



FOOD COST 301

CONTROLLING FOOD COST & SETTING MENU PRICES

Contents

Terms used in this course.	2
Introduction	5
What is food cost?	11
Food Cost 101	13
Food Cost 201	17
Food Cost 301	22
Halfway home	23
Forecasting Sales	25
Predicting Sales	26
Par Stock	29
Controlling Cost Through Your Menu	34
Summary	38

Prerequisites for this course include watching my earlier videos:
[Food 101](#) and [Food Cost 201](#).

Terms used in this course.

Breakeven point is the sales point where all the bills have been paid AND all the food & paper to reach those sales have been paid. Every dollar after this point is your profit (less what it takes in food and paper).

Ending inventory is the dollar amount of your food you have at the end of a measurement time frame, such as the end of the week or month.

Fixed Cost is a cost that remains the same whether your sales are \$10 a day or a \$1,000. Examples include – propane, insurance, licenses, loan payments, gasoline, cell phone, internet, etc. These dollar amounts stay the same while the percentage IMPACT goes DOWN as sales go up.

Food Cost is determined by how much food you have used to make your products for your guests. The formula is $\text{Opening inventory} + \text{purchases} - \text{ending inventory} = \text{food dollars}$. Turn it into a percentage by $\text{food dollars} / \text{food sales} = \text{food cost percentage}$.

Food Expense is how much money you have spent on food during a specific time frame. Ideally as you learn your business this number will be very close to your food cost in percentage. If you want to run 25% food cost you should only buy 25% (or as close as you can get) in supplies. The only reason you would exceed your food cost goal in purchases is buying a product that will last longer than your measurement time frame. For example, a 4-gallon case of mayo will last 2 weeks but you count food cost weekly. The week you buy mayo will put your food expense higher than the following week when you don't buy mayo. This has NO IMPACT on your weekly food cost computation since you are counting that left over mayo on your weekly ending inventory.

Gross Profit is figured as $\text{Sales} - \text{Food cost}$. Notice no labor, propane, or other supplies. Gross profit is what you will pay ALL your other expenses from.

Therefore, you want this number to be as big as possible so there is also something leftover for you.

Inventory is all products that go into making your food that is also given to your guest. A bun would be part of your inventory, a sandwich wrapper would be part of your inventory. Propane, gasoline, etc. would NOT be a part of your inventory as you do not give those to your guests and they *cannot be figured on a per product basis*.

Inventory Usage is figured at the end of your measurement time frame with this formula. $\text{Opening inventory} + \text{purchases} - \text{ending inventory} = \text{amount used}$. This number is figured by how you sell your product. For example if you sell hamburger patties made from fresh beef you buy by the pound. You should inventory it by the number of patties you get from a pound. This makes comparing your POS sales mix report much easier as it will show the number of hamburgers you sold and hopefully your inventory use will be the same.

Opening inventory is the amount of food in dollars you have at the beginning of a measurement time frame, such as the start of a new week or month.

Plate Total this can be the same as a recipe or can include additional items used to create a “plate” like a meat paired with two vegetables. It can also refer to a combo including all the individual items used to make that combo.

POS system is a computerized cash register that will track sales of individual items, allows for modification of those items at the time ordering and communicates orders to the kitchen, as well as, process credit cards, compute tax and track all cash.

Purchases refers to the dollar amount spent on inventory within that measurement time frame.

Recipes are used for every product you give to your guests and MUST be detailed down to seasonings, oils, flavorings, packaging and utensils.

Sales Mix report is a report your POS system can generate that show the total number of each product plus the total sales for that product sold as rung up by the cashiers.

Variable cost is a cost expressed as a percentage and the dollar amount INCREASES as sales increase but the percentage of sales remains UNCHANGED. For example if your food cost budget is 25% on \$100 in sales you will spend \$25, while on \$1,000 in sales you will spend \$250.

Yield is what you get out of product after processing. Meat for BBQ starts at a certain weight say 10 lbs. but after cooking weighs only 9.6 lbs. Your prices per lbs. must be figured on the 9.6 weight. At \$5.99 a pound after cooking that price is really \$6.24 a pound. That is the price you would figure for your plate cost. Same for slicing deli meats or prepping vegetables.

Introduction



If you were ask a food truck group “how much do I charge for this?”

The answers will vary from a few dollars to well over ten. What is missing in this picture is **context**.

Is that bun a store bought or house made? What kind of bacon? How thick is the bacon? How many eggs? What is the red sauce? What kind of cheese? How thick is the cheese cut?

Is that bun a store bought or house made? What kind of bacon? How thick is the

How about this deceptive egg dish? Can you price something so simple just from this photo? What you can't see is this egg is not an egg and has 87 ingredients and 92 steps to prepare and assemble.



You get the idea. A photo does not allow good input for pricing. It lacks important context like cost and amount of ingredients or the economy of the area where it will be served. A picture many be worth a thousand words but none of those words speak to quality, taste or preparation. The top photo is from Chef Eric Greenspan's virtual restaurant *2 On a Roll*, serving Los Angeles and sells for the low, low price of \$11. The delightfully deceptive egg is from Heston Blumenthal and will set you back \$21.58.

Looking at a photo and setting a price is simply impossible.

Another popular question is the generic “how do I price my menu?” A volley of differing methods will be put out and arguments ensue over who is right in their method. Scan through any menu price post and you will see several comments with "3 times cost". You will also see posts recommending 30% and every other percentage down to 20%. Often I will post to start at 25%.

Who is right? **NO ONE.** If your guest is willing to pay your price repeatedly that is the only opinion that matters. The only other question that matters to your business is: "are you happy with the profit?" SO...

Let's look at pricing a different way. You have only 2 goals when pricing - your guests seeing value in your offerings and you enjoying your own profit. You are not working for free, right? The first thing to consider is your breakeven point.

The breakeven formula for a business is:

$$\text{fixed cost}/(100\% - \text{variable percent}) = \text{break even.}$$

This is the point all the bills are paid. All sales after this point become your profit *less the variable cost* it takes to produce those sales. This is why when I see amateur advice adding in propane, or “overhead” when figuring menu cost it drives me crazy. **It simply cannot be done.**

Let's play around with those numbers.

The examples below are for daily sales since this a number most folks can relate to. We will set the fixed costs (propane, cell phone, insurance, licenses, etc.) at \$70 a day. Remember FIXED means it stays the SAME. Next we will figure the variable cost percentages not including food at 17.5% (hourly labor, marketing, repair and maintenance, cleaning supplies, etc.) Just for ease of figuring let's say cash only. It is not difficult to compute costs with credit cards but why complicate things at this point?

We will say the vendor handles 100 guests per day. Each guests buys the only product sold and that product costs the vendor \$3.00 in food & paper. Meaning the vendor will **spend \$300 on those 100 guests** no matter what menu price is charged.

Let's start at 33% food cost level (three times cost advice).

The cost per item is \$3. Take that \$3 in cost TIMES 3 equals a \$9 menu price. 100 guests TIMES \$9 menu price puts sales at \$900 daily. So far, so good.

Our variable cost is 17.5% plus the 33% food cost for a total of 40.5%. That means EVERY dollar coming into our business only 59.5 cents is left to pay the FIXED costs and what is left after paying the fixed cost is profit.

\$900 - \$70 fixed costs - \$454.5 variable cost (17.5% plus 33% food cost) leaves \$375.50 in profit! Not bad, right?

Now the 30% advice. The menu price goes to \$10 (\$3 in cost divided by 30%) meaning sales of \$1,000 from that same 100 guests. Take the \$1000 - \$70 fixed cost - \$475 (1000 times 30% food cost plus 17.5% other variable costs) is \$455 in profit! Looking better.

Hmmm... same number of guests only a dollar increase in price and \$79.5 more in profit for the **exact same amount of work**. Starting to see the issue with “3 times cost”?

Let's do one more percentage to establish a pattern. 20% is usually the lowest of recommendations. The menu price goes to \$15 meaning sales of \$1500. Again \$1500 - \$70 fixed cost - \$562.50 variable cost leaves \$867.50 in profit!

The pattern is:

The HIGHER your food cost percentage the LOWER your profit.

I recommend starting at 25% for food cost. It is much easier to adjust menu prices DOWN (which increases your food cost towards the 30% plateau) than it is to RAISE prices (which lowers your food cost) to cover your expenses so you don't go bankrupt.

Guests never like when you raise prices. If you do it too soon after opening for business it leaves an extremely negative impression.



Realistically as you raise prices you are effectively taking your business above some people's wallets and the guest count will go down slightly but that issue becomes a **marketing problem** rather than a price/cost problem.

The infamous "3 times cost" is an antiquated rule from 1980. It simply will not work in a restaurant any longer and for a street vendor it is the difference in making money or just getting by. Certain products require a much bigger multiplier and very rarely (like almost never) a smaller multiplier. The current economy is requiring at least 3.5 times cost to be competitive and profitable. (3.5 times cost yields a 28.57% food cost)

This is not a blanket rule, either. Take drinks for example. A soda costs around thirty cents so multiplying that by 3 gives a ninety cents menu price. The going rate is around \$1.75 or a 17.14% food cost.

Sodas and sides in restaurants have much, much lower food cost than the main items. That is why restaurants push combos so much. Combos do two things – one they help LOWER the impact of fixed costs and they help LOWER the overall food cost.

What is included in food cost? (note some businesses will take a separate inventory for food and paper keeping those cost separate, each with its own budget, for our purposes I will lump them together and call it "food cost") Everything related to a product as given to a guest is part of the cost. Wraps, napkins, boxes, plates, seasonings, gloves (if you are wearing the same set for hours, why bother?), straws, carryout bags, and of course all the food.

Labor is never figured as a part of the "food cost" because your labor expense goes up every second someone is on the clock whether the business is selling a product or not.

"Overhead" likewise is not figured as a part of "food cost" because in most cases the "overhead" is a fixed or nearly fixed amount that will not change no matter how many or how few food items are sold. Anyone that claims to add "overhead" into a product does not understand the term nor how to price their food.

For example, propane would be a part of "overhead". Propane burns at a constant rate regardless of whether you sell a million hot dogs or 100. So if a tank of propane lasts you one day (costing \$15) and you sold 100 hot dogs does that mean the cost of propane per hot dog is \$0.15? What about tomorrow

when you sell 200 yet burn the exact same amount of propane? What cost do you use?

How about your license fees, insurance, loan payments, commissary fees, rent? Each of those stay the same no matter how much or how little food you sell.



"Overhead" is NOT figured per product. IT IS COVERED by the multiplier you chose to use. That is why you MUST know your breakeven point BEFORE attempting to sell anything. Otherwise you will find yourself constantly putting personal

money into the business and joining the ranks of those who answer the oft asked question "how much do you make running a food truck" with the sad "I haven't paid myself yet."

I often answer the menu price question with “**multiply your cost by 4**” and some “expert” pretender will flame the post, giving a complicated answer using division, multiplication, percentages and blah, blah blah.

Their goal is to look “knowledgeable and experienced” to the newbies.

I am going to reveal a secret. **Multiplication verifies division, and vice versa.**

Oh, wait you learned that in second grade. Not really a secret.

Multiplying your cost times a number (like 4) will yield a price. Just like dividing your cost by .25 (25%) yields a price. Guess what, it is the EXACT same price! (if you use 4 with 25% or you could use 5 with 20%, 6 with 16.67%, etc.)

Pick which ever method helps you understand your price and the relationship the cost of ingredients has in that price.

I use multiplication when I explain food cost because it is *easier* for most people to understand and to do in their head.

Your total cost has a mathematical relationship to the end menu price. That relationship must yield **enough profit to keep you in business.**

As I often point out there are only two questions that matter in menu price.

1. Will your guests love the price, see the value and be willing to pay it again tomorrow?

2. Will you love the profit compared to the work you are putting in and be excited to open tomorrow?

If you can honestly answer "yes" to both questions it does not matter what costing instructions you choose to follow.

What is food cost?

Food Cost is determined by how much food you have used to make your products for your guests. **Not to be confused with food expense.** Food expense is how much total money you spent on food and listed on your accounting forms as an account payable.

Food expense directly impacts your profits. You can perfectly portion all your food and have zero waste and still not show a profit!

How is that possible you ask?

Simply look in your refrigerator, freezer and dry storage. Every bit of inventory sitting on your shelves is money already spent and not in your pocket.

Having excess inventory leads to food spoilage, waste and inventory shrinkage (theft). The trick is to make sure you only order what is needed for the sales you project. We will talk about sales projections later. Let's get on the same page as to figuring food cost.

Figuring food cost is done by:

Calculating an opening inventory amount. When you first start your business this will be zero.

Next add up all the food and paper purchases only.

Finally, at the end of the day, week or month take an inventory of what is remaining on your truck. This number is subtracted from the subtotal of your opening inventory plus purchases and looks something like this:

Open Inventory	\$70
Total Purchases	\$800
Ending Inventory	\$162
Food Cost \$	\$708

Turning that into percentage is taking the Food Cost \$ divided by Net Sales. If sales are \$2,832 the food cost percentage is 25.00%

Things to notice that impact your business. The \$800 (food expense) in purchases is 28.24% of Net Sales. Including your Opening Inventory there was \$870 (30.72%) in food available to sell. This total is money **already** spent and the \$162 (sitting on the shelves represents the difference in 30.72% and 25.00%) becomes next weeks starting inventory.

Fancy math, right? But how do you price the menu that yields those sales and more importantly, profit?

Food Cost 101

The very first thing to do when starting to write your menu is to LIMIT yourself.

Limit ingredients, limit products and limit what you plan to offer.

A food truck menu is limited to 3 to 4 main product lines. Why? Limited space, limited equipment, ease and speed of guest ordering, can't be all things to all people, etc., etc. **That does not mean only 4 things on the menu.** A burger truck may have 5 or 6 different burgers but still counts as ONE product line. They may also offer chips, fries and onion rings making this a second product line. The next product line may be deli sandwiches where they also use the deli meats to also create differently topped burgers.

When you think about all the possible combinations of ham, turkey, bacon, salami and pepperoni them menu could be exceptionally large with these 3 lines of products. Resist the temptation! Every product your guest has to read does two things. It slows down the order taking process and confuses the guests. **A food truck with a single order taking window wants to take one order every 45 seconds or less.** The longer the menu is to read the more likely to exceed 45 second order taking. Edit yourself.

Once you have written an edited menu look for one off products. A one-off product is a product that is used for a single menu item. Usually a one-off product is hidden in the sauces/condiments sections of your menu. Your policy should be **"if it is on my truck it must be used on more than one product."** Space is a precious commodity on a food truck do not take it lightly.

The next step is to **write a detailed recipe** for each item, down to the seasonings and oils. The recipe would look like this:

Menu Name	Inventory Item	portion cost	recipe amount	extensio
Hot Dog		\$ -		\$ -
	hot dogs	\$ 0.31	1	\$ 0.31
	hot dog buns	\$ 0.15	1	\$ 0.15
	Ketchup	\$ 0.03	1	\$ 0.03
	Mustard	\$ 0.04	0.75	\$ 0.03
	YELLOW ONIONS	\$ 0.86	0.15	\$ 0.13
	Wickles	\$ 0.22	0.75	\$ 0.16
		\$ -		\$ -
	Foil Wrapper	\$ 0.02	1	\$ 0.02
	# 6 bags	\$ 0.02	0.5	\$ 0.01
	napkins	\$ 0.01	5	\$ 0.05
	gloves	\$ 0.03	1	\$ 0.03
	salt pak	\$ 0.00	1	\$ 0.00
	pepper pak	\$ 0.00	2	\$ 0.01

This simple recipe for a hot dog includes all the food **with exact portions**, plus all the paper used to wrap and present the product to the guest. If you are thinking “why be exact on things like ketchup or mustard? they can’t cost that much.” Yes, you are right for a single hot dog the cost is extremely small. You do plan on selling more than one right? If you sell 50 hot dogs a day over the course of 200 days vending that is 10,000 hot dogs. What if you put only a half-ounce more? That is \$150 wasted. What if you over portioned on a more expensive condiment? **Our business is a nickel and dime business** learn to count them!

Eagle eyed folks are noticing odd things like .5 of a carryout bag or only 1 glove. This recipe assumes more than one item will be ordered by a single guest. A bag of chips would have the other .5 of a carryout bag, for example.

No, the operator is not Michael Jackson wearing a single glove. I price one glove per food item. Again hoping to sell more than one item per guest and also knowing I will likely make several items with one pair of gloves. This takes the pain out of changing gloves frequently.



The above pictured spreadsheet is available in the FOOD TRUCK TRAINING group files section. You will not find a more comprehensive food costing spreadsheet anywhere. Look for “2021 Food Cost Control”. The sheet will take some time to set up. Once it is set up you will be able to adjust ingredient prices, verify your menu price is still profitable, allows you to set prices if you decided to include tax in the menu price and much more useful information.

So far you have edited your menu and written a complete recipe for every product the final step is determining a price for each product. Looking at the hot dog example you will see it costs us \$0.94 as the recipe is written.

I suggest starting with a times 4 multiplier. So the menu price (without tax included) would be \$3.76. Since most vendors fear pennies (believing them to slow service) make the price a change friendly \$3.75.

Menu Item Cost	My Price Point	Penny Profit	Food Cost
\$ 0.94	\$ 3.75	\$ 2.81	24.98%

As you can see from the last page the spreadsheet totals your cost and allows you to input a price. (The yellow box) Then the sheet shows you the “penny profit” from that item and the food cost percentage. Penny profit is another name for gross profit. Again gross profit is what you pay all the other expenses from.



The 25% food cost goal is not a hard rule, like Captain Barbossa says, “it’s more of a guideline”. That price could easily be \$5.00 (18.8% fc) or \$3.00 (31.33% fc) just depends on your area’s economy. I personally sold that hot dog on the beach for \$5.00 with zero

problems, but also had zero food competition. Limited supply with high demand means high prices. Over the years as beach competition increased the prices came down. Excess supply lower demand – lower prices. Economics 101.

In summary for understanding the basics of food cost you will:

- Write an edited menu.
- Ensure all ingredients have multiple uses across the whole menu.
- Write a detailed, down to the part of an ounce, recipe for everything you sell.
- Assign a price for each product on your menu starting with a goal of 25% food cost. But not being afraid to go higher or lower based on area economics.

At this point most vendors feel nothing else is needed in the realm of determining a menu price and controlling food cost. As you may imagine they would be wrong.



I will point out it is possible to never do more than the above and make enough money to be happy. However, the question becomes “Am I making efficient use of my resources?” Ignoring waste, theft and portion control issues is exactly like taking a \$20 dollar bill and lighting it on fire. Profit goes up in smoke.

Food Cost 201

Having a well thought out menu with profitable pricing is a great beginning and you could easily survive your entire food truck career without doing anymore.

BUT is this all there is to controlling food cost? NO.

In this section we will look at food cost problems and how to fix them. Remember food cost is determined by:

Opening inventory + purchases – ending inventory = food cost dollars.

Then take those food cost dollars and divide by the sales for the inventory period to get a percentage.

So what happens when that inventory reveals a 26% instead of the 25% you expected? On the example sales from above the 1% is \$28.32 lost profit. Extend that out working 40 weeks a year and you have lost \$1,132.80 in profit. I don't know about you but I could do a lot with \$1,100.

Tracking down that lost food can be difficult. Unless you have a **properly programmed POS system capable of providing you with sales mix reports**. A POS system does more than process credit cards and add tax to sales. The system should track each product you sell and provide a report by the day, week and month for each item on your menu. It is **extremely important to know exactly how many of each item you sold**.

Part of that inventory process to get your ending dollar amount should also include a second step of determining how much of each product was used.

Ingredient	Case Count	Open Inventory	Invoices						Total Available for sale	Ending Inventory Count	Used	Price	Ending Inv \$
Hot dogs	120	40	120	120	120	240	240		880	125	755	\$ 0.66	\$ 82.36
Buns	8	35	120	120	120	240	240		875	120	755	\$ 0.27	\$ 32.70
Mustard	64	20	256	128	128	256	256		1044	101	943	\$ 0.03	\$ 3.11

The spreadsheet download has an inventory sheet to help you start to control your food cost. All the yellow areas are your input for the week. The other areas are either pulled from pages you have already setup or have math formulas already built in.

The “USED” column is the important one. That will be compared to the report from your POS. The Sales Mix Report will need to be entered into a spreadsheet

containing your exact recipes. (this type of sheet is unique per vendor menu and recipes otherwise I would include it here) It will look something like this:

POS ITEM	Number sold per POS	Recipe	Theoretical use	Use from Inventory	+/-	Price	\$+/-
Hot Dog	755						
Hot dogs		1	755	755	0	\$ 0.66	\$ -
Buns		1	755	755	0	\$ 0.27	\$ -
Mustard		0.75	566.25	943	(377)	\$ 0.03	\$ (11.60)
Lost Profit							\$ (11.60)

According to our POS we sold 755 hot dogs! Both the bun and hot dog usage match the sales count. However, the actual mustard usage is higher than our recipe (theoretical) usage expects. This means most likely we were **heavy handed with our portions** on most if not all hot dogs we made.

This heavy handedness hurts both our profit and our guests. **Over portioning changes the taste of your end product.** You spent time developing your recipe to achieve the perfect taste, you wrote down recipes so you could be consistent presenting that perfect taste and when it counted to your bank account and your guests, you failed to deliver that perfect taste.

This is an easy example for tracking down a food cost problem. Sauces are easier to over portion until you force yourself to use some type of measuring system, double check yourself or your team often and **PRACTICE**.

My first job 44 years ago was cutting and then weighing roast beef to order. Each sandwich needed to weigh 2.8 ounces. I made hundreds of sandwiches a night and got to the point where I did not need the scale. To this day I can get dangerously close to 2.8 ounces on a consistent basis without a scale. Practice and double checking does make perfect when it comes to simple tasks.

Condiments can be easy to figure out when you use more than expected but what about something like the hot dog count being off? The first thing is look at the bun count. If it is off by a similar amount that means unrecorded sales, unrecorded giveaways or unrecorded waste of assembled products. Unrecorded sales could be a sign your cashier is stealing either by giving away free food or by collecting and pocketing the cash. One way to avoid this is to not use

handwritten tickets. Best practice is use a KDS (kitchen display system) and only make food that appears on the screen. NO VERBAL FOOD REQUESTS.

If a product is mis-made which does happen, the remake still should be rung up and then discounted so your inventory will match your sales. The same with wasted products they should be rung up and then discounted with a “waste” key that removes the dollar amount but still accounts for the inventory.



If you decide on offering a sample to encourage selection of a new product, **the sample still needs to be rung up and accounted for.** Get in the habit of ringing up all food in your POS. Even food you eat yourself or feed your staff.

As you can see tracking all sales is important but so is tracking ALL activity on your POS. Look at discount amounts, coupons, voided tickets and error correct inputs. Each of those tell a story and should have an acceptable range for cashiers before a red flag is thrown.

Things get a little dicey with products that have yields. If your recipe expects a 10 lbs. roast to shrink to 9.6 lbs. you would account for that in the recipe programming of your POS. The problem is when you start converting out the sales to see if the sandwich count matches your cook shrinkage. If they are off you may not have the problems listed above. You could have a cooking process problem. Most places that have an expected cook shrinkage also weigh the product both before and after cooking. Keeping accurate records helps track down problems in the cooking process.

In the weigh example above if you suddenly start getting only 9 lbs. out of a roast there are multiple reasons. Higher fat content, oven temperature, cooking time all play a role in reducing your expected yield. Cooking controls and great record keeping contribute to achieving your food cost goal.



Another product that will require additional tracking is **product bought by the pound but sold by the piece**. Chicken wings, for example, a 5 lbs. bag may contain 28 to 32 pieces. Leaving you to average the price per piece on your inventory and menu cost. BUT when comparing sales to inventory you could be off as many as one wing per order sold. Which drives you crazy deciding whether you have a theft problem or a supplier problem.

One way to prevent this is to randomly piece count a bag per case and record the numbers. If you see a short fall pattern contact your distributor immediately. The same thing applies to something like hamburger patties. Since they are sold as a certain count per pound comparing inventory use to POS sold should be identical. BUT like with all things man made a slight misalignment of equipment could result in a slightly larger patty and then fewer in a case. Having spot counted cases from BK and McDonalds I saw this often enough to know it is a problem. We had cases that weighed properly but the patty count was short by as many as 10 per case. That adds up quickly.

What about your suppliers, are they above suspicion? NO. Double check that 25-pound case of tomatoes, or that 50-pound bag of onions. I have weighed a 25-pound case of tomatoes found it to be 22-pounds and watched an embarrassed driver pull 3-pounds from another case and add it to mine. Someone down the delivery route accepted that case and later wondered why their food cost was off.

A common cheat on cases that contain something like cans or bottles is for **the interior rows to be missing one or more**. Most business just assume someone else opened the case and pulled one rather than think it was received that way.

Either the driver or someone at the distribution center just helped themselves to a freebie. Cases of dressings can appear perfect on the outside and when opened have broken seals and liquid spilt. Having a good working relationship with drivers, salespeople and office personnel from your supplies help cut down on these types of loss and lead to free cases in the future.

To summarize the basics of Food Cost 201:

- Take a frequent inventory.
- Figure your food cost for a time frame. Weekly is best.
- Compare your actual inventory usage to what your POS system shows as sold. Investigate any shortages.
- Set up cooking control recording sheets for products that will shrink during the cooking or prep process.
- Program your POS with waste, sample or other discount keys. Make certain every food item is account for in the POS.
- Personally check each deliver and inspect cases for weight, temperature, missing items, etc.
- Act when issues arise, I promise they WILL NOT self-correct. Missing food is lost profit.

Food Cost 301



This is advanced material that most food trucks simply don't do OR they just guess. Food cost control goes well beyond what you have just read. To this point everything has been fairly simple tasks most teenage shift managers could do. Once you understand the math formulas and create

spreadsheet to do the work, as Scotty said to Captain Kirk, **“All systems automated and ready. A chimpanzee and two trainees could run her.”**

I like simple and I like automated. That is why I develop spreadsheets.

Halfway home



What causes a food trailer to run out of food?

There are only 3 reasons you would run out.

- Sales beat projection! That's a good thing.
- You over portioned. That's bad for you and misleads your guests. They now expect the over portioned sizes.
- Unaccounted for sales/waste. Someone is stealing or you aren't tracking your own business properly.

Sales beat projections. Time to stand up and cheer, but if you really did a sales projection and ordered to it. **Otherwise you just guessed and were wrong.** BUT what was your guest reaction? If you ran out of food BEFORE you ran out of guests you have created a negative feeling towards your business from the guests you turned away. Same with closing up early when you said, "open 11 to 2" but closed at 1:30 because you ran out and left your location. The guest that showed up at 1:45 may have never talked to you but they will remember you. (In a negative way). Have a backup plan on how and where to get more supplies. Also have what a call a "panic point". A "panic point" is the point where I know my food supply will not last for the time remaining in service. That is when my back up plan is engaged.

For example. I sell hot dogs. **I know from experience** I usually sell 60 an hour. If I plan on opening for 3 hours I need 180 dogs. Easy, right. Yes until I am busier than expected and realize I am on my last 60 with 90 minutes to go. That means I will likely run out 30 minutes or more before I planned on closing. At this point I can send someone to the store to buy more so I do not run out and can still keep my word on what time I will close. This also slows the service times a bit (because one person is no longer producing food or taking orders) stretching the time my remaining inventory will last. Slow speed of service is forgivable if your food is great. **Running out is not forgivable because your guest has nothing to like.**

If your food requires more hours to prep/cook than you have to serve your best option is to never promise a set service time. Advertise a set open time with an open-ended closing time. Such as “**servicing 11 to ??**” or “**servicing 11 to sold out**”. Then create a sense of urgency by saying something along the lines of “**get yours early it goes fast!**”. This way you never have a bad review from closing earlier than promised.

You over portioned. We talked about this earlier but is worth repeating. This causes you to run out because you sold what you expected to sell but do not handle the portions properly. This creates two problems. First is a profit problem. You wrote recipes expecting a certain cost from the sale of an item. Now your profit is diminished because you “gave” away more than you have priced on your product. Second is a guest problem. That over portion may change the flavor profile of your product and that now becomes the expectation of your guest, both in size and taste. If tomorrow you realize the issue and begin producing your food as recipe designed, returning guests will notice the change and be disappointed. Reviews will include “smaller portions than before” or “does not taste the same”. That inconsistency will hurt future sales which hurts future profits.

Unaccounted for sales/waste. It is your business and you may give away “free” items as you see fit. You will want to account for a freebie, nonetheless. Have a discount key set up on your POS and track everything from meal replacements to a loyalty freebie to samples. Hold staff accountable for waste by setting a budget. Waste includes dropped, mis-made, expired or burnt foods. It can also include food prep waste like onion skins, tomato cores, or exterior leaves of lettuce. Tracking these items takes your food truck from a hobby that might make some money to a business that does make money.

All of these things happen AFTER you have committed money to purchase your inventory. **The question now is, “how do you determine what you really need?”**

Forecasting Sales



Get your crystal ball all polished up!

Seriously, accurate sales projections are possible if you keep great records.

This is one of many reasons to use a Point of Sale (POS) system. A POS tracks sales & taxes and processes credit cards but also must track...

How many of each menu item you are selling?

Knowing your total sales PLUS how many of each item you sold to achieve those sales helps you determine your inventory requirements for each and every product. I don't believe in

guessing and neither should you.

Predicting future sales is ALWAYS based on past sales PLUS the expected impact of marketing, weather, holidays and local community events.

Predicting Sales

If for the last 4 weeks you have averaged \$4500 in sales, you should reasonably expect this week to be \$4500, UNLESS...

- There is a major holiday that changes peoples eating habits or...
- There is a local event that pulls people away from your location or...
- You are running a marketing campaign and...
- Weather forecasts different than the last 4 weeks.

Each of these impacts are added (or subtracted) as a percentage.

Let's start with the last 4 weeks average is \$4500, the upcoming week includes Memorial Day weekend, locally the town has a popular Art Walk the last Friday of the month that is on the opposite side of town from your, rain is predicted for Saturday.

Each of these will do something to guest traffic. Keeping good records will help make determining the impact of these events easier. Even with NO records you can make educated guesses. (and have a backup plan if your guess is incorrect)

- **Holidays** change what and where people will eat. Memorial Day typically is a cookout day which slows down most food establishment sales.
Example from historical data: *Expect a 5% decrease.*
- **Popular small events** tend to change where people eat, they want to be close to the action and will eat in that area rather than their normal area.
Example from historical data: *Expect another 5% decrease.*
- **Ad buys** on Social Media can have a positive sales impact if your social media activity is already strong and those buys are targeted to your area. Ad buys help soften the impact of known negative events like holidays.
Example from historical data: *Expect a 7% increase.*
- **Depending on weather forecasts** that are a week out is a gamble, but still should be considered. The more you watch the forecasts the more you will know their accuracy. Rain impacts trucks and trailers negatively as will unusually abrupt changes in temperature. Just because you are willing to brave the cold (or heat) does not mean your guests will. Remember you

are technically indoors while your guests are not. Example from historical data: *Expect a 4% decrease.*

All those estimated increases and decrease would come from your own records and experience. If this is your first year then use them as a guideline and adjust based on your area. After all you have to start somewhere.

Overall the expected loss in sales is 7% of the average sales. Which looks like this:

$\$4500 \times (-7\%) = (\$315)$ and $\$4500 - \315 leave a projected sales of \$4185.



What does this have to do with FOOD COST?!?!?

Knowing your sales means you **now know how much food you will need dollar wise**. If you run a 25% food cost you will need \$1125 in inventory. If you took an ending inventory last week and had \$200 on hand that means you need \$925 this week in purchases. (or as close as you can get based on what the case sizes are)

If you hit your sales goal your ending inventory will be close to zero, **meaning your cash IS NOT tied up in inventory sitting on a shelf**. It also means you are turning over your inventory and getting fresh product in for the next week. Good for your business and good for your guests.

From a business profit standpoint all is great with the world if you can pull off those computations and be close to accurate with your predictions. Then all you and your team have to do is follow the recipes and procedures you have already written.

First thing to do is create a “par stock” to help you place orders based on your predictions.

Par Stock

Two things you will need:

1. The total sales for a certain timeframe. The longer the timeframe the better.
2. The sales mix of every item it took to achieve those sales. Your POS if programmed properly can give you this list in seconds.

Now we will create an average amount sold per \$100 in sales. The longer the time frame the **better the averages will be at predicting the inventory needs.**

This average sold per \$100 in sales is your 'par' for that product. Remember this 'par' is based on averages. The longer time frame used for the average the more accurate the 'par' becomes.

Once we know this number, we can order supplies based on what we project the sales for the coming days (until the next order is required).

We are going to switch our examples to a full menu for these examples.

First run a sales mix report for the longest time frame your system will allow. The longer the better! **The menu must remain the same throughout the reporting period.** The sales report would look like this:

Item	Price	Sold	Sales
Cheeseburger	\$ 6.25	242	\$1,512.50
1/4 lbs Hot Dog	\$ 5.00	253	\$1,265.00
Fries	\$ 2.50	398	\$ 995.00
Coke	\$ 1.50	141	\$ 211.50
Diet	\$ 1.50	79	\$ 118.50
Sprite	\$ 1.50	87	\$ 130.50
Water	\$ 1.50	178	\$ 267.00
Total Sales			\$4,500.00

Next divide the sales by \$100. **\$4500 / \$100 = 45 increments of \$100 in sales**

Now divide the total number of Cheeseburgers sold and divide by 45. **$242 / 45 = 5.38$ cheeseburgers sold per \$100 in total sales.**

This tells you for every \$100 in sales you should reasonably expect to sell 5 to 6 cheeseburgers. (I like dealing in numbers that are small and easy to visualize) In terms of **how much to order round UP we will always round up.**

Using a spreadsheet, we can figure how much of each ingredient is used per \$100 in sales.

Earlier we said our projected sales for the week would be \$4185. Now we divide that also by \$100 to give us 42.85 or rounded up to 42 one-hundred-dollar sales increments.

Now take that 6 hamburgers sold per \$100 in sales and multiple it by 42 one-hundred-dollar increments. Telling us we should expect to sell 252 hamburgers for the coming week.

But wait you say, the sale mix report showed only selling 242 to achieve \$4500 in sales. What gives?

We rounded UP two numbers. Those rounded UP numbers gives us the buffer in case our crystal ball was cloudy and we beat the sales projection OR our guests decided to order more burgers than they normally do. Either way we are covered.

After all this figuring leads to developing what is known in the industry as a "PAR STOCK". A par stock is simply a guide telling you what is needed to cover a certain number of sales. A par stock is ALWAYS based on historical sales records otherwise it is simply a guess. I don't like guesses and neither should you when it comes to your money.



One last number is required to complete your order for stock and to ensure you have enough product to achieve your projected sales. That number is...

Taking a PHYSICAL INVENTORY!

A physical inventory is also needed to determine your food cost. This number is now pulling double duty for your business.

You will need to develop a spreadsheet that looks something like this:

This is the number sold per \$100 in sales we figured earlier.

This is your projected sales for the coming week.

Sales projection for order period			\$ 4,185.00		
ingredient	case size	Par/ \$100	Needed for projection	On hand	Cases to order
Hamburgers	40	6	252	51	5.03
Buns	30	6	252	30	7.40
Mayo	128	6	252	64	1.47
Ketchup	128	4.5	189	32	1.23

This is from your physical inventory

This is the number needed to order AFTER removing what is on hand.

Notice the cases to order is NOT ROUNDED up. I recommend at this point **you decide** whether to order that 6th case or to see if 5 will really be enough. After

all we have rounded 2 other numbers up so gambling on not ordering the extra case to cover that short fall (which is less than two patties on this example) makes sense. If that recommendation were 5.5 cases or higher I would buy 6.

Remember inventory is money sitting on a shelf. Money you can't spend.

Did you notice the ketchup was only 4.5 rather than 6 per \$100? Do you know why? In the recipe we only put .75 of an ounce rather than a full ounce. Since the portion is less than one we have to make that adjustment otherwise we would be literally swimming in ketchup.

What happens if the week is slower than projected?

That is where being a smart shopper and prudent food manager come in. As you notice the sales are not going to reach projections you must act to preserve your most perishable foods. You can cut back on the amount of prepped lettuce, onions and tomatoes for example. You could freeze meats or buns.

The par stock number you figured also helps determine **how much to prep for a whole day and even how much to cook on an hour-by-hour basis**. Since we broke the number down in \$100 sales increments we can use the same figures to build a stock sheet for prepping our produce and we can also develop a cooking control for the hamburgers.

Instead of projecting for the week we are project for the day or even by the hour if needed. It is all built on the numbers we computed earlier. For example, we want to know how many onions to cut for hamburgers for a single day.

First project sales for the day. If the weekly projection is \$4185 and from our history we know Fridays are typically 40% of the weekly sales then our Friday projection is \$1674. There are nearly 17 increments of \$100 so 17 times 6 means we expect to sell 102 burgers.

Using our recipes (remember those?) if we put $\frac{3}{4}$ ounce of onions per burger we should only prep 4.78 lbs. of onions. To make it easy and build in a small buffer round to 5 lbs. The math on that is **102 burgers times .75 ounces equals 76.5 ounces. Divide the total ounces by 16 ounces in a pound to get the number of pounds required for prep.**

What to double check yourself and your team? At the end of the day run a sales mix report to see how many burgers you really sold. Figure the number of onions you should have really used and compare that to what you did use. So if you used all the onions and had to cut more before the end of the day you should expect sales to HIGHER than your projection. If you really sold more burgers – GREAT!

If not, well, you now know there is a problem somewhere just based this one item. Friday night is the time to figure out what the problem may be. If you enter Saturday without fixing the problem you can expect the same result.

Which means you are losing money.

Controlling Cost Through Your Menu

This type of control depends on a bit of psychology and understanding human nature. Look at the menu below.

<div style="border: 2px solid red; padding: 10px;"> <h1 style="color: red; margin: 0;">Daily Special</h1>  <p>Hamburger Combo 10.00 Our signature Hamburger with fries and a drink</p> </div>	<h2 style="color: black;">Sandwiches</h2>
	<p>Signature Hamburger 6.00</p>
	<p>Pulled Pork 6.00</p>
	<p>Hot Dog 4.00</p>
	<p>Grilled Cheese 4.00</p>
	<h2 style="color: black;">Sides</h2>
	<p>French Fries 2.50</p>
	<p>Southern Style Coleslaw 2.00</p>
	<p>Lay's Brand Chips 1.25</p>
	<h2 style="color: black;">Drinks</h2>
	<p>Can Coca-Cola products 1.50 <small>Coke, Sprite, Diet Coke</small></p>
	<p>Zephyrhills Spring Water 1.50</p>

Notice there are no “\$” symbols? Using that symbol reminds people of the cost and spending money. We want guests to spend lots of money.

Notice the box around the Hamburger combo? Perhaps your eye was drawn there first? The price is not discounted in any way but **the DECISION is already made for a guest** that is undecided on what to order. A nice tidy meal for a reasonable price, ready to place my order!

Notice the words DAILY SPECIAL? Again a way to draw focus on a **profitable product** taking away the need to read any more of the menu. This trick works

even when selling less desirable products, like liver and onions, for example. When we faced an expiration deadline we would list the soon to expire liver and onions as a daily feature. Even with no discount folks would buy it and we did not have to worry about expired foods.

Place your most profitable item in the **upper left-hand corner of your menu with a photo**. Folks read menus like they read newspapers. The scan for pictures of interest then read words. Make it easy by using your **best photo along side your best profit item**.

Add some breathing room on your menu. **Cluttered menus are hard to read** and slow your order taking process.

Use large text again make it easy to read. Use high contrast colors for the same reason. Make the price a smaller font than the product which implies the price is small.

If you go digital make it simple, fades, jiggles, twists, etc. may be fun for you to program but **slows the reading process and frustrates guests** that do want to read it all.

As a guest walks up to your ordering window how are they greeted? I suggest a script for the greeting that includes a suggestive sell. "Hi! Welcome to Pirate's Galley! Would you like to try our hot and spicy Chili Dog?" Of course this must sound like an announcer on a game show telling the contestant what they've won. **Enthusiasm sells**. Do I have to say the suggested item should be a high profit item? No? Good!

This greeting covers all the bases, you have a salutation, a welcome to my business and a suggestion to focus the guest while notifying them it is time to order. Be enthusiastic! You love making money, right? Can't do that without guests. A boring voice muttering "can I help you" won't win you any loyal repeat guests.

Once a guest orders you and your staff should be looking to round out the meal making a better food experience for your guests. Suggest items that add flavor (and dollars to your till) like cheese or chili. Suggest items that may have been

forgotten like dessert or drinks. You want to slow your overall service? Have a guest pay and then say “oh, yeah. Add two cokes and a brownie. I forgot.” Now the guests behind them are frustrated that the line hasn’t moved and you could have easily prevented that slow point just by helping that guest get a more rounded meal. Of course that helps your bottom line.

Combos can be a touchy subject for some operators. I will say NOT using at least one or two combos is short sighted. A combo as noted above is a complete meal making the decision on what to order easier and thus FASTER for the next guest to move up the line. Combos also do something deep in the P&L statement that novices just don’t understand. Higher tickets impact FIXED costs more than lower tickets.

Take the guy that orders a hot dog and drink off the menu above. He is paying \$5.50. If we add a hot dog combo (hot dog, chip drink) with a small discount he is encouraged to pay MORE because we are rewarding him with a discount. Let’s make the discount \$0.50 for a total paid to us of \$6.25.

I know you are thinking I just raised food cost percentage for the truck. You would be right. But I lowered the FIXED COST percentage by getting more money coming into the business. The trick is to raise the food cost by a smaller percentage than we lowered the fixed cost percentage. Combos account for up to 60 percent of orders in fast food restaurants. (fast food is the closest analogue to a food truck) Here is a side-by-side comparison of not using a combo versus using a combo. Even with discounts combo encourage MORE spending.

Hot dog	Guests	Guest ordering combo	no combo	Totals
	100	40	60	100
	Dog & drink	Dog combo		
	\$ 5.25	\$ 6.25	\$ 5.25	
	\$ 525.00	\$ 250.00	\$ 315.00	\$ 565.00
Food cost	\$ 131.25	67.5	\$ 78.75	\$ 146.25
	25.00%	27.00%	25.00%	25.88%
Fixed cost	\$ 70.00			\$ 70.00
	13.33%			12.39%
Profit	\$ 323.75			\$ 348.75
	61.67%			61.73%

As you can see with only 40% of guests ordering combos the profit is HIGHER even with HIGHER food cost. The difference is the HIGHER sales helps LOWER the impact of fixed costs, putting more cash in the bank! After all more cash is more cash!

Without straying off the food cost topic too much you can also control food cost with limited time offers. (LTO) These offers can be for a special product at a premium price. For example, seasonal offerings or a popular diet fad related food. LTOs are used to invigorate sales by offering something different and create urgency since the product is only available for a limited time. Note these types of offers are NOT discounted but PREMIUM priced items with good food cost built in. This is why you will see lighter foods on spring and summer menus and heavier, hearty foods in fall winter. LTOs also help combat menu fatigue from your current guests.

Summary

Running these numbers, inventory, prep sheets, etc. will become second nature to you. Don't be afraid of these formulas even if you don't fully understand them right now. Use them and look at the math formulas in Excel. I promise it is not as hard as it looks when just reading cold numbers in a book.

- Food Cost is determined by how much food you have used to make your products for your guests.
- Write your menu and LIMIT yourself to 3 to 4 main product lines.
- Remember the mantra **“if it is on my truck it must be used on more than one product”**.
- **Write a detailed recipe** for each and every item.
- Add the cost for each finished product and MULTIPLY by 4 (which yields a 25% food cost).
- Some foods will require a higher MULTIPLIER like sides and drinks which traditionally have lower food cost. These help balance out the products or economies that require less expensive main menu prices.
- Food cost is determined by: **Opening inventory + purchases – ending inventory = food cost dollars.**
- You must have a **properly programmed POS system capable of providing you with sales mix reports.**
- Part of the inventory process to get your ending dollar amount must also include a **second step of determining how much of each product was used.** Then you must compare what the POS says should have been used to what you really did use according to the inventory sheets.
- Track all waste, giveaways and samples in your POS. If it is on inventory the product must be accounted for in some manner.
- Personally **check each delivery** and inspect cases for weight, temperature, missing items, etc.
- Act when issues arise, I promise they WILL NOT self-correct. **Missing food is lost profit.**
- Get in the habit of projecting your sales. The more you do it the better and more accurate you become.

- Create a par stock system and use it.
- Base all ordering, prep and employee scheduling off those projections or pars.
- **Make your menu work for you** and help your guest order higher profit items.

Food cost along with labor are the two biggest expenses in a food business. Most advice out there is basic, lacking details. I hope this booklet helps you improve your food cost and understand what goes into controlling one of the two biggest expenses you will have.

If all this seems like a lot, you are right it is. But doing it on a consistent basis will put more money in your pockets and that is what matters to you and your family.

Whew, if you read this far – CONGRATS. This topic can be so boring. Please leave a comment on <https://www.facebook.com/groups/FoodTruckTraining> the comments and support means more than I could ever explain and I thank you.

If you have questions or need help give me a call. Follow this link to my schedule and see when I am next available. The first hour is free!

https://calendly.com/bill_moore/hour-consultation

If you love what you see buy me a cup of coffee!



A course that comes with a teacher!



- Includes 250-page Textbook.
- 80-page printable workbook
- Business Plan Word & Excel template designed for food trucks.
- PLUS spread sheets for Food Cost, Recipe Planning, Sales Tracking, HACCP Plan, Used Trailer inspection and more.
- Contract templates for Catering, Restroom permission, Space Lease, Commissary Agreement.

Bonus - 8 hours of virtual coaching with me.
Together creating profit from opening day.

LET'S GET TO WORK!

ONLY \$149

LIMITED SPOTS