

How to Start a Weekly Inventory Management System to Cut Food Cost & Reduce Theft

Whether you operate a takeout delicatessen or a full-service restaurant, the amount of money you make depends to a sizable degree on how well you manage your food inventory. Food cost is often a restaurant's largest single expense, and is second only to hourly labor in the overall cost of running a restaurant.

It's easy and, unfortunately, common for restaurants to lose money through poor inventory management. Startup restaurants are particularly vulnerable to this cash drain, since they often do not have their financial control systems nailed down. But even the most well-managed, established restaurants have ongoing challenges in this area.

As a restaurateur, you share the same challenges as any business with a valuable inventory. Inventory is nothing more than a cost until it is sold. The larger your inventory, the less money you have available for marketing, for new equipment, or simply drawing interest in a bank account. Major manufacturers and retailers work very hard to keep inventory levels low and constantly moving.

Now consider the challenges of dealing with food. First, your inventory is not like nuts and bolts at the hardware store. Most of it is highly perishable. Your ingredients have a limited shelf life, much of it less than a week, some as short as just a day or two. Fail to use a product within this short time frame and off to the garbage it goes, along with some of your hard-earned profit. Second, you have a lot of people who handle your food inventory. From the time your products are ordered, received, stored, prepared and ultimately served to your customers, even a small restaurant can have more than 20 employees involved in the food production process.



The more people involved in taking "raw" inventory and converting it to the delivered product, the more difficult it is to control loss, waste and misuse of inventory. Waste and theft become hidden problems, gradually nipping away at your gross margins like termites. And on the subject of theft, even a small eatery has dozens if not hundreds of raw and partially prepared food products in storage. You're stocking lots of desirable products to which many people have access. Depending on your concept and recipes there's a good chance that you'll have between 300 and 800 different raw food products in your storage rooms that are of value to everyone. The more products you have, the more challenging it is to control their use. The more of anything you have, the less likely one or two items will be immediately missed.

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-- Jim Laube

Combine these factors and a dose of human nature and you end up with potential losses manifesting in a variety of forms. Spoilage, theft, overportioning, improper rotation, waste, breakage, kickbacks, cooking errors, short weights, unrecorded sales and employee nibbling are just a few of the ways restaurants can lose money working with food. With food cost being such a large expense, losing or squandering even just a small portion of your total food dollar can represent a lot of money.

With termite infestation and inventory control, ignorance is only bliss until the house starts crumbling. The biggest problem facing many restaurant operators and managers is a lack of know-how regarding sound food cost controls. As a corollary to this problem, managers and staff often aren't aware of the true financial effect of poor food cost control on their overall profitability. If we're successful, this article will at least help you think about these matters. If we're really successful, you might walk away with some ideas to cut food costs immediately. Regardless of the type of restaurant you operate, or whether you're in the startup phase or have been operating for 30 years, adopting the following practices will in all likelihood result in lower food cost and a more profitable restaurant.

A Penny Here, A Penny There

In a prior issue of RS&G, author Banger Smith pointed out that the restaurant business is measured in pennies (See "[Menu Engineering Basics: How to Make Your Menu Your Top Salesperson](#),"). As Banger reminds us, you gain profitability through increased sales and decreased costs. On either side of the equation, a penny, nickel or dime here and there add up to big gains, and conversely big losses, depending on whether they go in your till or down the drain.

There are very few absolutes in the restaurant business, but I will share one with you now. (Forgive me as I climb onto my soapbox.) "Reducing inventory levels means lower food cost." To which you might say, "Sure, if I reduce my inventory to zero, I won't have any food costs, or menu items, customers, or business." That's oversimplifying the issue.

Again, remember that inventory is the food you've purchased and placed in storage. Whether the value of that food in inventory is \$500 or \$50,000, until it is sold to a customer it isn't doing anything for your business, other than taking up space, tying up money, and in some cases, spoiling. In an ideal world, you would maintain an inventory

level only large enough to allow you to serve your customers without running out of an item. In an ideal world, you would run out of an item at the same time as the next delivery of that item pulls up to the back door. In manufacturing parlance, that is called "just in time" inventory management, and not something you should expect to accomplish. But hopefully it will give you an idea of the direction you would like to travel.

Every time I've seen operators reduce their inventory levels, thereby increasing inventory turnover, their food cost goes down. Obviously there's a limit to how far you can reduce food inventory, but just consider for a moment the psychology of purchasing in a typical restaurant. When ordering, most restaurant managers' primary objective is to buy enough food so they don't "run out." I recall my days as a manager. The last thing I wanted to be doing at 6:30 on a busy night, or anytime for that matter, was having to scramble for a key product I didn't have. So when ordering, I'd figure out the quantity of any given product I actually needed and then added a "safety factor" just in case.

At some point those "safety factors" become excessive, and it is very easy to end up with a large amount of excess inventory. Having more food on your shelves than you really need is one of the most expensive things you can do in this business. It's also a very common condition, one with which even sophisticated, systems-driven chain restaurants struggle.

Problems with Carrying Too Much Food

Carrying excess food products ties up your valuable cash and leads to excessive food waste and spoilage. It results in overportioning and misuse of your valuable food products because employees become careless when there's always an overabundant supply of food. Employees don't have to be all that concerned about using products sparingly because there's little risk of "running out" when there's always more in the storage room or walk-in.

If you don't believe this, I'll try to prove it to you. This gets a little personal, but all of us purchase and use toothpaste. Think about what happens when you open up a brand-new tube of toothpaste. How big of a portion do you put on your toothbrush when your tube is full and brand-new? Do you use any more toothpaste than you did a few days ago when the last tube of toothpaste was getting a little low? If you're like most people, you do. This is especially true when the old tube was the only toothpaste left in the house. And we do the same thing with shampoo, shaving cream and about every other product we use.

If you still harbor doubt about the effectiveness of reducing inventory, consider the following. If you've ever served fries, you've probably made the horrifying discovery that there is only one box left in the freezer and four hours left in the shift. So the manager tells everyone to be real careful with fries because there is only a box left, and guess what happens? Fries are immediately perceived as a valuable commodity. Somehow the staff manages to scrape by with the last box. Everyone's handling them with kid gloves because they're scarce. They're valuable. When there are 20 boxes in the walk-in who cares about fries? Nobody. That's when you see them flying around the kitchen and 2 inches deep all over the floor.

Why? It's basically human nature to attach less value to anything of which we have an abundant, seemingly endless supply.

That same psychology enters the kitchen with your employees who prep and handle your food. They are often the lowest-paid people in the restaurant, and they don't pay for any of

those products they use. So if the storage rooms are always jam-packed with food, and those employees never have to be concerned with running low on anything, do you think they will tend to use more food? Do you think they'll be less careful with how they handle those products? You know the answers.

Also, when products are always in abundant supply, theft tends to be more of a problem. Imagine an employee in your walk-in looking down at 15 boxes of pork tenderloin, knowing that there's enough pork tenderloin sitting there for the next two weeks. Do you think it might make any difference, in the employee's decision to steal or not to steal, if there were only, say, three boxes, just enough to make it until the next delivery? Fewer products on the shelf mean a greater chance that they'll be missed.

Determine Your Inventory Level in Two Steps

An easy way to get an instant gauge on whether you're carrying an appropriate amount of inventory is to calculate your "number of days of inventory on hand." It tells you how many days your existing inventory will last (assuming you're carrying the right mix of products) based on how much food you're using in an average day, which translates to your average daily food cost. Calculating your "number of days of inventory" on hand is a two-step process:

STEP 1:

Calculate Average Daily Food Cost:

Average Daily Food Cost = Food Cost / Number of Days in Period

STEP 2:

Calculate Days Sales In Inventory:

Days Sales in Inventory = Ending Food Inventory / Average Daily Food Cost

Here's an example: You need the following information to calculate the number of Days Sales in Inventory. You should be able to get these numbers right off your financial statements:

Number of days in the period = 30

Food cost for the period (from the profit and loss statement) = \$30,000

Ending food inventory (on the balance sheet) = \$10,000

STEP 1:

Calculate Average Daily Food Cost:

$\$30,000 / 30 \text{ days} = \$1,000$

STEP 2:

Calculate Days Sales In Inventory:

$\$10,000 / \$1,000 = 10 \text{ days' worth of food on hand}$

This tells you that at the end of last month there was about 10 days' worth of food on hand. For most restaurants that's too much excess inventory. In full-menu restaurants, most operators optimize food inventory at about six to seven days of food on hand. Ideally, they have less than a week of produce and fresh products and more than a week in the freezer and dry storage areas; however, on the average of all products it's six to seven days. This means the entire inventory turns over every week or so. There may be extenuating factors that might drive inventory requirements higher such as infrequent deliveries, a high number of raw ingredients (making everything from scratch) or having to stockpile one or more products because of availability concerns. But generally six to seven days is a pretty good rule of thumb. For operators in limited-menu, quick-service restaurants, three to five days of food on hand is usually considered adequate but not excessive.

In the above example, having 10 days' worth of inventory would probably indicate that there's too much food on the shelves. If operationally feasible, lowering inventory levels to six or seven days of sales would cause food cost to drop immediately, everything else being equal.

What a Difference a Few Days Can Make

I've seen many cases when reducing inventory levels by two or three days results in food cost reductions of 2-3 percentage points and sometimes even more. Why? Because there's less spoilage, less waste, better portioning, less theft, essentially much more overall care in handling of your valuable inventory when there is less of it around.

Just to clarify, I'm not advocating reducing inventory levels to the point that you risk constantly running out of products. What we're talking about is reducing or eliminating the amount of "excess" inventory that 98 percent to 100 percent of the time you don't need and won't use before the next delivery shows up.

Lowering your food inventory and maintaining a low yet adequate amount is a genuine double win, too. Your food cost will be lower and (the best reason of all) your customers will get better food. When inventory levels are reduced, inventory turns over quicker, food spends less time on the shelf and your guests get higher-quality, fresher products.

But If You Really Want to Do it Well, Do It Once a Week

If you want to run with the big dogs, you need to step up the pace. Most independent restaurants calculate their food cost once a month. Virtually all the major chain restaurants calculate their food cost each week. According to industry averages, chain restaurants (before corporate expenses) are two to three times as profitable as independent restaurants. While weekly food costing isn't the entire the reason, it's part of it.

Here's the problem with knowing your food cost only once a month. If your monthly P&L indicates that your food cost is 4 percentage points higher than normal, there is not much you can do about it; it's probably been a few weeks, at least, since the month ended so you're already halfway through the next month. The most profitable restaurants in our industry know what their food cost is every week — 52 times a year — so if there's a problem, they know about it quickly and can respond accordingly.

Here's an easy way to arrive at your food cost every week that won't take much time. Refer

to the Sample Invoice Log, above. It's just a form to record and keep track of daily purchases. Many restaurants, regardless of whether they calculate their weekly food cost, keep a record of their purchases each day. So, if you're already doing this, it will be easy to separate the food purchases on each invoice.

Aspen Grille

Invoice Log

For the Week Ending: April 9, 2004

Date	Invoice Number	Vendor	Invoice Amount	PURCHASES	
				Food	Other
4/3/2004	3514	Valley Produce	259.59	259.59	
4/3/2004	91546	Foodservice Inc.	1,278.56	1,113.56	165.00
4/4/2004	88558	Mavis Poultry	202.54	202.54	
4/4/2004	485-5412256	Mountain Meat	565.89	565.89	
4/4/2004	51248	Summit Beverage	337.24	337.24	
4/6/2004	2323	Bakery Services	151.38	151.38	
4/6/2004	458-8551	Manor Seafood	723.45	723.45	
4/7/2004	11-84238	Valley Produce	278.85	278.85	
4/7/2004	92547	Foodservice Inc.	1,147.20	925.70	221.50
TOTALS			4,944.70	4,558.20	386.50

At the end of the week, the food column is totaled and you have your total food purchases for the week. Next, you might have something like the Sample Weekly Food Cost Worksheet, below. You can see where you'd post the daily sales figures, your food purchases, and your beginning and ending inventory for the week.

Aspen Grille

Weekly Food Cost Worksheet

For the Week Ending: September 18

	Mon	Tue	Wed	Thu	Fri	Sat	Sun	Beg. Inv.	End. Inv.	Total	%
SALES:											
Food	1,522	1,835	2,123	2,542	2,605	2,821	2,512			15,960	100%
COST OF SALES:							Purchases				
Food							4,558	1,255	995	4,818	30%
Gross Margin										11,142	70%

Operators who calculate their food cost weekly often end their week on a Sunday and prepare this report every Monday morning so they know their food cost from the previous week by noon the day after the week ends. If something is out of line, they know about it

your kitchen. It's nothing short of amazing how it brings focus, awareness and a sense of accountability to food cost because the feedback is quick and every week, instead of just once a month. Weekly food costing keeps food cost control "top of mind" in the kitchen rather than the elusive, removed number it is when the feedback only comes once a month.

Also, right after the weekend, inventory is usually at its lowest level of the week so there are fewer products to count Sunday night or the first thing Monday morning.

How It's Done In the Real World

Here's an illustration of what can happen when food cost and inventory levels are calculated and monitored weekly. Let's play make-believe for a moment. Put yourself in the shoes of a hypothetical restaurant operator who has read this article and decides to start calculating food cost and tracking inventory levels every week. He's never done this before. He checks his profit and loss statement (P&L) for Week 1 (see chart below), and determines that sales were \$25,000. He knows he started the week with an inventory of \$15,000 and purchased \$10,000 of food during that period. Plugging in the data in the chart below, he finds that his weekly food cost is \$10,000, or 40 percent of sales. The \$15,000 in ending inventory equals 11 "days in sales inventory."

	<u>Week 1</u>
Weekly Sales	\$ 25,000
Beg. Inventory	15,000
Purchases	<u>10,000</u>
Goods Available	25,000
Less End. Inv.	<u>(15,000)</u>
Food Cost	\$ <u>10,000</u>
Food Cost %	40%
Days Sales in Inv.	11

You notice that you're sitting on 11 days of excess food inventory. You are inspired and motivated, and you assemble your management team (even if that only includes your spouse and Cousin Billy) to determine if you really need to have that much food on the shelves. Your managers grab their clipboards and walk through the storage areas. With the vigilance of IRS auditors, they count your high-dollar products and evaluate whether you need that much inventory, based upon each product's average daily usage and the number of deliveries they receive each week.

After their investigation, management develops a list of overstocked products. They give this to the person who is responsible for purchasing (which may also be Cousin Billy), with instructions to reduce purchases in week two, so that the restaurant can use up the excess inventory. Sales remain steady throughout week two, but you reduce your purchasing.

At the end of Week 2 (see above), your management team conducts a physical inventory and determines the ending inventory value is now down to \$14,000. Food cost is \$9,500 or 38 percent of sales and you have 10 days' worth of food on the shelf. Again, you ask if there's still too much food in inventory. Management conducts the same drill as above, and in the immortal words of Gomer Pyle, "Surprise, surprise, surprise!" There are still quite a few products that are overstocked. Again, management gives this list of overstocked products to the person who is purchasing for week three. In week three, you find that you've reduced your purchases even further, in a continued attempt to deplete excess inventory.

	<u>Week 1</u>	<u>Week 2</u>
Weekly Sales	\$ 25,000	\$ 25,000
Beg. Inventory	15,000	15,000
Purchases	10,000	8,500
Goods Available	25,000	23,500
Less End. Inv.	(15,000)	(14,000)
Food Cost	\$ 10,000	\$ 9,500
Food Cost %	40%	38%
Days Sales in Inv.	11	10

The results at the end of Week 3 (see below) show that your food cost has dropped to \$9,200 or 37 percent of sales, and inventory levels are down to about nine days. The light bulb goes on in your head. You see what is happening. Inventory levels are reduced, as reflected by Days Sales In Inventory. Food cost has gone from 40 percent of sales in week one to 37 percent of sales in week three.

	<u>Week 1</u>	<u>Week 2</u>	<u>Week 3</u>
Weekly Sales	\$ 25,000	\$ 25,000	\$ 25,000
Beg. Inventory	15,000	15,000	14,000
Purchases	10,000	8,500	7,500
Goods Available	25,000	23,500	21,500
Less End. Inv.	(15,000)	(14,000)	(12,300)
Food Cost	\$ 10,000	\$ 9,500	\$ 9,200
Food Cost %	40%	38%	37%
Days Sales in Inv.	11	10	9

As a thinking restaurateur, you ask yourself, "Why would food costs go down when inventory levels are reduced?" The answer quickly comes to you: "Because when there is less excess inventory on the shelves, there will, by default, be less waste, less spoilage, less theft, better portioning, better care and handling of the valuable food products when there's less of it sitting around."

What About Quantity Discounts?

Does it make sense to buy food in larger quantities to get a lower cost per unit? That depends on the type of product, the amount of the discount, your cash situation and how well you safeguard and control the use of your food products.

But let me tell you the policy of many highly successful operators I have worked with, who have seen what happens to their food cost when they keep their inventory levels as low as possible. These operators don't even want to hear about quantity discounts. Some are even willing to pay extra for more deliveries per week so they don't have to keep as much product on their shelves. They're convinced that the way they save the most money on their food cost is not in getting quantity discounts but in buying just what they need and maximizing the use of every single product.

A Great Place to Start

There are many other smart practices and controls operators use to control their food cost. We'll cover these topics in future issues of RS&G; however, if your restaurant is new or you feel you have room for improvement in the food cost area, begin by adapting the weekly food cost discipline and closely monitor your inventory levels.

It's easy to lose money working with food, but many operators do an excellent job of controlling it and are rewarded handsomely on their bottom lines for doing so. Chances are good that successfully putting in place the practices discussed above will go a long way toward allowing you to effectively control your food cost and enhance your restaurant's potential for profit.

-- [Restaurant Startup & Growth](#)

Don't Lose Sight of Profitability When Chasing Price

Some operators, new restaurateurs in particular, can become obsessed with trying to get the lowest price on every product they buy. I know we emphasize that you need to think pennies when approaching the restaurant business; however, spending excessive time poring over bids trying to always get the lowest prices at the expense of developing across-the-board systems to reduce costs is false economy. The key to making money in the restaurant business won't be realized from saving 25 cents on a single case of tomatoes, here and there. You'll make money by providing your customers with a superior dining experience so they're more inclined to become loyal guests and return again and again. Making money is also realized from putting in place systems to cut your costs across your menu and throughout your restaurant, such as inventory reduction techniques.

You need to develop a competent, motivated staff and good systems to do that. Many more restaurants go out of business because they lack enough customers as opposed to not being able to pay for their groceries. Also keep in mind that there are factors equally or even more important than price when choosing a supplier. Product quality and consistency, service and responsiveness, delivery times and frequency, and minimum-order quantities are important factors that can affect your inventory levels, food cost, and ability to provide a high-quality product consistently to your customers.

A lower price is not a bargain when the supplier can't get enough of it or can't get it to you on time. This point is especially clear when trying to manage food inventory. You can't run a lean and mean storeroom, if you can't depend on your suppliers to deliver goods as promised. Hold your suppliers to their agreed delivery dates and quantities. If they can't perform, say "Next!" Your ability to turn a profit depends on it.