

## Competence Area 2: Foodservice

### Calculating Food Costs

Updated: November 2023

Overview: The Certified Dietary Manager, Certified Food Protection Professional (CDM®, CFPP®) is the financial and budgeting expert in the foodservice department to help their facility's bottom line. After labor costs, food cost will use up much of the budget. Fitting food costs into your budget is a vital skill for the CDM, CFPP.

#### Standard 1

The CDM, CFPP calculates food costs in order to make decisions and meet budgeting goals.

CRITERIA	IMPLEMENT & EVALUATE								
<p><b>1.1</b> The CDM, CFPP calculates their department's Monthly Food Cost.</p>	<p>Example:</p> <table style="width: 100%; border-collapse: collapse;"> <tr> <td style="width: 70%;">Beginning Inventory</td> <td style="text-align: right;">\$21,745.00</td> </tr> <tr> <td>PLUS Purchases</td> <td style="text-align: right;">+ \$7,976.00</td> </tr> <tr> <td>MINUS Ending Inventory</td> <td style="text-align: right;">- \$17,365.00</td> </tr> <tr> <td></td> <td style="text-align: right; border-top: 1px solid black;">\$12,356.00</td> </tr> </table>	Beginning Inventory	\$21,745.00	PLUS Purchases	+ \$7,976.00	MINUS Ending Inventory	- \$17,365.00		\$12,356.00
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<p><b>1.2</b> The CDM, CFPP calculates their department's Food Cost as a Percentage of Sales.</p>	<p>Food Cost as a Percentage of Sales Monthly Food Cost DIVIDED by Sales</p> <p>Example</p> <table style="width: 100%; border-collapse: collapse;"> <tr> <td style="width: 70%;">Monthly Food Cost</td> <td style="text-align: right;">\$12,356.00</td> </tr> <tr> <td>DIVIDED by Sales</td> <td style="text-align: right;">÷ \$36,421.00</td> </tr> <tr> <td></td> <td style="text-align: right; border-top: 1px solid black;">33.9% (.339)</td> </tr> </table>	Monthly Food Cost	\$12,356.00	DIVIDED by Sales	÷ \$36,421.00		33.9% (.339)		
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<p><b>1.3</b> The CDM, CFPP in Healthcare calculates their Raw Food Cost Per Patient Day (PPD).</p>	<p><b>Per Patient Day (PPD)</b> Monthly Food Cost DIVIDED by Total Patient Days (Total Patient Days = the number of patients MULTIPLIED by # of days in the month)</p> <p>Example</p> <table style="width: 100%; border-collapse: collapse;"> <tr> <td style="width: 70%;">Monthly Food Cost</td> <td style="text-align: right;">\$12,356.00</td> </tr> <tr> <td>DIVIDED by Total Patient Days*</td> <td style="text-align: right;">÷ 2,850</td> </tr> <tr> <td></td> <td style="text-align: right; border-top: 1px solid black;">\$4.33 PPD</td> </tr> </table> <p><i>ANFP Benchmarking 2016 Data shows \$5.35-\$7.41 Food Cost Per Patient Day for Skilled Nursing Facilities</i></p> <p><i>*Total Patient Days = 95 patients x 30 days</i></p>	Monthly Food Cost	\$12,356.00	DIVIDED by Total Patient Days*	÷ 2,850		\$4.33 PPD		
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<p><b>1.4</b> The CDM, CFPP in Healthcare calculates their Total Cost Per Patient Day.</p>	<p>Total Cost Per Patient Day (including labor)</p> <ol style="list-style-type: none"> <li>1. Monthly Food Cost</li> <li>2. PLUS Labor Costs*</li> <li>3. DIVIDED by Total Patient Days</li> </ol> <table style="width: 100%; border-collapse: collapse;"> <tr> <td style="width: 70%;">Monthly Food Cost</td> <td style="width: 30%;"></td> </tr> <tr> <td>PLUS Labor Costs*</td> <td style="text-align: right;">\$12,356.00</td> </tr> <tr> <td>DIVIDED by Total Patient Days</td> <td style="text-align: right;">+ \$15,600.00</td> </tr> <tr> <td>= TOTAL COST Per Patient Day</td> <td style="text-align: right;">\$27,956.00</td> </tr> <tr> <td></td> <td style="text-align: right;">÷ 2,850</td> </tr> <tr> <td></td> <td style="text-align: right; border-top: 1px solid black;">\$9.81</td> </tr> </table> <p>*In this example, Labor Costs include: Wages:</p> <table style="width: 100%; border-collapse: collapse;"> <tr> <td style="width: 70%;">5 cooks x 40 hours/wk @ \$15.00/ hour</td> <td style="width: 30%;">= \$3,000/week = \$12,000/month</td> </tr> <tr> <td>Benefits: \$12,000 x 30%</td> <td style="text-align: right;">\$3,600/month</td> </tr> <tr> <td></td> <td style="text-align: right;">TOTAL LABOR COSTS = \$15,600.00</td> </tr> </table> <p>As a CDM, CFPP, you will estimate personnel/labor costs (use HR as needed). Factors to consider:</p> <ul style="list-style-type: none"> <li>• Should you calculate in benefits?</li> <li>• Should you calculate in all employees such as waitstaff, sanitation, etc.?</li> <li>• Should you just calculate those preparing the meals?</li> <li>• You may also want to consider utilities or other costs that are worked into your department's costs or budget.</li> <li>• The key is to choose a method to count Labor Costs and be consistent with it to compare from month to month.</li> </ul>	Monthly Food Cost		PLUS Labor Costs*	\$12,356.00	DIVIDED by Total Patient Days	+ \$15,600.00	= TOTAL COST Per Patient Day	\$27,956.00		÷ 2,850		\$9.81	5 cooks x 40 hours/wk @ \$15.00/ hour	= \$3,000/week = \$12,000/month	Benefits: \$12,000 x 30%	\$3,600/month		TOTAL LABOR COSTS = \$15,600.00
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<p><b>1.5</b> The CDM, CFPP calculates their Raw Food Cost per Meal.</p>	<p><b>Raw Food Cost per Meal</b></p> <p>Monthly Food Cost DIVIDED by Total Meals Served (using whatever you define as a meal served)</p> <p>Example</p> <table style="width: 100%; border-collapse: collapse;"> <tr> <td style="width: 70%;">Monthly Food Cost</td> <td style="width: 30%;"></td> </tr> <tr> <td>DIVIDED by Total Meals Served*</td> <td style="text-align: right;">\$12,356.00</td> </tr> <tr> <td></td> <td style="text-align: right;">÷ 8,550</td> </tr> <tr> <td></td> <td style="text-align: right; border-top: 1px solid black;">\$1.45</td> </tr> </table>	Monthly Food Cost		DIVIDED by Total Meals Served*	\$12,356.00		÷ 8,550		\$1.45										
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## References

Zikmund, Julie. *Nutrition Fundamentals and Medical Nutrition Therapy*. St. Charles, IL: Association of Nutrition & Foodservice Professionals, 2018.

Kristin Klinefelter, MS, RDN, LD has been in the dietetics field for 20 years, working in a variety of consulting and education capacities. She has been working with the University of North Dakota's Nutrition and Foodservice Training Program for ten years and served on the Certifying Board for Dietary Managers (CBDM) for six years.