was used for both cheese and pepperoni pizzas—the pepperoni was removed for analysis as cheese pizza)

Specific measurements for seasonings were included in all the homemade recipes except for the recipe named *Homemade Mac & Cheese*. For this recipe 1/4 tsp salt, 1/4 tsp pepper and 1/4 tsp paprika, usual and customary portions, were added.

In select cases, as noted below, ingredients were adjusted to increase the comparability between the homemade versions and the frozen options:

- For each broccoli and cheese analysis, 6 cups of broccoli were added to each homemade cheese sauce recipe.
- For each homemade broccoli and cheese recipe, the analysis was conducted using 75 g broccoli and 25 g sauce.
- In the recipe named [Cheese Sauce for Broccoli and Cauliflower](#), ¼ cup of Italian Breadcrumbs was added since one of the three top sellers of frozen options includes breadcrumbs. For this recipe, the analysis was conducted using 75 g broccoli, 23 g sauce and 2 g breadcrumbs, amounts comparable to the frozen varieties.
- Pepperoni was added to the homemade [Brick Oven Pizza](#) and [Mikes Homemade Pizza](#) since the original recipes were for cheese pizza with no pepperoni. The amount of pepperoni added was comparable in weight to the average amount of pepperoni on the frozen pizzas.

Part I: Nutritional Assessment Overview

The nutrient information found on the nutrition facts panels for the three top-selling brands was used to calculate the nutrient averages for each category. Specifically, averages for the following were calculated: Calories, total fat, saturated fat, cholesterol, sodium, total carbohydrates, dietary fiber, total sugars, protein, Calcium, Iron, and Potassium.

All homemade recipes were analyzed using the online nutrition analysis program, [HappyForks](#), which uses data from [USDA's FoodData Central](#) to assess each recipe's total weight and determine the nutrition data for 100g. This made it possible to compare the homemade recipes with the nutrition data (based on 100g) for their frozen counterparts. A side-by-side comparison for each nutrient based on 100g servings was conducted. In order to adequately compare specific nutrient values, the percentage change in Daily Value (DV) was evaluated for each nutrient.

Comparability was defined as being within 5% DV of the nutrient. Because total sugars do not have a DV, the analysis was not included. All other mandatory labeled nutrients were included except vitamins C and D due to lack of data. In general, saturated fat and sodium tended to be lower in frozen foods, and protein and calcium tended to be higher in the homemade recipes. Calories, for which there is no DV, were lower for frozen foods when compared to homemade foods for all categories that were evaluated.

All recipes and frozen product nutritional information is valid as of September 27, 2024, but may be subject the change.

Part II: Meal Preparation Time Overview

An analysis of the homemade recipes and frozen alternatives quantified the differences in meal preparation times and cooking times. For the homemade options, meal preparation times and cooking times were recorded as published on AllRecipes.com. All homemade meals required

oven or stovetop cooking; none of them included microwave options. Many of the frozen options included both microwave and oven cooking times. These values were factored into the total cooking times used for comparison.

Part III: Cost Overview

The per-serving costs for the homemade entrees were identified by calculating the total cost for all ingredients according to the online shopping option on AllRecipes.com and dividing the total cost by the number of servings as defined on AllRecipes.com. Staple ingredients (defined by AllRecipes.com) were removed from the list in order to calculate the cost for the amount used in each recipe. Staple ingredients were identified as milk, eggs, butter, white all-purpose flour, white sugar, olive oil, salt, pepper and dried spices. Average costs (September 2024) for these ingredients were determined using data from the U.S. Bureau of Labor Statistics via FRED®.

The exception to this is the cheese sauce recipes for the homemade broccoli and cheese dishes. The yield for all three cheese sauces was the same, and broccoli was added to complete the dish. For this reason, the number of servings per broccoli and cheese sauce recipe was set to 1/3 cup sauce, 1 cup of broccoli.

The cost of the frozen entrée at the same retailer as featured for the select recipe was divided by the number of servings as defined on the package, and recorded for comparison.

All recipe ingredients and frozen product cost information is valid as of September 27, 2024, but may be subject the change.

