

RESULTS AND DISCUSSION

IV RESULTS AND DISCUSSION

The results and discussion of the study on “**Acceptability and Impact of Convenience Foods in the Selected Households in Coimbatore City**” are discussed under the following major headings:

- A. Results of the market survey
- B. Results of the household survey
- C. Results of the cooking experiment

A. Results of the Market Survey

The outcome of the market survey with regard to convenience food is presented under the following headings:

- a) General Information
- b) Type of convenience foods
- c) Brands of convenience foods
- d) Mode of purchase by the establishment
- e) Opinion given by the sales men

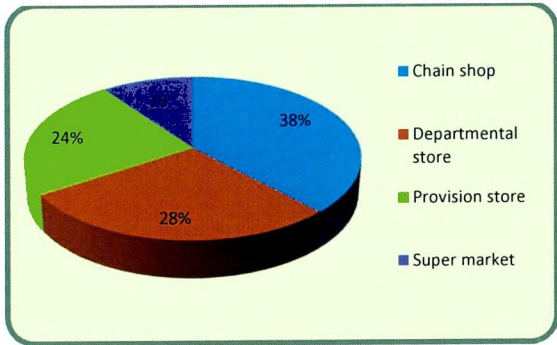
a) General Information

The details pertaining to the general information is in given Table I.

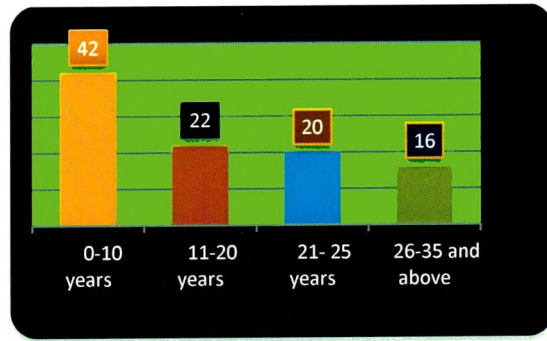
TABLE I
GENERAL INFORMATION

General Information	Shops (N:50)	Percentage
Type of shop		
Chain shop	19	38
Departmental store	14	28
Provision store	12	24
Super market	5	10
Year of experiences		
0-10 years	21	42
11-20 years	11	22
21- 25 years	10	20
26-35 and above	8	16
Type of ownership		
Owned building	28	56
Rented building	22	44
No. employed		
5-10	21	42
11-15	16	32
15 and above	13	26
Educational status of the employees		
Post graduate	15	30
Under graduate	9	18
Higher secondary	13	26
High school	8	16
Primary	5	10

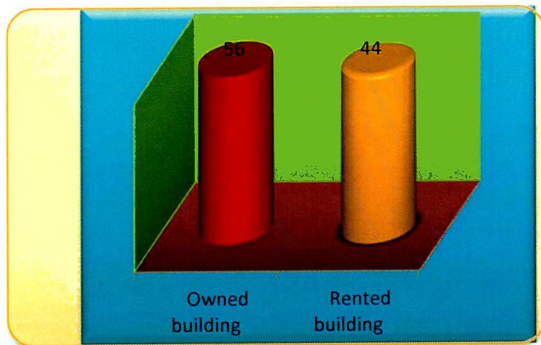
Among the selected outlets 38percent were chain shops, 28 percent Departmental Stores, 24 percent provision shops, and another 10percent were supermarkets. It was noted that a maximum of 42 percent of the shops surveyed were established within 10yrs, 22 percent within 11-20 years and 20 percent had business experience of 21-25 years. Only 16 percent of the outlets were established and had an experience of 35 years and above (Figure 1).



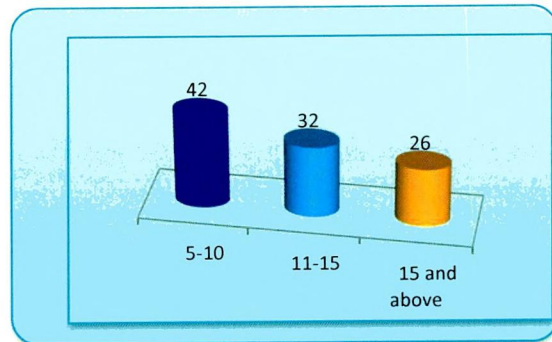
Type of Shops



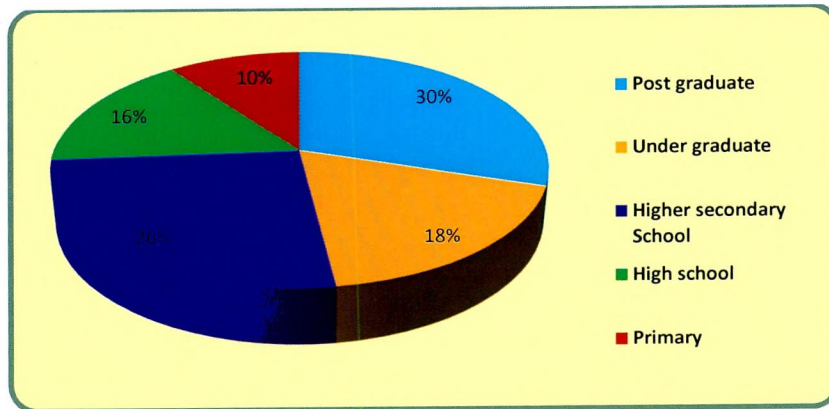
Years of experiences



Type of ownership



Number of Employed



Educational status of the employees

GENERAL INFORMATION

FIGURE - 1

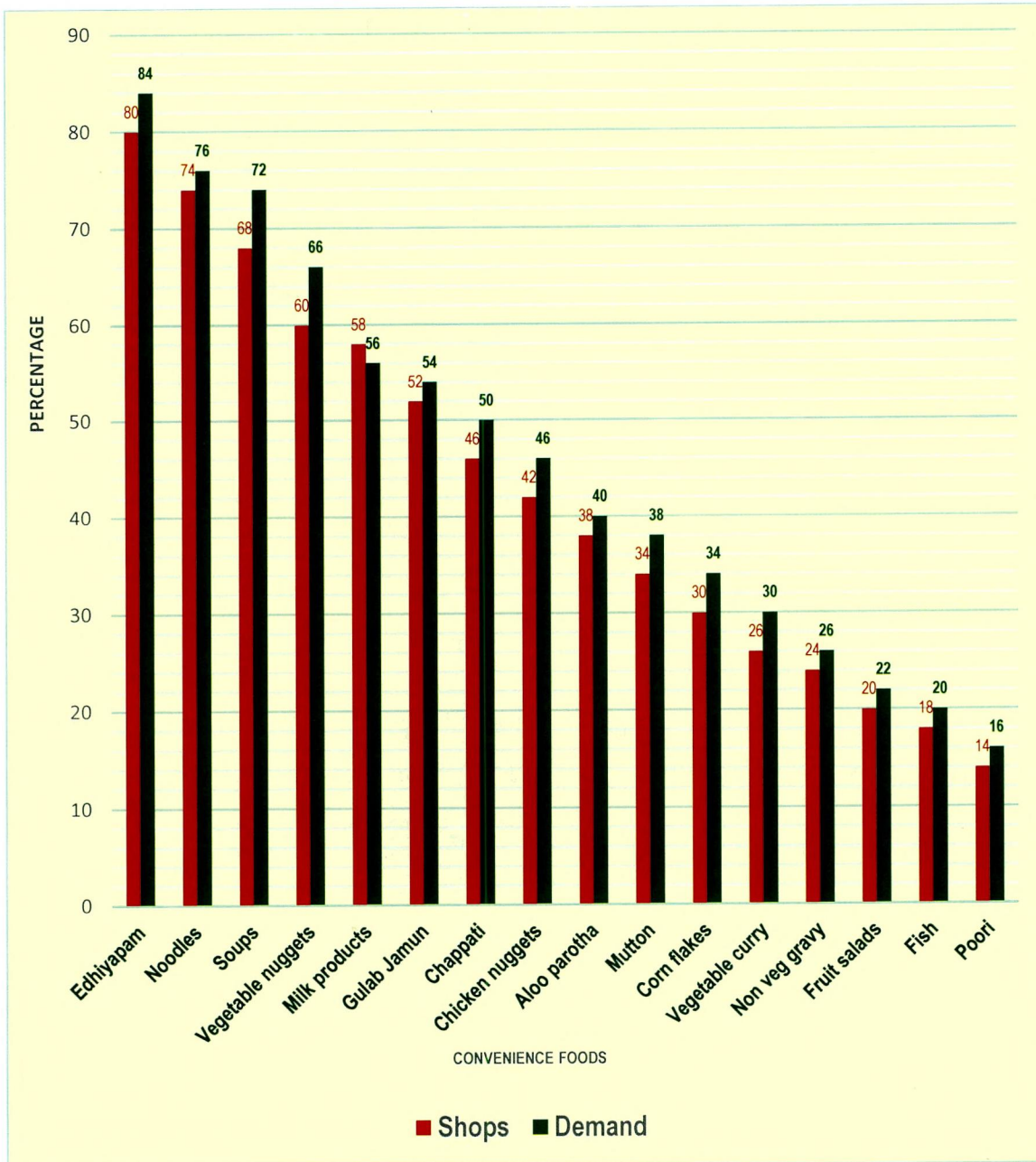
Regarding the type of ownership of the building fifty six percent of the surveyed shops were running business in their own building and 44 percent were rented buildings. The number of employees in shops ranged from 5-10 in 42 percent, 11-15 in 32 percent and above 15 members in 26 percent. The educational status of the owners or managers ranged from (18 percent) to post graduate (26 percent). However, there were a maximum of 30 percent with undergraduate education and 16 percent with high school education. Eight percent having primary education were running their business effectively. The floor area ranged between 9000 sq.ft and 24,000 sq.ft. However the area covered by provision shops ranged only between 1500 and 4000 sq ft.

b) Types of convenience foods

The table below presents the information regarding the different variety of convenience foods available in the selected outlets (Figure 2).

TABLE II
TYPES AND DEMAND OF CONVENIENCE FOODS

Convenience foods	shops (N:50)	Percentage	Demand (N:50)	Percentage
Edhiyapam	40	80	42	84
Noodles	37	74	38	76
Soups	34	68	36	72
Vegetable nuggets	30	60	33	66
Milk products	29	58	28	56
Gulab Jamun	26	52	27	54
Chappati	23	46	25	50
Chicken nuggets	21	42	23	46
Aloo paratha	19	38	20	40
Mutton	17	34	19	38
Corn flakes	15	30	17	34
Vegetable curry	13	26	15	30
Non veg gravy	12	24	13	26
Fruit salads	10	20	11	22
Fish	9	18	10	20
Poori	7	14	8	16



CONVENIENCE FOODS AND DEMAND

FIGURE 2

The table present commonly available the type of convenience foods sold in the outlets. Edhiyapam 80 percent, noddles 74 percent, soups 68 percent, vegetable nuggets 60 percent, milk products 58 percent, gulab jamun 52 percent, were sold in the selected outlets. Fish (18 percent) and poori (14 percent) were also sold in the selected outlets.

With regard to a demand among the selected outlets edhiyapam 84 percent, noddles 76 percent, 72 soups percent,vegetable nuggets 66 percent, Gulab jamun 54 percent, chappati 50 percent, Chicken nuggets 46 percent. The other items which had demand was Aloo parotha 40 percent, mutton 38 percent, Cornflakes 34 percent, vegetable curry 30 percent, Non –veg gravy 26 percent and fruit salads 22 percent, fish 20 percent and poori 16 percent are the medium demand.

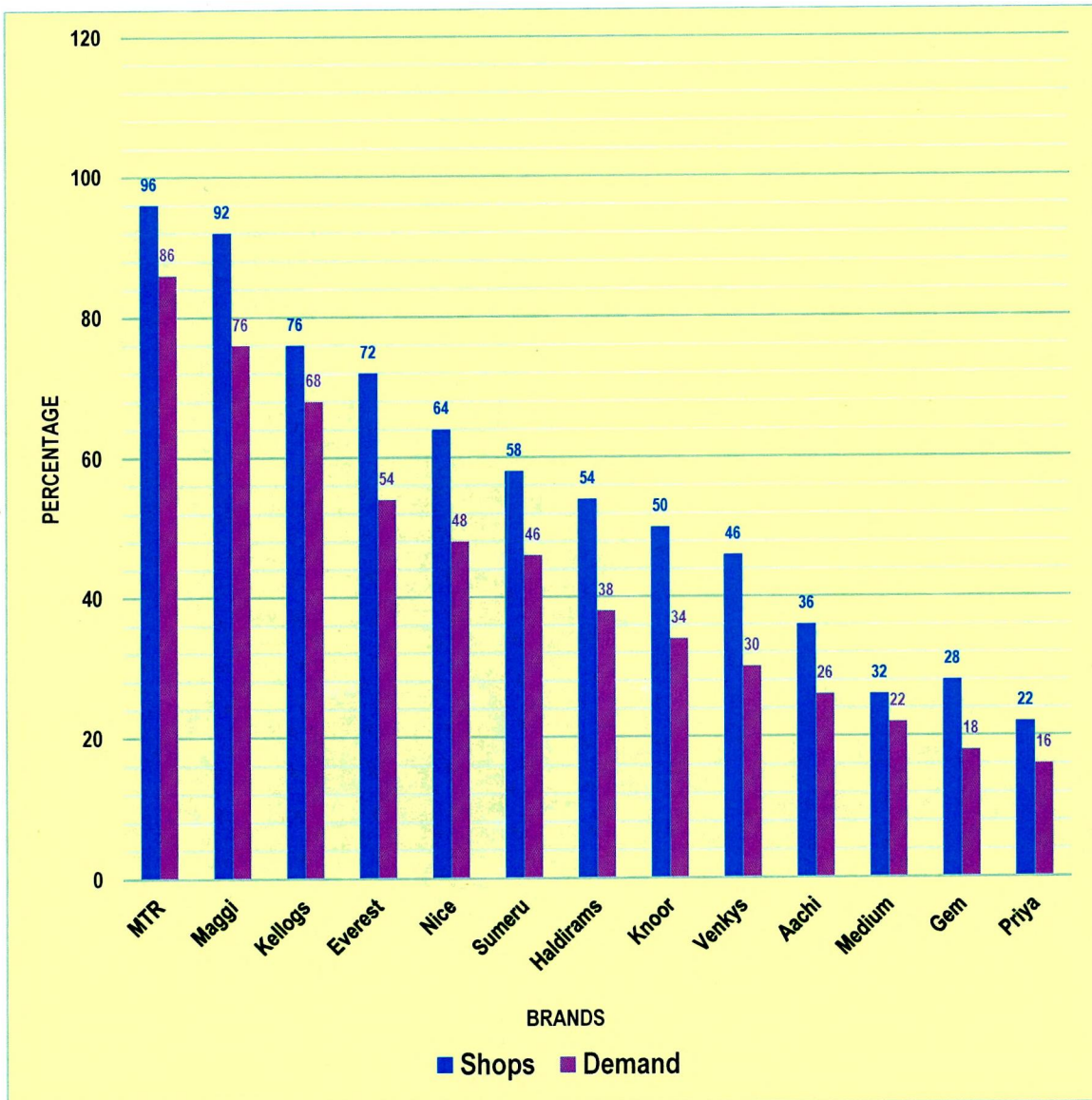
c. Brands of convenience foods

The table III and Figure 3 presents the popular brands for convenience foods sold in the market.

TABLE III
BRANDS AND DEMAND OF CONVENIENCE FOODS

Brands	shops (N:50)	Percentage	Demand (N:50)	Percentage
MTR	48	96	43	86
Maggi	46	92	38	76
Kellogs	38	76	34	68
Everest	36	72	27	54
Nice	32	64	24	48
Sumeru	29	58	23	46
Haldirams	27	54	19	38
Knoor	25	50	17	34
Venkys	23	46	15	30
Aachi	18	36	13	26
Medium	16	32	11	22
Gem	14	28	9	18
Priya	11	22	8	16

* Multiple response



BRANDS AND DEMAND OF CONVENIENCE FOODS

FIGURE 3

The table reveals the brand of the convenience foods available in the selected outlets. It was observed that as and when the products are introduced in the market, the product representatives display the new products in the racks for sale. However a number of products are flooded with different brands of convenience foods. The popular brands available in their respective shops were MTR, Maggie, Kellogs, Everest, nice, Sumeru, Haldirams etc. Different variety of convenience foods with different brands were sold in the outlets. The cost the of convenience foods varied with brands, content, quantity, and quality and at times with added offer from season to season.

The shops surveyed disclosed that majority of 86 percent of the consumers who purchased the convenience foods belonged to high income group and 66 percent were belonged to upper middle income. Low income group (36 percent) also purchased the convenience foods in the shops. Plate III and IV exhibits the variety of the convenience foods displayed in the selected outlets.



DISPLAYS OF CONVEINCE FOODS IN DEPARTMENTAL STORE
PLATE - III



DISPLAYS OF CONVEINCE FOODS IN SUPERMARKET
PLATE — IV

d) Mode of purchase

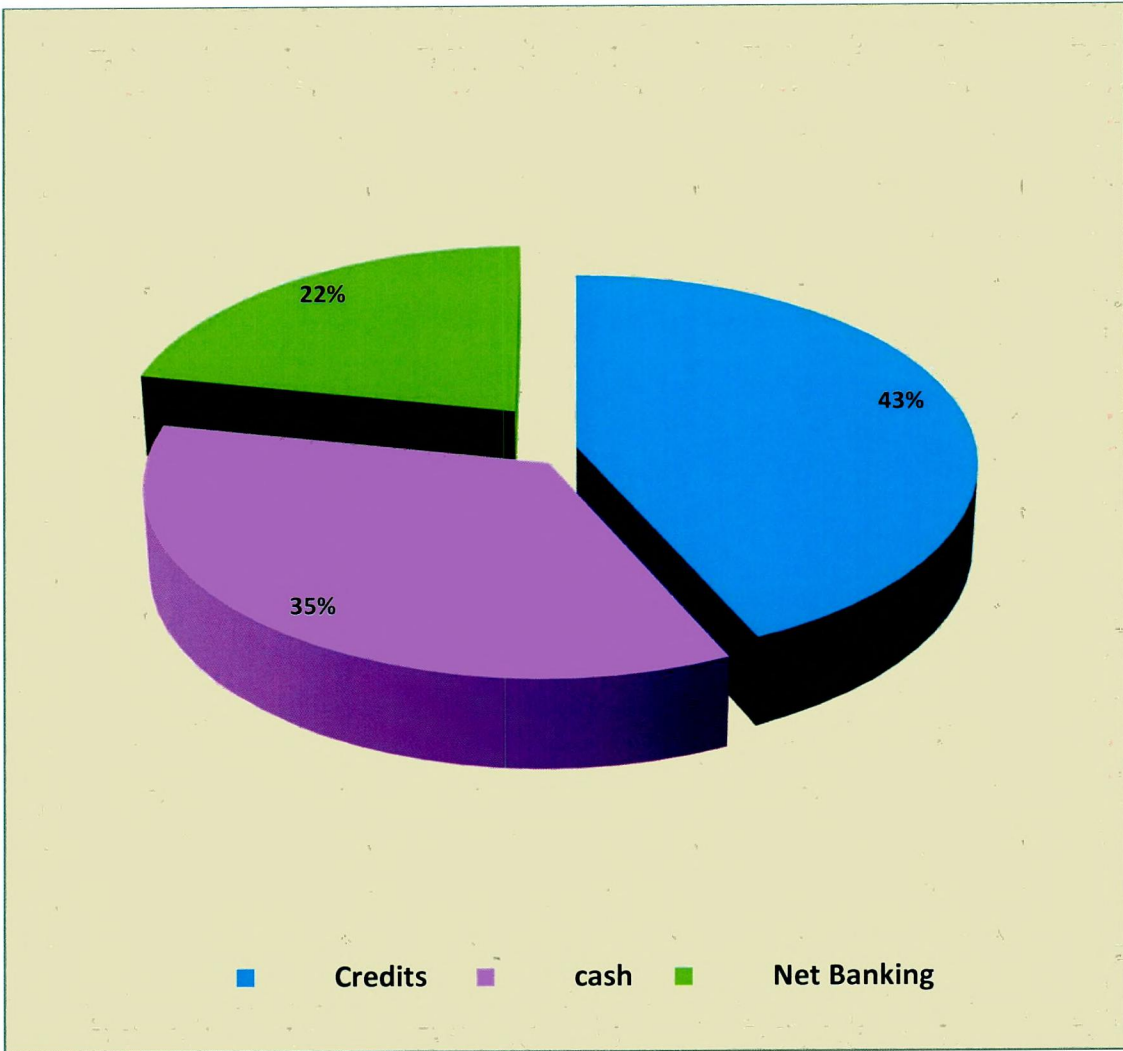
Table IV and Figure 4 presents the mode of purchase in the shops.

TABLE IV
MODE OF PURCHASE BY THE ESTABLISHMENT

Mode of purchase	Shops (N:50)	Percentage
Credits	32	64
cash	26	52
Net Banking	16	32

*Multiple response

The mode of purchasing convenience foods by the establishment varied depending on the products placed for order. All the popular brands which move fast in the market and which has great demand by the customer on obtained credit (64percent)by the customers and paying cash (52 percent). It was to noted that 32 percent purchased by net banking. With regard to sales there were not much difference in the profit. However, the quantity or bulk purchase did have an impact on the profit gained by the outlets.



MODE OF PURCHASE BY THE ESTABLISHMENT

FIGURE 4

e) Opinion given by the sales men

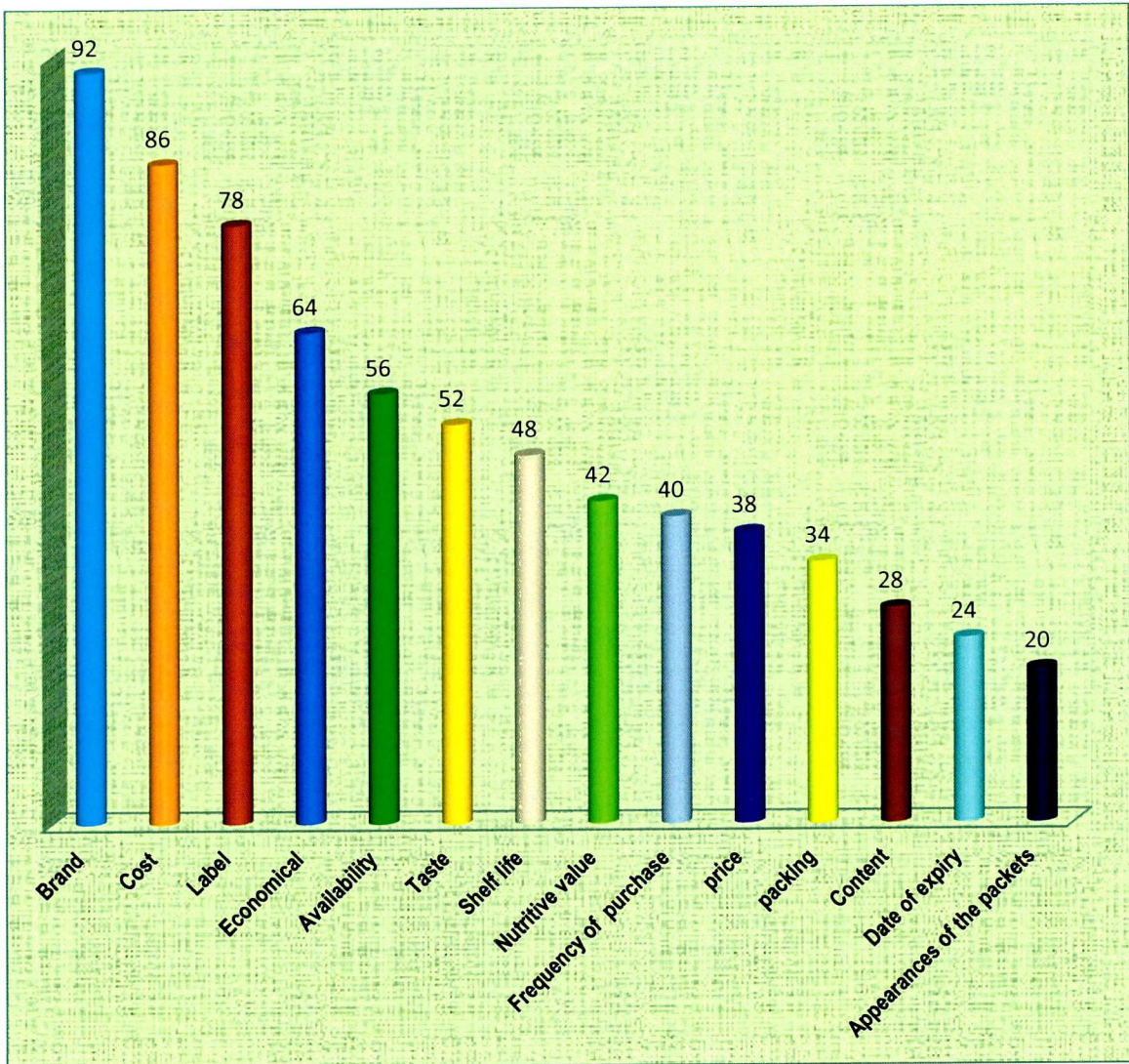
Table V and Figure 5 presents the opinion reported by the sales men.

TABLE V
OPINION GIVEN BY THE SALES MEN

Opinion	Shops (N:50)	Percentage
Brand	46	92
Cost	43	86
Label	39	78
Economical	32	64
Availability	28	56
Taste	26	52
Shelf life	24	48
Nutritive value	21	42
Frequency of purchase	20	40
price	19	38
packing	17	34
Content	14	28
Date of expiry	12	24
Appearances of the packets	10	20

*Multiple response

The shop owners or managers sold different types of products (convenience food) in their shop. A majority of 92 percent placed importance in brands, cost (86 percent), labels (78percent), were the points given importance. Economical (64percent), Availability (56percent), taste (52percent), Shelf life (48percent), Nutritive value (42percent), Frequency purchase (40percent) Price (38percent),Packing (34percent),Content (28 percent), Date of expiry (24percent) and Appearance (20percent) were the other element given importance to the content. There opinion were considered are the most important aspect looked into by the customers as reported by the salesmen.



OPINION GIVEN BY THE SALES MEN

FIGURE 5

B) Results of the Household Survey

The results of the household survey obtained from the consumption of convenience foods in the selected households are discussed under the following headings:

1. General information
2. Details of family background
3. Details on cooking related information and convenience foods
 - a) Cooking responsibility
 - b) Amount spent on convenience foods
 - c) Reason for purchasing convenience foods
 - d) Commonly prepared of convenience foods at home
 - e) Use of convenience foods.
 - f) Sources of information of convenience foods
4. Details on preparation on convenience foods
 - a) Average time spent preparation of day's meals
 - b) Frequency of eating outside
 - c) Reasons for preferring convenience food
 - d) Place of purchase of convenience foods
 - e) Opinion established on convenience foods
 - f) Average time spent in traditional and convenience foods cooking
 - g) Information about the purchasing of convenience foods.

1. General information

Table VI presents the general information of the selected families.

**TABLE VI
GENERAL INFORMATION OF THE FAMILIES**

Details	Households (N:300)	Percentage
Type of family		
Nuclear Family	135	45
Joint family	98	33
Extended family	67	22
Family Size		
Small (1-3)	110	37
Medium (4-6)	88	29
Large (more than 7)	102	34
Food habits		
Vegetarian	131	44
Non vegetarian	88	29
Ova vegetarian	81	27
Religion		
Hindu	158	53
Muslim	73	24
Christian	69	23
Age		
10-15	405	32
16-20	236	18
21-25	248	20
26 and above	383	30
Sex		
Female	686	54
Male	586	46
Family income (per month) (Rs)		
10,000- 50.000	120	40
50.001-1,00,000	94	31
1,00,001 and above	86	29

Table I reveals that the family is the smallest basic unit of the society. Among the selected families 45 percent belonged to nuclear family and 33 percent belonged to joint family and 22 percent comprised of extended family. Regarding the family size 37 percent were small families having 1-3 members. Small family is which has one to three family members according to <http://wiki.answers.com/>. Twenty nine percent of the families were medium family with 4-6 members, having one or two children and living with the grandparents, while 34 percent were large size families comprising of more than 7 members, with in laws and relatives staying. Family size refers to the total number of family members .which Included family members are those whose relationship is wife, son, daughter, father, mother, son-in-law, daughter-in-law, sister, brother, granddaughter and grandson. <http://www.nscb.gov.ph>.

Regarding the food habits 44 percent were vegetarians,29 percent were non –vegetarians while the rest 27 percent belonged to the category ova vegetarian, who consumed both vegetarian and non vegetarian food items.

Regarding the religion a maximum of 53 percent belonged to Hindu and 24 percent were Muslims and the rest 23 percent belonged to Christian religion.

From the table it was evident that the age of the households were between 10 and 26 years. Thirty percent of the household were 26 years above.

Higher percentage of the respondent belonged to high income group with a maximum of 40 percent having an income between ₹10,000 and 50,000 and 31 percent having a month income between ₹50,001 and 1,00,000. Twenty nine percent had a monthly income more than ₹1,00.001 which made life comfortable for the selected households.

2. Details of family background

Table VII presents the details of the family background.

TABLE VII
DETAILS OF THE EDUCATION AND OCCUPATION OF THE HOMEMAKERS
AND HEADS OF THE FAMILY

Details	Households (N :300)		Percentage	
	Homemakers	Head	Homemakers	Head
Education				
Professional	25	32	9	11
PG	108	133	36	44
UG	145	121	48	40
Higher secondary	22	14	7	5
Occupation				
Government Employee	92	103	31	34
Private Established	34	76	11	25
Teachers	74	5	24	2
Doctors	4	7	1	2
Bank Employee	12	14	4	5
Nurse	11	-	4	-
Clerk	36	-	13	-
Lawyer	8	15	3	5
Engineer	7	29	2	10
Business	22	51	7	17

With the regard to the education level, it was found that both homemakers and the heads of the family fell under Professional, Post graduates, Under graduates and Higher secondary level of education, with a maximum of Homemakers with Post graduates (36 percent) and Under graduates education (48 percent) and nine percent having Professional qualification.

With regard to the education of the heads of the families a majority of 44 percent had Post graduate education and 40 percent under graduates. Eleven percent had Professional qualification.

Regarding occupation all the homemakers were employed in different category, the maximum being government employees (31percent) and teacher (24 percent). The other occupation were clerks (13 percent), employed in private sectors (11 percent), banks (4 percent) and nurse (12 percent). Among the homemakers there were lawyer (31 percent), engineer (27 percent) and doctors (4 percent). Seven percent were, engaged in the family business assisting them husbands.

It was encouraging to note that all the selected homemakers were employed, having a very decent employment as well as they were professionally qualified and were employed as doctors and engineers.

Regarding the occupation of the heads of the family a maximum of 34 percent were government employees followed by employed in private sector (25percent), Engineer (10percent) and teachers (21percent). Five percent were doctors and lawyers respectively and 17 percent had them own business.

Since the study was undertaken in Coimbatore city it was quit obvious for the respondent to have at least minimum of the education, as the city is known as the education centre.

3. Details on cooking related information and convenience foods

This aspect is discussed under the following sub heading

- a) Cooking responsibility.
- b) Amount spent on convenience foods.
- c) Reasons for purchasing convenience foods.
- d) Commonly prepared convenience foods at home
- e) Use of convenience foods.
- f) Sources of information of convenience foods.

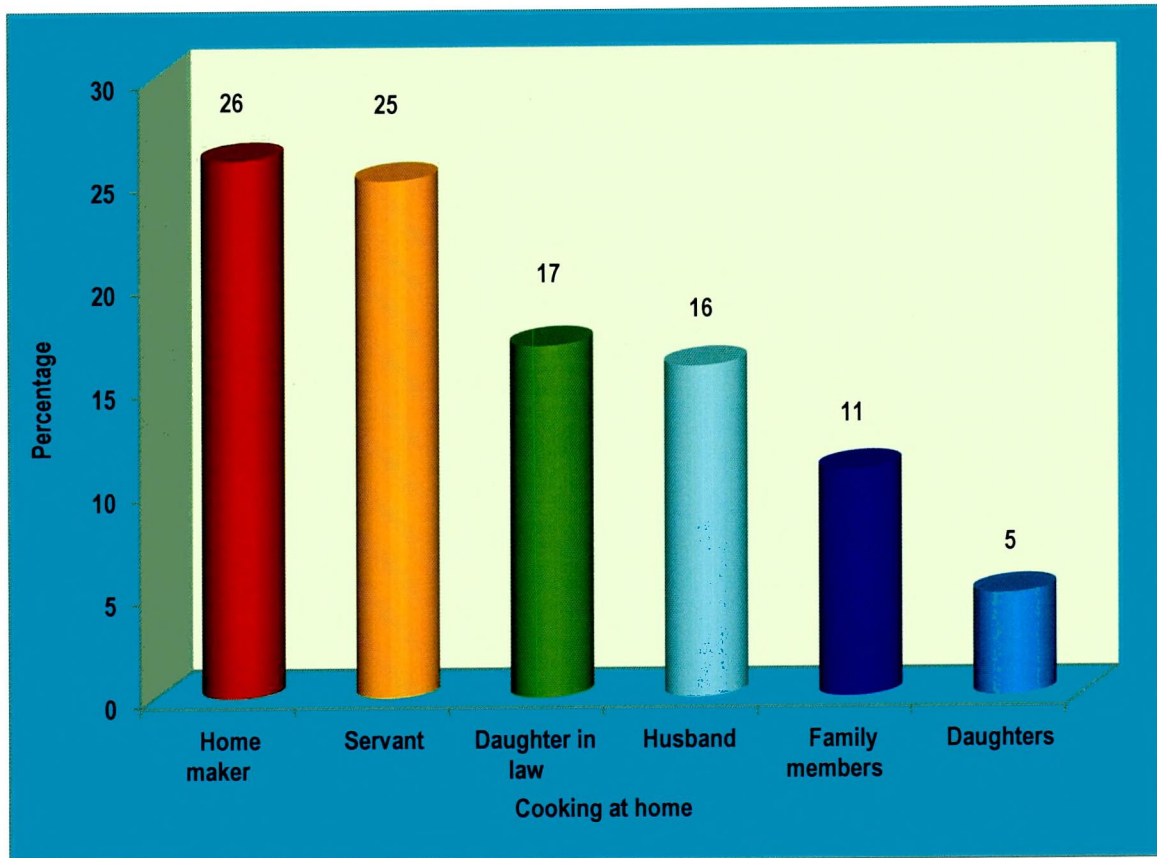
a) Cooking responsibility

Table VIII and Figure 6 presents the information on the persons responsible for cooking at home.

**TABLE VIII
RESPONSIBLE OF COOKING**

Cooking at home	Homemakers (N:300)	Percentage
Home maker	78	26
Servant	75	25
Daughter in law	51	17
Husband	47	16
Family members	34	11
Daughters	15	5

Table shows that cooking is generally considered as time consuming activity and the responsibility is either shared or totally shouldered by the home makers. Twenty six percent of the home makers were responsible for cooking while in 25 percent servants helped the homemakers in cooking activities. Among 17 percent of the families daughters in law took the charge for cooking while in 16 per husbands assisted their wives and in 5 percent the daughters helped in the kitchen and cooking related activities. It was observed that in joint families and extended families, 11 percent the other family members rendered help whenever, required. They were a solid help, responsible in helping the homemakers in all the cooking related activities.



RESPONSIBLE OF COOKING

FIGURE 6

b) Amount spent on convenience foods

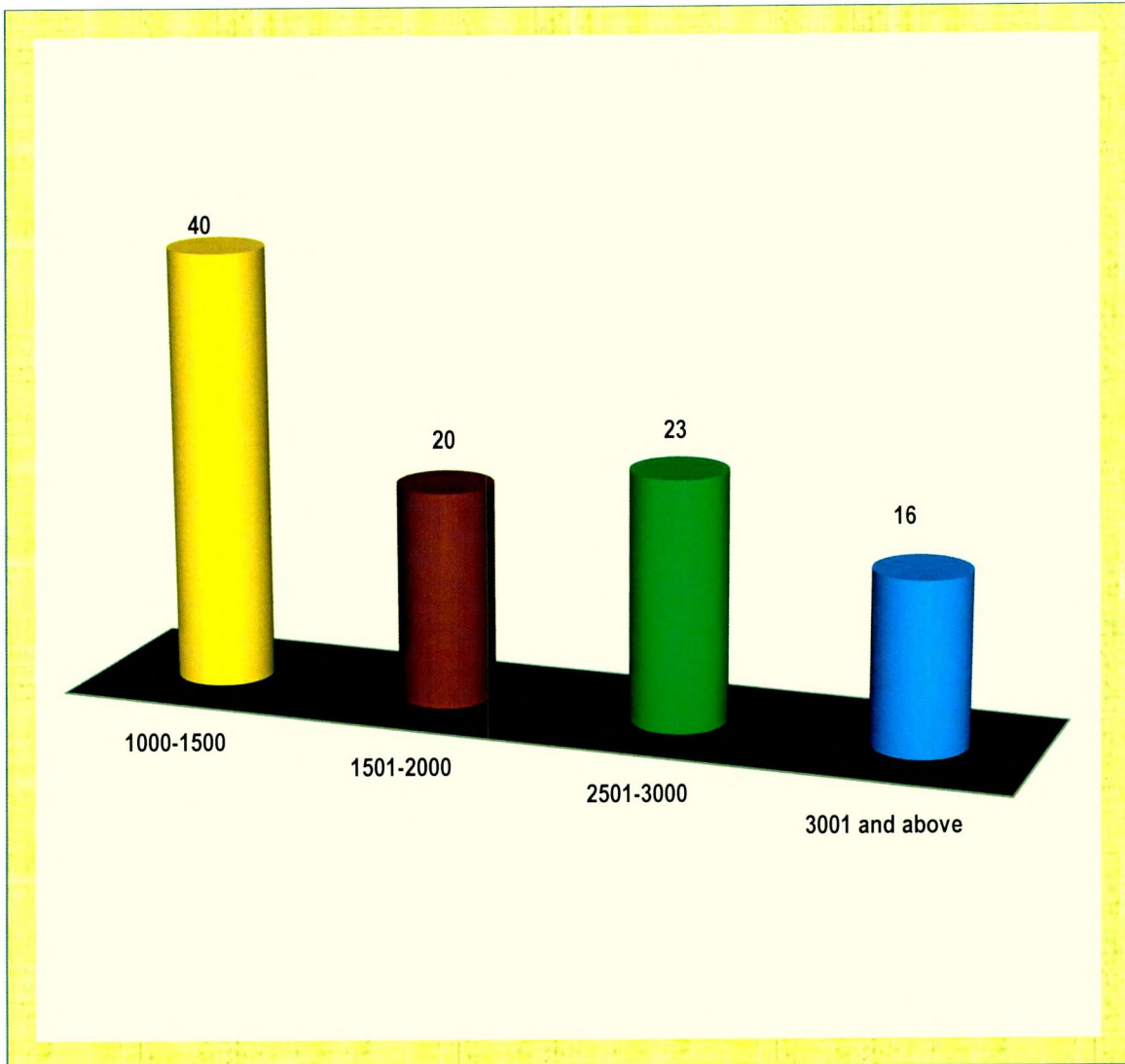
The Table IX and Figure 7 present the details regarding the amount spent on convenience foods. This indicates the monthly expenditure which includes convenience foods as regular item in their monthly purchasing habit.

TABLE IX

AMOUNT SPENT PER MONTH ON CONVENIENCE FOODS

Approximate amount spent (Per month) (in ₹)	Homemakers (N:300)	Percentage
1000-1500	120	40
1501-2000	61	20
2501-3000	70	23
3001 and above	49	16

The table gives the approximate amount spent per month by the selected homemakers. Forty percent of the homemakers spent Rs₹1000-1500 in per month, 20 percent, and 23 percent spent ₹1501-3000 on convenience foods respectively. The rest 16 percent spent ₹3001and above per month for convenience food, which focuses the importance laid in purchase of convenience food regularly.



AMOUNT SPENT PER MONTH ON CONVENIENCE FOODS

FIGURE 7

c) Reasons for purchasing convenience foods

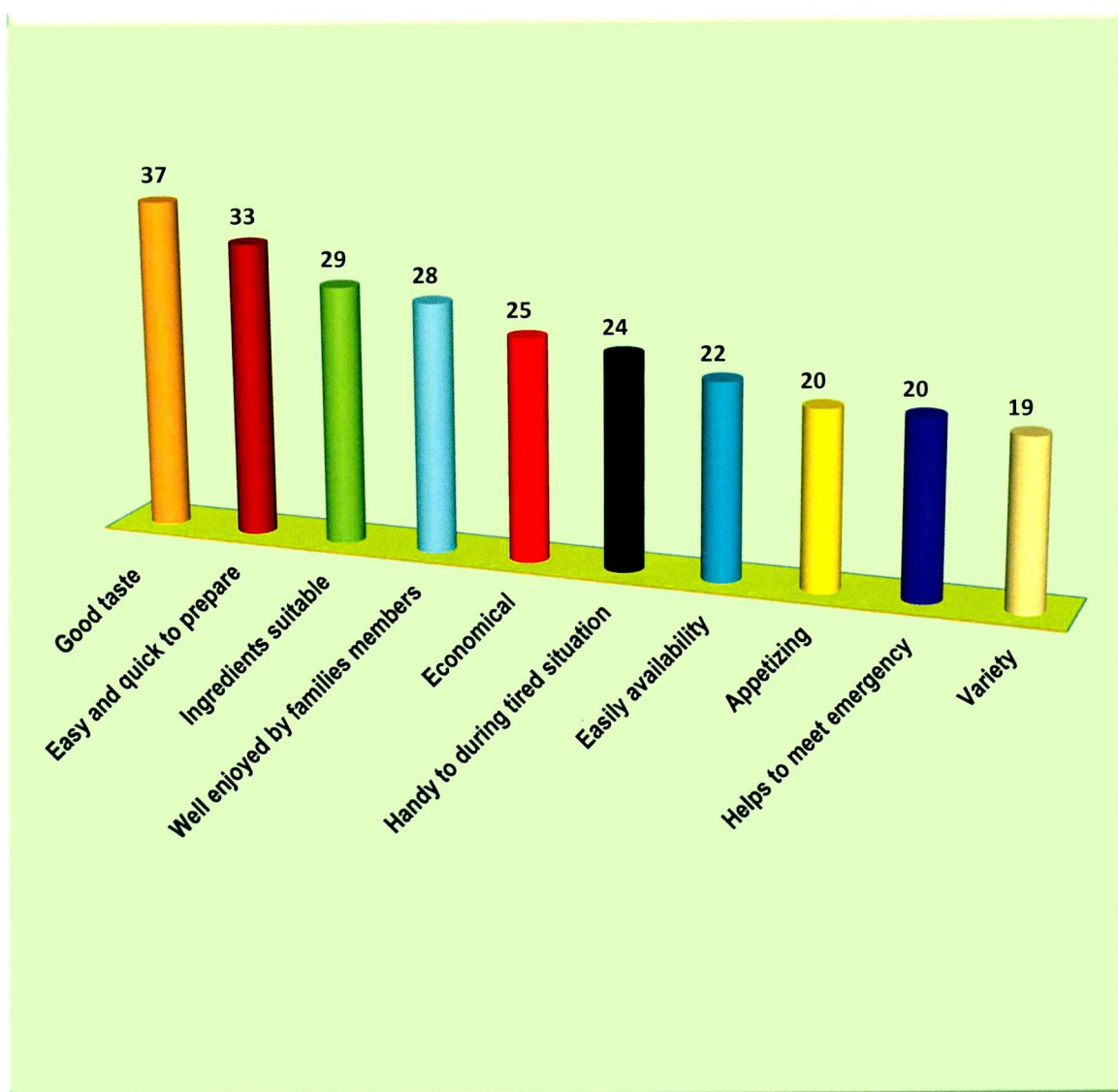
Table X and Figure 8 presents the reasons of purchasing convenience foods as reported by the homemakers.

TABLE X
REASONS FOR PURCHASING CONVENIENCE FOODS

Reasons	Homemakers (N:300)	Percentage
Good taste	110	37
Easy and quick to prepare	98	33
Ingredients suitable	86	29
Well enjoyed by families members	84	28
Economical	76	25
Handy to during tired situation	72	24
Easily availability	65	22
Appetizing	61	20
Helps to meet emergency	60	20
Variety	56	19

*Multiple response

Regarding the reasons for purchasing convenience foods by the selected homemakers, a majority of 37 percent express that good taste was the main reason and all the family members enjoyed the meals when convenience food was part of their regular menu. Easy to Quick to prepare (33 percent) , suitable ingredients (29 percent), economical (25percent), easily available in the market (22percent), helps to meet emergency situation (20percent) handy during tired situation (24percent), enjoyed by family members (28percent), were the other reasons mentioned by the homemakers. Besides variety (19percent) and appetizing (20percent) were also reasons for purchase of convenience food as reportedly homemakers.



REASON FOR PURCHASING CONVEINEINCE FOODS

FIGURE 8

d) Commonly prepared convenience foods at home

Table XI and Figure 9 present the details related to the commonly prepared convenience foods by the family members.

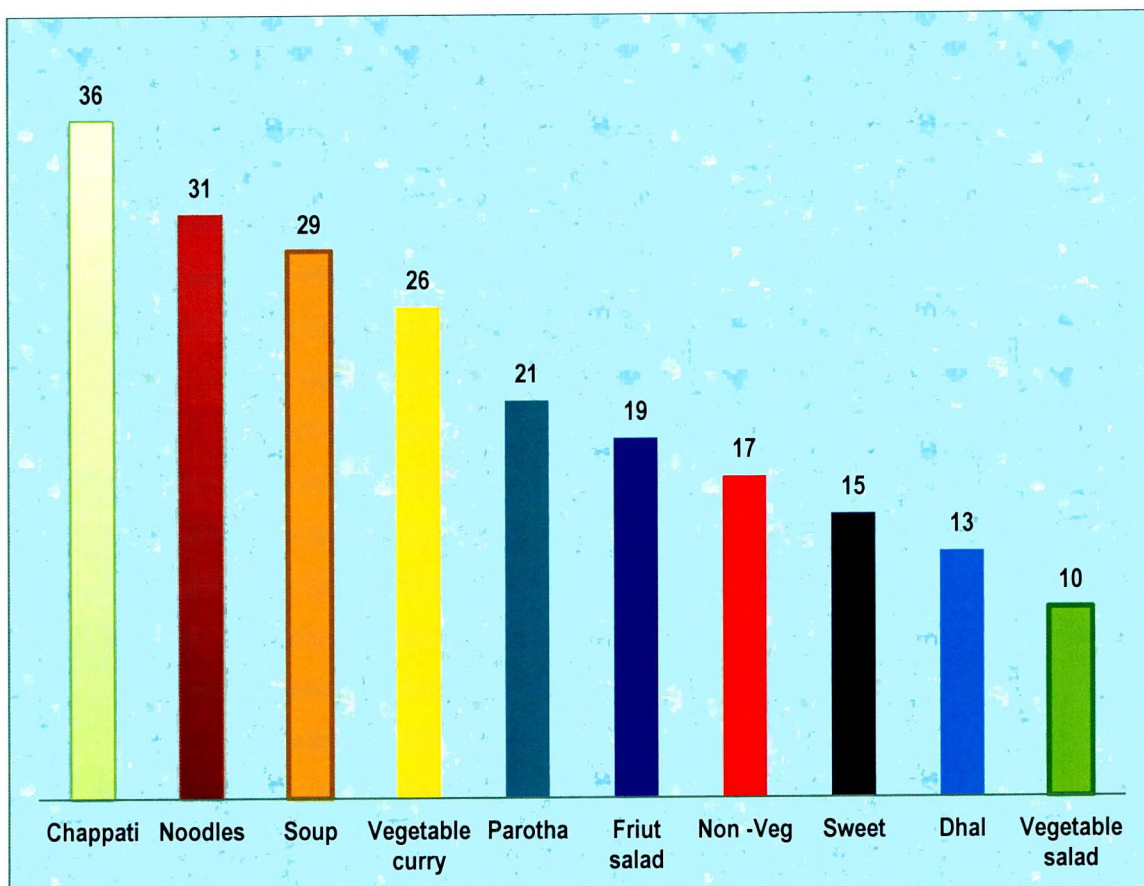
TABLE XI
COMMONLY PREPARED OF CONVENIENCE FOODS AT HOME

Prepared convenience foods	Homemakers (N:300)	Percentage
Chappati	108	36
Noodles	93	31
Soup	87	29
Vegetable curry	79	26
Parotha	63	21
Fruit salad	58	19
Non -Veg	52	17
Sweet	46	15
Dhal	40	13
Vegetable salad	31	10
Frequency of preparation		
Daily	84	28
Weekly	102	34
Fortnightly	47	16
Monthly	67	22

*Multiple response

The table VI represent the commonly prepared convenience foods preferred at home by the selected homemakers, Chappati was the most commonly preferred and preferred convenience foods by the homemakers. Noodles (31 percent), soups by (29 percent), vegetable curry (26 percent) and parotha (21 percent) were the next in line of preference. However, vegetables and fruit salads were consumed on special occasions or when guest were invited. Apart from this dhal curry, veg and non-veg gravies were also mentioned as the most liked and preferred convenience food. However, due to cost they were used occasionally.

Majority of the home makers consumed convenience foods daily (28 percent), followed by, 22 percent monthly and only 16 percent consumed fortnightly. However, it is well proved that convenience foods play an important role in our daily diet.



COMMONLY PREPARED OF CONVEINCE FOODS AT HOME

FIGURE 9

e) Use of consumption of convenience foods

Table XII and Figure 10 reveals the roles of convenience foods in very special situation or location.

TABLE XII
USE OF CONSUMPTION OF CONVENIENCE FOODS

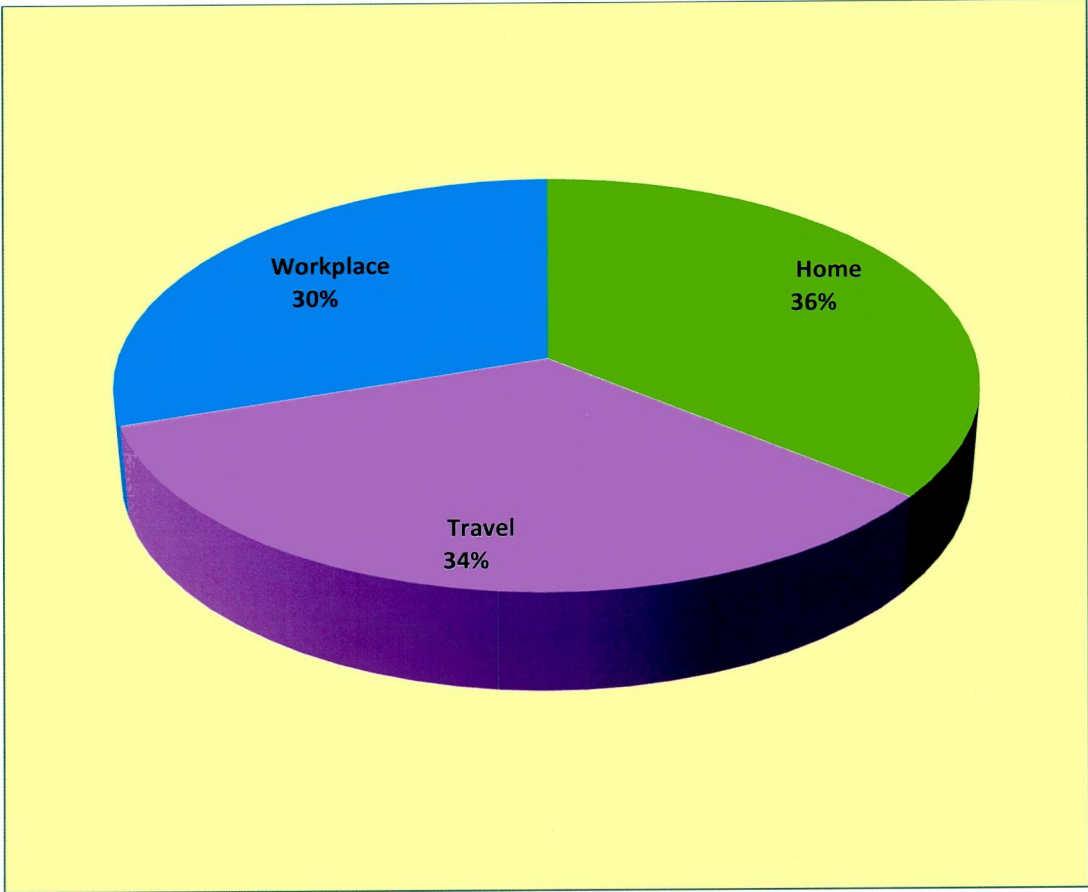
Situation /location	Homemakers (N:300)	Percentage
Home	109	36
Travel	101	34
Workplace	89	30
Prefers products during offer		
At times	93	31
A lot	82	27
Always	78	26
Never	47	16

The above table presents the situations where consumption of convenience foods is much appreciated as reported by the selected homemakers. Among the selected homemakers, 36 percent consumed and enjoyed convenience foods at home. While traveling and at work place were also said by 34 and 30 percent respectively, as situation where convenience food play an important role.

About 31 percent of the selected homemakers preferred to buy the products of convenience foods during seasons likes Christmas, Deepavalli, Ramzan, Aadi etc. where offer were put along with sale. Twenty seven percent reported purchasing convenience was on the regular along with monthly purchase items and 26 percent mentioned that they enjoyed purchasing convenience food regularly as they enjoy having variety quite often.

However, there was a minority percentage, which expressed that avoidance of convenience foods since they were, conscious of health and felt that convenience food can affect health adversely.

However the tendency towards convenience food in increasing and availability even at various joints seems to encourage people to go in for convenience food , thereby avoiding packing and carrying while going out.



USE OF CONSUMPTION OF CONVEINCE FOODS

FIGURE 10

f) Sources of information of convenience foods

Table XIII and Figure 11 present the different sources of information which influenced the homemakers to purchase convenience foods.

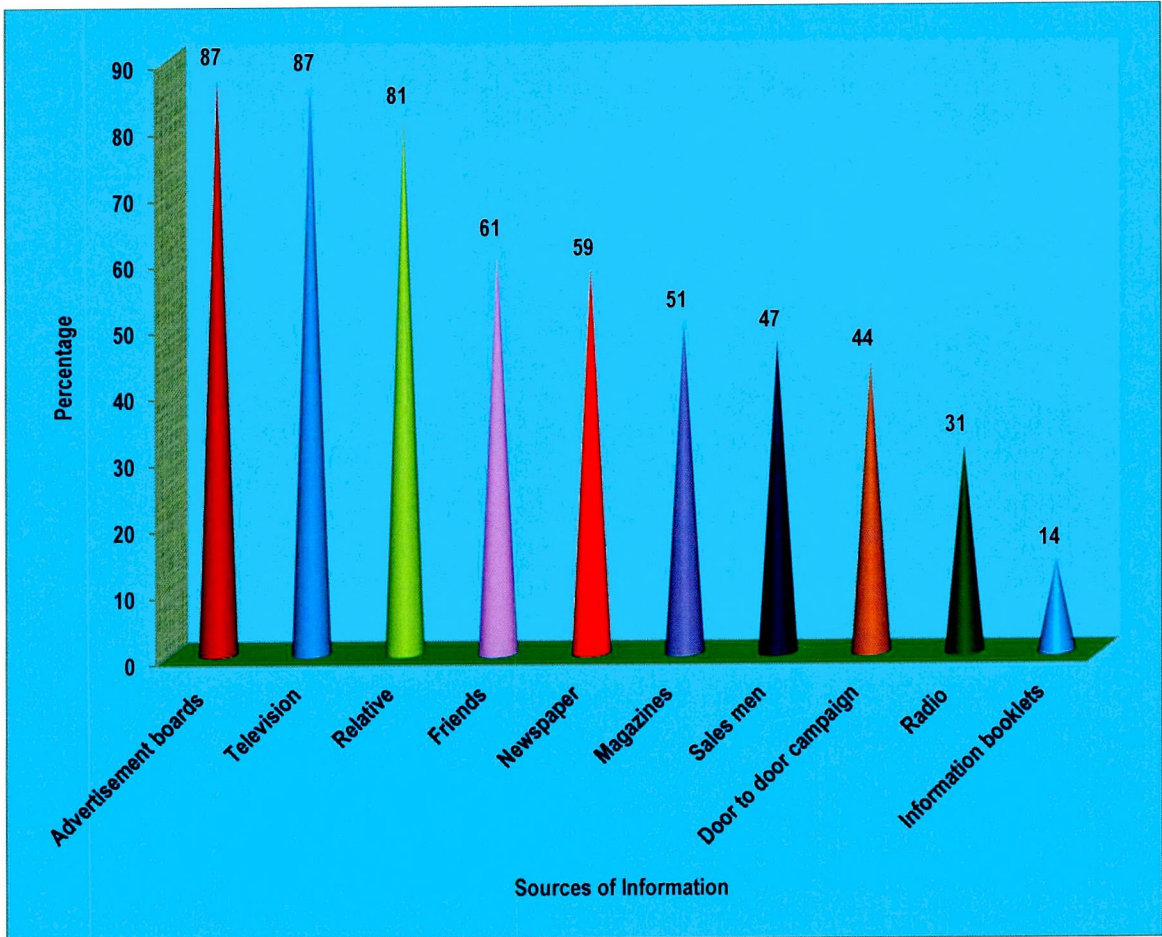
TABLE XIII
SOURCES OF INFORMATION OF CONVENIENCE FOODS

Sources of information	Homemakers (N:300)	Percentage
Advertisement boards	262	87
Television	260	87
Relative	242	81
Friends	200	61
Newspaper	176	59
Magazines	152	51
Sales men	142	47
Door to door campaign	131	44
Radio	93	31
Information booklets	42	14

*Multiple response

Its was encouraging to note that all the home makers irrespective of the their employment status ,were aware of convenience foods available in the market .All the home makers were purchasing the food commodities from various outlets representing, shops, departmental stores, chain stores, and local multipurpose stores. All the home makers informed that they were aware of cereals product, soft drinks, sea foods and milk product etc .Other than the convenience foods mentioned above they were also aware of all the instant food mixes commonly available in the market.

The table indicates that the new introduction of products of convenience foods are made available in the market ever day and the main sources of information by print media on the convenience foods are advertisement boards (87percent) and television (87percent) are the print media mainly providing information on the new products introduced in the market. The advertisement enhances, stimulates and forces to purchase the new products, since they depict the facts in a realistic manner. While the other print media are newspaper (59percent), magazines (51percent), friends (61percent) relatives (81percent),



SOURCES OF INFORMATION OF CONVEINECE FOODS

FIGURE 11

salesmen (47percent) and door to door campaign (44percent), which are mentioned as other sources which provided information on convenience foods as reported by the selected homemakers. In addition radio (31percent) and information booklets (14percent) also provided information on convenience food.

4. Details on preparation of convenience foods:

The details on this aspect is discussed under the following sub headings:

- a) Average time spent on preparing convenience foods
- b) Frequency of eating outside
- c) Reasons for preferring convenience food
- d) Place of purchase of convenience foods
- e) Opinion established on convenience foods
- f) Average time spent in traditional and convenience foods cooking
- g) Information about the purchasing of convenience foods

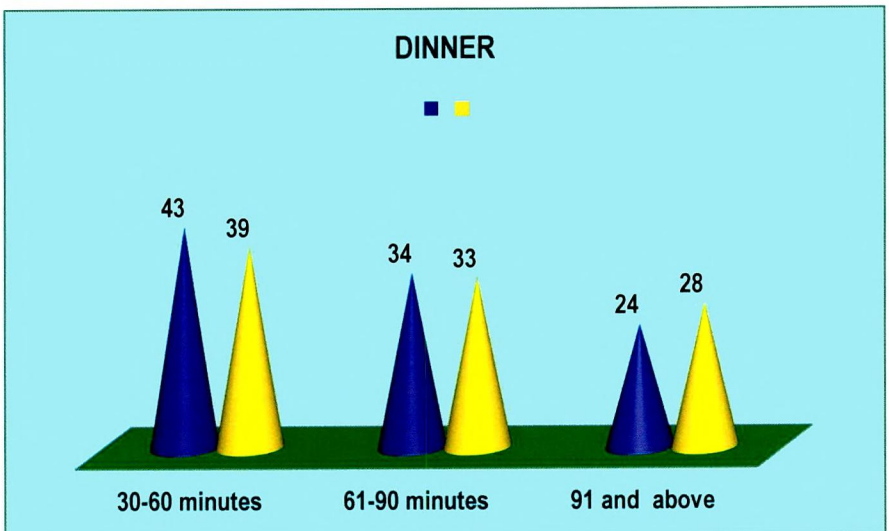
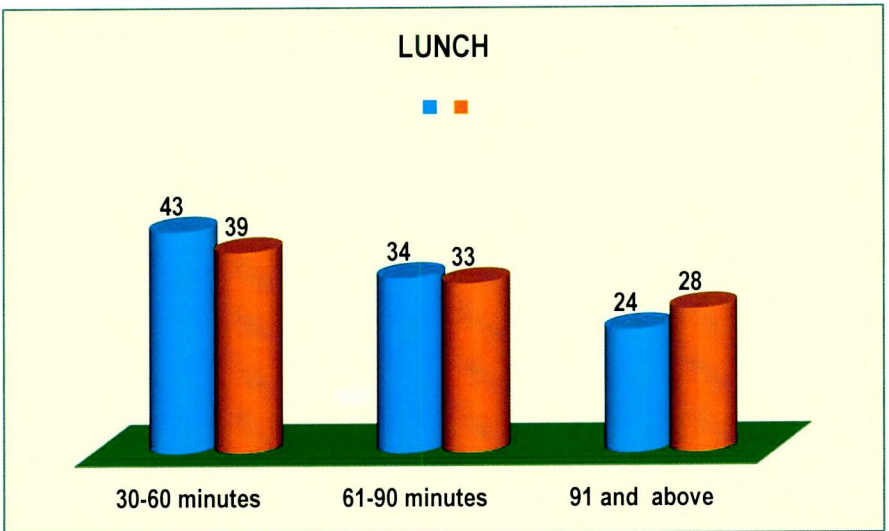
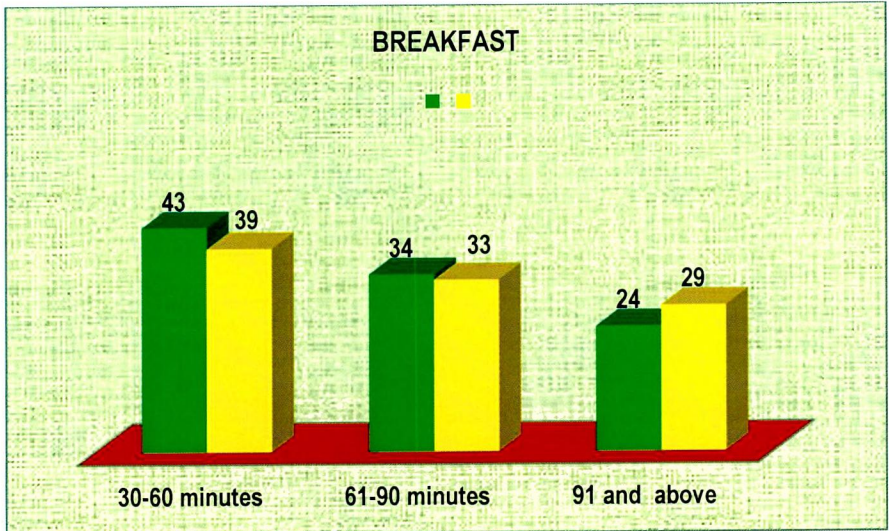
a) Average time spent on preparing convenience foods

Table XIV and Figure 12 gives the details regarding the time spent on preparing convenience food against regular cooking.

TABLE XIV
AVERAGE TIME SPENT PREPARATION OF A DAY'S MEALS

Average time spent in minutes	Homemakers (N:300)		Percentage	
	*Convenience	**Traditional	*Convenience	**Traditional
Breakfast				
30-60 minutes	138	120	46	40
61-90 minutes	87	94	29	31
91 and above	75	86	25	29
Lunch				
30-60minutes	105	98	35	33
61-90 minutes	110	142	37	47
91 and above	85	60	28	20
Dinner				
30-60 minutes	128	118	43	39
61-90minutes	101	98	34	33
91and above	71	84	24	28

*Convenience food preparation ** Traditional method preparation



AVERAGE TIME SPENT PREPARATION OF DAY'S MEAL

FIGURE 12

Forty six percent of the homemakers had spent on an average 30-60 minutes for preparing breakfast as against 100 percent who spent 91-120 minutes for the same preparation with regard to lunch 35 percent and 43 percent had spent 30-60 minutes for the preparation of lunch and dinner using convenience food as against 100 percent who spend more than 91 minutes for lunch and dinner for preparing same items by, traditional method. This clearly indicates that preparation of convenience food definitely reduced the preparation time.

On analysing it was observed that the use of convenience foods was responsible for time reduction in meal preparation and relieved the homemakers from the strenuous effort of standing for a long time in food preparation . Use of convenience food had come as a boon especially for homemakers who are fatigued and have health problems.

This also indicates that convenience foods have taken an important place in today's family regular food preparation activities.

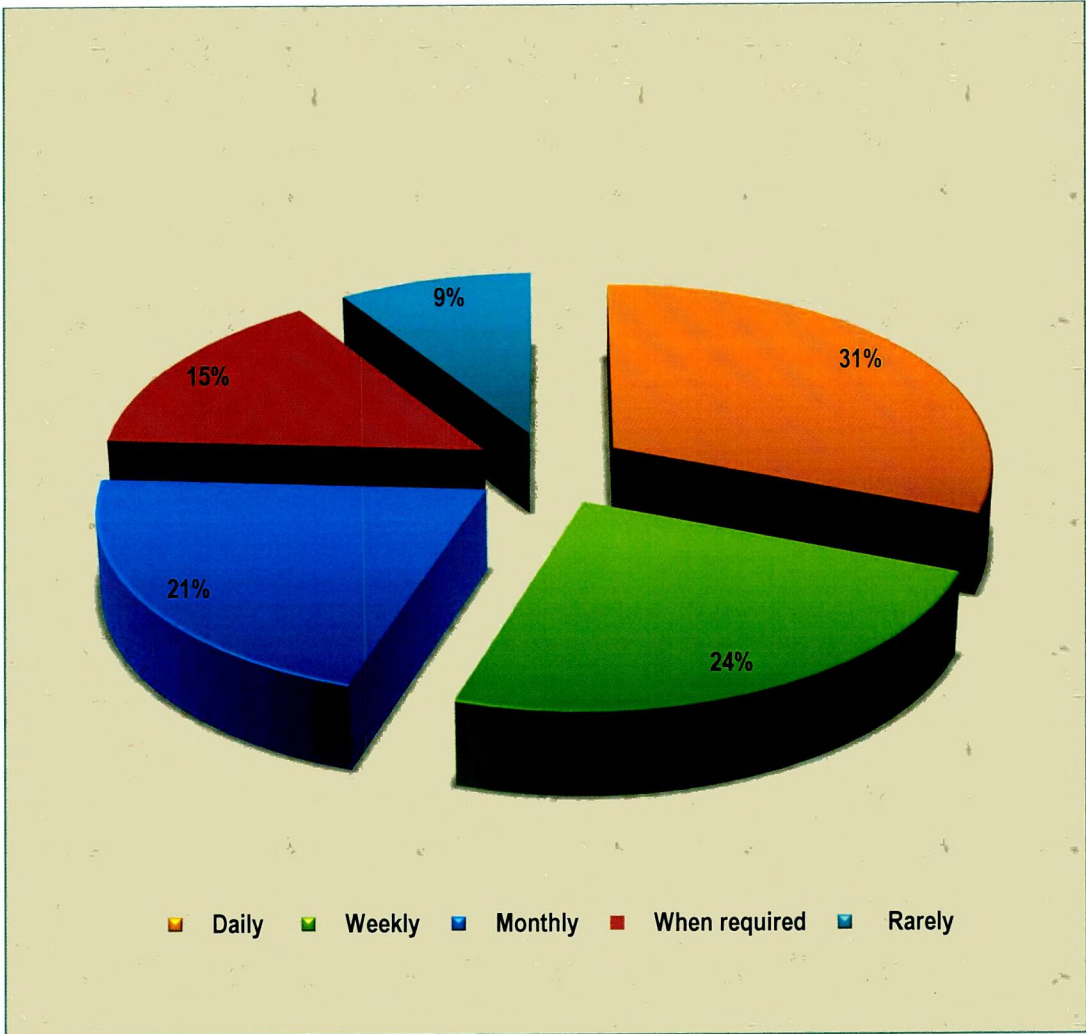
b) Frequency of eating outsides

Table XV and Figure 13 indicates the details on frequency of eating outside by the selected families.

TABLE XV
FREQUENCY OF EATING OUTSIDE

Frequency of consumption	Homemakers (N:300)	Percentage
Daily	92	31
Weekly	72	24
Monthly	64	21
When required	44	15
Rarely	28	9

The frequency of consuming foods outside the home by the individuals in the families varied. The frequency of eating food outside by the family members was taken into consideration. Thirty one percent of the home makers informed that once or twice a week they had the habit of taking food outside (either



FREQUENCY OF EATING OUTSIDE

FIGURE -13

breakfast, lunch or dinner). Twenty four per cent of the home makers informed that at least weekly once they consumed food from outside. Twenty one percent consumed monthly form outside while the remaining 15 percent and 9 percent consumed convenience food when required and very rarely.

b) Reasons for preferring convenience foods

The table XVI indicates the reasons for preferring and cooking convenience foods.

**TABLE XVI
REASONS FOR PREFERRING CONVENIENCE FOODS**

Reasons	Homemakers (N:300)	Percentage
Easy to store	110	37
Can be prepared when required	98	33
Takes limited times	94	31
Can be prepared immediately after purchase	91	30
During guest surprise visit	85	28
Unexpected event emergency	76	25
Urgent to leave work	60	20
Partying and celebration	43	14
Chi² value	103.470**	

*Multiple Response

** - Significant at 1% level

The table reveals that 37 percent of the homemakers stored and 32 percent prepared convenience foods, only when required. Thirty one percent mentioned convenience food takes very limited time to prepare and 30 percent said that they prepared immediately after purchase. Only 28 percent preferred to prepare the convenience foods during surprise guest visit and 25 percent of the home makers prepared when unexpected relatives visited their home. Very few homemakers said that when they had to leave home urgently and during party and celebration (14 percent) they preferred to use convenience foods.

d) Place of purchase of convenience food

Table XVII reveals the details on place of purchase of convenience foods.

TABLE XVII
PLACE OF PURCHASE OF CONVENIENCE FOODS

Purchase location	Homemakers (N:300)	Percentage
Super market	98	33
Pick and pay stores	88	29
Departmental stores	76	25
Whole sale shops	60	20
Provision stores	58	19
Door to door Campaign	38	13
Fruit stall	25	8
Multi purpose	18	6
Specialty response	15	5
Chi²	79.345**	

*Multiple response

** - Significant at 1% level

The table shows that 33 percent were buying convenience foods from the supermarkets, 29 percent from pick and pay outlets, 25 percent from Departmental store, and 20 percent from the whole sale shops. Only 19 percent were buying the convenience foods from the provisional store. It was found that very few of them were buying from door to door campaign, fruit stalls, multipurpose retail stores and specialty stores. However, the homemakers revealed that local multipurpose retail stores came handy especially, during emergencies due to sudden and unexpected guest arrival.

e) Opinion established on convenience foods

Table XVIII and Figure 14 gives the particulars on the opinion established on the convenience foods as reports by respondents.

TABLE XVIII

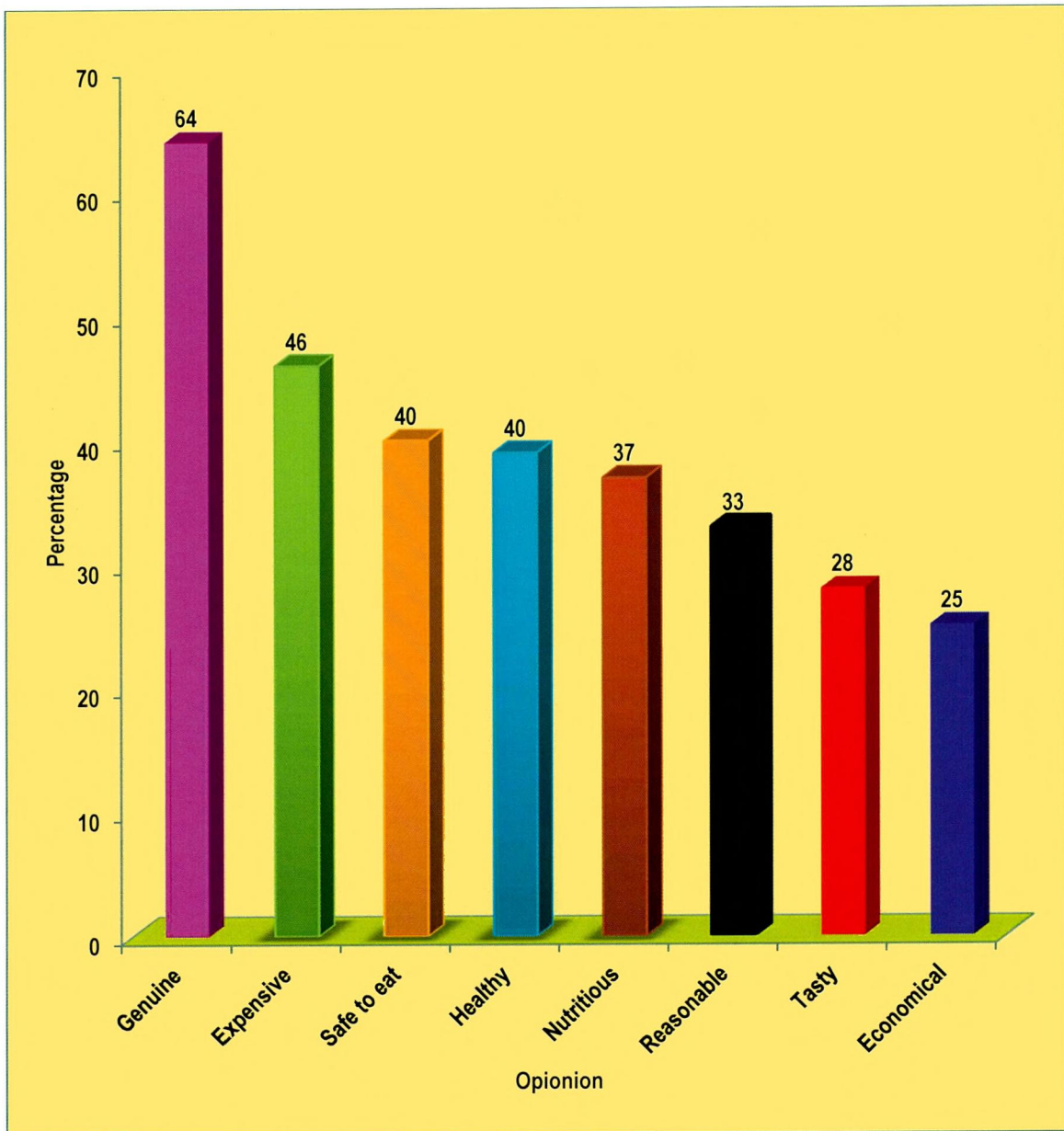
OPINION ESTABLISHED ON CONVENIENCE FOODS

Opinion	Homemakers (N:300)	Percentage
Genuine	192	64
Expensive	139	46
Safe to eat	121	40
Healthy	119	40
Nutritious	110	37
Reasonable	98	33
Tasty	84	28
Economical	74	25

*Multiple response

Genuineness was expressed as the best opinion established by 64 percent of the homemakers with regards to convenience foods. It was observed from the table that a majority of the homemakers expressed that cost wise analysis revealed that convenience foods are expensive if compared with the same homemade preparation. However they also accepted the positive points with regard to convenience foods. About, 46, 40 and 40 percent of the homemakers expressed that the convenience foods though expensive, are safe to eat and healthy.

However nutritious (37percent), reasonable (33percent), tasty(28 percent), and economical (25 percent), were the other reasons reported the opinion established on convenience foods by the homemakers.



OPINION ESTABLISHED ON CONVEINEICE FOODS

FIGURE 14

f) Average time spent in preparation of traditional against convenience foods cooking

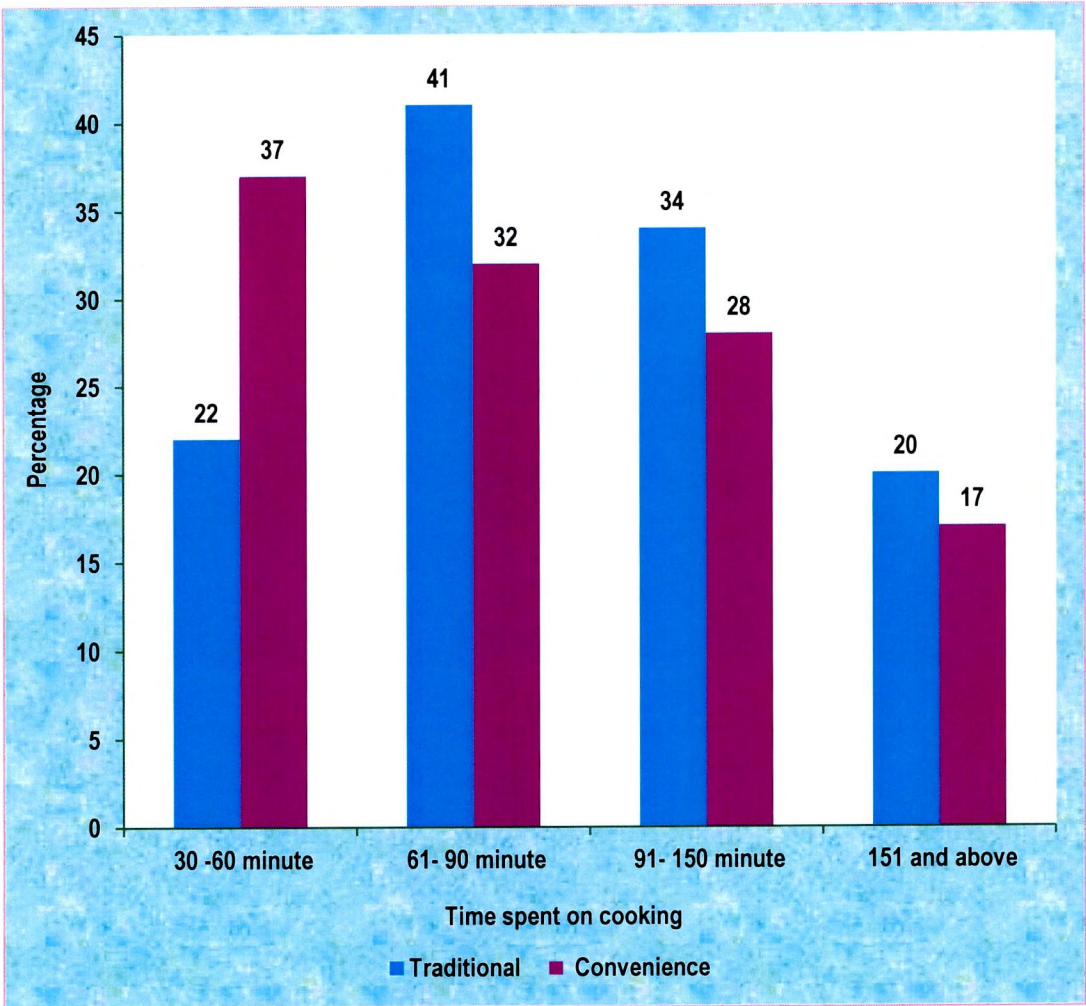
Table XIV and Figure 15 present the time spent cooking on convenience foods.

**TABLE XIX
AVERAGE TIME SPENT IN TRADITIONAL AND CONVENIENCE
FOODS COOKING**

Time spent on cooking	Homemakers (N:300)		Percentage	
	Traditional	Convenience	Traditional	Convenience
30 -60 minute	65	112	22	37
61- 90 minute	123	95	41	32
91- 150 minute	101	83	34	28
151 and above	60	52	20	17

*Multiple response

The above table shows that the average time spent in cooking between the convenience foods and traditional food. It was found that about 22 percent and 37 percent spent 30-60 minutes in cooking being the minimum spent on cooking. While 41 percent and 32 percent spent 61-90 minutes on cooking and comparatively less percentage, 34 percent and 28 percent spent 91-150 minutes, and only 20 percent and 17 percent spent above one hour and above in cooking. Hence, the observation revealed that use of convenience food definitely helped in conserving time on cooking when compared to traditional cooking.



**AVERAGE TIME SPENT IN TRADITIONAL AND CONVEINENCE
FOODS COOKING**

FIGURE 15

g) Information about the purchasing of convenience foods

Table XV presents the details on information looked into with regard to convenience foods.

**TABLE XX
INFORMATION ABOUT THE PURCHASING CONVENIENCE FOODS**

Information	Homemakers (N:300)	Percentage
Price	69	23
Ingredients	61	20
Procedure	52	17
Brand	48	16
Name of the product	42	14
Date of manufacture	38	13
Date of expiry	95	32
Veg /non -veg	84	28
Return if not satisfied	78	26
Chi² value	29.427**	

*Multiple responses

** - Significant at 1% level

The table presents the information looked into on convenience foods packages which influence to purchase the convenience food. The table shows that 23 percent of the homemakers purchased the convenience foods for reasonable price and it was found that, there was not much difference between the cost of convenience food and the cost of ingredients purchased for convenience foods. About 17 percent of the homemakers, purchased convenience foods mainly for procedure this was found to be easy to prepare. Also, it was found that the homemakers were not much considered about the brand of the product and name of the product but familiarity of the shop and salesmen encouraged them to purchase the convenience food which was available in the outlets. Thirty two percent, of the homemakers mentioned date of manufacture, Veg or non-veg (28percent), and returned if not satisfied (26percent) gave them more confidence to making use of the convenience food.

The confidence with the information found on convenience food enthused the homemakers, to develop liking towards frequent use of convenience food.

C) Results of the cooking experiment

The results of the cooking experiments are presented under the following heading:

1. Sensory evaluation of the cooked foods
2. Comparison of cooking of convenience against traditional method
3. Cost of the selected items (Four members)

TABLE XXI

SENSORY EVALUATION OF CONVEINENCE FOODS

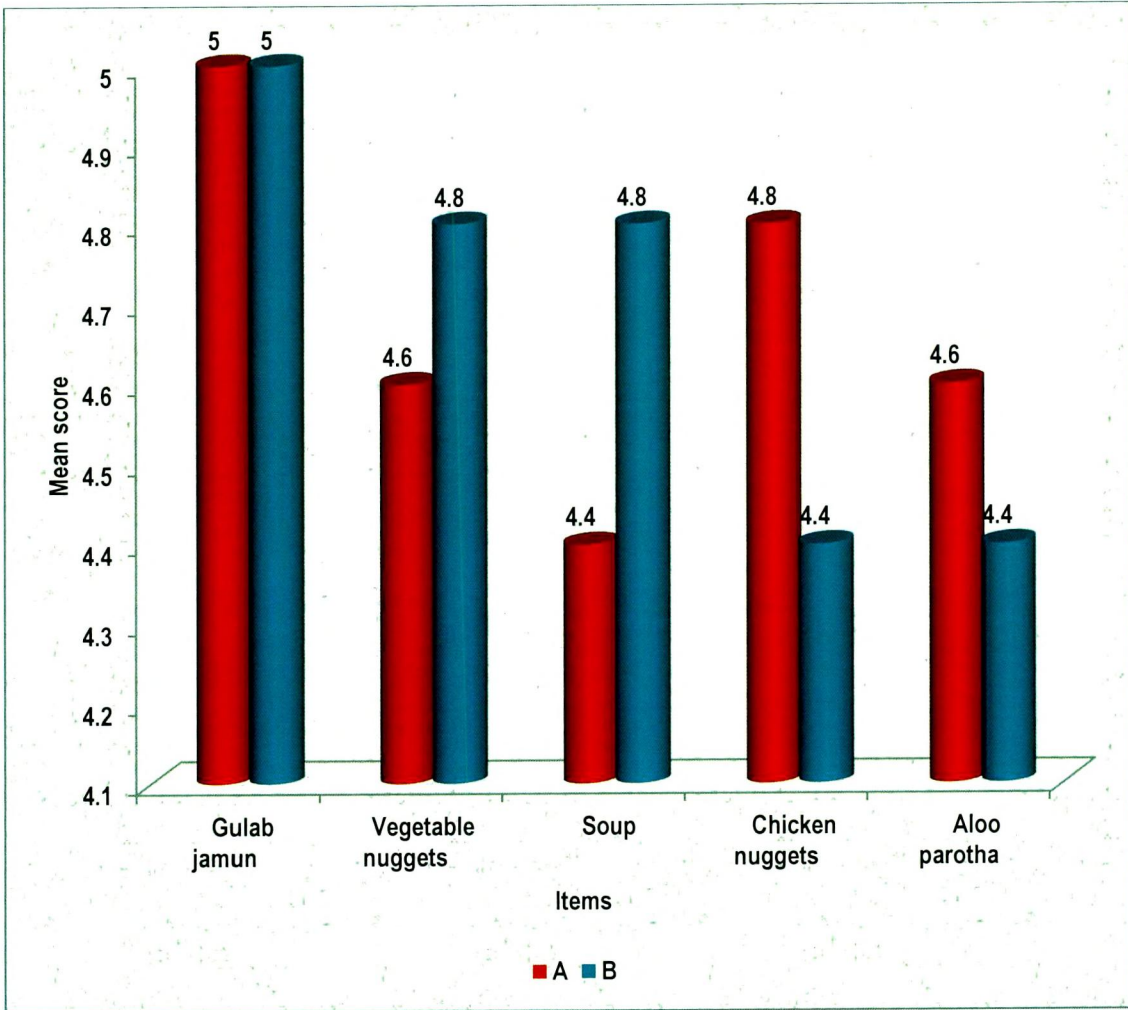
S.No	Items	Mean Score (5)				
		A	B			
1	Gulab jamun	5	5			
2	Vegetable nuggets	4.6	4.8			
3	Soup	4.4	4.8			
4	Chicken nuggets	4.8	4.4			
5	Aloo paratha	4.6	4.4			
		Excellent -5	very good-4	Good-3	Fair-2	poor-1

A - Traditional: B - Convenience

Sensory evaluation consisted of judging the quality of preparation items by a panel of judges in terms of flavor, texture, taste, appearance and color. Sensory evaluation deals with analyzing the quality of food as they are perceived by the senses of sight, taste, touch and smell, says Malhotra (2001). By the palate, the texture of food like crispy, chewy, sticky, smooth can be perceived.

Among the prepared items, Jamun preparation scored the highest on 5 points for both methods, gaining the recognition as excellent for appearance, texture, colour, taste and flavor.

Among the traditional preparation, chicken nuggets scored 4.8 and vegetable nuggets scored 4.8 and 4.6 respectively, followed by Aloo paratha and soup which scored 4.4 respectively. With regard to convenience food vegetable nuggets and soups scored 4.8 respectively. Aloo Paratha scored 4.6 and chicken nuggets 4.4. However, the scores obtained did not exhibit vast difference. Both preparation had appreciation by the judges (Figure 16).



A-Traditional

B- Convenience

Score: Excellent- 5

Very good- 4

Good- 3

Fair- 2

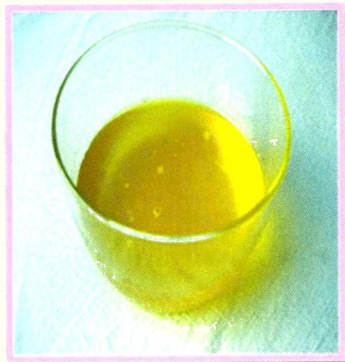
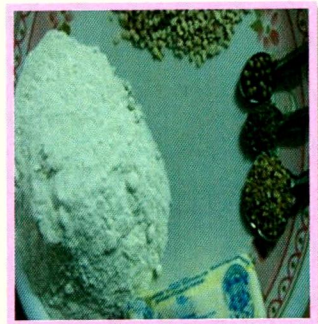
Poor-1

SENSORY EVALUATION OF CONVEINCE FOODS

FIGURE 16



CONVENIENCE



TRADITIONAL

DISPLAYS OF CONVENIENCE FOODS FOR EXPERIMENT
PLATE – V

TABLE XXII
COMPARISON OF COOKING OF CONVEINCE FOODS AGAINST
TRADITIONAL FOODS

S.No	Selected Items	Cooking Method adopted		Main ingredients (gm)		Time taken (in minutes)	
		A	B	A	B	A	B
1	Aloo Paraotha	Steaming and surface coking	Instant	500	400	90	10
2	Chicken nuggets	Deep frying	Instant	250	200	120	15
3	Vegetable nuggets	Deep frying	Instant	100	200	20	10
4	Soup	Boiling	Instant	Serve 4	Serve 4	15	7
5	Gulab jamun	Deep frying	Instant	250	500	60	Ready to eat

*Serving for four members

A -Traditional Cooking; B - Convenience Food

Among the preparation of the selected items, for the traditional method of preparation with deep frying had to be used as the method of preparation for the selected three items namely chicken nuggets, vegetable nuggets and gulab jamun. Steaming and surface cooking was adopted for Aloo paratha and boiling for the preparation of soup. With regard to convenience food, all the selected item were ready to be served and consumed.

The weight of the main items for Aloo paratha was 500 gm for Traditional and 400 gm for Convenience foods. With regard to weight almost similar amounts were to serve four members. The ingredients used in the case of traditional cooking were maida, atta, edible vegetable oil, oil cumin seeds, potato, corrainder seeds, green chilli, mixed spices, salt and amount of water a total weight being 500gm. Traditional preparation are more time consuming than convenience foods.

Traditional chicken nuggets weighed 250 gm (cooking 120 minutes) and convenience food weight 200gm are (time for preparation 15 minutes). The Ingredients used for the traditional method to prepare chicken nuggets were chicken, water, bread , wheat flour, yeast oil, spices and condiments.

Traditional cooking vegetable nuggets weight 100 gm (time spent for cooking 20 minutes) and convenience food 200gm (cooking time10 minutes) traditional cooking involved deep frying. The ingredients used are wheat flour, turmeric, green peas, carrot, oil, mixed spices.

Preparation of soup took by traditional method took 15 minutes and convenience food preparation took 7 minutes. The ingredients used in traditional method are corn flour, cabbage peas, salt, water and sugar.

Gulab jamun (250gm) took 60 minutes by traditional preparation and the instant (500 gm) was ready to consume. The ingredients used for traditional method was khova, cinnamon, oil , water and sugar syrup. Deep frying was used to fry the jamuns.

Traditional preparation are more time consuming compared to convenience method of preparation. The time factor makes the convenience food to be recognized, appreciated and used often in the households.

TABLE XXIII

COST OF THE SELECTED ITEMS (SERVING FOUR MEMEBERS)

S.No.	Food items selected	Cost in (₹)	
		A	B
1	Aloo Parotha	45.00	80.00
2	Chicken nuggets	60.00	90.00
3	Vegetable nuggets	45.00	72.00
4	soup	20.00	40.00
5	Gulab jamun	50.00	98.00

A-Traditional

B-Convenience

The cost of the convenience food is comparatively higher when compared with the cost of preparation of the selected food item when prepared by traditional method.

For people who are cost conscious may give a thought to the use convenience food. However, convenience food play an important role in the households for many positive reasons. As the life style is becoming more mechanical and for paucity of time households may be forced to go in for convenience food as a way of life.



COOKING EXPERIMENT BY THE INVESTIGATOR

PLATE - VI

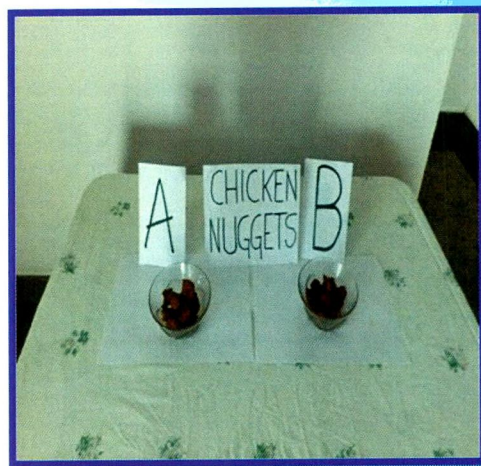


HOMEMAKERS PREPARING THE SELECTED FOOD ITEMS

PLATE—VII



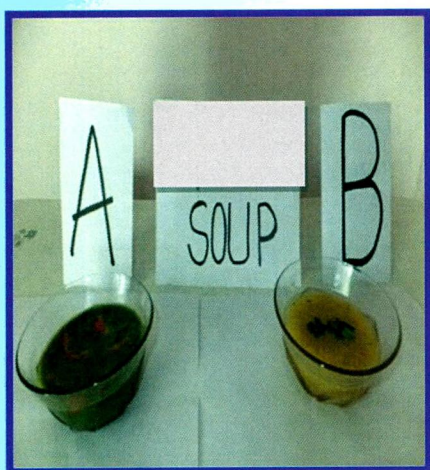
Evaluation of Gulab Jamun



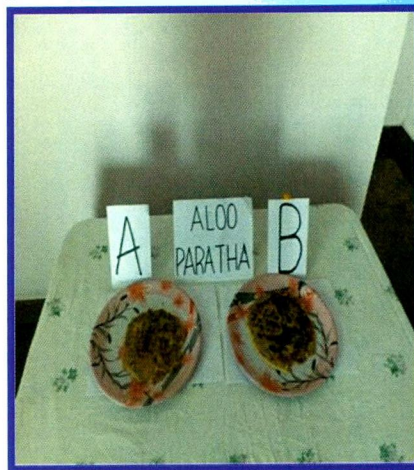
Evaluation of Chicken nuggets



Evaluation of vegetable nuggets



Evaluation of Soup



Evaluation of Aloo paratha

PREPARED FOR SENSORY EVALUATION

PLATE — VIII



SENSORY EVALUATION BY THE PANEL JUDGES

PLATE—IX