

The Rise of Diet Food Consumption Among Industrial Youth: A Study of the Food Processing Industry in Mysore

Dr.Aashish.C.I¹, Prof. Sowmya .H.L²

¹Associate Professor, Pooja Bhagavat Memorial Mahajana Education Centrem Metagalli, K.R.S Road, Mysore-570016

²Co-Author, Proprietor, Sharada Vidya Mandir, Mysore

Abstract: Industrial Youngsters must be conscious about food which they are consuming and physical activity because second level employees will be in the process of planning. Employees have to be physically fit to handle the raw material before the complete assembly of the finished goods that take place. The food processing industry have been increasing due to more customer demand.it is an innovation process where raw ingredients are converted into ready eatable form. The main aim of this research paper is to understand the quality and quantity of consumption of the diet food and its process in the unit.it also aims at to understand the relationship between price of the product and consumption of diet food. Data was collected by using structured questionnaire, 100 respondent was participated in the survey and data was collected in different location in Mysore sub urban. This study provide valuable insight regarding food processing industry by examining pricing, quality and quantity factor. It suggested to understand the needs, wants and attitude towards diet food use them as marketing strategy to increase the sale and encourage people in following healthy diet.

Key factors: Food processing industry, consumer, quality, quantity and price.

INTRODUCTION

Food is the Basic need of all living being on the earth and basic necessity of the humans. Traditional food process had worked only with local area food with very low quality packing process. Whereas industrial food processing industries concentrates not only on the quality of the food but centres on the preservation of the food for long period and also on the process of the product. The industries aims at providing the nutritious food and maintain good health amongst the huge population. Which in turn helps in the growth of sales and the demand for product. Based on the upcoming generation the traditional food has taken a best step of changing its

taste and preferences based on the demand factor by thee consumers. Food processing is the technique used by industry to give out preserved and processed food for daily consumption. With the change from traditional to industrial food processing there has been a change in the types of product processed. There are many techniques which is used in food processing industry and most common process used in food processing units are drying process, preservation process, smoking process, freezing, vacuum packs, salting, picking, sugaring etc.

Drying: This is the traditional method of preserving food in ancient days. This method was practiced by the people of ancient day because when food is dried it reduces water content in it and it became a common technique in those days.

Preservation process: This process is done in the food processing industry and includes different techniques like freezing, boiling and heating which kills the harmful micro-organisms and toxic among the food products.

Smoking: This is a process which is used to preserve the non-vegetarian items by different flavoured smokes. This became famous and is also famous in recent days.

Freezing: In the recent days the food is been processed by freezing. The food processing industry conduct this in a larger cold storage areas and preserves all kind of perishable food in them and use it.

Vacuum pack: This airtight packing process of food is done to protect eatables from getting rotten. This is a new concept of processing and packing food by the food processing industries.

Salting: This process includes salt which absorbs the wet o the moisture content present in the food and helps in packing of food for long term.

Pickling: This preserving process of food under goes cooking for destroying all kinds of micro-organisms and few chemicals which are harmless to human body are used in the process for preservation. The main items used in this is vegetables.

Sugaring: This method was mainly processed for preserving fruits, fruits where cooked with sugar syrups and dried and was used. This also became a part of branding the alcohols.

Food processing industry earn more value in the country because of following reason

A. benefit to more number of formers, vendors and packing suppliers,

B. Create more employment opportunity,

C. value to crops by processing,

D. participates in export trade hence increases in foreign exchange,

E. Major source of food in the diet.

Food processing is the process of converting raw ingredients into food which can eatable easily prepared and served. "Food processing is the transformation of cooked ingredients, by physical or chemical means into food, or of food into other forms."

Industrial Young employees are those people whose age is between 15 to 25 and working in industrial unit. Youngsters can be define them as the period between childhood and adult age. It is a life period where the person is neither child nor adult.

RESEARCH OBJECTIVES

1. To Evaluate the quality and quantity of consumption and processing of the unit.
2. To Determine the relation between price of the product and consumption pattern.

LITERATURE REVIEW

1. Fortuin and Omta (2009) discussed innovation drivers and barriers in food processing, finding that consumer demand and competition have prompted industries to innovate. Using data from nine multinational companies, they highlighted that overcoming internal resistance is key to innovation.

2. Taylor, Evers, and McKenna (2005) emphasized determinants of healthy eating in youth, identifying influences such as media exposure, age, socioeconomic status, and nutritional education as major factors affecting diet patterns.

3. Nowak-Wegrzyn and Flocchi (2009) studied how heating affects food allergenicity. Their findings showed that while heating can reduce allergenic proteins in some foods like milk and eggs, it can also increase allergenicity in others, like peanuts and shrimp.

4. Joshi (2010) analyzed lifestyle and food consumption among youth and advocated for health education, citing that over 20% of the global population consists of youth who must be sensitized to adopt healthy eating habits.

5. Rani (2014) examined factors influencing consumer buying behavior. She concluded that psychological, social, cultural, and personal factors significantly affect consumption decisions and should inform marketing strategies.

6. Smith, Raffle, Marriott, and Smith (2009) explored the concept of food poverty, highlighting that financial, social, and geographical limitations prevent access to healthy food, particularly among low-income populations.

7. Healthy Food for Life (Department of Health, Ireland, 2016) presented a visual food pyramid for various age groups, promoting portion control, fresh ingredients, and healthy preparation methods.

8. Decareau (1992) outlined the role of microwave food processing, detailing the equipment and benefits of using microwave technology in industrial-scale food preparation.

9. Connor and Schiek (1997) described the transformation of the U.S. food processing industry, noting shifts in management, location, and retail format, thus providing insight into global food industry dynamics.

10. Schoub and Levnord (2001) suggested composting as an alternative for reducing waste in the food processing industry, showing that nearly 30% of raw materials become waste and can be reused through composting.

12. Chandrasekaran and Beak (2012) reviewed microwave food processing, concluding that it is among the most efficient thermal processing techniques and enhances both safety and speed in production.

METHODOLOGY

This paper is based on primary and secondary data. Primary Data was collected using structured questionnaire in order to assess industrial youngster's response to diet food, 100 respondent was participated in the survey and data was collected in different location in Mysore sub urban. Overall, the sample was reasonable representative of Mysore population. Secondary data was collected by referring different journals and websites.

Analysis and interpretation:

1. Chi- square test is calculated to analysis the quality and quantity of food that are proceed in food industry.

Sl.no	Values
1	8
2	16
3	30
4	46

H₀:90% of the food quality is not meeting the standards.

H₁: 90% of the food quality is meeting the standards.

Expected frequency= total frequency/total number

$$100/4=25$$

Chi-square = $\sum (O_i - E_i)^2 / E_i$

$$= [(8-25^2/25) + (16-25^2/25) + (30-25^2/25) + (46-25^2/25)]$$

$$= (289/25) + (81/25) + (25/25) + (441/25)$$

$$= 11.56 + 3.24 + 1 + 17.64$$

$$= 33.44$$

Degree of freedom= (n-1)

$$(4-1)=3$$

Alpha value=0.05

Table value=7.81

Interpretation: According to the hypothesis, taken at alpha value being 0.05 or 95% confidential level with degrees of freedom being 3. Null hypothesis which is so stated is rejected. Therefore alternative hypothesis which stated that "90% of the quality of food is meeting the standards".

2. Correlation is calculated to analysis the relation between price of the product and consumption pattern.

H₀: There is no relation between price and consumption.

H₁: There is a relation between price and consumption.

X= price

Y= consumption

X	Y	X ²	Y ²	xy
11	20	121	400	220
13	26	169	676	338
30	28	900	784	840
46	26	2116	676	1196
Total=100	Total=100	Total=3306	Total=2536	Total=2594

$$(r) = [N \sum XY - (\sum X)(\sum Y) / \text{Sqrt}([N \sum X^2 - (\sum X)^2][N \sum Y^2 - (\sum Y)^2])]$$

$$4 * 2594 - (100)(100) / \text{sqrt}([4 * 3306 - (100)^2][4 * 2536 - (100)^2])$$

$$10376 - 10000 / \text{sqrt}(13224 - 10000)(10144 - 10000)$$

$$376 / \text{sqrt}(3224 * 144)$$

$$376 / 681.36$$

Correlation=0.551

Interpretation: Since the value is 0.551 which is positive so there is positive relation between price and consumption pattern.

REFERENCE

[1] Assocham (2009) Food Processing and Agribusiness. New Delhi, India.

- [2] Bhuyan, A (2010) *India's Food industry on the Path of High Growth*, Indo-Asian News Service
- [3] Bhuyan, A (2010) "India's Food industry on the Path of High Growth" Indo-Asian News Service
- [4] Chadha, S.K. (1999). *Prospects of Agro Food Processed Industry*, Political Economy Journal of India, vol.8, No.3 and 4, pp. 124-131]. *Environmental Sciences, Tennessee State University, Nashville, TN 37209 1561 7.*
- [5] Epstein LH, Dearing KK, Paluch RA, Roemmich JN, Cho D. *Price and maternal obesity influence purchasing of low- and high-energy-dense foods. Am J Clin Nutr* 2007;86(4):914–922 [PMC free article][PubMed]
- [6] French SA. *Pricing effects on food choices. J Nutr* 2003;133(3):841S–843S [PubMed]
- [7] Government of India, Ministry of Food Processing Industries (2006-07), Annual
- [8] Government of India, Ministry of Food Processing Industries (2011) *Strategic Investment in India*, Mumbai, India Government of India, Ministry of Food
- [9] Kachru RP (2006) *Agro-Processing Industries in India-Growth, Status and Lucknow, India.*
- [10] Mehta GS (2012) "Agro-Processing Industry in Uttar Pradesh
- [11] Merchant A (2008) *India-Food Processing Industry OSEC Business Network, Network and www.osec.ch[10]. New Delhi, India.*
- [12] *Plan for Food Processing Industries in India. Processing Industries (2011-12) Annual Report. New Delhi, India. Prospects. Indian Council of Agricultural Research. New Delhi, India.*
- [13] Raunekar R, Huang CL. *Food Demand Analysis: Problems, Issues, and Empirical Evidence Ames, IA: Iowa State University Press; 1987 Report. New Delhi, India.*
- [14] *Reports of Agricultural and Processed Food Products Export Development Authority (APEDA)*
- [15] *Reports of Ministry of Food Processing Industries (MoFPI),*
- [16] *Revisions in the WIC Food Packages: Interim Rule Washington, DC: US Dept of Agriculture; 2007*
- [17] Sidhu, M. S. (2005). *Fruit and vegetable processing industry in India : An Appraisal of the Post-Reform Period, Economic and Political Weekly, vol.40 (28), July 9, pp.3056-61*
- [18] Singh Surendra P Tegegne Fisseha and Ekenem Enefiok March 2012 "The Food Processing Industry in India: Challenges and Opportunities" -*Journal of Food Distribution Research, Volume 43, Issue 1, Department of Agricultural and Structure and Development Potentials", Giri Institute of Development Studies.*