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MANAGEMENT OF FOOD COST IN RESTAURANT BUSINESS

This article addresses the issue of managing food cost in restaurant business. The main reason most restaurants are not able to manage their finances and suffer losses is that they are not able to keep their restaurant costs in check. Restaurant Cost Control is essential as it allows to identify the area of expenses and take corrective and preventive measures to keep a healthy ratio between expenses and finances. In this article, we look at how to better manage food costs and menu pricing so the manager can increase profits and encourage diners. This article explains the depth explanation of what is food cost as well as how to accurately calculate food costs at a restaurant.

Key words: food cost, restaurant accounting, cost control, maximizing profit, operating expenses, revenue, restraint prime cost, menu price, restaurant budget, food waste, overall restaurant sales, inventory management.

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УПРАВЛІННЯ ФУД КОСТОМ У РЕСТОРАННОМУ БІЗНЕСІ

Стаття присвячена питанням управління витратами на приготування їжі в ресторанному бізнесі. Основна причина, що більшість ресторанів не в змозі управляти своїми фінансами та зазнають втрат, полягає в тому, що вони не можуть контролювати витрати. Контроль витрат на ресторан є надзвичайно важливим, оскільки він дозволяє визначити сферу витрат та вжити коригуючих та профілактичних заходів для збереження здорового співвідношення між витратами та фінансами. У статті розглянуто як краще керувати витратами на приготування їжі та ціновим меню, щоб менеджер міг збільшити прибуток та заохотити гостей. Стаття пояснює глибоке пояснення того, що коштує їжа, а також як розрахувати витрати на їжу в ресторані.

Ключові слова: вартість їжі, облік ресторану, контроль витрат, максимізація прибутку, операційні витрати, дохід, обмежена собівартість, ціна меню, бюджет ресторану, харчові відходи, загальні продажі ресторану, управління запасами.

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УПРАВЛЕНИЕ ФУД КОСТОМ В РЕСТОРАННОМ БИЗНЕСЕ

В данной статье рассматривается проблема управления стоимостью блюд в ресторанном бизнесе. Основная причина, по которой большинство ресторанов не могут управлять своими финансами и терпят убытки, заключается в том, что они не могут контролировать свои ресторанные расходы. Контроль стоимости ресторана имеет важное значение, поскольку он позволяет определить сферу расходов и принять корректирующие и профилактические меры для поддержания здорового соотношения между расходами и финансами. В этой статье мы рассмотрим, как лучше управлять расходами на еду и ценообразованием в меню, чтобы менеджер мог увеличить прибыль и поощрить посетителей. Статья раскрывает глубину объяснения того, что такое стоимость блюда, а также как точно рассчитать стоимость блюда в ресторане.

Ключевые слова: стоимость продуктов питания, ресторанный учет, контроль затрат, максимизация прибыли, операционные расходы, доход, сдерживание себестоимости, цена меню, бюджет ресторана, пищевые отходы, общие продажи ресторана, управление запасами.

Introduction. Anyone who owns or manages a restaurant should understand the concept of food cost percentage. This important metric shows how much of overall restaurant sales are dedicated to food ingredients—it's an absolutely essential part of restaurant's larger budget. Keeping tabs on food costs can help a manager make informed menu decisions and maximize profits at every opportunity.

Food cost is the ratio between how much it costs in raw materials to make a dish and how much revenue a restaurant owner generates from that dish. There are two ways to measure food cost- one will take the literal cost of a dish by breaking down each unit and pricing the dish accordingly. The other, considers how much a manager holds in assets, the value of inventory, to determine how much it costs to make a dish for every hryvna business makes.

By finding the value of inventory and food cost percent, a manager can cost dishes both accurately and effectively. The food cost percent is an important number to business, which will guide many crucial business decisions.

Literature review. Nowadays there are many articles devoted to the problem of management of costs of enterprises in different spheres. During our investigation we paid attention to works of such scientists: Velykii Yu.M. [1], Golov S.V. [2], Danylyuk M.O. [3], Drury K. [4], Musatov A. [15] and many others. But there were identified some aspects which will be analyzed in our article.

Unsolved problem. As simple as food cost sounds in theory, it's can be that difficult to measure in practice. The process of food costing takes a lot of dedication, organization, and mindfulness. Despite the challenges, food costing can and should be done.

The aim of the paper is to analyze the best ways to calculate food cost and figure out how to build a competitive and profitable business.

Results. Whether a manager is putting together a menu for newly opened restaurant, trying to budget for weekly expenditures, or thinking about implementing menu engineering practices, calculating food cost is one of the most essential pieces of information a manager can possess as a restaurant owner/operator. It forms the basis of proper restaurant accounting [6].

Food costing allows a manager to not only gauge how well the restaurant is doing in comparison to competition, but it also helps an owner distinguish between dishes that are bringing in the most profit and dishes that are actually losing money for the business.

Food cost is one of the biggest operating expenses in running a restaurant. Ingredients are often perishable, and wholesale food prices have been increasing, according to the State Statistics Service in Ukraine [7]. And while a restaurant operator can raise menu prices and try to work with a leaner staff, both these options are band-aid solutions that can have negative impacts on guest's experiences.

A restaurant manager can implement sales forecasting, goal setting, menu engineering, staff training, employee meal policies, theft prevention, and next-level inventory management to keep food cost in check. Any good manager should know a good food cost for a restaurant and the average food cost. But one can't determine a good food cost for a restaurant based on some industry standard. A restaurant is not average, especially if it is an independent restaurant.

To find a good food cost for a restaurant, the first place a restaurant owner has to start is a restaurant prime cost. Prime cost is the combination of cost of goods sold (food and beverage cost) and labor cost, including taxes, benefits and insurance. The ideal prime cost is 55%.

It doesn't matter how a manager breaks those points up between the two categories as long as he gets to 55%. That means labor can be 30% as long as cost of goods sold is 25% and vice versa. Any combination works, as long as a restaurant owner stays at or below 55%.

A manager has to develop a budget that tells what the actual costs are and what the ideal costs are.

There are many moving parts including recipe costing cards that tell what the ideal food cost is and the menu mix that tells what people are actually purchasing tells what the food cost should be.

When an owner has all three, one has the path to determining what a good food cost is for a restaurant [8].

While food costing can often seem like a difficult task for most restaurant operators, there are some steps for calculating your food costs: break up each dish into its ingredients; calculate the cost of each dish; figure out your fixed cost per meal served; calculate what percentage of your menu price comes from food; determine target food-cost [9].

Break up each dish into its ingredients means everything from seasoning to how much cooking oil is added. Calculate the cost of each dish: combines the cost of each ingredient to come up with the total cost per dish. Figuring out fixed cost per meal served is to arrive at this number, add up all the fixed costs that go into producing the dish such as salaries and utilities.

Assuming one's daily fixed costs are 15000 hryvnas and on average an operator serves 150 customers per day, this means that the fixed cost per meal served is 100 hryvnas.

Calculating what percentage of the menu price comes from food is found by dividing food cost by menu price. Assume that an order of Caesar Salad costs 30 hryvnas to produce and a restaurant sells it at 70 hryvnas that means the food cost is 43%.

The next step is to determine target food-cost. If a restaurant is selling a dish at 100 hryvnas and an owner finds that the fixed cost per meal is 70 hryvnas, the dishes can cost no more than 30 hryvnas to make a profit.

For established restaurants a manager should make sure to check each dish to determine whether or not the price covers the food cost and fixed price per dish.

According to this information it is a lot easier to get a bigger picture of restaurants daily operation and whether or not it is possible to break even or even turn over a profit [10].

Food cost percentage formula shows the percentage of expenses for the preparation of some meal or drink.

$$\text{Food cost percentage} = \text{Total costs of ingredients} / \text{Sale price} \quad (1)$$

So in example, borscht, that has selling price 90 hryvnas, percentage of the costs for the preparation of this drink would be:

$$0,45 / 90 = 0.5 \text{ or } 50\% \quad (2)$$

The owner's earnings, in this case, is $100\% - 50\% = 50\%$.

Once a manager's formed prices for all menu items that guarantee profits and are reasonable and affordable for guests he needs to pay attention to the quality of the raw materials used as ingredients for food preparation and control of portion size.

The success of big restaurant chains lies mainly in control of portion sizes. Each portion should be the same size and grammage. In this way, a restaurant operator can properly track food costs and make almost perfect calculation when creating final prices and profit.

To control portion size a manager must use precision scales, measuring cups, adjusted containers for storage of ingredients that are often used in large quantities such as flour, oil,

potatoes and similar foods. Plates and glasses that restaurant uses for serving must be of equal volume.

An operator should train staff how to use and measure ingredients while cooking and serving. Once the staff understands the portion size they would be able to serve and work with portions.

The importance of high-quality raw materials for the preparation of food and drinks not only affects the quality of the products, i.e. food and drinks, but it is a very important issue when determining the price of menu items. If a manager uses low-quality raw materials be sure that an owner will have a much more waste, and the calculation of food costs would not be correct from the start. As a result, a restaurant manager has a product with the same quality, the same sale price but lower earnings. A manager needs to keep ingredients on high quality, reduce food waste and make a constant profit.

Doing seasonal menu changes is the best idea. This is especially important when talking about seasonal fruits and vegetables because of big differences in purchase prices during the year even over 100%.

Delicious seasonal fruits and vegetables should be part of the offer. It applies particularly to side dishes, salads, desserts and fresh juices from fruits and vegetables. In this way, the same prices provide higher earnings. An owner should keep main meal the same, change just the side dish and keep the same prices.

Consider all these facts when pricing your menu and doing the calculation of costs. Special attention should be paid to the cost of best-selling food and beverages. A manager needs to include in calculation quality, quantity, time of preparation, packaging and demands for certain menu items.

By changing prices for individual items from the menu and analyzing sales and profits due these changes, a restaurant operator will determine the best price for a particular menu items. Because sales and bottom line analyzes are your best indicators of success [11].

Example of How to Calculate Food Cost

Burger priced at 90 hryvnas

Table 1 - Cost of ingredients

Cost of beef patty	10
Cost of hamburger buns	0.20
Cost of tomatoes	0.07
Cost of ketchup	0.02
Cost of lettuce	0.10
Cost of pickels	0.10
Cost of oil	0.05
Overhead costs	0.50
	Total cost: 11.04
	Food cost percentages: 11%

Developed by the authors

It is important to understand that an owner cannot apply a blanket target food cost percentage across the menu items. If one owns a fine dining restaurant where prices are a bit

higher than a fast casual restaurant, he can get away with a higher food cost because of the larger profit margins.

As a restaurant owner, profitability is probably your number one priority. Managers often gauge a restaurant's success by how profitable it is. Ultimately that is all that matters. In the restaurant industry, the owner's main method of increasing profits is through selling food. It only makes sense to understand the food cost of every dish on a menu to assess which dishes are profitable and which aren't.

Despite its importance, food costing is often not taken seriously by restaurant operators. This could be because of the assumption that food costing is a difficult process, or because food cost isn't as tangible a cost to a business as rent and labor. Regardless, assigning value to food cost is one of the quickest methods to get onto the path of profitability.

Food costing isn't only limited to small restaurant chains. It is an industry standard that even the biggest global restaurants put into practice.

If we take Burger King as an example it sells around 16.7 million burgers per day. If Burger King doesn't optimize their food costs down to one cent, they are losing \$167,000 per day, or \$61 million a year [12].

Obviously the same applies for smaller restaurants too. If a restaurant manager runs a moderately successful independent restaurant that seats about 100 customers per day he is looking at losing 30,000-50,000 hryvnas per year when your food costs aren't optimized.

There are a number of reasons why a manager always needs to calculate food cost at restaurant. Because it allows a restaurant owner to know which menu items are profitable and which aren't, preventing a manager from missing out on any opportunities to make more money. When a manager knows which items are more profitable, one can design menu and pricing around food cost (this is actually a strategy most restaurants use). Understanding how each ingredient affects the profit margins. If there is a sudden spike in the cost of beef, an owner will be prepared to adjust prices accordingly to protect the profit. Most importantly, it allows the owner to set a standard food cost percentage across the board, and eliminate any menu item that costs too much (or find a way to bring the food cost down).

So now we have a grasp on food costing and its importance and how do you optimize it. We've listed a few simple strategies to help a manager to lower food cost and keep it there to prevent overspending where an owner doesn't have to. In general, a restaurant operator needs to increase the number of carbs on a menu. Carb heavy dishes tend to be a lot cheaper than protein based plates. Design your menu to highlight the most profitable menu items. Play around with portion sizes until a manager gets the food cost percentage he is looking for. Increase menu prices slightly to compensate for higher food cost dishes [13].

At its core, food cost is simply the cost incurred by a restaurant on food after taking into consideration all external and implicit costs. Food cost is used by restaurant operators to determine how much money they make back on the sale of a dish compared to how much it costs to make that dish.

Food cost should take everything from fixed overheads such as labor and electricity to individual ingredient costs into consideration. Food cost helps restaurant operators better understand the profitability of their menu items, and make decisions based on that knowledge [14].

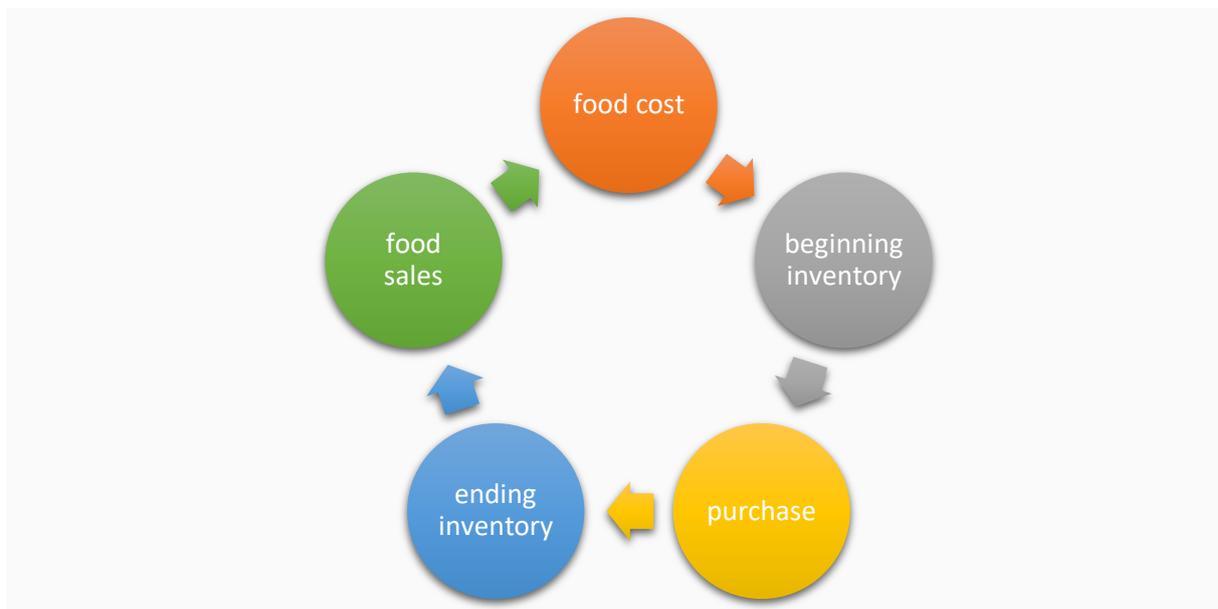


Figure 1 - The process of managing the building food cost in restaurant business

Developed by the authors according to [15]

There are some most common mistakes have been usually made during the creation of ingredient list for each menu item. It is necessary to involve main chef in this process or someone who knows the best each recipe. A manager needs to pay particular attention in: the type of food used for the preparation of specific drink or meal, the exact amount of each ingredient for the preparation of food, the quality of raw materials used for a preparation of food or drink, the amount of allowable drip loss for certain foods. the drip loss occurs during:

- Cleaning
- Cutting and formatting
- Cooling and storage
- Heat treatment (cooking, frying and baking).

This is very important, as for example for a portion of 330 grams of roasted beef steak a chef will need 500 grams of freshly cleaned steak because the loss for roasted beef is 34% of the total fresh meat. Define losses during food preparation (kalo) to have correctly defined norms (ingredients) for certain dishes, and thus exactly defined the cost of ingredients for cooking. Problems sometimes arise when a restaurant operator needs to determine the grammage of fine foods such as spices. The easiest and most accurate way to determine the exact amount of low grammage ingredients is to use the amount for preparation of 10 portions and this amount divide with 10 to get a grammage and costs of these ingredients per portion.

Whatever the size of the establishment that is opened, the basic management essential from the view point of cost control first, how much money has been received and second, how much it has take that money. The management must learn how to understand this and be able to interpret the results so that adjustments can be made where and when necessary.

The cost of meals fall naturally into three distinct section, the first being the cost of the food, second cost of the overheads which include fuel, light, heat, water, staff uniforms, laundry, social security payments, printing and stationery, cleaning material, advertising, telephone and postage, decorations, license, maintenance, linen, cutlery and crockery, replacement cost, insurance and finally rent, rates and interests on capital outlay. Third

section is the salaries and wages. The relation between these classes of costs which are always a matter of interest and vary considerably from one type of catering establishment to another, the overheads, usually being greater than the bare cost of food.

The problem of any management-control system is to make sure that a pre-determined food and wage –cost percentage has been decided. The figure will take in all aspects of expenses. The final trading results will show that a correct return has been made. To obtain this the following information should be studied:

All purchase must be controlled

Details of all merchandise received must be rechecked, as and when issued

Any overproduction of food must be checked and of course reused in the best and most economical way

Production-ingredient amount must be checked before preparation

Check the sales with direct number catered for

An efficient system of cash control must maintain

Sales of any kind checked with cash receipts

A record of costs for each section (wine, cigars, flowers, meals, rooms) must be made and recorded

Total daily wage cost must be recorded

A weekly summary of all the relevant details must be prepared

The trading profit and loss account should be prepared.

Controlling food and labor costs are two of the most important tasks for a restaurant owner. With proper menu planning, sales forecasting and employee training, a restaurant can prevent overspending on staff and supplies and still provide excellent quality dishes and service. Using a variety of planning, monitoring and evaluation techniques, you can continually manage these expenses to ensure you remain profitable without sacrificing quality.

The first step in controlling food costs is to determine what they are, per diner. A manager can do this by calculating the expense of each ingredient that goes into each dish, or divide the total number of diners a restaurant serves per month by monthly food costs. Food costs include the cost of the food, delivery, interest on those purchases, spoilage, theft and make-good meals returned for lack of quality.

Knowing the food costs of individual dishes lets an owner determine whether they belong on a menu. For example, if overhead cost per customer is \$7 and food cost for a specific lunch dish is \$4, the cost to serve that customer is \$11. Customers must pay \$11, as well as for a drink, tip and tax, and the desired profit margin, which brings the bill to more than \$15. If a target customer wants to spend \$12 or less on lunch, this item doesn't belong on a menu.

Some menu items can be loss leaders, used to attract customers who spend more on appetizers, drinks or desserts. Eliminate items that don't sell well, reducing food costs.

Use ordering, inventory and security techniques that reduce food from going bad or being stolen. Keep track of monthly and annual traffic to better project demand and prepare for sales peaks and valleys. Record how many dishes are returned each service and why, and how many meals a restaurant operator comps or replaces to determine if the problem is a particular cook or one or two dishes a manager needs to eliminate.

Buying in bulk saves you money, but can lead to spoilage of fresh foods. Work with suppliers to buy in bulk but receive orders in multiple shipments. Require servers to check each dish against the corresponding ticket to prevent orders from going out incorrectly.

Review expected tables for each service during the week and mix staff to ensure owners don't end up with all rookies during one lunch rush and all veterans during a slow dinner. Have fewer staff members for set-up and takedown than during a service to minimize your costs. To keep costs low on slow nights without losing staff, offer a cancellation fee to staff you schedule but send home. An owner'll pay staff for not working, but pay less than if they had stayed doing little or no work.

The more each staff member can do, the more productivity a manager'll receive from each. Slow service can doom a restaurant as customers leave or make the decision not to return. Train prep cooks to prepare menu items and managers and bus staff to serve diners to help out during rush periods.

Restaurants rely on repeat customers and sales of non-entrée items to maximize revenues. Paying the least amount for dining room staff can lead to frequent turnover and poor customer service. Consider paying high-quality, trained staff more and teach them to know how to sell specials, upsell appetizers, desserts and drinks, remember regular customers and their preferences and work with your kitchen staff to get orders in and out quickly.

Work with a benefits provider to offer voluntary benefits, which an owner doesn't pay for, but which give employees the chance to purchase health insurance and other benefits at group rates [15].

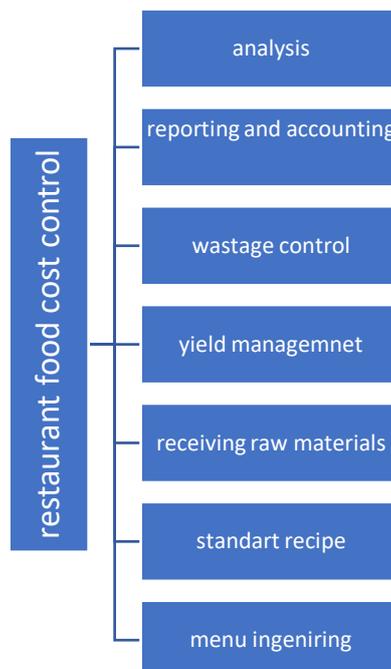


Figure 2 - The scheme of building a correct restaurant food cost control

Developed by author according to [11]

Conclusions. So now we have a grasp on food costing and its importance and how do you optimize it. We've listed a few simple strategies to help a manager to lower food cost and keep it there to prevent overspending where an owner doesn't have to. In general, a restaurant operator needs to increase the number of carbs on a menu. Carb heavy dishes tend to be a lot cheaper than protein based plates. Design your menu to highlight the most profitable menu items. Play around with portion sizes until a manager gets the food cost percentage he is looking for. Increase menu prices slightly to compensate for higher food cost dishes. At its core, food cost is simply the cost incurred by a restaurant on food after taking into consideration all external and implicit costs. Food cost is used by restaurant operators to

determine how much money they make back on the sale of a dish compared to how much it costs to make that dish. Food cost should take everything from fixed overheads such as labor and electricity to individual ingredient costs into consideration. Food cost helps restaurant operators better understand the profitability of their menu items, and make decisions based on that knowledge.

Investigation prospects. There was given much information about food cost according to the ratio between how much it costs in raw materials to make a dish and how much revenue a manager generates from that dish. There were also given two ways to measure food cost to determine how much it costs to make a dish for every hryvna business makes.

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