LECTURE 5

CALCULATING ACTUAL FOOD COST

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Introduction

The profit and loss statement also referred to as the income statement is used as a basis for actual costs incurred within the food service operation.by evaluating the income statement, one is able to determine the efficiency and profitability of the operation.

All financial statements used within the operation should adopt the same method for uniformity. In this case, the uniform system of accounts could be used in the determination of revenue, profits and expenses for a given period.

It is essential for managers to have the ability to interpret the data in financial systems for them to effectively manage costs. The goal is to maximize on revenue by maintaining expenses at recommended or ideal levels.

Basic Formulae

Beverage costs and revenues are computed separate from food costs especially in operations that serve both. This ensures that minor differences are captured and any areas of underperformance are identified. Using total revenue, the actual cost of food among other expenses can be captured using percentages. The cost of food sold refers to the amount of money spent on food items whether they were actually consumed or stolen, thrown out, wasted etc. Assuming that a restaurant's performance is as indicated below:

Revenue		1,200,000
Expenses: Food	450,000	
Labour	510,000	
Other	85,000	
Total		1,045,000
Profit		**$155,000**

Various cost percentages can be computed as.

Profit = Revenue – Expense

1,200,000 – 1,045,000 = $155,000

Food Cost % = Food Cost × 100

Revenue

450,000 × 100 = 37.50%

1,200,000

Labour Cost % = Labour Cost × 100

Revenue

510,000 × 100 = 42.50%

1,200,000

Expenses % = Expenses × 100

Revenue

85,000 × 100 = 7.10%

1,200,000

Total Expense % = Total Expense × 100

Revenue

1,045,000 × 100 =

1,200,000

According to the Restaurant Association of New Zealand, (2017) food cost calculations begin with determining the cost per dish. This forms a basis for further calculations and at the same time revealing any dishes that may be contributing to a high food cost. Various software can be used compute the figures to promote accuracy and speed. When estimating the cost of a dish, the following are necessary:

- Obtain the list of ingredients and their respective quantities from the standard recipe.
- Get the price of each ingredient from the purchasing records. Updates should be factored in the evaluations.
- Calculate the cost of the consumed goods and tally up to get the cost of the dish

Example:

Assuming that the standard recipe for a basic omelette calls for:

Ingredients	Quantity	Purchase Price ($)	Cost
Eggs	2	0.15 Cents each	
Onion	0.5	0.10 Cents each	?
Capsicum	0.25	0.10 Cents each	
Oil	20g	11 for 5 liters	
Salt	2g	0.50 Cents per Kg	

To obtain the cost of producing the dish based on the cost of food, the following applies:-

Eggs: $2 \times 0.15 =$ **0.30 Cents**

Onion: $0.5 \times 0.10 =$ **0.05 Cents**

Capsicum: $0.25 \times 0.10 =$ **0.025 Cents**

Oil: 1L is equivalent to 880g, so;

$= 5 \times 880$

$= 4400g$

$$= \frac{20g \times \$11}{880g}$$

= $0.05

Salt: $\frac{\$0.50 \times 2g}{1000g} =$ **0.001**

Therefore, the actual cost of making the dish is: 0.30+0.05+0.025+0.05+0.001= **$0.426 Cents**

Food Costing

A **cost** is a unit of measurement that signifies a level of investment meant to reap back benefits. In food service, it is the price paid in order to facilitate production and service.

Costing is therefore the act of determining ideal and actual levels of costs within the operation.

Control of cost is hereby the means within which managers regulate events pertaining to costs for the operation to achieve its financial objectives.

Food costing ensures that specific costs of food are maintained within the ideal range.

Food cost control occurs anywhere between purchasing and selling. Within this part of the cycle, is necessary to establish the operating cost as well as ideal profits. To do this, one should:

- Weigh between capital and returns
- Establish ideal profit levels
- Determine the amount of revenue needed to cater to all costs
- Estimate the cost of sales from sales forecasts
- Evaluate the profit margin of various menu items

Actual Food Cost

It is computed using the formula:

Actual Food Cost = Opening Inventory + Purchases (and transfers) – Closing Stock (might include complimentaries, staff meals and outward kitchen transfers)

Opening inventory – can be obtained through physical stock taking or by use of the closing inventory of the previous period. It is expressed in monetary value and obtained by:

No of Items × Purchase price

Purchases – include any purchases made for the current period.

Closing Stock – this includes anything that is left from the current period.

Transfers – may be inward or outward, depending on whether the kitchen is receiving them from a different kitchen or issuing them.

Complimentaries – any food items issued to guests on the house for any reason whatsoever.

Staff meals – food officially prepared for and consumed by the staff. When calculating the cost of food as means of financial analysis for profitability, staff meals may be considered as an independent type of cost as opposed to food cost. This is primarily because they are often offered as a form of employee welfare.

Example:

In a Pizzeria, the value of stock at the beginning of the day was $2,400. Goods worth $1,200 were purchased to further facilitate production. Some items worth $600 were issued out to a separate facility. Calculate the actual food cost if the closing stock was $200.

Solution:

Actual food cost is (2,400+1,200) – (600+200) = **$2,800**

Food cost percentages indicates the used in the calculation of actual food cost are a traditional means of appropriating the fraction of sales or revenue used on food as an expense. The fractions are as outlined in page 2 of this lecture.

The cost of food can be evaluated as often as required such as on a daily, weekly or monthly basis etc.

Daily Food Cost

The evaluation of food cost on a daily basis promotes a frequent analysis of the cost. This however requires that physical inventory is also taken on a regular basis consuming more time and energy.

Although food cost percentages can be estimated by maintaining daily records of sales and purchases, physical stock taking accounts for the invisible occurrences in a business that could affect the operation such as theft, spoilage and damage.

Estimating daily food cost requires daily entries of purchases and sales revenue in records. All purchases are the summed up to form the cost of the day's purchases. Similarly, the sales

revenue is compounded by summing up the prices of all items sold during the same period. The daily food cost is the estimated based on these figures by:

$$\textbf{Daily Food Cost } \% = \frac{\text{Purchases}}{\text{Sales Revenue}} \times 100$$

When estimating the food cost percentage for any other period, all sales and purchases made within the time should be factored in. The length of time within each period should also be the same for accuracy.

Attempt the following exercise on estimating daily food cost percentages.

Part 1:

Calculate:

a) The food cost percentage for the week given:
b) The food cost percentages for Tuesday and Thursday.

DAY	Purchases ($)	Sales ($)	Food Cost (%)
Monday	1,450	2,320	**62.5**
Tuesday	1,330	1,666	_____
Wednesday	1,280	2,304	**55.6**
Thursday	1,010	1,465	_____
Friday	1,705	2,220	**76.8**
Saturday	2,255	4,285	**52.6**
Sunday	2,600	3,120	**83.3**
Total	**11,630**	**17,380**	_____

Date: _____

Prepared By: _____ **Sign**: _____

Part 2:

Assuming that goods worth $20,150 were ordered on 12th January 2021, estimate the food cost percentage if 2,550 guests purchased products worth $23 each.

Benefits of maintaining daily food cost records include;

- It is fairly easy to use
- Defines the relationship between sales and expenses
- Promotes accuracy
- Promptly identifies issues
- Maintains a record of sales and purchases that indicate the trend

Monthly Food Cost

A major challenge of monthly food costs is determining the length of time per period. It is paramount that food cost is estimated within same length period for consistency. However, monthly food cost will determine whether there are any particular issues within the system that need prompt action thus assure the sustenance of revenue levels. Monthly food cost reports indicate the cost of food sold, sales on the products sold among other vital food cost percentages.

Causes of high food cost

In order to perform the evaluations with some precision, it is essential that the current price list is adopted and that random spot-checks are performed. There are numerous reasons discussed in this course so far, as to why the food cost may be high. Such as;

- Over-portioning
- Food waste and spoilage
- Price increments
- Receiving less than ordered
- Fraud and theft
- Overcooking etc.

Food and labour costs take the bigger share of overall costs within an operation. It is essential to maintain an ideal level of these costs by monitoring performance as often as possible. This

should be done while still guaranteeing the guest of quality products at an appropriate portion. Eventually, an operation employing these mechanisms attains profitability by maximizing on revenue.

Solution 1

Tuesday – 79.8

Thursday – 68.9

Total – 66.9

Solution 2

Assuming that goods worth $20,150 were ordered on 12th January 2021, estimate the food cost percentage if 2,550 guests purchased products worth $23 each.

To find sales revenue – 2,550 × $23

= 58,650

Thus; 20,150 ÷ 58,650

= 0.3436 × 100

= 34.4%

Quiz

1. Mention the factors you would consider when evaluating the cost of a dish.
2. Describe the following terms:
    a. Complimentary
    b. Opening stock
    c. Kitchen transfers
3. Explain how you would estimate the food cost on a daily basis.
4. State why monthly evaluation of food cost might be a challenge and suggest a way to solve it.
5. List some of the things that contribute to a high cost of food.

REFERENCES

Dopson L. R., Hayes D. K. & Miller J. E. (2008). Food and Beverage Cost Control. 4th Edition. John Wiley & Sons, Inc. 109-122

Restaurant Association of New Zealand, (2017). Food Costing .A Business Resource. [Online] Available: https://www.restaurantnz.co.nz/wp-content/uploads/2017/07/Food-Costing-Guideline-Restaurant-Association-July-2017.pdf