

Impact of Maggi Controversy on Packaged Food Consumption



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Nestle's years old noodles brand, Maggi, was put in hot soup when it was surrounded by the controversy of having the presence of Mono Sodium Glutamate beyond the permissible limits. The allegations of food adulteration have taken a detrimental toll on the demand and sale of 'Maggi' Noodles in the Indian market. In the wake of a rapidly increasing popularity of packaged food amongst the Indian consumer, this controversy raises intriguing questions about the impact of the alleged food adulteration on the demand of packaged foods and on the fate of packaged food consumption in the country. A study was conducted to investigate if the controversy related to the food safety and contamination of Maggi had some impact on the Indian consumers' tendency to purchase and consume packaged food. Data for the study was gathered from four states of India using a structured questionnaire that was administered to 239 respondents in the age group of 18-70 years. The study examined if the frequency of buying packaged food by the consumers underwent a significant change after the 'Maggi controversy'. A paired sample t test was employed for the purpose. No significant difference was noted in the frequency of purchase before and after the controversy. An attempt was also made to find out if there exists any evidence of significant association between the consumers' belief on the food contamination charges leveled against Maggi and their present level of consumption of packaged food and also to ascertain if the consumers' tendency to purchase packaged foods decreased with their increasing agreement with the allegations of 'chemical contamination of food' on Maggi. The association and direction of movements of the two variables were checked using Chi square analysis and coefficient of correlation respectively. It was concluded that no significant relationship existed between these two variables. The findings clearly reinstate that despite the hysteria created in the market place by the maggi controversy customers look at each brand in isolation and continue to repose reasonable faith in the packaged food products.

Keywords: Packaged Food, Nestle Maggi, Food Safety Perception, Food Consumption

1. Introduction

After getting entangled in the controversy regarding the presence of lead and Mono Sodium Glutamate beyond the permissible limit, Nestle's Maggi had to go through a prolonged period of bumpy ride and rough phase. Now, despite making a desperate effort to limp back to the market, recuperating from this unprecedented and severe jolt seems to be an uphill task. The allegations have undoubtedly taken a detrimental toll on the demand and sale of 'Maggi' Noodles in the Indian market. Moreover, it may also have planted a doubt in the minds of the consumers of packaged food brands about the safety of such products.

In the wake of a rapidly increasing popularity of packaged food amongst the Indian consumer, this controversy raises intriguing questions about the impact of the alleged food adulteration on the demand of packaged foods and on the fate of packaged food consumption in the country. An obvious question that crops up at this point is whether the 'Maggi controversy' had some impact on the Indian consumers' tendency to purchase and consume packaged food.

2. Literature Review

Food in an average, middle class Indian family is associated with motherly care and concern. Homemade food prepared by 'mother' epitomises gastronomical bliss. However, with many women entering into the workforce in India in the recent decades, fishing out delicacies from the Indian cuisine, preparing an elaborate Indian meal and serving it on the dinner plate has become too taxing for the Indian woman. Even the mere thought of this elaborate procedure robs many a woman of their sleep. Thus to the relief and rescue of this distressed woman, stealthily comes in the packaged food (Counihan & Esterik, 2012). A study conducted by Hubacek, Guan and Barua (2007) indicate that there is an increasing demand of packaged food amongst the category of consumers termed by the author as 'High Consumers' who constitute around 1/5th of the global population. In India, the average rate of spending on packaged food has increased by 22.5% annually during the years 2010 to 2015 and is further expected to increase by 32% by 2017 (ASSOCHAM India, 2015). According to the study conducted by ASSOCHAM in 2015, the current size of the packaged food industry in India is about \$30 billion which is expected to reach around \$50 billion by 2017. Amongst packaged foods, the most demanded category of products are the dairy products that constitute 35% of the total packaged food consumption in India followed by bakeries and cereals at 24%. (FnBnews.com, 2009)

According to a study conducted by Kaur & Singh, 2013, besides convenience, concern for health is also an important factor that influences the purchase of packaged food amongst the new generation of Indian consumer. Based on their study conducted in Belgium, Ragaert, et. al, 2003 concluded that there is an increasing trend in the purchase of minimally processed

packaged food which are perceivably rated high on convenience and healthiness. The likelihood of buying minimally processed vegetables was noticed to be higher among better-educated consumers and among consumers with young children. It has been found that consumers exhibit a favourable attitude and higher purchase intention for those packaged food products on which are presented favourable health claims and nutrition information. (Kozup, Creyer & Scot, 2003) Thus consumers see health claim as useful and repose a stronger faith in such claims if they are approved by the government (Williams, 2005). No study has been conducted to examine the impact of possibly hazardous or impermissible ingredients in packaged food on the consumers' response towards the specific brand in question and their purchase and consumption of the other packaged foods during the period of controversy. The controversy surrounding the detection of higher levels of MSG and lead in 'Maggi' brands of noodles presented an opportunity to study the consumers' propensity to purchase and consume packaged food in the wake of such a controversy.

3. Objectives

The broad objective of the study is to figure out if the controversy related to the food safety and contamination of Maggi had some impact on the Indian consumers' tendency to purchase and consume packaged food. This objective may be broken down into three specific objectives which are

- To ascertain if there were any changes in the consumers' frequency of purchasing packaged food owing to the allegations that Maggi brand of noodles were laced with impermissible amounts of MSG and lead.
- To understand if the consumers' level of consumption of packaged food has some relation to their belief on the food contamination charges levelled against Maggi.
- To understand if the consumers' perception about the allegations on Maggi has any influence on their purchase of packaged food brands.

4. Methodology

To gauge the impact of the 'Maggi Controversy' on the consumers' purchase of packaged food, data was collected from consumers purchasing packaged food in general and some or the other brand of instant noodles in particular. The study was conducted across four states of India (namely Uttar Pradesh, Uttarakhand, Delhi and Maharashtra) and a sample of 239 respondents in the age group of 18 to 70 was chosen for the study. The sampling technique used for selecting the sample elements from the population was Judgemental Sampling. The sampling unit was a household and a single respondent was chosen from each identified household. A structured questionnaire consisting of close ended, non disguised questions was administered to the respondents who were spread across five states of the country. Response was sought from the consumers regarding their agreement with the allegations of 'chemical contamination of food' on Maggi. A trichotomous (*Yes, No, Not Sure*) question was used for the purpose. The respondents were then asked about their frequency of purchase of packaged food brands before the Maggi controversy and that after the controversy. The responses were recorded using graphic rating scales. The graphic rating scales used in the questionnaire were four point verbal balanced scales (*Quite Often, Sometimes, Seldom, Never*).

5. Analysis and Discussion

To judge if there has been some change in the consumers' frequency of purchase of packaged food after the brand 'Maggi' having been through a period of controversy and a lot of mudslinging, paired sample t-test (See Table 1) was used. The mean of the two variables, ie, 'Frequency of Purchasing Packaged Food before Controversy' and 'Frequency of Purchasing Packaged Food after Controversy' was compared using this statistical tool. As the p value (0.254) exceeds 0.05, it indicates that there is no significant difference in the mean frequency of purchase of packaged food before and after the controversy. This also becomes evident by taking a look at the mean of the two variable ie, 'Frequency of purchase before controversy' and 'Frequency of purchase after controversy' which are 2.32 and 2.39 respectively (See Table 2)

Table 1 Paired Sample T-Test

		Paired Differences					t	df	Sig. (2-tailed)
		Mean	Std. Deviation	Std. Error Mean	95% Confidence Interval of the Difference				
					Lower	Upper			
Pair 1	Frequency of Purchasing Packaged Food Before Controversy - Present Frequency of Purchasing Packaged Food	-.071	.961	.062	-.194	.051	-1.144	238	.254

Table 2 Paired Samples Statistics

		Mean	N	Std. Deviation	Std. Error Mean
Pair 1	Frequency of Purchasing Packaged Food Before Controversy	2.32	239	.983	.064
	Present Frequency of Purchasing Packaged Food	2.39	239	1.011	.065

From the analysis it can be inferred that there has been no significant change in the consumers' frequency of purchase of packaged food owing to the allegations of food contamination on Nestle's Maggi. The study has also made an attempt to understand if the consumers' level of consumption of packaged food has some association with or some relation to their belief on the food contamination charges levelled against Maggi. Chi Square Test has been employed for the purpose (See Table 3).

Table 3 Chi-Square Tests

	Value	df	Asymp. Sig. (2-sided)
Pearson Chi-Square	7.975 ^a	6	.240
Likelihood Ratio	7.766	6	.256
Linear-by-Linear Association	.070	1	.792
N of Valid Cases	239		

a. 0 cells (.0%) have expected count less than 5. The minimum expected count is 5.27.

Table 3 shows that the chi square value for the association between the variables 'Present Frequency of Purchasing Packaged Food' and 'Agreement with the Allegations on Maggi' at degree of freedom 6 is 7.975 and the p value is 0.240. As the p value is more than the significance level of 0.05, it indicates that there is no significantly evident association between consumers' level of consumption of packaged food and their belief on the food contamination charges levelled against Maggi. To examine if the consumers' perception about the allegations on Maggi has any influence on their purchase of packaged food brands, it was evaluated if the consumers' tendency to purchase packaged foods decreased with their increasing agreement with the allegations of 'chemical contamination of food' on Maggi. For this purpose correlation between the variables 'Agreement with allegations on Maggi' and 'Present frequency of purchasing packaged food' was calculated (See Table 4). The coefficient of correlation (0.17) was found to be very small. Also, as the p-value was found to be 0.792 which was much more than the significance level of 0.05, it can be stated that no significant correlation existed between these two variables.

Table 4 Correlations

		Allegations on Maggi were Correct	Present Frequency of Purchasing Packaged Food
Allegations on Maggi were Correct	Pearson Correlation	1	.017
	Sig. (2-tailed)		.792
	N	239	239
Present Frequency of Purchasing Packaged Food	Pearson Correlation	.017	1
	Sig. (2-tailed)	.792	
	N	239	239

From this discussion, it can be argued that there is no significant influence of consumers' perception about the allegations on Maggi on their purchase of packaged food brands.

Table 5 also shows that quite a high percentage of consumers belonging to all three categories (ie, those who believe that the allegations were correct, those who do not believe the allegations to be correct and those who are not sure) mention that 'sometimes' they do purchase packaged food brands even after the controversy.

Table 5 Crosstabulation Allegations on Maggi were Correct * Present Frequency of Purchasing Packaged Food

			Present Frequency of Purchasing Packaged Food				Total
			Quite Often	Sometimes	Seldom	Never	
Allegations on Maggi were Correct	Yes	Count	20	37	14	18	89
		% within Allegations on Maggi were Correct	22.5%	41.6%	15.7%	20.2%	100.0%
	No	Count	6	22	4	13	45
		% within Allegations on Maggi were Correct	13.3%	48.9%	8.9%	28.9%	100.0%
	Not Sure	Count	14	59	10	22	105
		% within Allegations on Maggi were Correct	13.3%	56.2%	9.5%	21.0%	100.0%
Total	Count	40	118	28	53	239	
	% within Allegations on Maggi were Correct	16.7%	49.4%	11.7%	22.2%	100.0%	

6. Findings & Implication

The study found that though Maggi remained mired in controversy for a long time, during which it was not only the 'Maggi' brand that was in the eye of the storm but the entire 'packaged food' industry was put under the scanner by the media and the press, the controversy did not have any significant impact on the consumers' purchase of packaged food brands in general. No significant relation could be traced between the consumers' perception about the authenticity of the allegations and charges levelled on 'Maggi' and their frequency of purchase of packaged food sold by the FMCG companies. Thus their belief about the authenticity in the allegations (either in the affirmative or in the negative) or their level of agreement with the allegations does not seem to influence them in any way in their purchase of packaged food brands.

The findings indicate a matured mind set amongst the Indian consumers who seem to have an ability to look at each brand and at each case in isolation from other brands and from other cases. For companies operating in such a market it is a healthy sign that reiterates the faith in the market, a sign that ascertains a sustained growth which would not be affected by stray incidents remotely related to the brand in question, till the time the brand stands true to its promise of value and delivery.

7. References

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