

Module 3: The Cost of Food

Learning objective

Practice in controlling costs of CACFP meals.

Resources

1. Local food price lists, newspaper advertisements, flyers, vendor information, garden shares, etc.
2. The Food Buying Guide for Child Nutrition Programs, USDA Food and Nutrition Service
<http://www.fns.usda.gov/tn/Resources/foodbuyingguide.html>
3. Culinary Calculations, Simplified Math for Culinary Professionals, Terri Jones, 2nd Ed., 2008.
4. Food Service Management, Principles and Practices, J.Payne-Palacio and M. Theis, 12th Ed., 2012.
5. Economic Research Service, USDA
<http://ers.usda.gov/amber-waves>

Introduction

Food is a major cost in child care operations. Controlling food costs requires planning, calculating and making decisions at each step of the way. Each center develops their own menus, recipes, food purchases, food production materials, labor, equipment, storage and management system for producing meals. The meals served must meet the component requirements, taste and appetite.

Education and Experience

Education and experience in food service helps to manage food purchases and control the costs of meals. The more knowledge, skills and abilities a person has in this work, the wider the range of delicious and nutritious foods that can be served for a given cost.

Tracking the Cost of Food

There are many ways to track the cost of food. Centers must create a system that works for them. Simple lists or spreadsheets can be useful tracking tools. For example, for each food used, include the name of the food, percent yield (usable as food consumed), price, and the source. Calculations of the cost of food or the cost per serving need be made only once unless and until the price changes.

The Cost of Milk

Milk purchases are also very important for CACFP operations. In the CACFP, fluid milk is a food group containing one item. This requires one calculation, sometimes called “the milk calculation.” Once the calculation is made and determined sufficient, and if the number of meals served per day stays the same, then the purchase of milk can continue without repeating the calculation. However, it is

recommended to do the milk calculation at least once per month to verify that the milk purchased was sufficient for the CACFP meals claimed.

Milk is perishable and so it must be purchased frequently and regularly. Milk purchase receipts are required documentation of sufficient milk purchased for meals claimed. Milk purchase receipts must be marked or recorded separately and reviewed monthly by the center to be sure the purchased amount meets the minimum milk meal component requirement. The most frequent disallowance of meals in the CACFP Program is for insufficient milk purchased for meals claimed. Insufficient milk affects all meals that did not contain at least the minimum amount of milk required.

Cost per Serving (Example: oranges)

A center wants to serve either oranges or orange juice for a breakfast meal for 3-5 year old children. The CACFP breakfast meal requirement for fruit/vegetable is $\frac{1}{2}$ cup fruit or 4 fl. oz. juice. What is the cost per serving of these each of these types—whole oranges, frozen orange juice concentrate, or ready-to-drink full strength orange juice?

Medium fresh whole oranges cost \$1.49 per pound. There are 3 oranges per pound. One-half orange provides $\frac{1}{2}$ cup of fruit.

Calculation:

\$1.49 divided by 6 = .248 rounded to .25.

One-half orange = 1 serving.

1 serving costs 25 cents.

Frozen orange juice concentrate costs \$1.50 for a 16-fl.oz. can. It requires 3 equal parts water added to make full strength juice.

Calculation:

16 fl.oz. + (3 x 16 fl. oz.) = 64 fl. oz. full strength juice. .

\$1.50 divided by 64 = 2.34 cents per fl. oz.

4 fl. oz. = $\frac{1}{2}$ cup = 1 serving.

2.34 cents x 4 = 9.36 cents rounded to 10 cents.

1 serving costs 10 cents.

Ready-to-drink full strength juice costs \$4.99 for 64 fl. oz.

Calculation:

\$4.99 divided by 64 = .077 cents rounded to 8 cents per fl. oz.

4-fl. oz. = $\frac{1}{2}$ cup = 1 serving.

1 serving costs 32 cents.

In this example, orange juice made from concentrate costs the least and ready-to-drink juice costs the most. However, cost might not be the only factor in the decision of which type to choose. Fresh oranges are the natural form of the food. They require no refrigeration but must be washed and they are usually cut before serving. Orange juice concentrate requires freezer storage and the addition of water before serving. Ready-to-drink orange juice requires refrigeration and is otherwise ready to serve. In a meal as served, fresh oranges and orange juice is not the same thing. One is whole fruit and the other is a drink

consumed from a cup. One time a center might choose whole fruit. For a variety of reasons, another time they might choose orange juice.

Food Sources

Access to food sources varies by community. The widest possible list may include grocery stores, markets, food delivery companies, vendors, warehouses, meat markets, dairy delivery, suppliers, farmers, gardens, co-ops, school or college food services, kitchens, cafeterias, food banks, donations, and others. It is important to choose food sources carefully. Evaluating whether these food sources suit the purpose is continuous work.

Gardening

Growing a small amount of one or more vegetable foods in a garden spot can reduce food costs by supplying foods for some meals in spring, summer and fall. One package of seeds provides many plants. For example, green leafy vegetables such as lettuces, spinach, chard, collards and kale are easy to grow. The cost is fairly small, including only a package of seeds, a place to plant, and a person's time and attention to water, weed and pick. Carrots, beets, onions, tomatoes, squash, pumpkins, peas, beans and peppers are also easy to grow if garden space is available. Basil, chives, dill, parsley, sage, rosemary and thyme provide a source of fresh seasoning for foods served. Planting flowers in pots, windowsills, corners, or along steps or walkways or in gardens can provide many weeks of enjoyment.

Food Service Account

All food and meal purchases belong in a food service account within a center's existing business accounting system. This account contains both income and expenditures. This account contains CACFP reimbursements as income and food and milk as expenses. Other expenses may also include food service and administrative labor costs associated with the operation of the CACFP such as a center director's time to approve and submit CACFP claims and take required annual training. This account is the place and the way a center displays the income and expenses of its food service operations. This account is the way a child care business demonstrates that it operates a non-profit food service.

Food Price Outlook

In an article below titled *Food Prices—Taking the Long View* from the USDA Economic Research Service, July 2015, the cost of food over time based on the all-food Consumer Price Index is discussed.
<http://www.ers.usda.gov/amber-waves/2014-april/food-prices%e2%80%94taking-the-long-term-view.aspx#.VZ7VmOntAB8.email>

The article explains that although food prices are increasing, annual food price inflation has gone down. Factors influencing this downward trend include advancements in agricultural productivity and enhancement of global agricultural trade.

Conclusion

Cost is an important factor in food selection. The challenge is to choose food that is healthy as possible with the money that you have.

Module 3 Quiz

Choose the correct answer.

1. Which of these costs the most per pound?
 - a. 1 lb. of carrots @ 79 cents per lb.
 - b. 1 lb. of tomatoes @ 99 cents per lb.
 - c. 1 lb. of spinach @ \$2.99 for 1-1/2 lb. bag
 - d. 1 lb. of potatoes @ \$2.99 per 5 lb. bag

2. Which costs the most?
 - a. 1 large egg @ \$1.89 per dozen
 - b. 2 oz. cottage cheese @ \$2.99 per 24 oz.
 - c. ½ cup canned red kidney beans @ \$1.49 per 13 oz. can
 - d. 6 oz. yogurt, flavored or unflavored @ \$3.99 per 32 oz. container

3. Which of the following is true?
 - a. Fresh raw foods are always the lowest in cost.
 - b. Canned foods are always the lowest in cost.
 - c. Frozen foods are always the lowest in cost.
 - d. The cost of food varies among the types available.

4. Which of the following actions can potentially reduce the overall cost of food?
 - a. Using a cycle menu
 - b. Using standardized recipes
 - c. Tracking the cost of foods commonly used to notice high and low prices.
 - d. All of the above.

5. CACFP reimbursements are considered _____.
 - a. income
 - b. expense
 - c. profit
 - d. loss

6. Food and meal purchase expenses should be recorded in
 - a. a payroll account
 - b. a savings account
 - c. a food service account
 - d. a building and grounds account

7. How will you decide which form of a food to buy?
 - a. Foods in season
 - b. Foods on sale at reduced prices
 - c. Storage is available to hold the food safely
 - d. All of the above considerations are useful in deciding forms of food to buy.

8. According to the article *Food Prices—Taking the Long View*, USDA Economic Research Service in July 2015, average food price inflation is
 - a. increasing
 - b. decreasing
 - c. staying the same
 - d. unknown

9. Which of the following categories of meal service costs are the highest at your center? Mark the answer that is correct for your center.
 - a. Food and milk
 - b. Food service labor (payroll for food service manager, cook, assistant cooks, etc.)
 - c. Vended meals (purchase of meals delivered from a vendor)
 - d. Administrative costs to operate the CACFP

10. Which of the following is required by the CACFP?
 - a. Receipts for foods or vended meals purchased for CACFP meals.
 - b. Food service labor payroll records if CACFP funds are used to pay for them.
 - c. Food service equipment costs if CACFP funds are used to pay for them.
 - d. All of the above.

Module 3 Activity

Activity 1: Food Sources Used

Consider the sources of food used to prepare and serve CACFP meals at your center. List all of them including grocery stores, markets, food delivery companies, vendors, warehouses, meat markets, dairy delivery, suppliers, farmers, gardens, shares, school or college food services, kitchens, cafeterias, food banks, donations, and any other sources. Most centers use several sources. There is no right number of sources. The number of sources will vary by center and by community.

Food sources used by our center:

Activity 2: The cost of food per serving

Provide the cost of one food item commonly used on your menu in each of the food groups:

| | Total Cost | | Unit size | | Name of Food |
|----------------------|-------------------------|-----|----------------------|----|-----------------------------------|
| Meat/Meat Alternate: | \$ <input type="text"/> | per | <input type="text"/> | of | <input type="text"/> |
| Bread/Grain: | \$ <input type="text"/> | per | <input type="text"/> | of | <input type="text"/> |
| Fruit/Vegetable: | \$ <input type="text"/> | per | <input type="text"/> | of | <input type="text"/> |
| Milk: | \$ <input type="text"/> | per | <input type="text"/> | of | <input type="text" value="milk"/> |

Activity 3: Growing food

List three foods or herb plants that you are growing now or that you could grow at your center and use in CACFP meals.

1. _____
2. _____
3. _____