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## Study the role of brand awareness, consumption pattern, purchase decision and packaging of edible oil

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### Abstract

India is a major oil seed producing country. Edible oil is one of the basic and important ingredients traditionally used by all people for all food items and is essential for everything that is cooked. The market is flooded with various kinds of edible oils. Such as groundnut oil, soybean oil, coconut oil, sunflower oil, mustard oil, etc. Consumers are becoming more aware of quality, and they are also becoming more health-conscious, which has resulted in the introduction of refined oils. An important characteristic of the Indian edible oil consumption pattern is the variation in preferences across regions, driven by taste and availability. The present study was based on quantitative methodology through conducting a comprehensive survey of consumers in order to understand the role of brand awareness, health attributes, sensory, price, packaging and consumption of edible oil in India. 110 participants, comprising of students, service people, housewives, and business owners from different locations in Uttar Pradesh and Madhya Pradesh, took part in the survey on edible oils. It was found that according to the survey in the Impact of Brand Awareness on Consumer Behavior of Edible Oil, the higher majority of respondents Fortune, was 30.9% and fortune soya bean was 55.5%. It was found that according to that survey which is response to consumption patterns for different varieties of edible oil, 55.5% preferred soya bean oil, 20.9% of respondent's preferred sunflower oil, 8.2% of respondents preferred vegetable oil, 6.4% of respondents prefers mustard oil and 4.5% preferred olive oil.

**Keywords:** Brand awareness, consumption pattern, purchase decision, purchase location, packaging material, consumers

### Introduction

India is blessed with many positive factors that enable it to stand at a unique position in agro-based products. After achieving independence, Indian agriculture is a positive whereby it has become not employer of agricultural based products. India is one of the largest producers of oilseeds in the world. Groundnut oil is the second most preferred edible oil. Increasing health awareness and effective implementation of food laws will expand the market for branded edible oils in the future (Elyaraja and Rajamohan 2018). Traditionally people have been using unrefined oils such as gingerly oil, ground oils and coconut oil. In recent years, there is a growing awareness among the consumer towards quality and they have also become health conscious which resulted in the arrival of refined oils. Thus in the recent past, the edible oil market is catered by many branded refined oils available in loose and in consumer packs. The refined oil is available for different varieties of edible oils like gingili oil, sunflower oil, groundnut oil, etc. Edible oils are most often plant-based oils, which are similar, if not the same as those produced by the industrial biotech industry for use as biofuels such as biodiesel, for use in cosmetics, and in other everyday biotech products. Edible oils may be solid or liquid at room temperature (Arya *et al.*, 2021) <sup>[10]</sup>. The oil is mostly sold loose directly to the consumers from a variety of containers, often within two to three days of production. These local crushers will produce between half and two MTs per month. This decentralized production and marketing pattern may account for around 20% of all edible oils in the country. The share of raw oil & refined oil in the total edible oil market is respectively 42.0% and 42.7% as per the Department of Food & Public Distribution. In the above context, an attempt has been made to understand the buyer's behavior and brand preferences for edible oils in the state of Maharashtra (Sarwade, 2011) <sup>[8]</sup>. This research work was aimed to study the role of consumption pattern, purchase decision and packaging of edible oil.

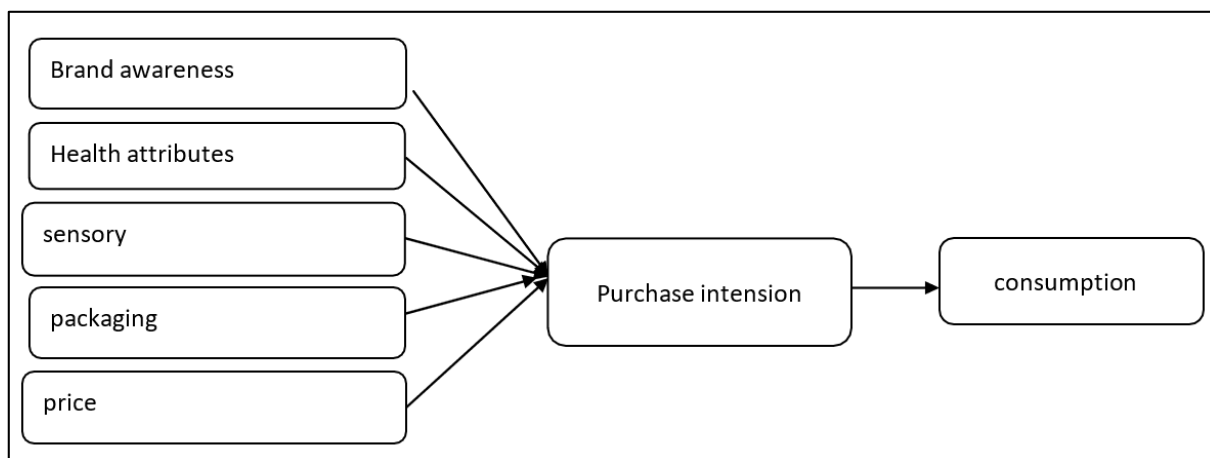
**Material and Methods**

**Selection of the study area**

The present study was carried out in different location in India like Uttar Pradesh (Allahabad, Agra) and Madhya Pradesh (Narsinghpur, Jabalpur, Indoor, Mandala,).

**Conceptual frame work**

The present study was based on quantitative methodology through conducting comprehensive survey of the consumers in order to understand the role of brand awareness, health attributes, sensory, price, packaging and consumption of edible oil.



**Development of questionnaire**

The questionnaire was developed in order to achieve the purpose and objectives of the study. The questionnaire was developed on the basis of previous studies concerning the role of brand awareness, health attributes, sensory packaging and consumption of edible oil.

**Data collection**

The data were collected at different location in India like Uttar Pradesh (Allahabad, Agra) and Madhya Pradesh (Narsinghpur, Jabalpur, Indoor, Mandala). The questionnaire was distributed to 110 participants comprising of student, service persons, housewives and business persons.

**Sources of data collection:**

Primary data was collected by preparing questionnaire and the people were randomly requested to fill them. (Maric *et al*, 2010) [4], (Kannan 2017) [2], (Souki 2015) [5] and Secondary data- Secondary data was consist of different literatures like books which are published, articles, journals, magazines, internet and websites. (Khanna 2016), (Kannan 2017) [2], (Souki 2015) [5].

**Statistical tools used**

The main statistical tools used for the analyses of data in this

research were: Pie chart which was used to represent the data in percentage, obtained from survey, Bar diagrams which was used to represent the numeric value (exact value) of the data obtained from survey and Chi-square test which was used to analyze the data obtained from survey at 5% significance level. (Kannan 2017) [2], (Artalejo *et.al* 2002), (Gul *et.al* 2017)

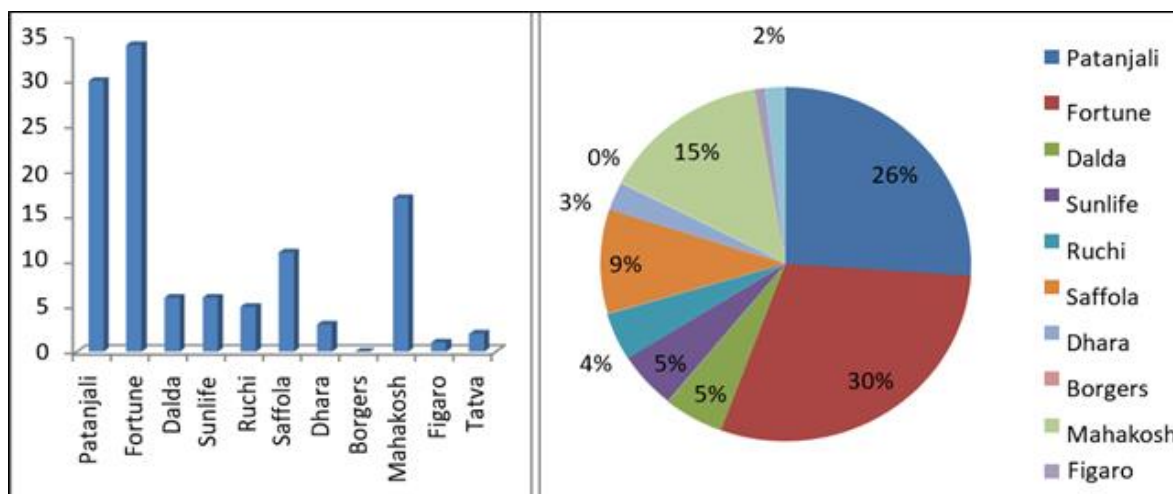
**Results**

**1 Impact of Brand awareness on consumer behavior of edible oil**

According to the survey it was found that the Impact of Brand awareness on consumer behavior of cooking oil was as follows: 27.27% prefer Patanjali brand, Fortune is preferred by 30.9% of the total responses, 5.45% prefer Dalda, 5.45% prefer Sunlife, 4.45% prefer Ruchi, 10% prefer Saffola, 2.7% prefer Dhara, 0% prefer Borgers brand, 15.45% prefer Mahakosh brand, 0.9% prefer Figaro, 1.8% prefer Tatva brand. According to this result, Fortune has the highest percentage i.e., 30% and lowest percentage is of Borgers i.e., 0% as shown in Table 4.1. At 5% significance level, tabulated value of chi-square test is 18.31. Calculated value for this analysis is 61.506.

**Table 1:** Impact of Brand awareness on consumer behavior of edible oil

S. No.	Brand currently used	No. of frequency	Percent	Chi-Square Statistic Calculated value 5%	Chi-Square Statistic tabulated value 5%
1	Patanjali	30	27.27	61.506	18.31
2	Fortune	34	30.9		
3	Dalda	6	5.45		
4	Sunlife	6	5.45		
5	Ruchi	5	4.5		
6	Saffola	11	10		
7	Dhara	3	2.7		
8	Borgers	0	0		
9	Mahakosh	17	15.45		
10	Figaro	1	0.9		
11	Tatva	2	1.8		
	Total	110	100		



**Fig 1:** Responses and percentage of Impact of Brand awareness on consumer behavior of edible oil Similar results were also obtained in previous researches done by Gurrappanaidu *et al.* (2012) <sup>[1]</sup>.

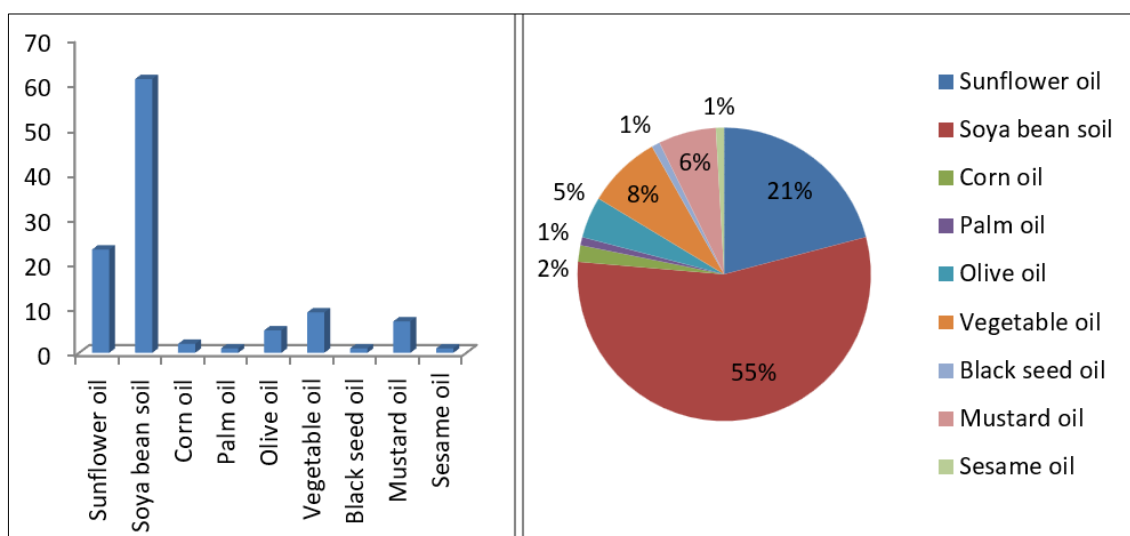
**2 Consumption pattern for different varieties of edible oil**

According to the survey of consumption pattern for different varieties of edible oil 20.9% respondent prefer “Sunflower oil”, 55.5% prefer soya bean oil, 1.85% prefer “corn oil”, 0.9% prefer “palm oil”, 4.5% prefer “olive oil”, 8.2% prefer “vegetable oil”, 0.9% prefer “blackseed oil”, 6.4% prefer

“mustard oil” and 0.9% prefer “sesame oil”. According to this result maximum number of respondents prefer “Soya bean oil” that is 55.5% whereas minimum respondents 0.9% were prefer “Palm oil”, “Black seed oil” & “Sesame oil”. At 5% significance level, tabulated value of chi-square test is 15.51. Calculated value for this analysis is 5.313.

**Table 2:** Responses for consumption pattern for different varieties edible oil

S. No.	Vegetable oil and fat	No. of frequency	Percent	Chi-Square Statistic Calculated value 5%	Chi-Square Statistic tabulated value 5%
1	Sunflower oil	23	20.9	5.313	15.51
2	Soya bean oil	61	55.5		
3	Corn oil	2	1.8		
4	Palm oil	1	0.9		
5	Olive oil	5	4.5		
6	Vegetable oil	9	8.2		
7	Black seed oil	1	0.9		
8	Mustard oil	7	6.4		
9	Sesame oil	1	0.9		
	Total	110	100		



**Fig 2:** Responses and percentage of consumption pattern for different varieties edible oil Similar results were also obtained in previous researches done by Gurrappanaidu *et al.* (2012) <sup>[1]</sup>.

**Factors affecting purchase Decision of edible oil**

According to the survey regarding factors affecting purchase

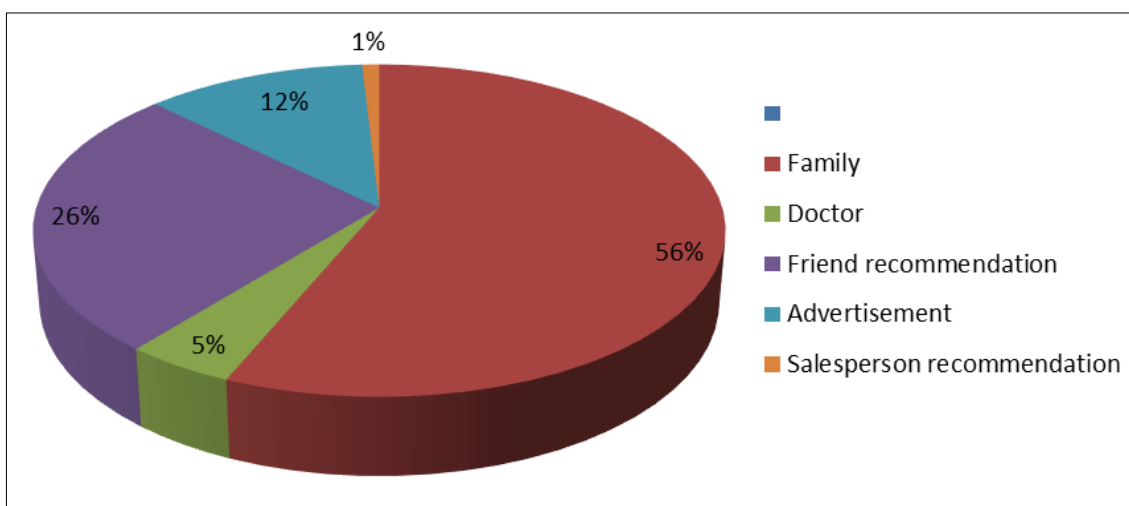
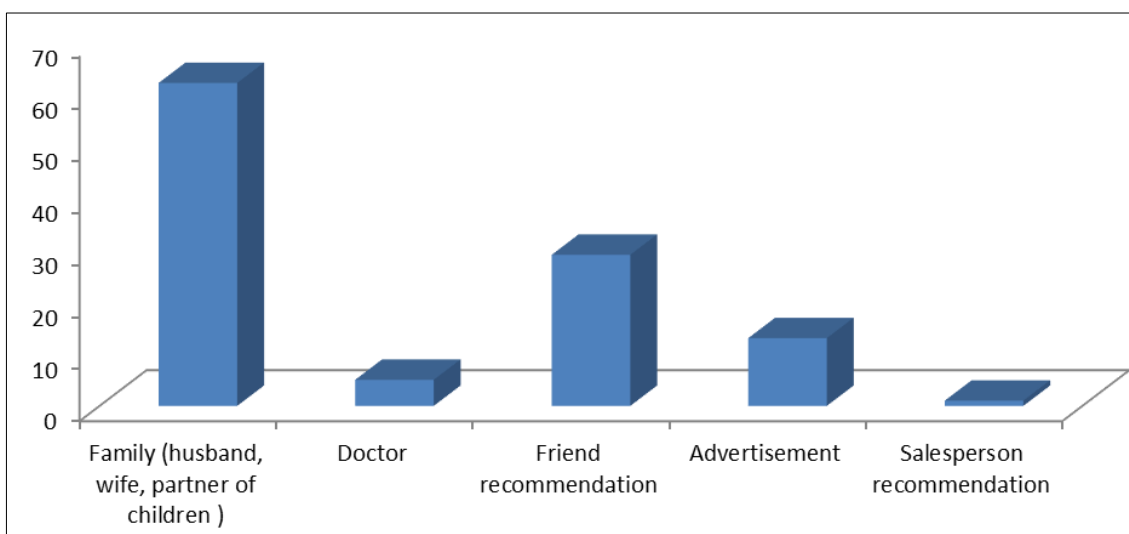
decision of edible oil 56.4% people responded that they make decision among “Family”, 5% people responded that

“Doctor” prescribed them, 26% people responded that they purchase on “Friend recommendation”, 11.6% people responded they purchase through “Advertisement” and 0.9% people responded that they purchase on “Salesperson recommendation”. According to this result maximum number

of people that is 56.4% responded that they make decision among “Family” and minimum number of people that is 0.9% purchase on “Salesperson recommendation”. At 5% significance level, tabulated value of chi-square test is 9.49. Calculated value for this analysis is 39.680.

**Table 3:** Factors affecting purchase Decision of edible oil

S. No.	Decision making to purchase edible oil	No. of frequency	Percent	Chi-Square Statistic Calculated value 5%	Chi-Square Statistic tabulated value 5%
1	Family (husband, wife, partner of children)	62	56.4	39.680	9.49
2	Doctor	5	4.5		
3	Friend recommendation	29	26		
4	Advertisement	13	11.6		
5	Salesperson recommendation	1	0.9		
	Total	110	100		



**Fig 3:** Factors affecting purchase Decision of edible oil Similar results were also obtained in previous researches done by Vishal Raut (2014) [6].

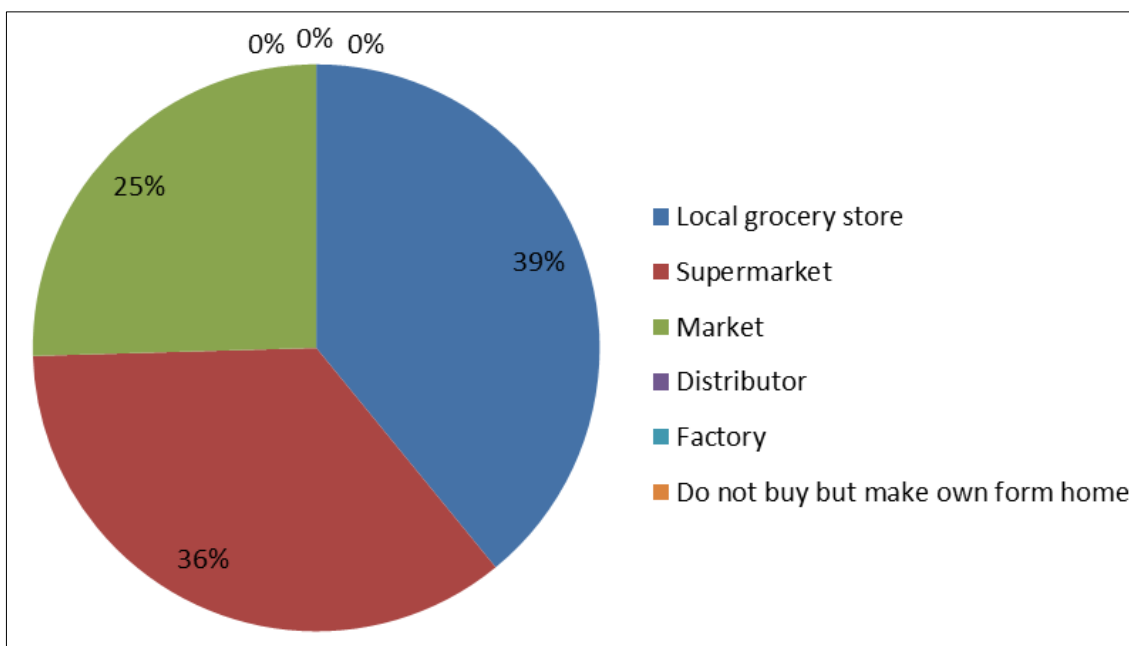
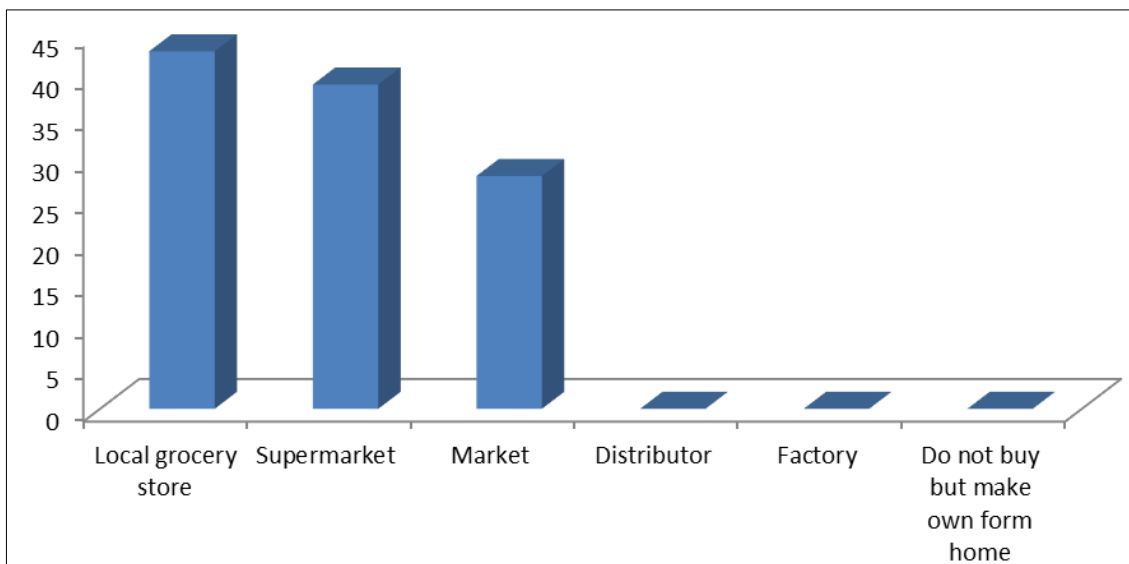
**Different Location of purchase of edible oil**

According to the survey of different location of purchase of edible oil 39.1% respondent buys from “Local grocery store”, 35.5% respondent buys from “Supermarket”, 25.5% respondent buys from “Market”, 0% responded for Distributor, 0% responded for “Factory” and 0% responded for “Do not buy but make own form home”. According to this

result maximum respondents buys edible oil from “Local grocery store” that is 39.1% whereas 0% responded to Factory, Distributor and “Do not buy but make own from home”. At 5% significance level, tabulated value of chi-square test is 11.07. Calculated value for this analysis is 5.178.

**Table 4:** Different Location of purchase of edible oil

S. No.	Buying Place	No. of frequency	Percent	Chi-Square Statistic Calculated value 5%	Chi-Square Statistic tabulated value 5%
1	Local grocery store	43	39.1	5.178	11.07
2	Supermarket	39	35.5		
3	Market	28	25.5		
4	Distributor	0.0	0.0		
5	Factory	0.0	0.0		
6	Do not buy but make own form home	0.00	0.00		
	Total	110	100		



**Fig 4:** Different Location of purchase of edible oil Similar results were also obtained in previous researches done by Lavanya *et al.* (2012)<sup>[3]</sup>.

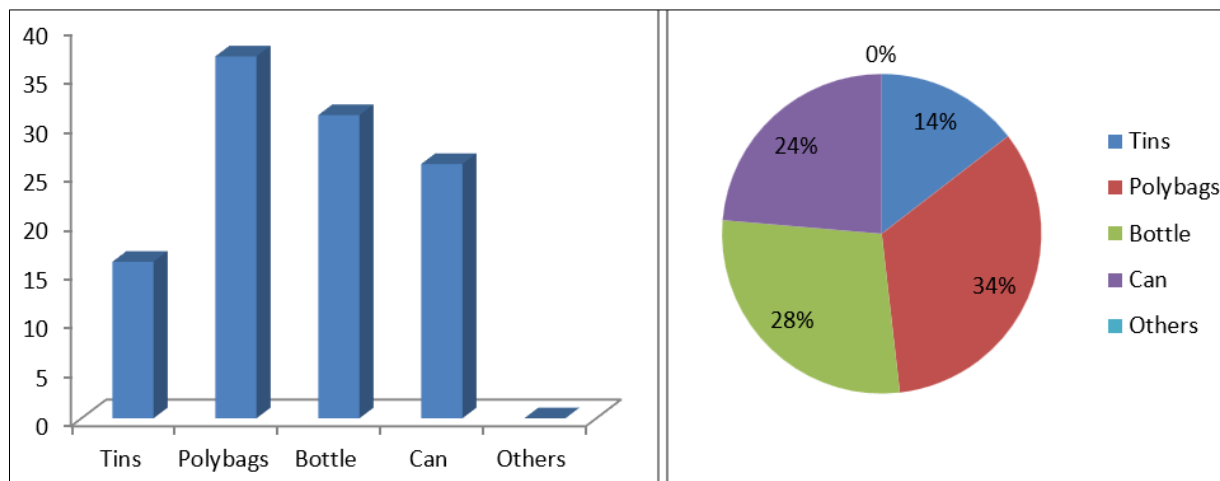
**5 Type of packaging material preferred by consumers**

According to the survey on type of packing material preferred by consumers 14.5% respondent prefer “Tin packaging”, 33.6% respondent prefer “polybags packaging”, 28.2% respondent prefer “Bottled packaging”, 23.6% respondent prefer “can packaging”, 0% responded to others method of

packaging. According to this result maximum numbers respondents prefer “Polybags packaging” that is 33.1% and 0% responded to “Others”. At 5% significance level, tabulated value of chi-square test is 9.49. Calculated value for this analysis is 38.783.

**Table 5:** Type of packaging material preferred by consumers

S. No.	Package of cooking oil	No. of frequency	Percent	Chi-Square Statistic Calculated value 5%	Chi-Square Statistic tabulated value 5%
1	Tins	16	14.5	38.783	9.49
2	Polybags	37	33.6		
3	Bottle	31	28.2		
4	Can	26	23.6		
5	Others	0	0		
	Total	110	100		



**Fig 5:** Responses and percentage Type of packaging material preferred by consumers Similar results were also obtained in previous researches done by Thomas *et al.* (2015) [5].

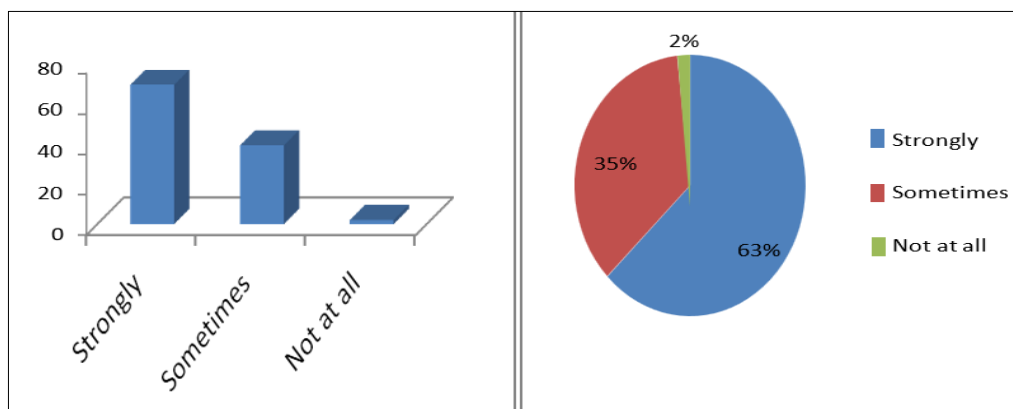
**Influence of packaging while buying edible oil**

According to the survey on influence of packaging while buying edible oil 62.7% respondent are strongly influenced by packaging, 35.5% respondent were sometimes influenced by packaging, 1.8% respondent were Not at all influenced by packaging. According to this result maximum respondent

were sometimes influenced by packaging of edible oil that is 62.7% whereas 1.8% respondents were Not influenced by packaging of edible oil at all. At 5% significance level, tabulated value of chi-square test is 5.99. Calculated value for this analysis is 44.108.

**Table 6:** Influence of packaging when buying edible oils

S. No.	Packaging	No. of frequency	Percent	Chi- Square Statistic Calculated value 5%	Chi- Square Statistic tabulated value 5%
1	Strongly	69	62.7	44.108	5.99
2	Sometimes	39	35.5		
3	Not at all	2	1.8		
	Total	110	100		



**Fig 6:** Responses and percentage of Influence of packaging while buying edible oil. Similar results were also obtained in previous researches done by M. Salazar *et al.* (2015) [5].

**Conclusion**

According to obtain result greater majority of consumers

consume respondent are soya bean oil 55.5% and majority of purchase decision of cooking oil was found, family 56.4%.,

majority of respondent purchase location of edible oil was found, local grocery store 39.1% and majority of consumers prefer packaging material of edible oil was found, polybags 33.6%. Mustard oil reduces triglycerides level and help in keeping the heart healthy. It was also concluded that most people in Madhya Pradesh prefer peanut oil and refined oils majority of population in Maharashtra prefer peanut oil and in Uttar Pradesh, mustard oil was found to be the most common choice.

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