

# CONTROLLING FOOD AND BEVERAGE INVENTORY

*A New Way of Thinking*

*Is proactive control based on usage more effective than reactive control based on cost?*

By Bill Schwartz



The purpose of this article is to take a new look at an old topic. Since the dawn of time, food service operators have focused on Profit and Loss Statements (P&Ls) for controlling food and beverage costs. Food and beverage cost percentages remain the number one tool for inventory control in club and resort environments. Not only are these numbers inaccurate, as will be shown below, but the ideal food or beverage cost numbers against which these values are compared are also inaccurate. The result is a system where two inaccurate and very general numbers are used to help control inventory and maximize profitability. Looking at the issue in a new way, it should be possible to improve the odds for effective inventory control. More importantly, by exposing some of the problems with the current view, the importance and benefits of the new way of thinking will become more obvious.

**2006  
Annual Convention  
Speaker**

*Controlling Food & Beverage  
Inventory in Club and  
Resort Environments*

*Saturday, Oct 21  
11:30 a.m. – 12:45 p.m.*

## Three Common Problems

**Actual Food and Beverage Costs are Always Inaccurate** — Consider how food and beverage costs are calculated. The formula is fairly simple:

$$\text{Beginning inventory} + \text{purchases} - \text{ending inventory} = \text{cost of goods sold}$$

The problem with this calculation is the inventory value. First, inventory counts are not particularly accurate. Items counted by weight are rarely weighed, and some are mislabeled or counted as something else. Partial cases are counted as fractional cases, as opposed to the more accurate piece count. Prepared items are tough to count accurately. Items counted by volume are typically estimated, not poured into measuring containers. Second, the values of some of these items are not accurate. The cost of inventoried batch recipes, or prepared items, are generally not recalculated just prior to counting, even though many of the ingredients have changed costs since the last calculation. Some items change cost each time they are purchased, and the shelves contain more than just the last purchased amounts. Third, the writing on the form is not always legible. And fourth, the people entering the data into the inventory system make errors entering the some of the numbers as they work through the form.

Considering the formula presented earlier, if the inventory value is inaccurate,

and it represents two of the three numbers in the equation (beginning and ending), how could it be possible for the cost of goods to be accurate?

**Ideal Food and Beverage Costs are Always Inaccurate** — Actual food and beverage cost percentages on financial statements are compared against percentages management feels the casino should run. For example, a club determines it should run a 35 percent food cost. Assuming it actually runs a 42 percent food cost, management determines there is a variance of 7 percent and looks for the food and beverage operators to fix this problem. But how is the 35 percent number determined in the first place, and is it accurate? To be accurate, all recipe costs would have to be continually re-calculated as purchase prices change. These costs would need to be applied against sales figures for every recipe sold. A number of other calculations would have to be made to adjust for FIFO (first-in, first-out) valuation, transfers and comps. Without a very sophisticated software package, it is highly unlikely the number is accurate, or perhaps even close to accurate. The result is a somewhat inaccurate actual food cost, being compared against a significantly inaccurate ideal cost, to arrive at a variance that can never be correct. Unfortunately, many decisions are made based on this perceived variance, and people's livelihoods are affected by it.

**For the Most Part, Food and Beverage Costs Are Not Controllable** — Stated simply, no food service operation can corner the market on individual food or beverage items. Distributors do not allow their customers to set the price they will pay. While it is true that larger customers get better pricing than smaller ones, and that volume purchases can lower the price of some items, the customer cannot control the price of food and beverage they buy to any large extent. Certainly the food and beverage director cannot be held responsible for the cost of the food and beverage purchased. Hence the statement that food and beverage costs are not controllable.

On the other hand, food and beverage usage is controllable. The food and beverage director can and should be held accountable for the use of those products. It also stands to reason that if the use of the foods and beverages in the department equals the exact amount required by food and beverage sales as determined by the recipes and yields of the items sold, the food and beverage costs of the operation will be as good as they can be. In other words, if the variance between what was used and what should have been used is zero, the operation runs its best possible food and beverage cost, regardless of exactly what dollar amount or percentage that happens to be. Once again, the focus shifts from cost to usage results in the ability to improve profits.

### Solution — Focus on Food and Beverage Usage to Control Inventory

Given the problems inherent in the management by the percentage approach used by most operators, it seems only prudent to find a better alternative. Shifting the focus away from strictly accounting for the dollars and percentages, and onto accounting for the usage in units of measure is the answer. The best chance at cost control is by reducing overuse.

With accounting information, almost everything is measured in monetary units (ex: dollars). Food cost, inventory value, purchase costs and transfer costs are the numbers required for financial statements. With control information, the concept of cost is irrelevant. Inventory is purchased and used in non-monetary units such as pounds, cases, sleeves, gallons, fluid ounces and other similar descriptive units.

For simplicity, refer to these units as usage units, describing the unit of measure in which they are counted or used, as opposed to monetary units, describing the way they are valued.

The objective is to determine the usage variance. This variance is calculated by subtracting the ideal usage in units for a particular item, from the actual usage in units for the same item. A positive variance indicates overuse, and a strategy is then developed to eliminate the overuse. For best results, do the calculation frequently over short time intervals, such as daily or weekly.

Actual usage is derived by taking the beginning inventory in units, adding the purchases in units and subtracting the ending inventory in units. Ideal usage is calculated by taking the number sold of each product that uses the item in question and multiplying that number by the amount required by the recipe for that product. The number is adjusted for yield and converted to the same unit as that used for the actual usage. In this way, raw actual usage is compared to raw ideal usage. This process is performed for key items only, unless an automated system is in use. It is widely accepted that 20 percent of the items purchased, represent 80 percent of the food cost. Further, approximately 10 percent of those items represent 90 percent of the variance. Therefore, by isolating key items such as meats, seafood and high use items, calculating the variance on those items, and implementing an approach to reduce individual item overuse as it is discovered, food and beverage costs can be dramatically reduced.

Another way to control usage is to isolate as much food into a central storage area as possible. The definition of central storage for control purposes is a place where food or beverage can only enter through purchases or transfers in, and can only leave through transfers out (not sales). This area can be easily controlled with a perpetual inventory approach, eliminating the need to deal with recipes and yields. Quantities on hand are increased/decreased incrementally as they arrive and leave. The end result is the ability to know exactly how much of any given item should be in central storage at any time. Successful operators keep as much food in central storage as possible, leaving as little as possible in the out-

Inventory Control Example: Ground Beef	
Actual Usage	
Beginning Inventory:	200 lbs
Purchase Inventory:	+ 250 lbs
Ending Inventory:	– 150 lbs
Total Actual Usage:	= 300 lbs
Ideal Usage	
Single Burger (4 oz x 750 units sold):	3,000 oz
Double Burger (8 oz x 100 units sold):	+ 800 oz
Total Ideal Usage:	= 4,000 oz
Yield:	
Assuming 90 percent yield: 16 oz per pound x 90 percent = 14.4 oz usable per pound of raw ground beef.	
4,000 oz sold/14.4 oz yield per pound = 277.78 lbs	
Variance:	
Actual Use:	300.00 lbs
Ideal Use:	– 277.78 lbs
Overuse:	= 22.22 lbs

lets. While it may add time required for transfers and requisitions, this approach provides the ability to maintain tight control over a majority of the inventory.

Regardless of method and approach, the concept of proactive control based on usage is far more effective than the concept of reactive control based on cost. Operators are well advised to begin thinking about how food and beverage items are used, and focus less time on chasing down the costs of those items. After all, if only the right amount is used, the operation will be running its best possible food and beverage costs. ■