

A Study on the Important Characteristics associated with the Consumers' Current Practice of Use of Branded Edible Vegetable Oil

Dr. Dhananjay Pingale

APIMR, Manchar, Pune

Dr. Jena Joshi

Dr. D.Y. Patil Unitech Society's Dr. D.Y. Patil Institute of Management and Research

Dr. Jini Saxena

Dr. D.Y. Patil Unitech Society's Dr. D.Y. Patil Institute of Management and Research

Abstract:

Today's lifestyle has become complex and hypercompetitive. Due to hectic work schedule, priorities and fast-pace life, people hardly care about what they eat, how they eat, when they eat. They miss the timelines at times. In addition, getting hygienic food is another challenge. Hence, the manufacturers have come up with edible oils which are more safe with minimum negative impact. They advertise in such manner leading to brands. The present study aims to identify the salient features associated with branded edible vegetable oil. The study is empirical in nature. The statistical tools were applied to collect and analyze the data. The study is significant as it deals with the health consciousness, marketing strategy and consumer perceptions.

Keywords: *Consumer Perceptions, Branding, Vegetable Oil, Marketing Strategy*

1. Introduction

Vegetable oil is an essential constituent of the Indian household all over India. Vegetable oils are often known as the triglycerides of the fatty acids of saturated and unsaturated. It is used for many purposes including edible as well as non-edible. With the fast changing demand pattern of consumers regarding edible vegetable oil, there is a need for knowing the factors, which are important for understanding the underlying reasons for forcing change in consumer behavior. In India, consumers use edible oil for different purposes viz., cooking food, dressing salads, frying the foods, making mayonnaise, used as preservatives and also for providing the traditional flavor to food. Consumers consider many factors at the time of purchase of different oils viz., price, nutrition, taste, odour, colour, smoke, density, quality, taste, stickiness, nutritional value, packaging, availability, medicinal use, company's image and promotional schemes etc. This paper presents our study the different factors that are considered important choosing different vegetable oils.

2. Review of Literature

Prerna R (2013) in the research study titled "An Empirical Study on Brand Preference towards Edible oil in Rural Areas with Special Reference to Coimbatore District" explained that customers prefer good quality of edible oil which are healthy to consume. The author has suggested the edible vegetable oil manufacturing companies to emphasize on price, quality and packaging aspects of the branded oil as consumers consider these aspects for purchasing and consumption of the oil.

A research entitled “Sources of Information, Consumer Attitudes on Nutrition, and Consumption of Dairy Products” by Jensen H.H. & Kesavan T. (1993) has pointed that advertisement related to nutrition has a very high influence on the attitude of consumers. It increases awareness regarding health, which motivates the consumers to frequently consume dairy products and also makes them consume a large amounts. The advertisements with nutritional awareness have a positive effect on consumers’ thinking and attitude and influence them in considering healthy dietary changes.

Wang Guijing et al. (1995) in “Consumer Factors Influencing the Use of Nutrition Information Sources”, pondered about the different sources of nutrition information which is important for the consumers to know to determine the consumer usage of nutrition. The research paper determines the factors related to the usage, how much the level of information sources of nutrition is important and the way it provides knowledge to the consumers. It discussed that the result differs for both urban as well as rural areas. Moreover, it depended on consumers’ household expenditure, size of their family, qualification, age, and importance of nutrition. These are important factors and are positively related with the usage rate with which consumers look for information of nutrition. The study shows that the consumers with higher income used various sources to understand the nutritional source like food packages or labels for the nutritional source, newspapers, magazines, books and rarely referred doctor, nurse, home economist as compared to those having low household income.

Bainbridge Jane (2008) in the research study “Premium Appeal Returns a Profit” explains that consumers give higher preference to liquid oils than the solid fats. With more awareness regarding keeping good health through the intake, consumers are consciously emphasizing on the use of different varieties of oil for making various culinary preparations. Consumers also prefer the oil spray in order to reduce the intake of fats in the form of oil. The nutritional information printed on the pack helps diet conscious people to make changes in their consumption.

A study on “Consumer Perceptions of Heart-Health Claims for Cooking Oils and Vegetable Oil Spreads” by Murphy Dennis R. et al. (2007) has pointed out that the advertisements shown by the edible vegetable oil companies emphasize on the heart benefits. It sometimes misleads to consumers in ignoring the high fats and calories present in the oil leading to increased body weight.

3. Objectives of the study

To crystallize the important characteristics of the currently used branded edible oil as perceived by the customers at the time of purchase

4. Research Methodology

The study is based on data collected on structured questionnaire for recording information from respondents. A sample of 300 households in Pune city was selected conveniently i.e. non-probability sampling. The customers as respondents were interrogated about the name of the currently used brand of oil and the characteristics of the oil that influences their decision for purchase. Multiple choice questions were used in the questionnaire. Responses

base on Likert scale i.e. 5=strongly agree, 4= agree, 3= neutral, 2=disagree, 1=strongly disagree were recorded.

5. Data Analysis

The analysis based on percentages and application of Binary Logistic Model has been made. The findings have been checked for significance of characteristics of currently used branded oil. Table 1.1 presents percent distribution of respondents by currently used branded oil. It shows that majority of the respondents (59.8%) use Gemini oil, 15.85% use other brands of oil, 13.85% use Saffola and 10.47% respondents use Fortune oil. The other brands include Sundrop, Sweekar, Dhara and Sunrich.

Table 1.1: Percent distribution of respondents by currently used branded oil

Currently used oil	Percent
Gemini	59.80
Saffola	13.85
Fortune	10.47
Others (Sundrop, Sweekar, Dhara and Sunrich)	15.88
Total	100.00

Source: Primary data

• Hypotheses

Ho (Null Hypothesis): No characteristic of currently used brand of vegetable oil predicts the purchase of the brand.

H1 (Alternate Hypothesis): Characteristic of currently used brand of vegetable oil predicts the purchase of the brand.

- **Statistical Tools:** Binary Logistic Model has been employed to predict numerical categorical outcome in which the dependent variable is categorical and the independent variable(s) i.e. explanatory or predictor variable(s) is continuous, categorical or both.

The model is given by,

$$Y = \beta_0 + \beta_1 X_1 + \beta_2 X_2 + \beta_3 X_3 + \beta_4 X_4 + \dots + \beta_k X_k + U$$

Where X_1, X_2, \dots, X_k are independent variables,

β_0 is intercept,

β_1 is slope of Y with variable X_1 holding variable $X_2, X_3, X_4, \dots, X_k$ constant,

β_2 is slope of Y with variable X_2 holding variable $X_1, X_3, X_4, \dots, X_k$ constant,

β_3 is slope of Y with variable X_3 holding variable $X_1, X_2, X_4, \dots, X_k$ constant

and so on

β_k is slope of Y with variable X_k holding variable $X_1, X_2, X_3, X_4, \dots, X_{k-1}$ constant

U_i is error term

The analysis based on this model provides following test as well as the model determines the probability of an observation belonging to one of the two classes defined by the binary dependent variable.

H₀: $\beta_1 = \beta_2 = \dots = \beta_k$

H₁: at least one pair $\beta_j \neq \beta_j$

Our objective is to test the hypothesis

H₀: Respondents reporting dependent categorical variable is not related to exploratory variable (s)

H₁: Respondents reporting dependent categorical variable is related to exploratory variable(s)

The model has been applied to our data using SPSS. X1= Quality, X2=Price, X3=Taste, X4=Odour, X5=Non-Stickiness, X6=Nutritional value, X7=Packaging, X8=Availability, X9=Medicinal use, X10 = Company image, X11=Promotional schemes and X12=Color of oil. Results based on our Model for (a) Gemini Oil (b) Saffola Oil (c) Fortune oil and (d) Sundrop, Sweekar, Dhara and Sunrich oil, are as under:

Table 1.2: Variables in the Equation for the Characteristic of purchase of Gemini Oil

Characteristic	B	S.E.	Wald	df	Sig.	Exp(B)	Probability
Quality	.435	.353	1.516	1	.218	1.545	0.393
Price	.385	.201	3.685	1	.05*	1.470	0.405
Taste	.133	.395	.113	1	.737	1.142	0.467
Odour	-.275	.300	.840	1	.359	.760	0.568
Non-Stickiness	-.098	.269	.132	1	.717	.907	0.524
Nutritional value	-.418	.270	2.394	1	.122	.659	0.603
Packaging	-.024	.244	.010	1	.922	.976	0.506
Availability	.374	.262	2.042	1	.153	1.454	0.407
Medicinal use	-.260	.222	1.373	1	.241	.771	0.565
Company image	.057	.079	.516	1	.472	1.058	0.486
Promotional schemes	.033	.183	.033	1	.856	1.034	0.492
Color of oil	-.100	.232	.185	1	.667	.905	0.525
Constant	-.762	1.228	.385	1	.535	.467	0.682

* Significant at 5% level of significance

The above table shows that characteristic-price of the oil was significantly different for the brand Gemini. It can be inferred that the current practice for purchase and consumption of Gemini oil is based on Price. It can be inferred that the price is the characteristic of Gemini oil, which predicts its purchase.

Table 1.3: Variables in the Equation for the Characteristic of Purchase of Saffola Oil

Characteristic	B	S.E.	Wald	df	Sig.	Exp(B)	Probability
Quality	-1.264	.556	5.162	1	.023*	.283	0.780
Price	-.643	.256	6.320	1	.012*	.526	0.655
Taste	-.047	.585	.007	1	.936	.954	0.512
Odour	.750	.494	2.307	1	.129	2.117	0.321
Non-Stickiness	-.106	.365	.084	1	.771	.899	0.526
Nutritional value	.563	.383	2.160	1	.142	1.757	0.363
Packaging	-.246	.342	.516	1	.472	.782	0.561
Availability	.250	.380	.433	1	.510	1.284	0.438

Medicinal use	-.440	.315	1.950	1	.163	.644	0.608
Company image	-.082	.237	.121	1	.728	.921	0.521
Promotional schemes	-.091	.270	.113	1	.737	.913	0.523
Color of oil	.198	.344	.331	1	.565	1.219	0.451
Constant	2.640	1.738	2.306	1	.129	14.007	0.067

*Significant at 5% level of significance

The above table shows that Quality and Price are significant at 5% of level of significance, and thus it can be inferred that current practice for purchase and consumption of Saffola is based on quality and price.

Table 1.4: Variables in the Equation for the Characteristic of Purchase of Fortune oil

Characteristic	B	S.E.	Wald	df	Sig.	Exp(B)	Probability
Quality	.086	.552	.025	1	.876	1.090	0.478
Price	.425	.383	1.233	1	.267	1.529	0.395
Taste	-.541	.619	.764	1	.382	.582	0.632
Odour	-.597	.482	1.534	1	.216	.551	0.645
Non-Stickiness	1.301	.533	5.964	1	.015*	3.673	0.214
Nutritional value	-.561	.444	1.599	1	.206	.571	0.637
Packaging	-.709	.352	4.060	1	.044*	.492	0.670
Availability	-.213	.393	.293	1	.588	.808	0.553
Medicinal use	.548	.394	1.938	1	.164	1.730	0.366
Company image	-.038	.257	.022	1	.882	.963	0.510
Promotional schemes	.278	.325	.733	1	.392	1.321	0.431
Color of oil	-.145	.388	.141	1	.708	.865	0.536
Constant	-1.259	1.972	.408	1	.523	.284	0.779

* Significant at 5% level of significance

From the above table 1.4, it can be inferred that non stickiness and packaging are significant at 5% of level of significance, and thus it shows that current practice for purchase and consumption of fortune brand rests on non-stickiness and packaging.

Table 1.5 Variables in the Equation for the Characteristic of Purchase of Sundrop, Sweekar, Dhara and Sunrich oil

Characteristic	B	S.E.	Wald	df	Sig.	Exp(B)	Probability
Quality	-.015	.498	.001	1	.977	.986	0.504
Price	-.213	.268	.632	1	.427	.808	0.553
Taste	.264	.560	.222	1	.637	1.302	0.434
Odour	.385	.415	.858	1	.354	1.469	0.405
Non-Stickiness	-.636	.378	2.831	1	.092	.530	0.654
Nutritional value	.637	.387	2.712	1	.100	1.891	0.346
Packaging	.985	.386	6.501	1	.011*	2.678	0.272
Availability	-.911	.387	5.529	1	.019*	.402	0.713
Medicinal use	.430	.315	1.867	1	.172	1.537	0.394

Company image	-.046	.102	.201	1	.654	.955	0.511
Promotional schemes	-.188	.243	.593	1	.441	.829	0.547
Color of oil	.037	.313	.014	1	.907	1.037	0.491
Constant	-4.876	1.733	7.919	1	.005	.008	0.992

* Significant at 5% level of significance

From the above table it can be inferred that availability and packaging are significant at 5% of level of significance, and thus it can be inferred that current practice for purchase and consumption of brands namely, Sweekar, Dhara Sundrop, and Sunrich oil rests on its availability and packaging.

6. Conclusion

The current study reveals that majority of respondents (i.e. 59.8%) use Gemini oil brand, 15.85% use other brands of oil namely, Sundrop, Sweekar, Dhara and Sunrich oil, 13.85% use Saffola and 10.47% respondents use Fortune oil. The other brands include Sundrop, Sweekar, Dhara and Sunrich. The study explains the different important characteristics/factors for using current brand. According to the consumers of Gemini, their purchase and consumption of Gemini oil rests on its Price whereas that of Saffola consider quality and price as important factors. Moreover, the purchase and consumption of Fortune brand rests on oil’s non-stickiness and its packaging. And that of other brands namely, Sundrop, Sweekar, Dhara and Sunrich oil consider its availability and packaging as important factors.

References:

- Bainbridge Jane (2008), “Premium Appeal Returns a Profit”, Marketing.
- Jensen H.H., Kesavan T. (1993), “Sources of Information, Consumer Attitudes on Nutrition, and Consumption of Dairy Products”, The Journal of Consumer Affairs, Vol 27, No.2, 1993.
- Murphy Dennis R., Ippolito Pauline M., Pappalardo Janis K. (2007), “Consumer Perceptions of Heart-Health Claims for Cooking Oils and Vegetable Oil Spreads”, Bureau of Economics.
- R Perna (2013), “An Empirical Study on Brand Preference Towards Edible oil in Rural Areas with Special Reference to Coimbatore District”, Volume 3, Issue 3, March 2013, ISSN - 2249-555X.
- Wang Guijing, Fletcher Stanley, Carley Dale (1995), “Consumer Factors Influencing the Use of Nutrition Information Sources”, Advances in Consumer Research, Vol 22, 1995.pp 573-581.