

**ATTITUDE OF URBAN AND RURAL  
HOMEMAKERS TOWARDS  
CONVENIENCE FOODS**

BY

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VELLAYANI  
THIRUVANANTHAPURAM**

**2001**

## DECLARATION

*I hereby declare that this thesis entitled "Attitude of urban and rural homemakers towards convenience foods" is a bonafide record of research work done by me during the course of research and that the thesis has not previously formed the basis for the award of any degree, diploma, associateship, fellowship or other similar title, of any other university or society.*

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## CERTIFICATE

*Certified that this thesis entitled "Attitude of urban and rural homemakers towards convenience foods" is a record of research work done independently by Ms. Rekha. K.M. under my guidance and supervision and that it has not previously formed the basis for the award of any degree, fellowship or associateship to her.*

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*There is Reason  
For every pain that we must bear,  
For every burden, every care  
There is a REASON*

*For every grief that crushes our heart  
For every scalding tear we shed,  
There is a REASON*

*For every hurt, for every plight,  
For every lonely, painful night,  
There is a REASON*

*Yet, if we trust God, as we all must,  
It all can turn to be for our good,  
He knows the REASON.*

*- Swami Chinmayananda*

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REKHA. K.M.

*Dedicated*

*To*

*My Family*



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# *INTRODUCTION*

## 1. INTRODUCTION

In India, agriculture is the largest and the most vital sector of economy with its diverse agro climatic conditions to grow a wide variety of tropical, subtropical and temperate food grains, fruits, vegetables and plantation crops. Country faces a major challenge for proper feeding of its growing population having different needs. It is evident from the literature that besides natural losses, a lot of post harvest products go waste because of improper handling, transportation and storage techniques which can be prevented by proper handling and processing. The task of feeding the country's population can also be achieved to a greater extent through concerted action by not only further increasing the food production but also by reducing the post harvest losses; hence food processing can be one of the important ways of reducing these losses. Processed food is one which undergoes processing, adding value to conventional and innovative basic food forms through various permutations and combination of providing, protection, presentation, packing, convenience, transportation and disposability (Rao, 1989). Though food processing was not given due importance in earlier time, however since last few years a change has taken place in this area. Now a days, the growth of technology has made many of the basic foods in to processed items and with people opting for life on a fast lane, these processed foods has come to the market as a blessing in disguise (Sohrab, 1995).

There is a considerable change in the life style of an average Indian due to various reasons, viz., urbanization, increase in per capita income, explosion of mass media, increase in working women's population, scarcity of

household labourers as well as technological developments and invasion of consumerism (Nirmal *et al.*, 1998). There has been a significant change in the eating habits over the last ten years due to the significant sociological changes that has affected the structure of the family. Changing trends in households have given a tremendous boost to convenience products for this is the age of instant meals. In view of all these aspects it can be assumed that there is an increase in the consumption of convenience foods because these products are convenient in use. The term 'convenience foods' refers to a very heterogeneous group of foods varying in composition, shape, size, method of processing even with regards to their function in diet (Arya, 1984).

The convenience food market started as early as 1963-64 with the introduction of various instant mixes developed by CFTRI Mysore. The sector is claimed to have an annual growth rate nearly twenty per cent. The demand for convenience foods in the domestic market is increasing. Indian food processing industry is now witness to a mad rush of new entrants.

The world of convenience foods has brought many easy and tasty changes to our lives. If we do not have time to prepare a meal, many pre-prepared foods, such as noodles, cornflakes, hot soups etc. await us in the deli case. Today's foods are being produced with new ingredients such as intense sweeteners, fat replacers and fat substitutes (Sandra and Andrews, 1991).

Women, who are primarily responsible for 30 per cent of the worlds households are being increasingly burdened with the growing responsibility of fulfilling the basic survival needs of all families. In this changing socio-economic environment, women have to play not only as traditional



homemakers but also as wage earners. A woman's domestic role as a wife and mother consumes half of her time and energy (UNICEF, 1985).

Change in social pattern from joint family to nuclear family had also vested greater responsibilities on these employed women. The continuous conflict between the demands of the home and the career brought various stress and strains on these women. This has left little time for women to work in kitchen resulting in demand for convenient preparations.

Keeping all this in mind a survey was conducted among the homemakers of urban and rural areas of Thiruvananthapuram district. The wards of Kalliyoor panchayat was selected as the rural area and the wards of Thiruvananthapuram Corporation was selected as urban area. Hundred respondents each from urban and rural area were selected for the study.

Until now no systematic research work has been carried out in Kerala to find out the attitude of urban and rural homemakers to wards convenience foods, their consumption pattern etc. and it was felt worthwhile to undertake such a study.

Hence the present study entitled "The attitude of urban and rural home makers towards convenience foods" in Thiruvananthapuram district is proposed with the following objectives.

- 1) To study the consumption pattern of convenience foods among urban and rural homemakers,
- 2) to study the attitude towards convenience foods and
- 3) to assess the perception on economy of convenience foods.

## **Scope of the study**

Convenience foods provide adequate savings of time and labour in consumer's kitchen. Today convenience food industry is fast developing and people are more dependent on convenience foods. The convenience food industry has never been what is today- a symbol of hope and endeavour; and it is not what it will be tomorrow- a land mark of success and achievement. In the coming years it will be an industrial revolution which can be made beneficial to the rural poor to take up as an income generating activity. In this context, such a study may help to understand the extent of use of convenience foods in urban and rural area, attitude of urban and rural homemakers towards convenience foods and perception on economy of convenience foods.

## **Limitations of the study**

Considering the limited time and other resources available with the researcher the study has been confined only in some urban and rural wards of Thiruvananthapuram district. The respondents in this study group do not represent the whole urban and rural homemakers in Kerala. Another limitation is that all convenience foods were not included in the checklist; only limited numbers were considered. Hence the conclusion drawn from the study cannot be generalized to other areas. However considering the efforts put in planning and conducting the experiment, it is hoped that the results generated will be of use of make broad generalizations for the whole state of Kerala.

*REVIEW OF  
LITERATURE*

## **2. REVIEW OF LITERATURE**

This chapter presents the review of earlier studies conducted on the attitude of urban and rural homemakers towards convenience foods, consumption pattern of convenience foods, perception on economy of convenience foods and associated studies under the different subheads.

2.1 Convenience foods

2.2 Need for convenience foods

2.3 Consumption pattern of convenience foods

2.4 Attitude towards convenience foods

2.5 Perception on economy of convenience foods

2.6 Convenience foods used during special occasions and physiological conditions

2.7 Influence of socio economic profile of families and the dietary habits

### **2.1 Convenience foods**

The term “convenience foods” is used for a very heterogeneous group of foods which vary in composition, shape, size, method of preparation and processing, and even with regard to their functions in the diet (Arya, 1984).

Frost and Sullivan (1990) have defined convenience foods as those products in which all or a significant portion of their preparation has been transferred from the consumer's kitchen to the processing plant.

According to Arya (1992) different kinds of convenience foods are moist fried products, shelf stable fried products, popped or puffed cereal, expanded cereal, extruded foods, fermented products, papads and wafers, instant mixes, ready-to-eat products stabilized by antimycotic agents, canned convenience foods, breakfast cereals and fruits and vegetable based convenience foods.

According to Devariya (1996) convenience foods are of three types, solid foods, concentrates and liquids. Solid foods include freeze dried products, bakery items, confectionary, milk powder, egg powder, chapattis, candied fruits, spiced snacks, canned meat and dry fruits/nuts. Jams/jellies, shrikhand, condensed milk, yoghurt, ready-to-cook retortable foods, curries, fruit pulp concentrates etc. comes under concentrates. Liquids include sterilized milk, fruit juices and soups.

## **2.2 Need for convenience foods**

Rapid urbanization and sociological changes, like the desire on the part of the house wives to spend less time in the kitchen, the increased value she places on leisure, the habit of eating out, women taking full time jobs, the weakening of family ties, the spread of television and its impact, the increasing difficulty and expenses involved in obtaining domestic help, finally the changing life styles and growth of foreign travel have created a demand for

pre-packaged, pre cooked food which could be cooked quickly and also ensures top quality, variety, taste and flavour (Srinivasan, 1967; Sami, 1990).

According to Singh and Palackar (1989), in the newly emerging era, fast and convenience foods and other instant foods are becoming increasingly popular among Indian households and therefore there is a higher priority for the development of food processing industry. Arya (1990) reported that the changing life style and food habits of middle income group and availability of better quality processed foods as a result of modern technology advances have also enhanced the production and consumption pattern of convenience foods.

According to Anvita *et al.* (1993) there is a considerable increase in the use of convenience foods due to various reasons viz., urbanization, increase in per capita income, changing life style, increase in working women population, scarcity of house hold labourers as well as technical developments.

An increase in urbanization, migration of rural population to urban areas, rising literacy and income levels, more working women and increased health awareness have influenced the increased use of convenience foods (Gopalan, 1994).

According to Potty (1995) the consumption of convenience food is accentuated by opportunity factors like increased economic freedom, lesser family cohesion, time constraints for in-house food preparation, enormous expansion of education, impressive growth of catering sector including the fast food phenomenon and greater access to information through electronic

media about vast array of convenience oriented food product with different features.

Besides education, rapid urbanization, changing life styles and increase in working women population have contributed to the increased use of convenience foods (Singh *et al.* 1998)

Chellamal (1995) reported that the popularity of convenience foods is more in nuclear families due to the involvement of women in multifaceted activities within the house. The increasing importance and value of time resources also might have generated a greater demand for convenience foods (Gofton, 1995)

### **2.3 Consumption pattern of convenience foods**

Bhattacharya (1980) stated that the quality and quantity of products, produced by Indian food industry had increased to a greater extent and among them the baking industry is one of the largest organized food industries in India with turn of Rs. 1200 crores. More than two and half fold increase in bakery products during the last decade had been reported by Haridas (1993).

Gaur (1993) concluded that the annual production of baked products in India is about two to six million tonnes, 1.85 million tonnes of bread, 0.5 million tonnes of biscuit and 0.18 million tonnes of other bakery items. A study conducted by Maria (1989) on food consumption and energy expenditure of employed home makers in organized sector in Thiruvananthapuram revealed that bakery items and other convenience food items form a major part of the daily menu of the population surveyed.

Mathias (1971) found that with higher and regular income, the consumption pattern of the family changed in quantity and quality.

On the basis of studies conducted by Musaiger (1982), income, price limit, purchasing power, high growth rate of population, family size and educational level of husband and wife were considered as determinants of consumption level of convenience foods.

Guitiman and Gorden (1982) opined that nuclear families residing in urban areas were heavy users of convenience food items.

Parent (1984) reported that among adolescents intake of confectionary is high.

A survey conducted in the district of Punjab by Puri and Sanghera (1987) revealed that majority of the people surveyed consumed convenience foods and among these jam and squash were very popular.

In a study conducted by Gofton (1995) about the changes in the use pattern of convenience foods in the family, 65.5 percent respondents told that its consumption has increased. Anvita *et al.* (1993) reported that among adolescents frequent consumers of convenience foods are children than the adults in the households.

The younger generations have shown more inclination towards convenience foods when compared with elderly people who have reservations about its healthfulness (Raj *et al.* 1998).



According to Karuna (1993) factors like food preferences, availability of food items in the locality, knowledge of nutritional values of certain food items, relative prices of food articles and urgency of non-food expenses were all found to determine priorities in food expenditure.

Khaitan (1989) who have stated that as the total food expenditure increases, there is an increase in the expenditure on convenience foods.

A study conducted by Sami (1990) revealed that monthly expenditure on convenience foods by employed housewives on an average was Rs. 489 which was higher than the expenditure incurred by unemployed women. Sridevi and Uma (1998) have also reported that the monthly expenditure on convenience foods alone ranged from Rs. 200 – 600, maximum being among employed housewives.

Expenditure on convenience foods by urban home makers was significantly higher than the rural homemakers (Rege, 1992). Anvita *et al.* (1993) reported that the expenditure on convenience foods ranged from 5-25 percent out of total expenditure on food.

A study conducted by Mehta *et al.* (1995) among middle and high income groups revealed that the expenditure on convenience foods was almost same in both middle income group and high income group.

Rao (1989) and Boura *et al.* (1991) reported that better the literacy status higher the frequency of use of convenience foods.

As reported by Sonia (1989) the items like vermicelli, ada, custard powder, gulab jamun mix, cake etc. were used occasionally.

Story (1989) opined that noodles, cornflakes, ice cream mix and custard powder were most frequently used in urban areas because the adolescents liked it very much.

Susan *et al.* (1991) observed that the frequency of use of convenience foods was more among the urban families.

According to Mehta (1995) the frequency of use of convenience foods was more among the high-income group.

The masala mixes were frequently used by homemakers irrespective of income (Charanjit, 1997).

Radhakrishnan (1998) reported that the instant breakfast mixes and masala powders were more frequently used by the homemakers.

Nirmal *et al.* (1999) observed that fryums were more frequently used by working women.

According to Sridevi and Uma (1998) the frequency of purchase of convenience foods was monthly in most of the urban families.

#### **2.4 Attitude toward convenience foods**

Allport (1935) defined attitude as a mental and neural state of readiness organized through experience exerting a directive or dynamic influence upon the individuals response to all objects and situations with which it is related.

Thurstone (1946) defined attitude as the degree of positive or negative affect associated with some psychological object towards which people can differ in varying degrees. Kuppaswamy (1964) stated that attitudes are learned in the course of life experience which make the individual behave in characteristic ways towards person, objects or issues to which they get related.

According to Sharma (1972) attitude means a personal disposition which implies an individual to react to some objects or situations.

Dahama (1976) opined that attitudes are learned responses and since they are always found in relation to object, ideas and persons, they play an important role in determining human behaviour.

Baisya (1988) had felt that urban people had a positive attitude towards the convenience foods rather than rural people. Urban women are assumed to have a high attitude towards convenience foods, since most of these foods are simply heated, garnished and plated (Gurudas, 1989).

Arya (1984) has also opined that older people had a low attitude towards convenience foods because they believed that the convenience foods may cause diseases.

According to Arora (1991) the socio-economic background of the respondents such as social, economic, religious and the family background in general, have a very distinct part to play in determining the attitudes and behavioural patterns of the individuals.

A study conducted by Russo *et al.* (1986) revealed that as education increases, the awareness and attitude towards convenience foods increase.

Nagarajan (1972) reported that rural people had a negative attitude towards convenience foods because they thought that the consumption of these foods may cause diseases. Mukhopadhyaya (1981) noticed that in rural area, the people had a low attitude towards convenience foods because they were not much aware of these products.

According to Choudhari (1989) high and middle-income families had a highly favourable attitude towards convenience foods.

A study conducted by Sankar (1992) among the working and non working women about the preference of convenience foods, working women had a highly favourable attitude towards convenience foods. But Hollingsworth (1993) observed that some of the working women had a negative attitude towards convenience foods but used it because of lack of time.

As per Wrick (1995) consumers are making more health care decisions for themselves than ever before. Irrespective of income and people had a highly favourable attitude towards health drinks.

## **2.5 Perception on economy about convenience foods**

According to Kuppuswamy (1964) perception is a process of becoming aware of objects or events or characteristics by means of sensory operations. Previous experiences influence perception. Thus perception is a complex

process. A person tends to identify a given situation or objects in terms of what is familiar to him.

Theodorson and Theodorson (1970) defined perception as the selection, organization and interpretation by an individual of specific stimuli in a situation according to the prior learning activities, interest, experience etc.

Pestonjee *et al.* (1981) stated perception as the process of receiving selecting, organizing, interpreting, checking and reacting to the sensory stimuli or data.

Morgan (1986) defined perception as whatever experienced by a person.

According to Rao and Narayana (1986) avoiding the perceptual distortion is one of the techniques to develop the perceptual skill.

Although costly, convenience foods are mostly purchased by urban people because family members liked them very much (Steencamp, 1986).

Puri and Sanghera (1987) noticed that as the income increases, the expenditure on convenience foods also increases.

As reported by Sandra and Andrews (1991) consumption of convenience foods were low among rural people compared to urban people because of its high cost.

Working women had an opinion that convenience foods were very economical because it saves energy, fuel and time (Singh *et al.* 1998). A

study conducted by Ranjini *et al.* (2000) revealed that people had an opinion that convenience foods are costly when compared to home made foods.

## **2.6 Convenience foods used during special occasions and physiological conditions**

Items like cake, ada, vermicelli etc. were mostly used on the occasions of birthday, marriage and religious festivals (Sonia, 1989).

Potty (1995) reported that various sweet items were served at home and in other public places with subtle differences in blends and flavour to celebrate special occasions.

Mehta *et al.* (1995) opined that health drinks were used in special physiological conditions like infancy, pregnancy and old age.

As noticed by Rognerud *et al.* (1983) the quality factors such as taste, nutritive value and maintenance of freshness, convenience and economy were the major reasons promoting use of convenience food.

Easy availability of the product was the most important reason for the purchase of convenience foods followed by consumer's belief that these products are nutritious, tastier and easy to store (Consumer Research Report, 1987).

A study conducted by Choudary (1989) has revealed that 53 percent of people pay extra for convenience, 77 percent for variety of preparation, 73 percent for trying out new recipes and 71 percent for reliable quality of convenience foods.

A study conducted by Anvita *et al.* (1993) revealed that time saving quality of convenience food was appeared as a most important reason for its use.

Kinsey (1997) reported that convenience was the most important reason for the purchase of convenience foods although sometimes it was purchased due to demand.

A study conducted by Nirmal *et al.* (1998) among working and non-working women about consumers preferences of processed food revealed that non working women preferred convenience food because of its convenience in use, where as working women preferred convenience foods due to its good taste, easy availability and time saving quality.

Sridevi and Uma (1998) showed similar results stating that the reasons for using convenience foods were time saving, easy to prepare, nutritious and liked by family members. Employed housewives ranked time saving aspect of convenience foods as the most preferred reason where as unemployed women ranked easy to prepare aspect as the most preferred reason. Nutritious aspect of processed food ranked third by employed women, where as it was the last preference by unemployed women.

Nirmal (1999) observed that fryum was relatively more preferred by working women because of status symbol.

## **2.7 Influence of socio economic profile of families on the dietary habits**

As observed by Arora (1991) that religion plays a dominant role in the process of socialization and it maintains the stability of the social system and relationships.

The Hindus constitute 57 percent of the total population in rural Kerala as reported by Kannan *et al.* (1991).

A report of the Kerala Statistical Institute (1992) reveals that Thiruvananthapuram district has a majority of population who follow Hindu religion.

Park (1997) opined that the demographic profile of India is fast changing and is characterized by adult population forming 60 percent.

Gaikwad and Gunjal (2000) in their study on information seeking behaviour of the respondents revealed that most of the respondents were belonged to middle age category.

As reported by Sadana *et al.* (1997) the consumption of convenience food is more among teenagers. Potato chips, noodles, hot dog and pastry were the most frequently consumed convenience foods.

Kerala is reported to have well adjusted to the small family norms. Mazumdar (1979) has opined that expansion of employment and strengthening of women's decision making roles could also contribute to the adoption of small family norms. Oza (1987) has stated that size of the family will be small for the couple having educated husbands. Lisa (1995) reported that growing urbanization, breaking down of joint family system, and high female literacy as a reason for reduced family size. According to Park (1997) and Boora *et al.* (1999) the average family size in India is four. A study conducted Asha and Sehgal (1997) among urban and rural girls revealed that family size of majority of urban girls was small i.e. number of family members were



below five but 68 percent of rural girls had large family size i.e. the number of members were more than five.

Kumar (1982) revealed that joint family system is not prevalent among agricultural labourers. Predominance of nuclear type families residing in Thiruvananthapuram has been reported by Sadasivan *et al.* (1980), Suja (1996), Lovely (1996) and Vishma (2000).

Gincy (1988), Nagammal (1989) and Thomas (1989) had reported that most of the families residing in the rural / urban areas of Thiruvananthapuram district were of nuclear type. According to Potty (1995) consumption of convenience foods is more among nuclear families.

According to Arora (1991) income is an important indicator of the socio-economic status of an individual. Alexander (1980) reported that in no state other than Punjab will the agricultural labourer be able to have an earning above the poverty line at the prescribed minimum wage.

Oza (1987) reported that education of the working mother as well as that of the head of the family increase the level of family income.

As reported by UNICEF (1990) in India share of earning of female workers in the family income was found to be below 50 percent. Laisamma (1992) had found in her study that family income was directly proportional to the number of persons employed in the family.

As reported by National Sample Survey (1994) in all the states the income of urban populations as judged by monthly per capita expenditure, was

higher than that of their rural counterparts. On an average, the income of the urban population was 80 percent higher than that of rural people. Park (1997) reported that Keralites are enjoying the high standard of living in spite of low per capita income. According to Bull (1992) there is a linear increase of consumption of convenience foods with increase in the family income.

Haffman *et al.* (1985) reported that educational status and literacy rate have been proved to be powerful determinants of nutritional status and it may influence the awareness about importance of good nutrition, which can affect food choice.

Gopalan (1987) reported that education is an important factor influencing economic status of women. Main reason for low level of education among women was the poor economic background, failure and early marriage as reported by Kuttykrishnan and Sucheta (1989).

According to Park and Park (1991) those who are well educated will be placed in higher positions drawing a good salary, which will increase the purchasing power of family. Steek *et al.* (1991) observed that women with more education had food consumption patterns more consistent with current health promotion messages.

The female literacy rate in Kerala is 86.13 percent (Resia and Sarangadharan, 1994). Nair (1992) stated that Kerala leads to other parts of the country in women's education and the literacy rate of women in Thiruvananthapuram is 77.72 percent.

Rao (1989) noted that convenience foods in India are mostly consumed by rich people compared to the poor which indicates that literacy is almost hundred percent amongst the rich while it is quite low among the poorer sections of the society. Anvita *et al.* (1993) observed that the consumption of convenience foods increase with educational status of the people. Less educated respondents gave more preference to taste and more educated respondents gave more preference to qualities of nutrition input, list of ingredients and freshness of the product.

The employment status of the population is an important determining factor with respect to health and nutritional status of the population (Reddy *et al.*, 1993).

Sloan *et al.* (1984) had reported that due to unemployment and under employment at least 30 percent of population in India were living below the poverty line. Meslem (1985) reported that the world survey on women conducted by several U.N. agencies provided a mass of data on employment, education, health and other aspects.

Malik (1987) indicated that there was a dramatic increase globally in the participation of women in economic activity as wage earners, as self employed and as entrepreneurs.

Ramachandran (1980) reported that in India working women constituted about twelve percent of the total population and this trend was on the increase. The 1981 Census series of Kerala revealed that the work participation rates of women in urban Kerala is 11.87.

Ramachandran (1980) also indicated that more and more women were seeking employment in non-traditional occupations outside home because of socio-economic and other consideration and this trend begun in the industrialized countries was rapidly spreading to urban and rural populations in developing countries. According to UNDP (1980) the employment profile of women in organized sector indicated that they worked mainly in female stereotyped occupations such as teaching nursing, tailoring, clerical jobs and similar sedentary type occupations. Nirmala *et al.* (1978) and Swaminathan (1980) reported that between rural and urban areas there were differences in the pattern of employment of women.

Alauddin and Tisdell (1989) observed an increasing dependence on wage employment for sustenance by the rural poor, the majority of whom are agricultural labourers. In Kerala, the employment status of women is 12.77 percent (1991 census).

A study conducted by Charanjit *et al.* (1997) revealed that if both spouses are working, then the consumption of convenience food also increases.

Exposure to mass media was assessed by Prema and Menon (1978) by determining the familiarity of women with different media and found that printed media and radio are the most popular in state. Lalitha (1985) and Selvaraj and John (1985) reported that there was no significant difference in knowledge level of high and low mass media participation group.

Pearson *et al.* (1986) noted that very large percentage of respondents acknowledge that their first source of information of convenience foods is media i.e., television, radio and news papers. However many are reluctant to admit that they are influenced by attractive advertisements.

Fatimabi (1993) stated that the exposure to mass media is influenced by young age, higher education and socio-economic status. Mony (1993) proved that poor socio-economic background of the respondents may be a reason for poor response of the television programmes and Keralites in general, are familiar with the various media like newspaper, radio and television.

A study conducted by Sinha (1993) about the criteria for choosing a new convenience food and source for such information revealed that a large majority (78.4 percent) of respondents told that media i.e., news paper, magazine and television are main sources for getting information about the product.

Communication through mass media like television has advantages over other media because of its mass coverage (Philip *et al.*, 1998). Ranjini *et al.* (2000) reported that of all the communication media, television was most important media that influenced the purchase of convenience foods.

Mishra and Tripathy (1991) revealed that women had very little contact with extension staff and were not exposed to formal sources to information.

Quiogue (1970) found that the lower the income, the higher was the percentage of income spent on food. Stephanie (1984) revealed that the expenditure on food is high, constituting 60 to 70 percent of the total monthly

expenditure on an average Indian. Wong *et al.* (1985) also found a direct relation between amount of family income and expenditure on food. Godawari *et al.* (1987) found that in Tamil Nadu, around 65 percent of the families spent 60 to 80 percent of their income on food.

As reported by Bamji (1999) while urban Indians spent on an average 51 percent of their income on food, their rural counterpart spent 66 percent.

A survey conducted by NIN (1985) revealed that in low income groups over 90 percent of the family's income was used up for providing the essentials such as food, clothing and shelter.

Pawar *et al.* (1991) indicated that the expenditure exceeds the income in all labour families forcing them to borrow money from the money lenders.

In terms of non-food expenditure, the urban people spent much more on durable goods, clothing, fuel as well as on rent and taxes (National Sample Survey, 1994).

Dietary habits of the people depended on the availability of food, which was observed to be influenced by the climate, socio-economic, cultural variables, environment, religion, superstitions and ignorance (Devadas and Eswaran, 1986). According to Dwyer (1996) different philosophical and religious groups have advocated vegetarian diets for philosophical as well as health reasons.

It was observed by Stephanie (1984) that in South India, only about 28 percent of the total population were completely vegetarians.

Studies conducted by Jyothi (1993), Karuna (1993) and Lovely (1996) revealed that food consumption pattern of low income strata in Kerala were observed to be of the habitual non-vegetarian type with rice as the staple food.

A study conducted by Sridevi and Uma (1998) among urban families revealed that monthly expenditure on food ranged from Rs. 2000–3000 in middle income group and Rs. 3000–4000 in high income group. Alanberg (1973) found that, the higher the income, higher the percentage spent on fruits, vegetables and other variety of food items.

Roots and tubers form an important daily food for Keralites. Most of the subjects spent Rs. 100–200 on roots and tubers (Prema, 1988).

Diet surveys conducted in the southern part of the country had revealed that the expenditure on income-elastic foods such as animal foods, fruits and vegetables, sugar and oil was 50-80 percent higher and that on beverages and refreshments, almost three fold higher in urban populations than in rural populations. however the expenditure on food grains, mostly cereals and millets was 8 percent lower (Bamji, 1999). According to Sheeja (2000) a large percent in northern Kerala, spent less than Rs. 100 for green leafy vegetables.

Chadha *et al.* (1995) reported that there was higher intake of cereals, milk and milk products and sugar and lower intake of pulses, vegetables, fruits, flesh foods and oils and fats by rural population.

Boora *et al.* (1999) Rahman *et al.* (1999) reported that lower the socio-economic status of families, higher was the intake of cereals and lower was the foods of animal and vegetable origin. Preeth and Bhavana (1988)

and Parvathi and Babitha (1989) had found that cereals especially rice continued to be the major staple food item among South Indians.

A study conducted by Verma (1989) had revealed that the food consumption was closely associated with the economic levels of the family and their land ownership.

A survey conducted by NNMB (1984) revealed that rural families in our state are not in the habit of including all the food components specifically required for a balanced diet. Lina and Reddy (1985) had also found that a typical rural Kerala dietary pattern would be based on rice, fish, tapioca and coconut.

Studies conducted by Devadas and Eswaran (1986) had reported that food available to a household is dependent on the purchasing pattern power and food available in the region. Studies conducted among rural families in Thiruvananthapuram in Kerala had also revealed similar trend (Thomas, 1989).

Studies of Felsy (1989) and Sujatha (1990) revealed that compared to other states the expenditure on nuts and oilseeds was higher in Kerala.

Gopalan and Kaur (1989) also indicated that the cereals predominate the diets of women in general, irrespective of their socio-economic status both in urban and rural areas.



# *METHODOLOGY*

### **3. METHODOLOGY**

The study on “Attitude of urban and rural homemakers towards convenience foods” in Thiruvananthapuram district is an assessment of the attitude of urban and rural homemakers towards convenience foods with reference to their consumption pattern. This chapter deals with the methodology followed. The details of which are presented under the following heads.

3.1 Locale of the study

3.2 Selection of respondents

3.3 Selection of variables and their measurement

3.4 Statistical tools used

#### **3.1 Locale of study**

The study was conducted in Thiruvananthapuram district. Using multistage random sampling procedure, representative samples of 100 each from urban and rural areas of Thiruvananthapuram district were collected. Thiruvananthapuram district consists of twelve block panchayats and Thiruvananthapuram Corporation. One block panchayat namely Nemom representing rural area and Thiruvananthapuram corporation representing urban area were selected using random procedure. The selected block panchayat Nemom block consists of seven grama panchayats from which one gramapanchayat namely Kalliyoor was selected and four wards from this panchayat were identified.

From the urban area four wards of Thiruvananthapuram Corporation namely Ambalathara, Manacaud, Fort and Sreekanteswaram were identified randomly.

### **3.2 Selection of respondents**

From the Nemom block, Kalliyoor panchayat was selected as the rural area. And from this grama panchayat, four wards were identified and from each ward 25 rural households were selected and the homemaker of the family was selected as the respondent, thus forming hundred rural homemakers for the study.

From the urban area, four wards of Thiruvananthapuram Corporation were identified randomly and from each ward 25 households were identified and homemakers of the families were selected as the respondents thus forming 100 urban homemakers for the study.

In total 200 homemakers—100 rural and 100 urban were included.

For the collection of informations, a suitably structured interview schedule was prepared and is presented in Appendix I, II, III and IV. Bass *et al.* (1979) reported that interview method is the most suitable since it proceeds systematically and records the collected information quickly.

An interview schedule was prepared to collect the socio-economic status of the respondents.

A checklist was prepared as shown in Appendix II to find out the consumption pattern of convenience foods and their frequency of use.

An attitude scale consisting of 20 statements was prepared to find out the attitude of urban and rural homemakers towards convenience foods.

Another scale developed was about the perception of economy of convenience foods containing five statements.

A pilot study was conducted and in the next stage 100 homemakers each from urban and rural area were surveyed to elicit required information.

### **3.3 Measurement of selected dependent and independent variables**

#### **3.3.1 Dependent variables**

A pilot study was conducted by including non-sample respondents having similar socio economic conditions to get a clear picture of consumption pattern and attitude towards convenience foods. The dependent variables selected for the study include:

- 1) Consumption pattern of convenience foods
- 2) Attitude of urban and rural home makers
- 3) Perception about economy of convenience foods

#### **1) Consumption pattern of convenience foods**

This variable has three dimensions viz., frequency of purchase of convenience food items, frequency of use of convenience foods and monthly expenditure pattern on convenience foods.

##### **1.1 Frequency of purchase of convenience food items**

To measure the frequency of purchase of convenience foods, it was coded into daily, weekly, monthly twice, monthly, occasionally and rarely and the scores given were six to one respectively.

## **1.2 Frequency of use of convenience foods**

A method suggested by Nelson (1995) where a list of foods was presented and the respondent was required to say the frequency of use of items as daily, weekly four times, weekly thrice, weekly twice, weekly, Monthly twice, monthly, occasionally and never. The scoring ranged from eight to zero respectively.

## **1.3 Monthly expenditure pattern**

### **(a) Percentage of total monthly income spent on convenience foods**

The total amount spent for convenience foods/ month were found out, divided with total monthly income and multiplied with hundred and was correlated with independent variables.

### **(b) Percentage of total monthly food expenditure spent on convenience foods**

In this the total monthly expenditure on convenience food was divided by total monthly expenditure of food and was multiplied with hundred and was correlated with independent variables.

## **2. Attitude towards convenience foods**

The term attitude refers to the degree of positive or negative effect towards a psychological object. In the present study Likert's (1932) method of summated rating was used.

### **2.1 Collection of items**

The items to be included in the attitude scale were obtained through review of literature related to attitude towards convenience foods and discussion with experts of Kerala Agricultural University. In total 50 statements related to different aspects of attitude of convenience foods were collected.

## 2.2 Editing of statements

The statements thus collected were carefully edited in accordance with the criteria suggested by Edwards (1957), so as to indicate both favourable and unfavorable attitudes towards convenience food. In order to know the relevance of each of the statement, the statements thus selected were subjected to judges rating. The responses were obtained in a four point continuum, viz., 'very much relevant', 'much relevant', 'somewhat relevant' and 'not relevant' with the weightages of 4, 3, 2 and 1 respectively. The relevance of each of these statements were analysed and only those statements considered relevant by more than 50 per cent of the judges were included in the study. For the selection of statements to the final attitude scale, item analysis was done.

For the purpose of item analysis, the statements were first administered to a group of 30 non-sample respondents and they were requested to respond to each statement in terms of their own agreement or disagreement with the statement on a five point continuum, namely 'Strongly Agree', 'Agree', 'Undecided', 'Disagree' and 'Strongly Disagree'.

The responses were assigned numerical weights as follows for positive statements.

| Response          | Scores |
|-------------------|--------|
| Strongly agree    | 5      |
| Agree             | 4      |
| Undecided         | 3      |
| Disagree          | 2      |
| Strongly disagree | 1      |

The scoring pattern was reversed for negative statements. The sum of weightages of all the statements were worked out to get the attitude score of an individual respondent. The respondents score were arranged in descending order. 25 per cent of the respondents with higher total scores and 25 per cent of the respondents with lower total scores were selected from among the respondents. These two groups formed the criterion groups in terms of which evaluation of individual statements was made. The discrimination index 't' was computed for each statement using the formula.

$$t = \frac{\bar{X}_H - \bar{X}_L}{\sqrt{\frac{S_H^2}{n_H} + \frac{S_L^2}{n_L}}}$$

$\bar{X}_H$  – The mean score on a given statement for the high group.

$\bar{X}_L$  – The mean score for the same statement for the low group.

$S_H^2$  – The variance of the distribution of responses of the high group to the statement.

$S_L^2$  – The variance of the distribution of responses of the low group to the statement.

$n_H$  – The number of subjects in the high group

$n_L$  – The number of subjects in the low group.

Those statements with 't' values above 1.75 were selected. Finally twenty statements were selected for inclusion in the scale which consists of ten positive and ten negative statements (Appendix III).

### 2.3 Reliability of the scale

A scale is said to be reliable only when it will consistently produce the same or similar results when applied to the same sample. Here the reliability was tested by means of split-half method as detailed below.

The scale was administered to 30 non-sample respondents. The summation of scores obtained by odd numbered items and the summation of scores obtained by even numbered items of the scale for each respondent were correlated by using Pearson's product-moment correlation coefficient. The coefficient of internal consistency 'roe' was worked out using the formula.

$$roe = \frac{P_{xy}}{\sigma_x \times \sigma_y} \quad \text{where,}$$

roe = the correlation coefficient between sum of scores on odd and even numbered items in the scale

$P_{xy}$  = the product moment of scores on odd and even numbered items.

$\sigma_x$  = the standard deviation of the distribution of scores on odd numbered item.

$\sigma_y$  = the standard deviation of scores on even numbered items.

The 'roe' value obtained will give half test reliability. Therefore it was corrected by using Spearman Brown's prophecy formula and thus the reliability coefficient, 'tt', for the total length of the scale was obtained are given below.

$$r_{tt} = \frac{2 \text{ roe}}{1 + \text{ roe}}$$

The obtained 'tt' value 0.85 was highly significant and thus reliability was established.



## **2.4 Validity**

It is the fidelity with which the scale measures what it intends to measure. The validity of the scale was tested in the following way.

### **a) Content validity**

The scale was examined for the content validity by determining how well the content of the scale represented the subject matter under study. As all the possible items covering the universe of content were selected by discussion with experts, social scientists and from all the available literature on the subject, the scale satisfied the content validity.

## **2.5 Administering the scale**

The final scale with positive and negative statements was administered to the sample of homemakers under study and the responses were collected on a five point continuum namely 'Strongly-agree', 'Agree', 'Undecided', 'Disagree', 'Strongly disagree' with weightages five, four, three, two and one respectively. The procedure was reversed in the case of negative statements. The weightages on responses of all the statements were summated to get the attitude score of each individual. The possible score ranges from 20 to 100.

### **(3) Perception on economy of convenience foods**

Rao and Narayana (1986) defined perception as a process by which people organize, interpret, experience, process and use stimulus materials in the environment so that they satisfy their needs.

It was measured by applying the schedule developed by the researcher for the purpose. The schedule consisted of five statements comprising of two negative and three positive statements reflecting the respondent's perception

about the economy of convenience foods. The respondents were asked to give their responses in a five-point continuum as 'strongly agree' to strongly 'disagree' and scoring pattern was 'five' to 'one' for positive statements and was reversed in the case of negative statements. Total score of all the five statements was the respondent's score on the perception on economy about convenience foods.

### **3.3.2 Independent variables**

#### **1. Age**

Age of the respondent was measured as the number of completed years at the time of conducting the study. The respondents up to the age of 25 were considered as 'young', between the age of 25 and 55 were considered as "middle aged" and those above the age of 55 were considered as 'old'.

#### **2. Family size**

The size of the family refers to the total number of members of family of each respondent. The number of members was taken as numerical value against each respondent in the case of this variable.

#### **3. Type of family**

Based on the composition of the family, it was classified into joint or nuclear type. The coding was one and two respectively.

#### **4. Annual income**

Annual income of the respondents as expressed by the respondents was taken in to account for measuring this variable. The average monthly income of the respondents was collected and it was multiplied by the number of

months in a year to obtain their average annual income. It was categorized as low income group, middle income group and high income group.

### **5. Annual income**

Annual income of the family as expressed by the respondent was taken in to account for measuring this variable. The average monthly income of the family members including the respondents were collected and it was multiplied by the number of months in a year to obtain their average annual income. This was categorized in to low income group, middle income group and high income group.

### **6. Educational status**

It is defined as the level of formal education attained by the respondents. To measure the educational status of the respondents, the level of education was coded in to eight classes, ie illiterate, lower primary, upper primary, high school, pre-degree, degree, post graduation and professional level of education and scores given was one to eight respectively.

### **7. Occupational status**

To measure the employment status of the respondent, it was coded in to four classes i.e. unemployed, self-employed, private firms and government employed and the scores given was zero to three respectively.

### **8. Mass media contact**

Mass media contact is defined as the extent to which different mass media sources such as radio, newspaper, television etc. are utilized by the respondent for getting information.

In the present study, mass media contact was measured by using an arbitrary scale developed for the study. The respondents were asked to indicate the extent of contact with various mass media, viz., radio, television and print media. The variable was as follows.

|                       |                 |
|-----------------------|-----------------|
| Radio and Print media | Television      |
| Every day = 2         | Every day = 4   |
| Occasionally -1       | Occasionally -2 |
| Never = 0             | Never - 0       |

The score obtained for each item was summed up to arrive at the individual total score for mass media contact. The maximum score which may be obtained was ten.

#### **9. Extension contact**

This refers to the degree to which one has contact with the various extension personnel in her locality. It was measured by giving score one for each of the contact. The total score of a respondent was obtained by summing up the scores obtained for each extension contact.

Mean was computed and the scores below mean were considered as low and scores above mean were considered as high.

#### **10. Monthly expenditure pattern**

This include food, clothing housing (Rent, fuel, telephone, maintenance etc.) health transport, education, recreations, stationary, remittance/debt repayments and savings. The amount spent for each item was considered.

## **11. Dietary pattern**

This contains the food habit of the respondents and the monthly food expenditure pattern.

### **a) Food habit**

To measure the food habit of the respondent it was categorized into vegetarian and non-vegetarian and the scores given were one and two respectively.

### **b) Monthly food expenditure pattern**

The amount spent for each item of the foods like cereals, pulses, green leafy vegetables, other vegetables etc. were taken and total amount spent for a month was worked out.

## **12. Convenience foods used during special occasions and physiological stages**

The convenience foods used in special occasions were grouped in to two. The first group contained payasam mix/adamix, squash, custard powder, icecream mix, gulab jamun mix, cake and vermicelli. The second group included noodles, pulav mix, macaroni and idiyappam mix. The number of items used in each group considered.

The convenience foods used in different physiological conditions and the number of items used were also considered.

## **13. Reasons for preference of convenience food**

This item contains fourteen statements and the respondents were asked to rank the items according to their priority.

### 3.4 Statistical tools used

The following statistical tools were used for analyzing the data.

#### 1) Correlations

Simple correlations were computed to find out the relationship between the various independent variables and dependent variables.

#### 2) ANOVA

Analysis of variance (ANOVA) was used for determining the variances of use of convenience food during special occasions and physiological stages.

#### 3) Frequency score index

Frequency of use of various convenience food items among families were assessed by assigning scores ranging from one to nine depending upon frequency of use. Based on these scores, frequency score for each group was determined using the formula suggested by Reaburn *et al.* (1979).

$$\text{Score} = \frac{R_1S_1 + R_2S_2 + R_3S_3 + \dots + R_nS_n}{n}$$

$S_n$  – Scale of rating

$R_n$ - Per cent of respondents selecting rating

$n$ - Maximum scale rating

#### 4. Fried man's test

Fried mans two way analysis of variance by ranks is a non parametric approach to test differences in a single sample measured under at least two

conditions. Here it is used to find out the difference between the ranking pattern of respondents.

### **5. T test**

T test was employed to find out the significant differences between the mean scores of dependent and independent variables.

Some of the data are interpreted in terms of frequency and percentages, mean, chi square test etc.

## *RESULTS*



## 4. RESULTS

A study was conducted to make a comparative assessment of the consumption pattern and attitude of urban and rural homemakers towards convenience foods. The data collected from large sample (100 respondents each from urban and rural area) were analysed and the results of the study are presented under the following headings.

- 4.1 Distribution of respondents based on their dependent and independent variables
  - 4.1.1 Distribution of respondents based on the dependent variables
  - 4.1.2 Distribution of respondents based on their socio economic profile and personal characteristics
- 4.2 Consumption pattern and related factors
- 4.3 Relationship between the selected independent variables and the attitude towards convenience foods
- 4.4 Relationship between the selected independent variables and the perception on economy of convenience foods
- 4.5 Relationship between the selected independent variables and the percentage of total monthly income spent on convenience foods
- 4.6 Relationship between the selected independent variables and the percentage of total monthly food expenditure spent on convenience foods
- 4.7 Comparative analysis of the reasons of using convenience foods by urban and rural people
- 4.8 Comparison of extent of usage of various convenience foods by urban and rural people during different occasions
- 4.9 Comparison of extent of usage of convenience foods by urban and rural people during different physiological conditions
- 4.10 Multiple regression analysis of independent variables on dependent variables

#### 4.1.1 Distribution of respondents based on the dependent variables

Consumption pattern, attitude of urban and rural homemakers, perception about economy of convenience foods are the dependent variables selected for the study.

#### Comparison of monthly expenditure on convenience food

As evident from Table 1, 24 per cent of the urban families spent above Rs. 1000 for convenience foods where as in rural area, none of the respondents spent above Rs. 800 for the purchase of convenience foods. Majority of the respondents (53 percent) from rural areas spent below Rs. 200 for convenience foods. At the same time, none of the respondents spent below Rs. 200 in urban area. About 22 per cent of the respondents spent Rs. 401 – 600 and another 22 per cent spent Rs. 801–1000 while in rural areas, only ten per cent of the rural people spent Rs. 400–600 for convenience food. The monthly expenditure of convenience food ranged from Rs. 601–800 for nineteen per cent of urban families and two per cent of rural families. It was clear from the table that only thirteen per cent of the urban families spent Rs. 201–400 where as in rural area 35 per cent of the respondents belonged to this category.

**Table 1 Comparison of monthly expenditure on convenience foods**

| Sl. No. | Monthly expenditure Rs. | Urban (N = 100) | Rural (N = 100) |
|---------|-------------------------|-----------------|-----------------|
| 1       | < 200                   | 0               | 53              |
| 2       | 201 – 400               | 13              | 35              |
| 3       | 401 – 600               | 22              | 10              |
| 4       | 601 – 800               | 19              | 2               |
| 5       | 801 – 1000              | 22              | 0               |
| 6       | > 1000                  | 24              | 0               |

## **Comparison of percentage expenditure on total food versus percentage expenditure on convenience food**

A glance of Table 2 showed that 43 per cent of the urban people and 44 per cent of the rural people spent 36-55 per cent of their total income for food. In urban area 35 per cent of the respondents and in rural area six per cent of the respondents spent 26-35 per cent of their income for food. Only nine per cent of the rural families spent above 55 percentage of their income for food while 37 per cent of the rural people belonged to this category. Sixteen to 25 per cent of the income is spent on food by thirteen per cent of urban and eight per cent of rural people. None of the urban families spent less than fifteen per cent of their income for food. At the same time five per cent of the rural people spent less than fifteen per cent of income for food.

The data in Table 2 showed that none of the respondents in urban area is observed to spend less than five per cent of their monthly food expenditure on convenience foods. On the other hand, 35 per cent of the rural people spent less than five per cent for convenience food out of total expenditure on food. Nineteen per cent of the urban people and 44 per cent of the rural respondents spent six to ten per cent (from total monthly expenditure on food) for the purchase of convenience foods. Eleven to fifteen per cent, out of total expenditure on food is spent by 33 per cent of the urban people and seventeen per cent of the rural people on convenience foods. Twenty nine per cent of the respondents in urban area are found to earmark sixteen to twenty per cent of the monthly food expenditure for this purpose while only two per cent of the rural people belonged to this category. Thirteen per cent of the urban families and two per cent of the rural families are found to 21-25 per cent of

the monthly expenditure of food for buying convenience foods. Six per cent spent above 25 per cent of food expense for the same whereas in rural area the per cent of the respondents in this category were only one.

**Table 2 Expenditure of total food versus percentage expenditure on convenience foods**

| Percentage food expenditure | Percentage expenditure on convenience foods |       |       |       |       |       |       |       |       |       |       |       |       |       |
|-----------------------------|---|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|
|                             | <5  |       | 6-10  |       | 11-15 |       | 16-20 |       | 21-25 |       | >25   |       | Total |       |
|                             | Urban                                       | Rural | Urban | Rural | Urban | Rural | Urban | Rural | Urban | Rural | Urban | Rural | Urban | Rural |
| <15                         | 0   | 1     | 0     | 1     | 0     | 1     | 0     | 0     | 0     | 1     | 0     | 1     | 0     | 5     |
| 16-25                       | 0   | 1     | 1     | 4     | 8     | 3     | 3     | 0     | 0     | 0     | 1     | 0     | 13    | 8     |
| 26-35                       | 0   | 2     | 3     | 2     | 8     | 2     | 13    | 0     | 8     | 0     | 3     | 0     | 35    | 6     |
| 36-55                       | 0   | 14    | 11    | 21    | 14    | 8     | 12    | 1     | 4     | 0     | 2     | 0     | 43    | 44    |
| >55                         | 0   | 17    | 4     | 16    | 3     | 3     | 1     | 1     | 1     | 0     | 0     | 0     | 9     | 37    |
| Total                       | 0   | 35    | 19    | 44    | 33    | 17    | 29    | 2     | 13    | 1     | 6     | 1     | 100   | 100   |

### Comparison of frequency score index<sup>of</sup> convenience foods

Based on the scores obtained for different items it was observed that turmeric powder has got the highest score both in urban (99) and rural area (89). In urban area in ranking the turmeric powder is followed by coriander powder (98) and chilli powder (97). While in rural area, wheat flour (69) and garam masala (53) obtained second and third position respectively. Garam masala and corn flakes obtained frequency scores of 77 and 72 respectively in urban area where as in rural area corn flakes obtained a low score of twenty. Wheatflour had obtained almost same score both in urban (70) and rural area (69). In urban area, the least score was obtained for gulab jamun mix (22) and payasam mix (22), but in rural area the least score was for cutlet mix (12) biriyani masala (12) and gulab jamun mix (12). In general, there was wide variations in the frequency of use of convenience food items by the families in urban and rural area. (Table 3)

**Table 3 Frequency score index of convenience food items**

| Items                | Frequency Score Index |       |
|----------------------|-----------------------|-------|
|                      | Urban                 | Rural |
| 1. Idli/dosai mix    | 50                    | 14    |
| 2. Wheat flour       | 70                    | 69    |
| 3. Puttu mix         | 50                    | 14    |
| 4. Vermicelli        | 41                    | 26    |
| 5. Macaroni          | 26                    | 14    |
| 6. Corn flakes       | 72                    | 20    |
| 7. Pulav mix         | 27                    | 17    |
| 8. Noodles           | 53                    | 25    |
| 9. Sambar mix        | 62                    | 35    |
| 10. Rasam mix        | 40                    | 26    |
| 11. Garam masala     | 77                    | 53    |
| 12. Soup mix         | 32                    | 16    |
| 13. Biriyani masala  | 23                    | 12    |
| 14. Meat masala      | 35                    | 20    |
| 15. Chilli powder    | 97                    | 53    |
| 16. Coriander powder | 98                    | 45    |
| 17. Turmeric powder  | 99                    | 89    |
| 18. Fryums           | 44                    | 20    |
| 19. Cutlet mix       | 20                    | 12    |
| 20. Puffed products  | 25                    | 14    |
| 21. Icecream mix     | 31                    | 15    |
| 22. Custard powder   | 25                    | 13    |
| 23. Gulab jamun mix  | 22                    | 12    |
| 24. Payasam mix      | 22                    | 18    |

**Comparison of urban and rural homemakers based on the attitude towards convenience foods and perception on economy of convenience foods**

The urban and rural population differ significantly with regard to their attitude towards convenience foods and perception on economy of convenience food as evidenced by the significant 't' value given in Table 4.

**Table 4 Comparison of urban and rural homemakers based on the mean scores of attitude towards convenience foods and perception on economy of convenience foods**

| Dependent variables | Mean score |       | 't' value |
|---------------------|------------|-------|-----------|
|                     | Urban      | Rural |           |
| Attitude            | 79.87      | 49.16 | 20.65**   |
| Perception          | 17.1       | 8.06  | 29.84**   |

### **Comparison of attitude towards convenience foods**

In general, the urban homemakers were observed to have high attitude (mean score = 79.87) towards convenience foods. Sixty-six per cent were in the high category and only 34 per cent were having attitude score below the mean. On the other hand, in the case of rural homemakers the mean score was observed to be 49.16. Fifty-four per cent were having attitude score above the mean and 46 per cent were observed to have attitude score below mean (Table 5).

**Table 5 Comparison of attitude towards convenience foods**

|       | Mean score | Category    | Frequency |
|-------|------------|-------------|-----------|
| Urban | 79.87      | Low <79.87  | 34        |
|       |            | High >79.87 | 66        |
| Rural | 49.16      | Low <49.16  | 46        |
|       |            | High >49.16 | 54        |

### **Comparison of perception of economy of convenience foods**

As observed from the Table 6, the urban homemakers were found to have high perception on economy of convenience foods (mean score = 17.1), sixty one per cent were in the high category and 39 per cent belonged to the low category. At the same time, in the case of rural homemakers the mean score was observed to be 8.06. Sixty-two per cent were having perception score above the mean and 38 per cent were observed to have attitude score below mean.

**Table 6 Comparison of the respondents based on the perception on economy of convenience food**

|       | Mean scores | Category   | Frequency |
|-------|-------------|------------|-----------|
| Urban | 17.1        | Low <17.1  | 39        |
|       |             | High >17.1 | 61        |
| Rural | 8.06        | Low <8.06  | 38        |
|       |             | High >8.06 | 62        |

#### **4.1.2 Distribution of the respondents based on their socio-economic profile and personal characteristics**

Socio-economic profile of the urban and rural families with particular reference to religion, family size, type of family, annual income, educational and occupational status of the homemakers, annual income of the family, mass media contact and extension contact, food habit of the family, monthly expenditure pattern, monthly food expenditure and frequency of use of various food items were assessed and given in Tables 7, 8 and 9.

##### **Religion**

In urban area, majority of the respondents (80 per cent) were belonging to Hindu, fifteen per cent belonging to Muslim and five per cent belonging to Christian community.

In rural area also majority of the respondents (63 per cent) were belonging to Hindu community and the remaining Christian community. The number of Muslims was zero.

##### **Caste**

The caste-wise distribution of the respondents depicted in the Table 7 showed that in urban area majority of the respondents (58 per cent) belonged to forward caste and eighteen per cent were in OBC. The remaining 24 per cent belonged to SC/ST category.

In rural area majority of the respondents (52 per cent) belonged to SC/ST, 36 per cent to forward category and remaining twelve per cent to OBC.

**Table 7 Distribution of the respondents based on their socio-economic and personal characteristics**

| Sl. No. | Variables                                   | Category            | Score           | Percentage of respondents |                 |
|---------|---|---------------------|-----------------|---------------------------|-----------------|
|         |   |                     |                 | Urban (N = 100)           | Rural (N = 100) |
| 1       | Religion                                    | Hindu               | 1               | 80                        | 63              |
|         |   | Christian           | 2               | 5                         | 37              |
|         |   | Muslim              | 3               | 15                        | 0               |
| 2       | Caste                                       | Forward             |                 | 58                        | 36              |
|         |   | OBC                 |                 | 18                        | 12              |
|         |   | SC/ST               |                 | 24                        | 52              |
| 3       | Age of the Respondent                       | Young               | <25             | 5                         | 8               |
|         |   | Middle aged         | 25-55           | 90                        | 91              |
|         |   | Old                 | >55             | 5                         | 1               |
| 4       | Family size                                 | Small               | 1-5             | 80                        | 84              |
|         |   | Medium              | 5-8             | 18                        | 14              |
|         |   | Large               | >8              | 2                         | 2               |
| 5       | Type of family                              | Joint               | 1               | 16                        | 16              |
|         |   | Nuclear             | 2               | 84                        | 84              |
| 6       | Occupational status of the respondents      | Unemployed          | 0               | 50                        | 59              |
|         |   | Self employed       | 1               | 9                         | 16              |
|         |   | Private firms       | 2               | 5                         | 3               |
|         |   | Govt. employed      | 3               | 36                        | 22              |
| 7       | Annual income of the respondents (employed) | Low                 | <42,000         | 6                         | 22              |
|         |   | Medium              | 42,000-84,000   | 24                        | 16              |
|         |   | High                | >84,000         | 20                        | 3               |
| 8       | Annual income of the family                 | Low                 | <75,000         | 1                         | 59              |
|         |   | Medium              | 75,000-1,50,000 | 39                        | 27              |
|         |   | High                | >1,50,000       | 60                        | 14              |
| 9       | Educational status of the respondents       | Illiterate          | 1               | 0                         | 1               |
|         |   | L.P                 | 2               | 1                         | 3               |
|         |   | U.P                 | 3               | 1                         | 11              |
|         |   | High School         | 4               | 22                        | 55              |
|         |   | Pre-degree          | 5               | 15                        | 13              |
|         |   | Degree              | 6               | 30                        | 6               |
|         |   | P.G.                | 7               | 13                        | 3               |
|         |   | Professional-degree | 8               | 18                        | 8               |
| 10      | Mass media contact                          |                     | 0               |                           | 14              |
|         |   |                     | 1-4             | 2                         | 27              |
|         |   |                     | 5-8             | 7                         | 42              |
|         |   |                     | 9-10            | 91                        | 17              |
| 11      | Extension contact                           | Low                 | <4.47           | 23                        | 76              |
|         |   | High                | >4.47           | 77                        | 24              |
| 12      | Food habit of the family                    | Vegetarian          | 1               | 27                        | 1               |
|         |   | Non-vegetarian      | 2               | 73                        | 99              |



### **Age of the respondents**

Table 7 revealed that majority of the respondents in urban (90 per cent) and rural (91 per cent) belonged to middle aged category. In urban area five per cent belonged to the young and five per cent belonged to the old age category. In rural area eight per cent belonged to young and one per cent belonged to the old age category.

### **Family size**

The majority of the respondents, 80 per cent of the urban and 84 per cent of the rural respondents had one to five members in their family where as eighteen per cent of the respondents in urban area and fourteen per cent of the respondents in rural area had five to eight members and the remaining two per cent in each region had more than eight members.

### **Type of family**

The table revealed that majority (84 percent) of the respondents in urban and rural area had nuclear family and the remaining sixteen per cent had joint family.

### **Annual income of the respondents**

A glance at Table 7 reveals that in urban area, 50 per cent of the homemakers were unemployed where as in rural area it was 59 percent. Regular employment was observed among 45 and 25 per cent respondents in urban and rural areas respectively. Compared to urban residence (nine per cent), self employment pattern was more common among rural respondents (sixteen per cent). From the remaining fifty respondents in urban area, majority (24 percent) belonged to the middle income group and twenty per

cent to high income group. Only six per cent belonged to low income group where as in rural area majority of the respondents (22 percent) from 41 employed housewives belonged to low income group. Sixteen per cent of respondents belonged to high income group while only three per cent were having high income.

### **Annual income of the family**

When considering the annual income of the family in urban area, majority of the respondents (60 percent) belonged to the high income group. 39 per cent of the respondents belonged to the middle income group and the remaining one per cent belonged to low income group.

Compared to urban area, less number of people belonged to high income group in rural area. Here majority of the respondents (59 per cent) belonged to low income group, 27 per cent to the middle income group and the remaining fourteen per cent to the high income group.

### **Educational status of the respondents**

In urban area the educational status of the respondents revealed that none of them were illiterate. About one per cent of the homemakers had educational level upto primary schooling and one per cent upto middle schooling. Twenty two per cent of them had attended upto high schools and fifteen per cent had gone upto higher secondary schools. Another 30 per cent had undergone degree education, thirteen per cent had their post graduate degree and 18 per cent had undergone professional education.

When considering rural area out of 100 homemakers selected one per cent was illiterate, three per cent had lower primary education, eleven per cent

with upper primary education, 55 per cent with high school level education and thirteen per cent with pre-degree education. About six per cent had undergone degree course. But only three per cent had post-graduate degree and eight per cent had professional education.

### **Mass media contact**

Regarding mass media participation, it was observed that majority of the respondents 91 per cent come under the range of nine to ten score pattern, seven per cent come under five to eight and only two per cent were under the score range of one to four (Table 7).

In rural area mass media participation was low, fourteen per cent of the respondents had no contact with any of the mass media at all. Forty two per cent had comparatively better mass media contact (five to eight category) and 27 per cent were in one to four category. Only seventeen per cent belonged to nine to ten category.

### **Extension contact**

Compared to rural residents (24 per cent) urban residents were found to have more association with personnel engaged in community work under the banner of governmental and non-governmental organisations.

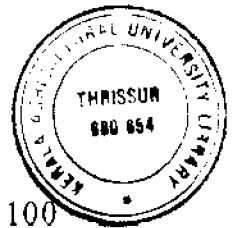
### **Monthly expenditure**

The distribution of respondents based on their monthly expenditure on various household and personal articles are given in Table 8. It revealed that all the urban respondents spent above Rs. 2000 per month for the purchase of food items where as in rural area 84 per cent spent above Rs. 2000. The remaining eleven per cent spent Rs.1501–2000 and five per cent spent

Rs. 1001-1500, for clothing, 72 per cent urban people spent Rs. 101-500 while in rural area 44 per cent belonged to this category. In the case of health 76 per cent of urban people used Rs. 101-500 whereas in rural area only 49 per cent spent that much amount. Forty seven per cent of the rural people spent less than Rs.100. Considering recreation/entertainment, 85 per cent of the respondents in urban area spend Rs. 101-500 while only 22 per cent in rural area belonged to this group. Fifty six per cent in rural area spent nothing for recreation/entertainment. In general, when compared with urban area, the expenditure for clothing, housing, health, recreation, stationary items and education were found to be very low in rural area.

**Table 8 Percentage distribution of monthly expenditure pattern**

Urban, N = 100 Rural, N = 100



| Sl. No. | Items                               | Regions | Expenditure amount in Rs. |       |         |          |           |           |       |
|---------|-------------------------------------|---------|---------------------------|-------|---------|----------|-----------|-----------|-------|
|         |                                     |         | 0                         | 1-100 | 101-500 | 501-1000 | 1001-1500 | 1501-2000 | >2001 |
| 1       | Food                                | Urban   | -                         | -     | -       | -        | -         | -         | 100   |
|         |                                     | Rural   | -                         | -     | -       | -        | 5         | 11        | 84    |
| 2       | Clothing                            | Urban   | -                         | 2     | 72      | 24       | 1         | -         | 1     |
|         |                                     | Rural   | 1                         | 52    | 44      | 2        | -         | 1         | -     |
| 3       | Housing                             | Urban   | -                         | -     | 25      | 33       | 9         | 11        | 22    |
|         |                                     | Rural   | -                         | 36    | 57      | 6        | 1         | -         | -     |
| 4       | Health                              | Urban   | -                         | 9     | 76      | 13       | 2         | -         | -     |
|         |                                     | Rural   | -                         | 47    | 49      | 2        | 1         | -         | 1     |
| 5       | Transport                           | Urban   | -                         | 3     | 32      | 51       | 7         | 5         | 2     |
|         |                                     | Rural   | -                         | 24    | 61      | 14       | 1         | -         | -     |
| 6       | Education                           | Urban   | 22                        | 2     | 39      | 22       | 9         | 6         | -     |
|         |                                     | Rural   | 42                        | 18    | 36      | 4        | -         | -         | -     |
| 7       | Recreation/<br>Entertainment        | Urban   | -                         | 4     | 85      | 7        | 2         | 2         | -     |
|         |                                     | Rural   | 56                        | 22    | 22      | -        | -         | -         | -     |
| 8       | Stationary items<br>(miscellaneous) | Urban   | -                         | -     | 49      | 45       | 5         | -         | 1     |
|         |                                     | Rural   | -                         | 2     | 84      | 14       | -         | -         | -     |
| 9       | Remittance/<br>Debt repayments      | Urban   | 35                        | 3     | 47      | 11       | -         | 1         | 3     |
|         |                                     | Rural   | 32                        | 14    | 27      | 15       | 5         | 6         | 1     |
| 10      | Savings                             | Urban   | -                         | -     | 5       | 13       | 5         | 7         | 70    |
|         |                                     | Rural   | 2                         | 1     | 37      | 18       | 6         | 7         | 29    |

## **Dietary habits and food consumption pattern of the respondents**

The food consumption pattern of the families was assessed with regard to the dietary practices of the families, food expenditure pattern and frequency of use of various food items.

### **Food habit of the family**

Food habits of all the families surveyed revealed that in urban area 73 per cent were non-vegetarians and the remaining 27 per cent were vegetarians. In rural area 99 per cent of the respondents were non-vegetarians and vegetarians were only one percent.

Though the respondents were branded as non-vegetarians, it was observed that the consumption of fish was very frequent among the families surveyed and they were found to consume other non-vegetarian food items occasionally.

### **Monthly food expenditure pattern**

The total food expenditure pattern of the families in Table 9 showed that 72 per cent of the urban families spent Rs. 501-1000<sup>for cereals</sup> while in rural area 75 per cent included in this category. For pulses 98 per cent of the urban people and 85 per cent of the rural people spent Rs. 101-500. For green leafy vegetables, 97 per cent of the urban people and cent per cent of the rural people spent below Rs. 100. The expenditure for other vegetables ranged from Rs. 101-500 for 84 per cent of the urban respondents and 93 per cent of rural respondents. In the case of roots and tubers, nuts and oil seeds, milk and milk products, fats and oils, sugar and jaggery, egg, meats, fish and beverages, there existed a difference in the expenditure pattern among urban and rural people.

Less than Rs. 500 was spent for different foods, except staple ones by many of the families in rural as well as in urban areas. Urban residents were found to spend more than Rs. 500 monthly for few nutrient dense foods like fruits (25 per cent), milk and milk products (55 per cent), meat (six per cent) and fish (48 per cent). In rural areas also, expenditure above Rs. 500 was found to be spent for the purchase of milk and milk products (eighteen per cent) and fish (seventeen per cent).

**Table 9 Monthly food expenditure pattern of the family**

Urban, N = 100 Rural, N = 100

| Sl. No. | Items                  | Regions | Percentage of families |       |         |          |           |           |       |
|---------|------------------------|---------|------------------------|-------|---------|----------|-----------|-----------|-------|
|         |                        |         | 0                      | 1-100 | 101-500 | 501-1000 | 1001-1500 | 1501-2000 | >2001 |
| 1       | Cereals                | Urban   | -                      | -     | 26      | 72       | -         | 2         | -     |
|         |                        | Rural   | -                      | -     | 5       | 75       | 19        | 1         | -     |
| 2       | Pulses                 | Urban   | -                      | 2     | 98      | -        | -         | -         | -     |
|         |                        | Rural   | -                      | 15    | 85      | -        | -         | -         | -     |
| 3       | Green leafy vegetables | Urban   | -                      | 97    | 3       | -        | -         | -         | -     |
|         |                        | Rural   | -                      | 100   | -       | -        | -         | -         | -     |
| 4       | Other vegetables       | Urban   | -                      | -     | 84      | 15       | 1         | -         | -     |
|         |                        | Rural   | -                      | 7     | 93      | -        | -         | -         | -     |
| 5       | Roots and tubers       | Urban   | -                      | 20    | 80      | -        | -         | -         | -     |
|         |                        | Rural   | -                      | 54    | 46      | -        | -         | -         | -     |
| 6       | Fruits                 | Urban   | -                      | -     | 74      | 25       | -         | 1         | -     |
|         |                        | Rural   | -                      | 25    | 75      | -        | -         | -         | -     |
| 7       | Nuts and oil seeds     | Urban   | -                      | 16    | 84      | -        | -         | -         | -     |
|         |                        | Rural   | 1                      | 46    | 53      | -        | -         | -         | -     |
| 8       | Milk and milk products | Urban   | -                      | -     | 36      | 55       | 9         | -         | -     |
|         |                        | Rural   | 1                      | 5     | 75      | 18       | 1         | -         | -     |
| 9       | Fats and oils          | Urban   | -                      | 1     | 99      | -        | -         | -         | -     |
|         |                        | Rural   | -                      | 25    | 75      | -        | -         | -         | -     |
| 10      | Sugar and jaggery      | Urban   | -                      | 4     | 96      | -        | -         | -         | -     |
|         |                        | Rural   | -                      | 65    | 35      | -        | -         | -         | -     |
| 11      | Egg                    | Urban   | 22                     | 59    | 19      | -        | -         | -         | -     |
|         |                        | Rural   | 4                      | 93    | 3       | -        | -         | -         | -     |
| 12      | Meat                   | Urban   | 24                     | 4     | 66      | 6        | -         | -         | -     |
|         |                        | Rural   | 4                      | 62    | 34      | -        | -         | -         | -     |
| 13      | Fish                   | Urban   | 27                     | 2     | 23      | 48       | -         | -         | -     |
|         |                        | Rural   | 1                      | 2     | 80      | 16       | 1-        | -         | -     |
| 14      | Beverages              | Urban   | -                      | 6     | 94      | -        | -         | -         | -     |
|         |                        | Rural   | -                      | 89    | 11      | -        | -         | -         | -     |

**Table 10 Frequency of use of various food items**

| Food items             | Region | Frequency of use |                      |                  |                 |        |                  |         |              |       |
|------------------------|--------|------------------|----------------------|------------------|-----------------|--------|------------------|---------|--------------|-------|
|                        |        | Daily            | Four times in a week | Thrice in a week | Twice in a week | Weekly | Twice in a month | Monthly | Occasionally | Never |
| Cereals                | Urban  | 100              |                      |                  |                 |        |                  |         |              |       |
|                        | Rural  | 100              |                      |                  |                 |        |                  |         |              |       |
| Pulses                 | Urban  | 16               | 42                   | 25               | 15              | 2      |                  |         |              |       |
|                        | Rural  | 16               | 65                   | 16               | 1               | 2      |                  |         |              |       |
| Green leafy vegetables | Urban  | 21               | 16                   | 50               | 4               | 9      |                  |         |              |       |
|                        | Rural  | 5                | 23                   | 35               | 19              | 16     |                  |         | 2            |       |
| Other vegetables       | Urban  | 100              |                      |                  |                 |        |                  |         |              |       |
|                        | Rural  | 100              |                      |                  |                 |        |                  |         |              |       |
| Roots and tubers       | Urban  | 1                | 12                   | 54               | 28              | 5      |                  |         |              |       |
|                        | Rural  | 3                | 82                   | 12               | 3               |        |                  |         |              |       |
| Fruits                 | Urban  | 97               | 1                    | 1                | 1               |        |                  |         |              |       |
|                        | Rural  | 77               | 4                    | 3                | 5               | 9      | 2                |         |              |       |
| Nuts and oilseeds      | Urban  | 100              |                      |                  |                 |        |                  |         |              |       |
|                        | Rural  | 100              |                      |                  |                 |        |                  |         |              |       |
| Milk and milk products | Urban  | 100              |                      |                  |                 |        |                  |         |              |       |
|                        | Rural  | 98               |                      |                  |                 |        |                  |         |              | 2     |
| Fats and oils          | Urban  | 100              |                      |                  |                 |        |                  |         |              |       |
|                        | Rural  | 100              |                      |                  |                 |        |                  |         |              |       |
| Sugar and jaggery      | Urban  | 100              |                      |                  |                 |        |                  |         |              |       |
|                        | Rural  | 100              |                      |                  |                 |        |                  |         |              |       |
| Egg                    | Urban  | 36               | 21                   | 6                | 12              | 3      |                  |         |              | 22    |
|                        | Rural  | 16               | 47                   | 14               | 8               | 11     |                  |         |              |       |
| Meat                   | Urban  |                  |                      |                  |                 | 56     | 8                | 9       |              | 27    |
|                        | Rural  |                  |                      | 2                |                 | 34     | 19               | 36      | 5            | 4     |
| Fish                   | Urban  | 68               |                      | 2                |                 | 3      |                  |         |              | 27    |
|                        | Rural  | 93               | 3                    | 1                |                 | 2      |                  |         |              | 1     |
| Beverages              | Urban  | 100              |                      |                  |                 |        |                  |         |              |       |
|                        | Rural  | 100              |                      |                  |                 |        |                  |         |              |       |

### **c. Frequency of use of various food items**

Frequency of use of various food items by the respondents were assessed and the details are presented in Table 10.

Considering the urban area all the respondents included cereals, other vegetables, nuts and oil seeds, milk and milk products, fats and oils, sugar and beverages in their daily diet and 97 per cent of the respondents were observed to have daily consumption of these items. Sixteen per cent of them used pulses in their daily diet while 68 per cent consumed fish daily. The consumption of roots, tubers and green leafy vegetables were low since only one per cent and 21 per cent of the families in the urban areas were found to include these foods, respectively. Thirty six per cent of the respondents in urban areas included egg in their daily diets.

In rural area also all the respondents included cereals, nuts and oilseeds, fats and oils, sugar and beverages in their daily diet. 93 per cent of the respondents consumed fish daily. Seventy seven per cent included fruits in their daily diet. Consumption of green leafy vegetables, roots and tubers and pulses were very low, only five percent, three per cent and sixteen per cent of the respondents were including these foods, respectively in their daily diet.

## **4.2 Consumption pattern and related factors**

### **4.2.1 Association of frequency of purchase of convenience foods with selected independent variables**

Association of frequency of purchase of convenience foods with selected independent variables were analysed in the present study and the results are presented in Table 11.



The results showed that frequency of purchase of convenience food had significant positive association with occupation of the respondent, income of the respondent, income of the family and family size at five per cent level both in urban and rural areas. Monthly food expenditure was in significant positive association with frequency of purchase of convenience foods at one per cent level in both the areas. Other selected characteristics of the respondents like age, educational level of the respondent, mass media contact and extension contact had no significant association with the frequency of purchase of convenience food.

#### **4.2.2 Association between monthly expenditure on convenience foods and selected independent variables**

The results presented in Table 11 revealed that, monthly expenditure on convenience food had significant positive association with monthly food expenditure, mass media contact and income of the family at one per cent level while all other characteristics except extension contact had positive significant association with the expenditure on convenience foods at five per cent level in urban areas. Similarly in rural areas, age and extension contact had no significant impact on the monthly expenditure on convenience foods. A significant positive association at one per cent level, was observed between monthly expenditure on convenience foods, with selected variables like occupation of the respondent, income of the respondent and monthly food expenditure residing in rural areas. Educational status of the respondents, family size and mass media contact had a positive significant association at five per cent level with monthly expenditure on convenience foods.

**Table 11 Association of frequency of purchase of convenience foods and monthly expenditure on convenience foods with selected independent variables**

| Sl. No. | Independent variables                | Frequency of purchase of convenience food |        | Monthly expenditure on convenience food |         |
|---------|--------------------------------------|---|--------|---|---------|
|         |                                      | Chi square values                         |        | Chi square values                       |         |
|         |                                      | Urban                                     | Rural  | Urban                                   | Rural   |
| 1       | Age                                  | 0.66                                      | 0.12   | 6.44*                                   | 0.36    |
| 2       | Educational status of the respondent | 0.053                                     | 0.006  | 5.34*                                   | 5.21*   |
| 3       | Occupation of the respondent         | 4.01*                                     | 3.91*  | 4.40*                                   | 9.90**  |
| 4       | Income of the respondent             | 3.85*                                     | 3.84*  | 6.98*                                   | 22.26** |
| 5       | Income of the family                 | 4.35*                                     | 3.89*  | 22.44**                                 | 13.71** |
| 6       | Family size                          | 3.88*                                     | 3.85*  | 4.14*                                   | 3.87*   |
| 7       | Mass media contact                   | 0.005                                     | 0.84   | 20.77**                                 | 9.22*   |
| 8       | Extension contact                    | 0.21                                      | 0.13   | 6.73                                    | 0.075   |
| 9       | Monthly food expenditure             | 6.85**                                    | 6.72** | 6.78**                                  | 7.33**  |

\* Significant at 5 per cent level

\*\* Significant at 1 per cent level

#### **4.2.3 Association between frequency of use of convenience foods with attitude and perception**

A glance at Table 12 indicates that majority of the variables had significant positive association with attitude towards convenience foods in both urban and rural area. With respect to attitude towards convenience food the selected variables viz., macaroni, puttu mix, corn flakes, noodles, sambar mix, garam masala, ice cream mix, custard powder and gulab jamun mix were found to have positive significant association at one per cent level in urban

area. The items like idli/dosai mix, wheat flour, fryums, cutlet mix and puffed products, were found to have significant relationship in the positive direction with attitude at one per cent level. No other variable was found to be significantly associated.

In rural area, attitude towards convenience foods was positively and significantly associated with variables like wheat flour, vermicelli, macaroni, cornflakes, pulav mix, noodles, sambar mix, meat masala, chilli powder, coriander powder, cutlet mix, icecream mix and payasam mix at one per cent level. Attitude had positive significant association at five per cent level with the variables viz., idli/dosai mix, puttu mix, rasam mix, soup mix and custard powder. No other variable exhibited significant association.

Considering the perception of economy of convenience food among urban residents the variables idli/dosai mix and gulab jamun mix were significantly and positively associated at five per cent level. Perception had significant positive association with coriander powder at one per cent level. All other variables had no significant association with perception on economy of convenience foods.

In the case of rural residents, the variables like noodles, fryums and ice cream mix had positive significant association at one per cent level while coriander powder and macaroni had a significant positive association at five per cent level. The remaining variables had no significant association with perception about economy of convenience foods.

**Table 12. Association between frequency of use of convenience foods with attitude and perception of economy of convenience foods**

| Sl. No. | Items            | Attitude          |          | Perception        |          |
|---------|------------------|-------------------|----------|-------------------|----------|
|         |                  | Chi square values |          | Chi square values |          |
|         |                  | Urban             | Rural    | Urban             | Rural    |
| 1       | Idli/dosai mix   | 8.839*            | 4.363*   | 12.171*           | 0.082    |
| 2       | Wheat flour      | 3.962*            | 17.591** | 0.736             | 2.099    |
| 3       | Puttu mix        | 14.101**          | 4.982*   | 0.96              | 0.181    |
| 4       | Vermicelli       | 4.276             | 13.931** | 0.472             | 0.163    |
| 5       | Macaroni         | 12.192**          | 9.744**  | 1.844             | 4.381*   |
| 6       | Cornflakes       | 6.741**           | 10.733** | 1.310             | 1.778    |
| 7       | Pulav mix        | 3.308             | 10.951** | 2.064             | 2.33     |
| 8       | Noodles          | 9.279**           | 8.855**  | 0.426             | 10.953** |
| 9       | Sambar mix       | 10.433**          | 14.414** | 1.059             | 3.030    |
| 10      | Rasam mix        | 7.46              | 12.118*  | 6.267             | 1.110    |
| 11      | Garam masala     | 13.879**          | 2.750    | 4.274             | 3.356    |
| 12      | Soup mix         | 3.521             | 5.165*   | 2.663             | 0.566    |
| 13      | Biriyani masala  | 3.381             | 2.508    | 1.988             | 1.892    |
| 14      | Meat masala      | 0.608             | 11.291** | 1.246             | 2.740    |
| 15      | Chilli powder    | 1.032             | 17.601** | 0.103             | 2.841    |
| 16      | Coriander powder | 0.478             | 19.564** | 8.435**           | 4.787*   |
| 17      | Turmeric powder  | 1.020             | 0.003    | 2.168             | 1.117    |
| 18      | Fryums           | 6.580*            | 5.876    | 2.041             | 7.104**  |
| 19      | Cutlet mix       | 4.742*            | 50.933** | 3.126             | 1.016    |
| 20      | Puffed products  | 6.607*            | 3.611    | 1.914             | 0.359    |
| 21      | Ice cream mix    | 6.641**           | 13.438** | 1.604             | 8.111**  |
| 22      | Custard powder   | 4.314**           | 5.439*   | 1.727             | 2.348    |
| 23      | Gulab jamun mix  | 10.344**          | 1.308    | 5.329*            | 3.211    |
| 24      | Payasam mix      | 3.208             | 11.064** | 0.681             | 2.861    |

\* Significant at 5 per cent level

\*\* Significant at 1 per cent level

#### **4.3 Relationship between the selected independent variables and the attitude towards convenience food**

The nature of degree of relationship between attitude and the selected characteristics of respondents presented in Table 13. It is evident that in urban area educational status, occupation and income of the respondent, family income, mass media and monthly food expenditure were positively and

significantly correlated with attitude at one per cent level while the characteristics extension contact and family size were found significantly and positively correlated at five per cent level. A negative and significant correlation at five per cent level was observed in the case of age.

In rural area, the variables like educational status, occupation and income of the respondent, income of the family, mass media contact, extension contact and monthly food expenditure were significantly and positively correlated at one per cent level while family size was positively and significantly correlated at five per cent level. Age had negative and significant correlation at one per cent level.

**Table 13. Relationship between the selected independent variables and the attitude towards convenience foods**

| Sl. No. | Independent variables            | Correlation coefficient |          |
|---------|----------------------------------|-------------------------|----------|
|         |                                  | Urban                   | Rural    |
| 1       | Age of the respondent            | -0.2032*                | -0.2200* |
| 2       | Educational status of respondent | 0.3524**                | 0.2815** |
| 3       | Occupation of the respondents    | 0.2173*                 | 0.3179*  |
| 4       | Annual income of the respondent  | 0.5209**                | 0.3862** |
| 5       | Annual income of the family      | 0.6645**                | 0.3779** |
| 6       | Mass media contact               | 0.2925**                | 0.3349** |
| 7       | Extension contact                | 0.2219*                 | 0.2815** |
| 8       | Family size                      | 0.1978*                 | 0.2311*  |
| 9       | Monthly food expenditure         | 0.4774**                | 0.3354** |

\* Significant at 5 per cent level

\*\* Significant at 1 per cent level

#### **4.4 Relationship between the selected independent variables and the perception of economy of convenience foods**

From Table 14, it is evident that in urban area, the variables like educational status and occupation of the respondents, annual income of the respondents, the family mass media contact and monthly expenditure on food

showed a positive significant correlation at one per cent level. The variables like age, extension contact and family size were found to be non significant.

In rural area also, the educational status and occupation of the respondent, annual income of the respondents and family mass media contact, extension contact and monthly food expenditure had positive and significant correlation at one per cent level with the perception about economy of convenience foods. The age of the respondent and family size had positive non significant correlation.

**Table 14 Relationship between the selected independent variables and the perception of economy of convenience foods**

| Sl. No. | Independent variables            | Correlation coefficient |           |
|---------|----------------------------------|-------------------------|-----------|
|         |                                  | Urban                   | Rural     |
| 1       | Age of the respondent            | 0.1521 NS               | 0.0661 NS |
| 2       | Educational status of respondent | 0.2763**                | 0.3504**  |
| 3       | Occupation of the respondent     | 0.2148**                | 0.2218**  |
| 4       | Annual income of the respondent  | 0.2950**                | 0.4083**  |
| 5       | Annual income of the family      | 0.4523**                | 0.2808**  |
| 6       | Mass media contact               | 0.4588**                | 0.4819**  |
| 7       | Extension contact                | 0.1216 NS               | 0.3594**  |
| 8       | Family size                      | 0.1627 NS               | 0.1080 NS |
| 9       | Monthly food expenditure         | 0.4588**                | 0.4234**  |

\* Significant at 5 per cent level

\*\* Significant at 1 per cent level

NS-Non Significant

#### **4.5 Relationship between the selected independent variables and the percentage of total monthly income spent on convenience foods**

The nature and degree of relationship between the percentage of monthly income spent on convenience foods and the selected characteristics of respondents is presented in Table 15. It is evident that educational status of the respondents, annual income of the respondent and the family, family size and monthly food expenditure were positively and significantly correlated with the dependent variable at five per cent level, while the

characteristics namely occupation of the respondents, mass media and extension contact were found to be positively and significantly correlated at one per cent level. The variable age had negative non-significant correlation.

When considering rural area, educational status of the respondents, annual income of the respondent, mass media contact, family size and monthly food expenditure had positive significant correlation at five per cent level, while the variables occupation of the respondents, annual income of the family was in positive significant correlation at one per cent level. The variable age had negative non-significant correlation whereas extension contact of rural respondents had positive non-significant correlation.

**Table 15 Relationship between the selected independent variables and the percentage of monthly income spent on convenience foods**

| Sl. No. | Independent variables            | Correlation coefficient |                       |
|---------|----------------------------------|-------------------------|-----------------------|
|         |                                  | Urban                   | Rural                 |
| 1       | Age of the respondent            | -0.1626 NS              | -0.1189 <sup>NS</sup> |
| 2       | Educational status of respondent | 0.1968*                 | 0.2314*               |
| 3       | Occupation of the respondents    | 0.3443*                 | 0.2906*               |
| 4       | Annual income of the respondent  | 0.1977*                 | 0.2523*               |
| 5       | Annual income of the family      | 0.2111*                 | 0.2621**              |
| 6       | Mass media contact               | 0.3166**                | 0.2416*               |
| 7       | Extension contact                | 0.2621**                | 0.0422 <sup>NS</sup>  |
| 8       | Family size                      | 0.2138*                 | 0.2219*               |
| 9       | Monthly food expenditure         | 0.2247*                 | 0.1978*               |

\* Significant at 5 per cent level

\*\* Significant at 1 per cent level

NS - Non Significant

#### **4.6 Relationship between the selected independent variables and percentage of monthly food expenditure spent on convenience foods**

A glance at Table 16 shows that educational status and occupation of the respondent, annual income of the respondent, annual income of the family and monthly food expenditure were positively and significantly correlated at one per cent level, while the variables mass media contact, extension contact and family size had a positive and significant correlation at five per cent

level. The variable age showed a positive non-significant correlation in the case of urban respondents.

In the case of rural area, the variables educational status, annual income of the respondent, family size and monthly food expenditure were positively and significantly correlated at five per cent level. Occupation of the respondents, annual income of the family and mass media contact had a positive and significant correlation at one per cent level. The variables age and extension contact had a negative non-significant correlation.

**Table 16 Relationship between the selected independent variables and percentage of monthly food expenditure spent on convenience foods**

| Sl. No. | Independent variables            | Correlation coefficient |            |
|---------|----------------------------------|-------------------------|------------|
|         |                                  | Urban                   | Rural      |
| 1       | Age of the respondent            | 0.0283 NS               | -0.1938 NS |
| 2       | Educational status of respondent | 0.3863**                | 0.2081*    |
| 3       | Occupation of the respondents    | 0.2138**                | 0.1984**   |
| 4       | Annual income of the respondent  | 0.3794**                | 0.2078*    |
| 5       | Annual income of the family      | 0.5034**                | 0.3583**   |
| 6       | Mass media contact               | 0.2389*                 | 0.2698**   |
| 7       | Extension contact                | 0.2214*                 | -0.0907 NS |
| 8       | Family size                      | 0.2134*                 | 0.2339*    |
| 9       | Monthly food expenditure         | 0.4800**                | 0.2437*    |

\* Significant at 5 per cent level

\*\* Significant at 1 per cent level

NS - Non Significant

#### 4.7 Comparative analysis of the reasons for using convenience foods

The rank total presented in Table 17 indicates that the highest rank was obtained for 'saving time' in urban area while in rural area this reason has got second rank. Urban homemakers ranked 'easy to prepare' aspect as the second where as it was ranked first by the rural homemakers. 'Liked by family members' aspect ranked third by urban homemakers, while it was the eighth preference by rural homemakers. The fourth preference of urban



homemakers was children's interests/likes whereas it was ranked ninth by rural homemakers. Reduce work/effort of homemaker was ranked fifth by urban homemakers at the same time it was ranked third by rural homemakers. Urban homemakers ranked easy to handle as the eighth one where as it was the fourth preference of rural people. Saving fuel got ninth rank by urban people where as it was the fifth preference of rural homemakers. To show prestige aspect ranked 14<sup>th</sup> by both urban and rural homemakers.

The rank totals of different reasons when compared with critical ratio observed from Table 17 showed that the reason saving time shows significant difference with all other reasons except the reason easy to prepare both in urban and rural area. The reason saving time was on par with the reason easy to prepare.

**Table 17 Comparative analysis of the reasons for using convenience foods by urban and rural people**

| Sl. No. | Statements                             | Urban      |    | Rural      |    |
|---------|--|------------|----|------------|----|
|         |  | Rank Total |    | Rank Total |    |
| 1.      | Saving time                            | 169        | 1  | 162        | 2  |
| 2       | Easy to prepare                        | 241        | 2  | 140        | 1  |
| 3       | Profitable                             | 1002       | 11 | 1258       | 13 |
| 4       | Nutritious                             | 691        | 7  | 838        | 10 |
| 5       | Liked by family members                | 520        | 3  | 719        | 8  |
| 6       | Does not know to make                  | 1201       | 13 | 1061       | 12 |
| 7       | To show prestige                       | 1390       | 14 | 1400       | 14 |
| 8       | Children's interest/likes              | 597        | 4  | 799        | 9  |
| 9       | Non availability of device in the home | 1133       | 12 | 1026       | 11 |
| 10      | Saving energy                          | 756        | 10 | 692        | 6  |
| 11      | Saving fuel                            | 738        | 9  | 642        | 5  |
| 12      | Easy to handle                         | 711        | 8  | 590        | 4  |
| 13      | More tasty                             | 681        | 6  | 695        | 7  |
| 14      | Reduce work/effort of homemakers       | 650        | 5  | 464        | 3  |

$$X^2 = 844.86$$

$$X^2 = 959.00$$

$$\text{Critical ratio} = 215.94$$

$$\text{Critical ratio} = 215.94$$

#### 4.8 Comparison of extent of usage of various convenience foods by rural and urban people during different occasions

The mean values presented in Table 18 indicates that the highest mean value obtained was for the occasion birthday.

The mean scores of different occasions when compared with the critical value observed from Table 18 showed that occasion birthday shows significant difference with occasion marriage but par with religious festivals. In the case of occasion marriage and religious festivals there exists significant difference. That means there is significant difference in the use of convenience food according to occasions.

**Table 18 Comparison of extent of usage of various convenience foods by rural and urban people during different occasions**

|                                       | Regions (R)             |       |                         |      | Mean |
|---------------------------------------|-------------------------|-------|-------------------------|------|------|
|                                       | Urban (R <sub>1</sub> ) |       | Rural (R <sub>2</sub> ) |      |      |
| Food Groups(GP)                       | GP I                    | GP II | GP I                    | GPII |      |
| Occasions (O)                         | GP I                    | GP II | GP I                    | GPII | Mean |
| Birthday (O <sub>1</sub> )            | 3.84                    | 1.22  | 1.70                    | 0.20 | 1.74 |
| Marriage (O <sub>2</sub> )            | 2.51                    | 0.73  | 1.63                    | 0.01 | 1.22 |
| Religious festivals (O <sub>3</sub> ) | 2.82                    | 1.68  | 1.75                    | 0.33 | 1.65 |

F – Occasion – 39.61\*\*      CD Occasion - 0.12      GP1 – 2.38  
 F – OGR – 16.55\*\*      CD Occasion, Group, Region– 0.24      GP2-0.70

\*\* Significant at 1 per cent level

When considering the use of number of items in groups of convenience foods in special occasions, the highest mean value was obtained for occasion

birthday and the mean values of birthday, marriage and religious festivals were when compared with the critical difference indicates that occasion birthday is superior to occasion marriage and religious festivals and the extent of use of convenience food differed significantly among occasions as well as groups of food items and between rural and urban folk. In rural area among the mean values, use of convenience food on religious festivals was the highest and the mean scores of use of convenience food on birthday, marriage and religious festivals when compared, religious festivals was superior to others. But no significant difference in mean values was observed when compared among occasions and groups of items in rural area.

#### **4.9 Comparison of extent of usage of various convenience food by rural and urban people during different physiological conditions**

The mean values presented in Table 19 reveals that the highest mean value is obtained for the condition pre-school/school age.

The mean scores of different conditions when compared with the critical value as shown in Table 19 revealed that condition pre-school/school age shows significant difference with all other conditions.

When considering the mean values of regions, the urban area has got the highest mean value and when these means were compared by means of critical value, it was found that there is significant difference in the use of convenience food in different physiological stages.

**Table 19 Comparison of extent of usage of various convenience food by rural and urban people during different physiological conditions**

| Conditions (C)                        | Regions (R) |       | Mean |
|---------------------------------------|-------------|-------|------|
|                                       | Urban       | Rural |      |
| Infancy (C <sub>1</sub> )             | 2.38        | 0.70  | 1.54 |
| Preschool/school (C <sub>2</sub> )    | 3.83        | 2.11  | 2.97 |
| Adolescence (C <sub>3</sub> )         | 3.61        | 1.38  | 2.50 |
| Pregnancy/Lactation (C <sub>4</sub> ) | 2.57        | 0.88  | 1.73 |
| Old age (C <sub>5</sub> )             | 2.08        | 0.73  | 1.41 |
| Disease (C <sub>6</sub> )             | 1.55        | 1.11  | 1.33 |
|                                       | 2.67        | 1.15  |      |

F-Condition = 68.16\*\*  
CD - C = 0.22

F-Region = 531.97\*\*  
CD - R = 0.13

F-Condition Region = 13.80\*\*  
CD - CR = 0.32

\*\* Significant at 1 per cent level

When the mean values obtained for different conditions in urban area is considered, the condition preschool/school age had obtained highest and when this value when compared with other means, it was clear that there was significant difference with all other conditions except with the condition adolescent age.

In rural area also highest mean was obtained for the condition preschool/school age. Here also exists a significant difference with all other conditions when compared with the critical value.

#### 4.10 Multiple regression analysis of independent variables on attitude

From the Table 20 it was clear that as far as the attitude of urban makers were considered only the mass media contact had a significant role (b = 2.9406, significant at one per cent level).

In rural area, the occupation of the respondents had a significant role in determining the attitude towards convenience foods ( $b = 2.8049$ ).

**Table 20 Multiple regression analysis of the independent variables on attitude**

| Sl. No. | No.            | Variables                        | Urban                   |          | Rural                   |          |
|---------|----------------|----------------------------------|-------------------------|----------|-------------------------|----------|
|         |                |                                  | Regression coefficients | $t_{90}$ | Regression coefficients | $t_{90}$ |
|         |                | (Constant)                       | 65.52                   |          | (Constant)              | 40.79    |
| 1       | X <sub>1</sub> | Age                              | -0.1593                 | 1.393    | -0.1437                 | 1.039    |
| 2       | X <sub>2</sub> | Family size                      | 0.9440                  | 1.193    | 0.3824                  | 0.432    |
| 3       | X <sub>3</sub> | Annual income (Respondents)      | -0.0001                 | 1.491    | -0.0001                 | 0.233    |
| 4       | X <sub>4</sub> | Annual income (Family)           | 0.0001                  | 0.434    | 0.0001                  | 1.753    |
| 5       | X <sub>5</sub> | Educational status (Respondents) | -1.0207                 | 1.245    | -0.2492                 | 0.261    |
| 6       | X <sub>6</sub> | Occupation (Respondents)         | 2.5879                  | 1.704    | 2.8049                  | 2.019*   |
| 7       | X <sub>7</sub> | Mass media (Possess)             | -2.2592                 | 0.828    | 2.1167                  | 0.950    |
| 8       | X <sub>8</sub> | Mass media (Utilization)         | 2.9046                  | 2.147*   | -0.4961                 | 0.438    |
| 9       | X <sub>9</sub> | Extension contact                | 0.8831                  | 1.403    | 1.1447                  | 1.128    |

$$F_{9,190} = 2.85^{**}$$

$$R^2 = 0.2221$$

$$F_{9,190} = 3.76^{**}$$

$$R^2 = 0.2731$$

\* Significant at 5 per cent level

#### 4.11 Multiple regression analysis of independent variables on perception

From Table 21 it was observed that in urban no independent variable had significant effect on the perception about economy of convenience foods.

But in rural area, the annual income of the respondents had significant effect on perception of economy of convenience foods at one per cent level and extension contact has positive significant effect at five per cent level.

**Table 21 Multiple regression analysis of the independent variables on perception**

| Sl. No. | No.            | Variables                        | Urban                   |                 | Rural                   |                 |
|---------|----------------|----------------------------------|-------------------------|-----------------|-------------------------|-----------------|
|         |                |                                  | Regression coefficients | t <sub>90</sub> | Regression coefficients | t <sub>90</sub> |
|         |                | (Constant)                       | 13.89                   |                 | (Constant)              | 6.07            |
| 1       | X <sub>1</sub> | Age                              | 0.0348                  | 1.086           | -0.0045                 | 0.218           |
| 2       | X <sub>2</sub> | Family size                      | 0.2278                  | 1.027           | -0.0858                 | 0.646           |
| 3       | X <sub>3</sub> | Annual income (Respondents)      | -0.0001                 | 7.11            | 0.0001                  | 2.693**         |
| 4       | X <sub>4</sub> | Annual income (Family)           | -0.0001                 | 0.125           | -0.0001                 | 0.888           |
| 5       | X <sub>5</sub> | Educational status (Respondents) | 0.1626                  | 0.707           | 0.0682                  | 0.477           |
| 6       | X <sub>6</sub> | Occupation (Respondents)         | 0.4862                  | 1.142           | -0.3522                 | 1.691           |
| 7       | X <sub>7</sub> | Mass media (Possess)             | 0.0857                  | 0.111           | 0.2378                  | 0.712           |
| 8       | X <sub>8</sub> | Mass media (Utilization)         | -0.0393                 | 0.104           | 0.0895                  | 0.527           |
| 9       | X <sub>9</sub> | Extension contact                | 0.0481                  | 0.273           | 0.3240                  | 2.128*          |

F<sub>9,190</sub> = 0.61  
R<sup>2</sup> = 0.06

F<sub>9,190</sub> = 24.51  
R<sup>2</sup> = 0.5373

\*Significant at 5 per cent level

\*\* Significant at 1 per cent level

#### 4.12 Multiple regression analysis of independent variables on percentage of monthly food expenditure spent on convenience foods

From the Table 22 it can be observed that in urban area the variables like age and mass media contact had significant positive effect at five per cent effect on the dependent variable. Educational status had a positive, significant effect at one per cent level.

In rural area the independent variables had a non-significant effect on the dependent variable.

**Table 22 Multiple regression analysis of the independent variables on percentage of monthly food expenditure spent on convenience foods**

| Sl. No. | No.            | Variables                        | Urban                   |                 | Rural                   |                 |
|---------|----------------|----------------------------------|-------------------------|-----------------|-------------------------|-----------------|
|         |                |                                  | Regression coefficients | t <sub>90</sub> | Regression coefficients | t <sub>90</sub> |
|         |                |                                  | (Constant)              | 18.57           | (Constant)              | 9.11            |
| 1       | X <sub>1</sub> | Age                              | -0.1717                 | 2.556           | -0.0722                 | 1.649           |
| 2       | X <sub>2</sub> | Family size                      | -0.5595                 | 1.203           | 0.0026                  | 0.009           |
| 3       | X <sub>3</sub> | Annual income (Respondents)      | -0.0001                 | 0.732           | 0.0001                  | 0.090           |
| 4       | X <sub>4</sub> | Annual income (Family)           | 0.0001                  | 0.120           | 0.0001                  | 1.747           |
| 5       | X <sub>5</sub> | Educational status (Respondents) | -1.3005                 | 2.699           | -0.0062                 | 0.21            |
| 6       | X <sub>6</sub> | Occupation (Respondents)         | 1.1142                  | 1.248           | 0.5100                  | 1.160           |
| 7       | X <sub>7</sub> | Mass media (Possess)             | -1.1571                 | 0.722           | 1.0196                  | 1.447           |
| 8       | X <sub>8</sub> | Mass media (Utilization)         | 1.6906                  | 2.127           | -0.5281                 | 1.474           |
| 9       | X <sub>9</sub> | Extension contact                | 0.4981                  | 1.347           | -0.2035                 | 0.633           |

$$F_{9,190} = 3.53^{**}$$

$$R^2 = 0.26$$

$$F_{9,190} = 1.65$$

$$R^2 = 0.14$$

## *DISCUSSION*



## **5. DISCUSSION**

The study entitled “Attitude of urban and rural homemakers towards convenience foods” was conducted with the purpose of eliciting information on the consumption pattern of convenience foods, attitude towards convenience foods and perception of economy about convenience foods. The salient findings of the study are discussed under.

5.1 Distribution of respondents based on their dependent and independent variables

5.1.1 Distribution of respondents based on the dependent variables

5.1.2 Distribution of respondents based on the independent variables

5.2 Consumption pattern and related factors

5.3 Relationship between the selected independent variables and the attitude towards convenience foods

5.4 Relationship between the selected independent variables and the perception on the economy of convenience foods

5.5 Relationship between the selected independent variables and the percentage of total monthly income spent on convenience foods

5.6 Relationship between the selected independent variables and the percentage of total monthly food expenditure spent on convenience foods

5.7 Comparative analysis of the reasons of using convenience foods by urban and rural people

5.8 Comparison of extent of usage of various convenience foods by urban and rural people during different occasions

5.9 Comparison of extent of usage of convenience foods by urban and rural people during different physiological conditions

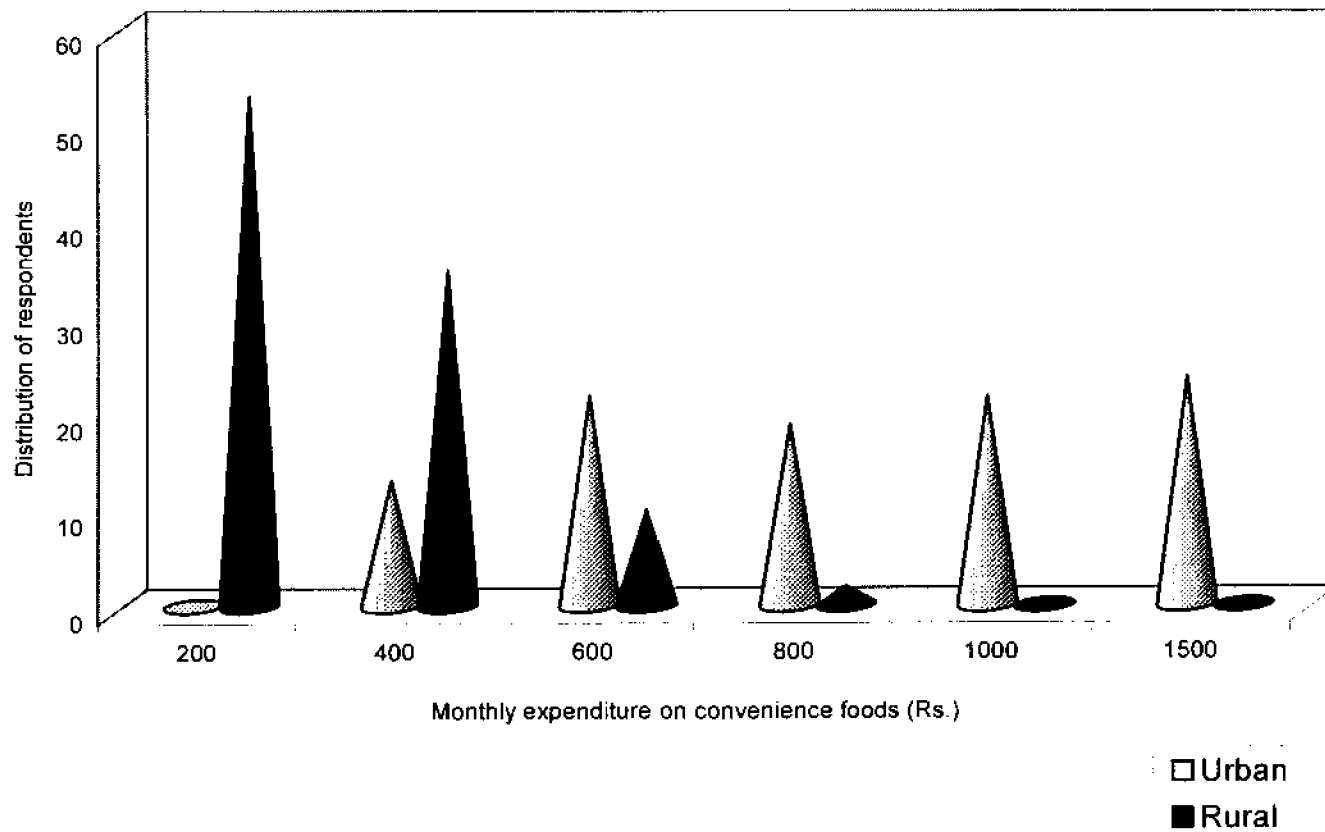
5.10 Multiple regression analysis of independent variables on dependent variables

### **5.1.1 Distribution of respondents based on the dependent variables**

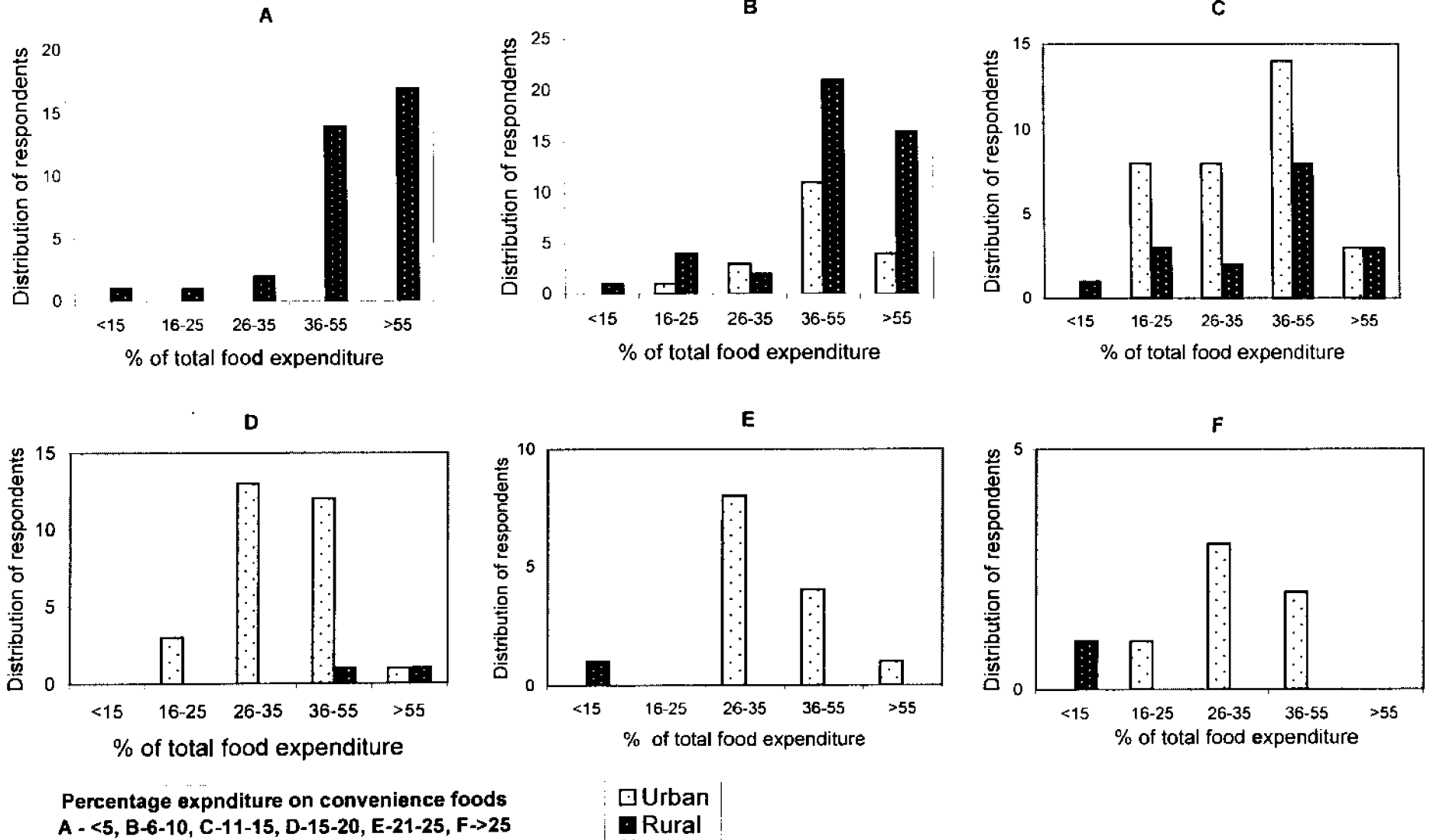
#### **Monthly expenditure on convenience foods**

From the findings of the present study it was clear that the monthly expenditure on convenience foods by urban homemakers were higher than the rural homemakers (Fig. 1). It was observed that in urban area, none of the respondents spend less than Rs. 200 per month while majority of the rural respondents spend less than Rs. 200 per month for the purchase of convenience foods. This may be due to the low monthly income in rural area, when compared to urban area. Thirteen per cent of the urban respondents spent Rs. 200-400. At the same time, in rural area 35 per cent of the respondents spent Rs. 200-400. In urban area 24 per cent of the respondents spent above Rs. 1000 while in rural area none of the respondents spent above 1000. Another reason for the increased use of convenience foods in urban area was appeared to be easy availability of these products in that area.

The results of the present study is in tune with the findings of Rege (1992), Mehta (1995) and Sridevi and Uma (1998).

**Fig. 1 Comparison of monthly expenditure on convenience foods**

**Fig 2 Influence of total food expenditure on percentage expenditure on convenience foods**



### **Comparison of percentage expenditure on total food versus percentage expenditure on convenience food**

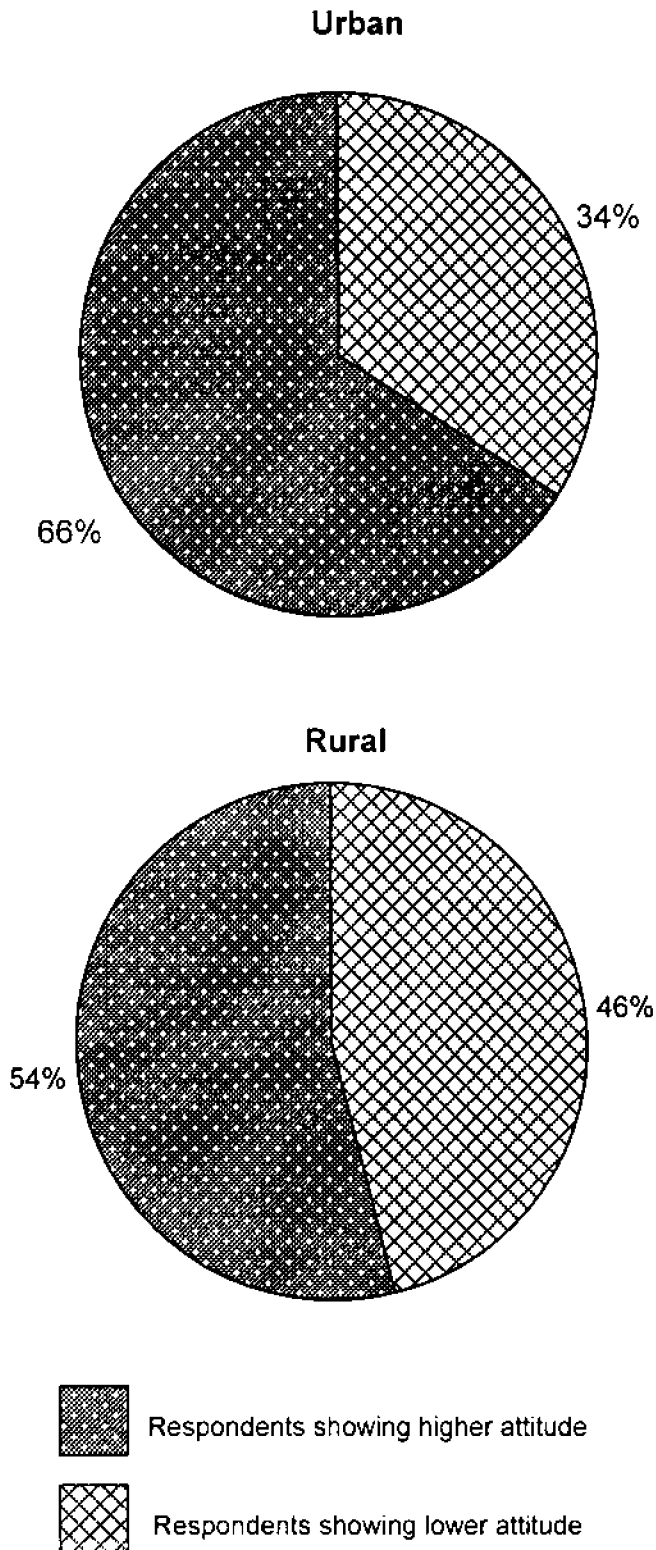
It was found that in rural area people spent higher percentage of their income for food than in urban area. Quiogue (1970) reported that lower the income, higher was the percentage of income spent on food.

Considering the monthly expenditure on convenience food, it was observed that 33 per cent of the urban people spent ten to fifteen per cent of their total expenditure on convenience food. In rural area only seventeen per cent belonged to this category (Fig. 2). None of the respondents spent less than five per cent of the total expenditure on food. While in rural area 35 per cent were observed to be included in this category. Influence of total food expenditure on the amount allocated for the purchase of convenience foods by urban and rural homemakers is vividly illustrated in Fig. 2. The difference in the expenditure on convenience foods among urban and rural folks, may be due to the differential socio-economic status of the respondents. The study conducted by Khaitan (1989) proved that as the total food expenditure increases, there is an increase in the expenditure on convenience foods.

### **Comparison of attitude of urban and rural homemakers towards convenience foods**

In the present study the mean attitude score of urban homemakers (79.87) was higher than that of the rural homemakers 49.16. This indicate that the urban homemakers had a higher attitude towards convenience foods (Fig. 3). In urban area 66 per cent and in rural area five per cent belonged to the category mean i.e., high attitude group (Table 5). As stated earlier the

**Fig. 3 Attitude towards convenience foods**



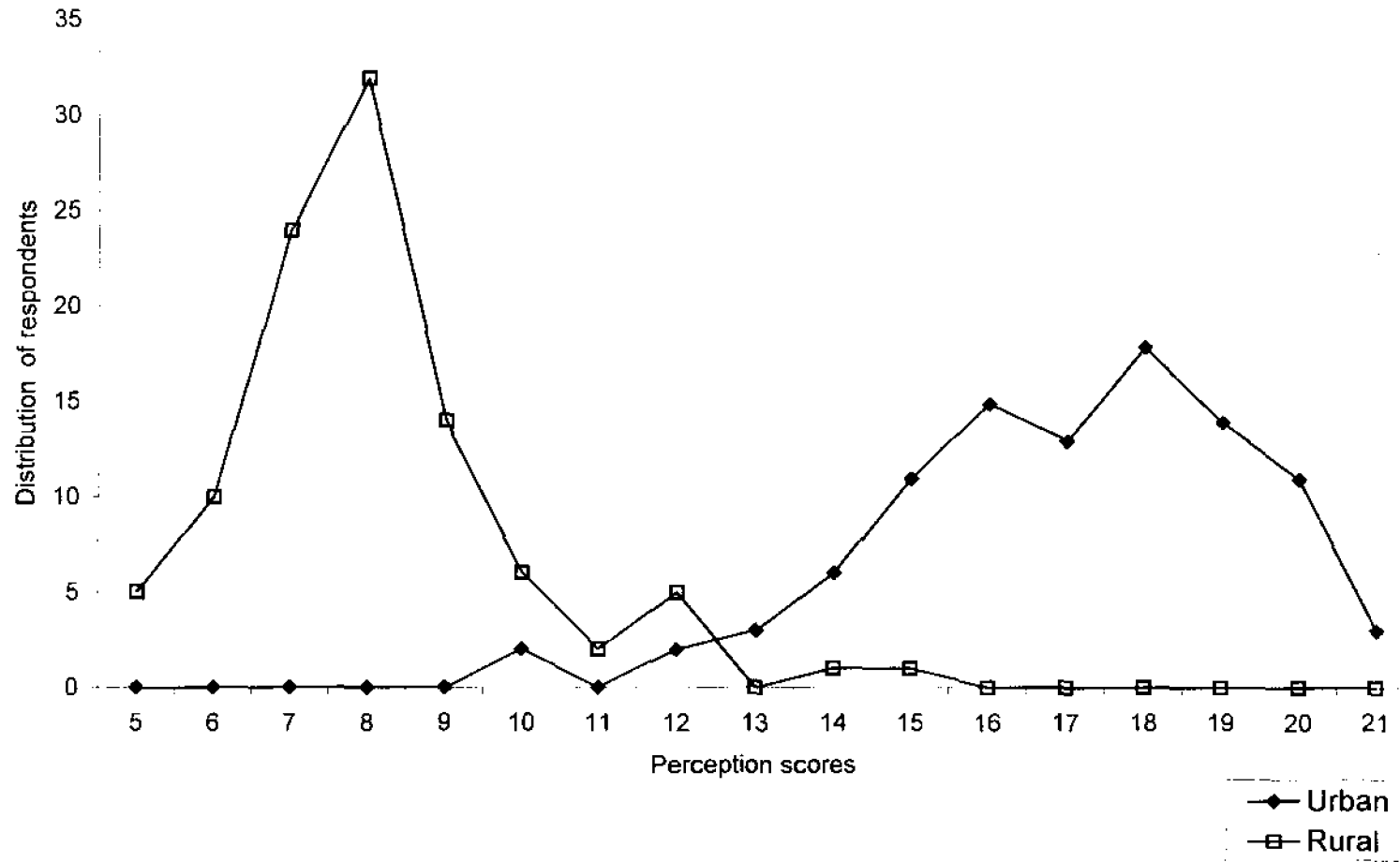
higher level in educational status, occupational status and annual income may be attributed to the high attitude of urban homemakers. Studies have established that, consumption of convenience foods had increased manifolds on account of favourable attitudinal disposition fostered by mass education both formal and non-formal. The variety offered by convenience foods and saving in time can be some of the reasons that lead to increasing attitude towards convenience foods.

Arora (1991) reported that the socio-economic background of the respondents such as social, economic, religious and the family background in general have a very distinct part to play in determining in attitudes and behavioural patterns of the individuals. The studies of Baisya (1988) revealed that urban people had a positive attitude towards the convenience foods.

#### **Comparison of urban and rural homemakers about the perception on economy of convenience foods**

The mean scores of perception among urban (17.1) and rural (8.06) homemakers also differ widely. Sixty one per cent of the homemakers in urban area and 62 per cent in rural area, belonged to the high perception group. The reasons stated for the difference in the attitude towards convenience foods between urban and rural homemakers hold in the case of perception about the economy food. Distribution of respondents based on the perception score obtained for each individual reveals a clear demarcation in the perception score, between urban and rural respondents (Fig. 4).

**Fig. 4 Perception on economy of convenience foods**





This result was in line with the study conducted by Steencamp (1986). The study revealed that although costly, convenience foods, are mostly purchased by urban people because the family members liked these foods very much.

### **5.1.2 Distribution of the respondent based on socio-economic profile and personal characteristics**

#### **Religion and caste**

Religion plays a dominant role in the process of socialization and it maintains the stability of the social system and social relationships. The vast majority of the respondents were Hindus (80 per cent) and belonged to forward category in urban area. Five per cent were in Christian and fifteen per cent belonged to Muslim religion. Twenty four per cent of the respondents belonged to SC/ST and eighteen per cent were in OBC. In rural area also majority of the respondents were Hindus (63 per cent) and the remaining were Christians (37 per cent). Fifty two per cent respondents belonged to SC/ST category and 36 per cent were in forward category and twelve per cent were in OBC category.

The results of this study is in line with the findings of Arora (1991), Kannan *et al.* (1991) and Kerala Statistical Institute (1992).

#### **Age**

The study revealed that majority of the urban and rural home makers belonged to the middle aged group (Table 1). Five per cent and eight per cent of the homemakers belonged to the young age category in urban and rural area respectively. The number of homemakers which came under old age

category was low. In urban area it was five per cent and in rural area it was one per cent. Some studies revealed that the inclination towards convenience foods were more among younger generation. This may be due to, the fact that the older people are more attached to traditional food habits. The results of this study is in tune with the findings of Park (1997) and Gaik and Gunjal (2000).

### **Family size**

As far as the family size is concerned it was found that majority of the respondents in urban (80 per cent) and rural (84 per cent) areas had small families while eighteen per cent of urban families and fourteen per cent of the rural families had medium family size and only two per cent of the respondents family size was large. This was because of their good knowledge about family planning and its importance. Kerala is a state with high literacy and people are exposed to the benefits of having small family.

The findings of the study is in conformity with the studies reported by Mazumdar (1979), Sadasivan *et al.* (1980) Oza (1987) and Lisa (1995).

### **Type of family**

The family type of respondents revealed that an over whelming majority of the urban and rural homemakers (84 per cent) were having nuclear families. In Kerala joint family system is not much prevalent now a days. Even though sixteen per cent of the urban and rural homemakers were found to have joint family system. In rural area it was because of the lack of money to construct new houses and in urban area, the non-availability of land is the problem.

The findings of the study is in concurrence with the findings reported by Sadasivan *et al.* (1980), Kumar (1982), Gincy (1988), Nagammal (1989), Thomas (1989), Potty (1995), Suja (1996) and Lovely (1996).

### **Annual income of the respondents**

In case of annual income of the respondents it could be seen that in urban area 50 per cent of the homemakers were unemployed and in rural area it was 59 per cent. In urban area, from the remaining 50 per cent many (24 per cent) belonged to middle income group and twenty per cent in high income group. Comparing with urban area, the majority of the employed homemakers belonged to low income group (22 per cent). This may be due to the low educational status and occupational status.

The findings were supported by Gopalan (1985), UNICEF (1990) and Park and Park (1991).

### **Annual income of family**

Family income is considered as an important determinant since the income determines family status and the socio-economic position in the society to which they belong. The present study revealed that majority of the urban families (60 per cent) belonged to high income group and had an annual income of above Rs. 1,50,000. This may be due to the higher educational status and occupational status. But in rural area, majority of the respondents (59 per cent) had low annual income, may be due to low educational status and occupational status. It can be due to the fact that as the annual income increases, the expenditure on convenience foods also increases.

The result is in accordance with the findings of Oza (1987), Arora (1991), Bull (1992) and Park (1997).

### **Educational status of the respondent**

As per data furnished in Table 7, none of the urban respondents were illiterate while in rural area, one per cent was illiterate. Thirty per cent of the urban respondents and six per cent of the rural homemakers had education up to graduate level. Thirteen per cent of the urban and three per cent of the rural respondents had postgraduate degree. In the case of professional degrees, eighteen per cent of the urban respondents and eight per cent of the rural respondents had undergone professional education. Thiruvananthapuram district in particular has the highest number of educational institutions. Therefore there is a higher chance of persons undergoing formal education. Comparing with urban area rural homemakers had lower education level. This may be due to the lower economic status and the lack of facilities in the rural area.

This findings were supported by findings Haffman *et al.* (1985), Kuttykrishnan and Sucheta (1989), Nair (1992) and Resia and Sarangadharan (1994).

### **Occupational status**

Regarding the occupational status, 50 per cent of the urban and 59 per cent of the rural homemakers were unemployed. Thirty six per cent of the urban and 22 per cent of the rural homemakers were government employees. But self employed homemakers were more in rural area. The higher

occupational status of the urban respondents may be due to their higher educational status.

The result is in accordance with the result of UNDP (1980) survey, Swaminathan (1980), 1981 Census, Malik (1987) and 1991 Census.

### **Mass media contact**

Mass media play a significant role in the spread of new ideas among women. The mass media contact of the respondents revealed that urban residents had the maximum mass media contact when compared to rural people. In rural area, fourteen per cent of the respondents had no mass media contact at all. The lower economic status of the rural respondents may be attributed to this. Another reason is that, the rural people may not get much leisure time because they have to earn their lively hood. In urban areas, most of the families had servants also.

The findings of the study is in conformity with the findings of Prema and Menon (1978), Fatimabi (1993) and Mony (1993).

### **Extension contact**

Women had very little exposure to formal sources of information compared to rural respondents, urban residents were found to have more extension contact (77 per cent). This may be because of their higher educational status which results in the social contacts.

The findings of the study is line with the findings of Mishra and Tripathy (1991).

## **Monthly expenditure pattern**

As evident from Table 8, monthly expenditure pattern of the urban residents were found to be high compared to the rural residents. Cent per cent of the urban residents and 84 per cent of the rural residents spent above Rs. 2000 for food. When compared with the urban area, the expenditure for clothing, housing, recreation, stationary items and education were found to be very low in rural area. This may be due to the differential socio-economic status of the rural families. Savings was also high in urban area.

The results of the present study is in the tune with the results of Quiogue (1970), Wong *et al.* (1985), Godawari *et al.* (1987), Bamji (1999) and National Sample Survey (1994).

## **Dietary pattern**

### **Food habit of the family**

With regard to the food habit, vast majority of the urban and rural families were non-vegetarians. Twenty three per cent of the respondents in urban area and one per cent in rural area were found to be vegetarians. All the non-vegetarians include fish in the daily diet and in urban area most of the people use meat once in a week. But in rural area, the non-vegetarians included meat and egg occasionally in their diets, although fish was a common constituent in daily diet, and that was the usual meal pattern found in low income groups in Kerala.

The findings of the present study is in line with the findings of Stephanie (1984), Devadas and Eswaran (1986), Jyothi (1993), Karuna (1993), Lovely (1996) and Dwyer (1996).

## **Monthly expenditure on food**

On further enquiry about the distribution of money for the purchase of various food items, it was revealed that majority of the families allocate more money for the purchase of cereals. Reddy *et al.* (1993) reported that cereal intake shows a decreasing trend with better economic status. In low income groups major expenditure was incurred on cereals. The majority of the income was spent on carbohydrate rich foods like cereals and roots. The present study revealed that the urban people allocate more money for the purchase of food items than rural people. This may be due to the differential economic status of rural people. The expenditure for food items like fruits, milk and milk products, meat and fish in urban area was more than Rs. 500 per month. But in rural area, the expenditure above Rs. 500 was only for milk and milk products and fish.

This results of the study is in agreement with the findings of Alanberg (1973), Sridevi and Uma (1998), Bamji (1999) and Sheeja (2000).

## **Frequency of use of various food items**

Food items like cereals, nuts (mainly coconut) and oil seeds milk and milk products, fats and oils, sugar and beverages found a way in the diets of many families surveyed. Being of better economic status, frequency of use of foods like pulses, roots and tubers and green leafy vegetables were low. Much variation in the food use frequency was not observed between urban and rural residents.

The findings of the present study is in accordance with the studies conducted by Sujatha (1990), Karuna (1993) and Suja (1996).

## **5.2 Consumption pattern and related factors**

### **Association of independent variables and consumption pattern of convenience food**

Chi-square test was employed to find out the association of the independent variables and dependent variables. It was found that frequency of purchase of convenience food had significant positive association with occupation of the respondent, income of the respondent, income of the family, family size and monthly food expenditure in both urban and rural areas. As the occupational status of the respondent increases the annual income of the respondent and family increases. The increase in family income is directly related to the frequency of purchase of convenience foods because of increase in the purchasing power. As the family size increases, more quantity of convenience food is needed. Since most of the people do not like to store convenience foods for longer periods, the purchasing frequency increases. The other variables like age, educational status, mass media contact and extension contact had no significant effect on purchasing frequency.

This result is in tune with the findings of Nirmal *et al.* (1999) who stated that increasing trend in the purchase of convenience foods and their use was in the increasing order with an increase in income level.

The association of monthly expenditure on convenience foods with independent variables listed in Table 11 revealed significant association of status and occupation of the respondent, monthly food expenditure, annual income of the respondent, family size and mass media contact of the respondent with monthly expenditure on convenience foods.



The reasons for this may be that higher the educational status of the respondent, higher the possibility of better placement in jobs, which results in increase in income. There is a natural tendency of increased expenditure on convenience foods as the income increases. Age had no significant association with monthly expenditure on convenience foods among residents from rural areas.

The results of this study is tune with the findings of Puri and Sanghera (1987) and Potty (1995). Puri and Sanghera (1987) opined that expenditure on convenience foods showed a linear increase with higher education of women because they are more aware of the existence and availability of such foods. Potty (1995) reported that the major communication media that influenced the increased expenditure on convenience foods were television and print media.

Considering the association between frequency of use of convenience foods with attitude and perception (Table 12) it was found that majority of the variables in urban and rural area had positive and significant association with attitude towards convenience foods.

A study conducted by Story (1989) revealed that frequency of use of convenience food had a direct relationship with the attitude towards convenience foods.

In the case of association between the perception about economy of convenience foods with the frequency of use of various convenience food items. It was observed that majority of the variables had a non-significant effect on perception about the economy of convenience foods.

### **5.3 Relationship between the selected independent variables and attitude towards convenience food**

In the present study, it was observed that in urban and rural areas, attitude had a positive significant correlation with educational status, occupation, annual income of the respondent and family, mass media contact, extension contact, family size and monthly food expenditure.

Education exposes the individual to a multitude of facts and informations. Educated people are more likely to have better awareness of the sources of information including mass media channels and extension activities. Exposure to television advertisements and programmes accelerated liking for convenience foods even amongst the common man. The educational status, increases the possibility of higher occupational status and thereby an increase in annual income is expected. As family size increases, the burden of the homemaker increases, so now a days to reduce the effort. They may resort to use of convenience foods. These all might have contributed for the positive significant relationship of the attitude with the above mentioned independent variables. Age had a negative significant relationship with attitude. As age advances, attitude towards convenience foods decreases. This is because the older people are more attached to traditional food habits.

The result was in tune with the findings of Varma (1996) who reported that there exists a positive significant correlation of attitude with annual income, educational status and mass media participation. The study conducted by Sinha *et al.* (1984) revealed that attitude is positively and significantly correlated with occupational status.

#### **5.4 Relationship between the selected independent variables and the perception on economy of convenience foods**

The correlation between selected independent variables and the perception on economy of convenience foods revealed that it had positive significant relationship with educational status, occupational status, annual income of the family and the respondent, mass media contact and monthly food expenditure both in urban and rural areas.

The explanations given for attitude holds good in this case also. Education exposes the individuals to wide-ranging general information from reliable sources and also facilitates meaningful social interactions.

A study conducted by Ranjini *et al.* (2000) revealed that people had an opinion that convenience foods are costly when compared to home made foods.

#### **5.5 Relationship between the selected independent variables and the percentage of monthly income spent on convenience foods**

It was observed that the percentage share of monthly income spent on convenience foods had positive significant correlation with educational status and occupation of the respondent, annual income of the respondent and family, mass media contact, family size and monthly food expenditure in both urban and rural areas.

Educational status of the homemakers had a direct effect on the food selection due to exposure to print media. Educated people are more exposed to the mass media and they know more about different types of convenience foods available in the market which may also be due to their contact with the

heterogeneous population outside the family and community circle which they would have acquired due to their educational status and occupational status.

Fennemma (1987) has stated that an increase in the employment status of women and the standard of living has created a powerful demand for convenience food which resulted in the increased expenditure on convenience foods.

#### **5.6 Relationship between selected independent variables and percentage of monthly food expenditure spent on convenience foods**

In the present study, it was found out that in both urban and rural areas the percentage share of monthly expenditure allocated for food on purchase of convenience food had a positive and significant correlation with educational status and occupation of the respondent, annual income of the family and the respondent, mass media contact, family size and monthly food expenditure.

As stated earlier, increased educational status might have facilitated the increased opportunities for higher occupational status, thereby an increase in the annual income. Monthly food expenditure increases with income. Monthly expenditure on convenience foods shows a linear increase with monthly food expenditure.

#### **5.7 Comparative analysis of the reasons for using convenience foods**

Considering the rank totals presented in Table 17, it revealed that, the highest rank was obtained for 'saving time' in urban area while in rural area, this reason had obtained second position. Urban homemakers ranked 'easy to prepare' aspect as the second whereas the rural homemakers gave first position to this aspect. This difference may be due to the regular employment

status of the urban homemakers. Liked by family members aspect ranked third by urban whereas it was the eighth preference of rural homemakers. Here the urban people are more exposed to mass media and they have more purchasing power. Another reason is that most of the rural people stick on to their traditional food habits. Children's interest/ likes were ranked fourth by urban residents, but in rural area, they did not give much importance to this reason. The changing life styles and food habits are easily adopted by urban children than rural children due to the greater influence of mass media. In general, there was a wide variation in the ranking pattern of urban and rural homemakers due to difference in their socio-economic background.

The results of this study is in tune with the results of Rognerud *et al.* (1983), Consumer Research Report (1987), Choudhari (1989), Kinsey (1992), Anvita *et al.* (1993), Nirmal *et al.* (1998) and Sridevi and Uma (1998).

### **5.8 Comparison of extent of usage of various convenience foods by urban and rural families during different occasions**

In the present study, the use of convenience foods was maximum in urban and rural areas. Religious festivals got the second position and the occasion marriage got third position. The mean scores showed that the use of number of items of convenience foods was more in urban area than in rural area and the items in group I was more preferred. The higher socio-economic status of the urban people attributed to this.

Studies of Arya (1992) revealed that the consumption of convenience food is more during the occasions like marriage, birthday and religious festivals.

## **5.9 Comparison of extent of usage of various convenience foods by urban and rural families during certain physiological conditions**

The present study proved that the use of convenience food is more during the physiological stage of pre-school /school age in both regions. During these periods most of children prefer convenience foods than traditional foods due to the influence of mass media. Here also the use of more number of convenience food items was observed among the urban people than by rural people. As stated earlier, this may be due to the higher purchasing power of urban residents.

As reported by Evans and Divan (1985) and Puri and Sanghera (1989) the convenience foods like mixed fruit jam, orange squash and pineapple juice. are used in certain physiological conditions because these are the concentrated sources of energy and in therapeutic diets, where low protein, low fat and high calorie is required.

## **5.10 Multiple regression analysis of independent variables on dependent variables**

The multiple regression analysis of independent variables on attitude towards convenience foods, perception about economy of convenience foods and the percentage monthly food expenditure spent on convenience foods showed that the most of variables had no significant effect on the dependent variables.

# *SUMMARY*

## 6. SUMMARY

In the age of the Internet, what we look for are things 'instant'—instant access to men (women) and material; instant remedy to our illness; and instant solution to all other problems. And in our daily life, we begin now with an array of 'convenience foods'. It is the time saving factor that makes the convenience foods popular among people especially in the growing number of families where both the husband and wife are employed. Due to many reasons food consumption patterns have witnessed a major change in the past five decades. The major change has been in the availability of convenience foods and in the quantum of convenience that has been offered to the consumer.

Under these circumstances a study which brings to light the attitude of urban and rural homemakers towards convenience foods seems the need of the hour. Hence, the present study was undertaken with the following specific objectives.

- (1) To study the consumption pattern of convenience foods among the urban and rural homemakers,
- (2) to study the attitude towards convenience foods and
- (3) to assess the perception about economy of convenience foods.

The study was conducted in urban and rural areas of Thiruvananthapuram district. Hundred homemakers of each urban and rural area formed the study sample.



The dependent variables selected for the study were consumption pattern of convenience foods, attitude towards convenience foods and perception about economy of convenience foods. The independent variables for the study include the socio-economic variables and dietary habits.

The salient findings of the study are summarized and presented below.

Analysis of the results revealed that monthly expenditure on convenience foods was more among the urban families than in the rural families. Twenty-four per cent of the urban respondents spent above Rs. 1000 for convenience foods while none of the rural respondents spent above Rs. 1000. None of the urban respondents spent below Rs. 200 for convenience foods, whereas 53 per cent of the rural respondents belonged to this category. The monthly expenditure on convenience foods were found not exceeding Rs. 800 among rural families.

Considering the percentage of total monthly income spent on food spent on total food, 43 per cent of the urban families and 44 per cent of the rural families spent 36-55 per cent of their income for food. Only nine per cent of the urban families spent above 55 per cent of their income for food whereas in the rural area, 37 per cent of the respondents spent the same.

The monthly expenditure on convenience food was more among the urban families than in rural families. The expenditure on convenience food from total food expenditure ranged from fifteen to twenty per cent out of total food for 29 per cent of the urban families and two per cent of the rural families. None of the urban respondents spent less than five per cent of their

total food expenditure while 35 per cent of the rural respondents belonged to this category.

When the frequency of use of various convenience food items among urban and rural residents were considered, turmeric powder has got the highest score both in urban (99) and rural area. Urban homemakers frequently used coriander powder (98) and chilli powder (97) after turmeric powder. At the same time in rural area, wheat flour (69) and garam masala (53) had obtained second and third position respectively. There was significant difference in the frequency of use of various convenience foods among urban and rural respondents.

The results showed that the urban homemakers had obtained highest mean score of 79.87 while the rural homemakers had obtained a mean score of 49.16. In urban area 66 per cent had high attitude and in rural 54 per cent were having high attitude.

Same is the case with perception about economy of convenience foods. Here also the mean scores differed in urban (seventeen per cent) and rural areas (8.06). Majority of the respondents in urban (61 per cent) and rural area (8.06) belonged to high perception category.

The profile analysis of the sample showed that majority of the urban and rural respondents belonged to the middle age group and they belonged to Hindu religion. 58 per cent of urban respondents were from forward caste while 52 per cent of rural respondents were in SC/ST. Eighty per cent of the urban respondents and 84 per cent of the rural respondents had small family and 84 per cent had nuclear families in both areas.

Fifty per cent of the urban homemakers and 59 per cent of the rural homemakers were unemployed. Government employees were low in rural area (22 per cent) when compared to urban respondents (26 per cent). Annual income of the respondents showed that 22 per cent belonged to low income category in rural area while majority of the employed homemakers <sup>in urban area</sup> belonged to middle income group. In the case of annual income of the family, majority of the urban respondents belonged to high income group, while in rural area majority belonged to low income category. Educational status of the respondents were also high in urban areas comparing with rural areas. urban homemakers had more mass media contact and extension contact.

Monthly expenditure pattern of the respondents indicated that the expenditure was more among urban residents due to their high monthly income.

The monthly expenditure on food was also high among the urban people. Dietary practices showed that urban people are taking more nutrient dense foods. Majority of the respondents were non-vegetarians in both regions.

Association between the independent variables and dependent variables showed that there exists a significant association between the frequency of purchase of convenience and majority of the selected independent variables. Monthly expenditure on convenience foods is also had an association with most of the selected independent variables.

Association between frequency of use of convenience foods and attitude towards convenience foods and perception about the economy of

convenience foods showed that the frequency of use of most items had significant association with the attitude towards convenience foods in both regions. On the other hand perception about economy of convenience foods had no effect on the frequency of use of majority of the items among urban and rural residents.

Correlation between attitude towards convenience foods, perception about economy of convenience foods, percentage of total monthly income spent on convenience food and total monthly expenditure on food spent on convenience foods with selected socio-economic variables revealed that there exists a significant relationship with the above stated dependent variables and the selected socio-economic variables.

Comparative analysis of the reasons for using convenience foods when analysed, showed that the aspect saving time was the priority reason for the case of convenience foods, while in urban area it was 'easy to prepare'. There existed a significant difference in the ranking pattern of urban and rural homemakers.

Comparative analysis of the extent of usage of various convenience foods by urban and rural during different occasions and physiological conditions revealed that, the use of convenience foods was more in the occasion of birthday and in the physiological stage it was pre-school / school age. The urban people used more items of convenience food than in rural people.

Multiple regression analysis of independent variables on dependent variables showed that majority of the selected independent variables had a non-significant effect on the attitude towards convenience foods, perception about the economy of convenience foods and percentage on monthly expenditure on food spent on convenience foods.



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\* Original not seen

# *APPENDICES*



**APPENDIX -1 Contd....**

10. Annual income of the respondent
11. Annual income of the family
12. Mass media contact
- I 1) Do you own a radio? Yes/ No
- 2) Do you hear a radio ? Every day/ occasionally/  
Never
- II 1) Do your family possess TV ? Yes/ No
- 2) Do you see television programmes: 1. Every day  
2. Occasionally  
3. Never
- III. Do your family subscribe the news paper? Yes/ No
- 2) Do you read news paper? 1. Every day  
2. Occasionally  
3. Never
- IV. 1. Do your family subscribe magazines? Yes/ No
2. Do you read magazines? 1. Every day  
2. Occasionally  
3. Never
- II. Contact with extension agency
- A. Formal sources
1. Campaign
2. Seminar
3. Training programmes
4. Extension officers in women's welfare
5. Health workers
6. Anganwadi workers
7. ICDS supervisors
8. Others

**APPENDIX –I Contd....**

**B. Informal sources**

1. Neighbours
2. Friends
3. Relatives
4. Ayalkootam
5. Youth clubs
6. Mahila mandals
7. Others

**IV. Monthly expenditure pattern of the family**

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| Item                                | Average Expenditure/month |
|-------------------------------------|---------------------------|
| 1. Food                             |                           |
| 2. Clothing                         |                           |
| 3. Housing                          |                           |
| 4. Health                           |                           |
| 5. Transport                        |                           |
| 6. Education                        |                           |
| 7. Recreation/ Entertainment        |                           |
| 8. Stationary items (miscellaneous) |                           |
| 9. Remittance / Debt repayments     |                           |
| 10. Savings                         |                           |

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**APPENDIX –II**  
**KERALA AGRICULTURAL UNIVESITY**  
**COLLEGE OF AGRICULTURE, VELLAYANI**  
**DEPARTMENT OF HOMESCIENCE**

Title of thesis :- Attitude of urban and rural home makers towards convenience foods

**Interview schedule to elicit information on consumption pattern of convenience foods**

| 1. Name of the respondent |                        | 2. Food habit of the family- Vegetarian/ Non Vegetarian |                          |                               |
|---------------------------|------------------------|---|--------------------------|-------------------------------|
| Expenditure on food       |                        | Expenditure /month                                      | Frequency of use         |                               |
| 1.                        | Cereals                | 1.1   | <input type="checkbox"/> | 1.2 <input type="checkbox"/>  |
| 2.                        | Pulses                 | 2.1   | <input type="checkbox"/> | 2.2 <input type="checkbox"/>  |
| 3.                        | Green leafy vegetables | 3.1   | <input type="checkbox"/> | 3.2 <input type="checkbox"/>  |
| 4.                        | Other vegetables       | 4.1   | <input type="checkbox"/> | 4.2 <input type="checkbox"/>  |
| 5.                        | Roots and tubers       | 5.1   | <input type="checkbox"/> | 5.2 <input type="checkbox"/>  |
| 6.                        | Fruits                 | 6.1   | <input type="checkbox"/> | 6.2 <input type="checkbox"/>  |
| 7.                        | Nuts and oil seeds     | 7.1   | <input type="checkbox"/> | 7.2 <input type="checkbox"/>  |
| 8.                        | Milk and milk products | 8.1   | <input type="checkbox"/> | 8.2 <input type="checkbox"/>  |
| 9.                        | Fats and oils          | 9.1   | <input type="checkbox"/> | 9.2 <input type="checkbox"/>  |
| 10.                       | Sugar and jaggery      | 10.1  | <input type="checkbox"/> | 10.2 <input type="checkbox"/> |
| 11.                       | Egg                    | 11.1  | <input type="checkbox"/> | 11.2 <input type="checkbox"/> |
| 12.                       | Meat                   | 12.1  | <input type="checkbox"/> | 12.2 <input type="checkbox"/> |
| 13.                       | Fish                   | 13.1  | <input type="checkbox"/> | 13.2 <input type="checkbox"/> |
| 14.                       | Beverages              | 14.1  | <input type="checkbox"/> | 14.2 <input type="checkbox"/> |



**APPENDIX –II Contd....**

**Purchase and use of convenience foods**

a) Do you purchase convenience foods : Yes/No

b) How often : Daily/Weekly/Monthly/Occasionally/Rarely

| Name of purchased item                         | Expenditure/<br>month | Frequency of<br>use |
|--|-----------------------|---------------------|
| <b>I Break fast item</b>                       |                       |                     |
| 1. Idli/Dosaimix                               |                       |                     |
| 2. Wheat flour                                 |                       |                     |
| 3. Puttu mix                                   |                       |                     |
| 4. Vermicelli                                  |                       |                     |
| 5. Macaroni                                    |                       |                     |
| 6. Corn flakes                                 |                       |                     |
| <b>II. Main dishes</b>                         |                       |                     |
| 1. Pulav mix                                   |                       |                     |
| 2. Noodles (raw<br>noodles/ Maggie<br>noodles) |                       |                     |
| <b>III Spices / Condiments</b>                 |                       |                     |
| 1. Sambar mix                                  |                       |                     |
| 2. Rasam mix                                   |                       |                     |
| 3. Garam masala                                |                       |                     |
| 4. Soup mix                                    |                       |                     |
| 5. Biryani masala                              |                       |                     |
| 6. Meat masala                                 |                       |                     |
| 7. Chilli powder                               |                       |                     |
| 8. Corriander powder                           |                       |                     |
| 9. Turmeric powder                             |                       |                     |
| <b>IV. Snack items</b>                         |                       |                     |
| 1. Fryums                                      |                       |                     |
| 2. Cutlet mix                                  |                       |                     |
| 3. Puffed products                             |                       |                     |
| <b>V. Sweets / Desserts</b>                    |                       |                     |
| 1. Ice cream mix                               |                       |                     |
| 2. Custard powder                              |                       |                     |
| 3. Gulab jumun mix                             |                       |                     |
| 4. Payasam mix                                 |                       |                     |

**APPENDIX -I1 Contd....**

**Convenience foods used during special occasions**

| Occasion               | Items used |
|------------------------|------------|
| 1. Birthday            |            |
| 2. Marriage            |            |
| 3. Religious festivals |            |

**Convenience foods used during physiological stages/conditions**

| Occasion                       | Items used |
|--------------------------------|------------|
| 1. Infancy                     |            |
| 2. Preschool / school children |            |
| 3. Adolescence                 |            |
| 4. Pregnancy / lactation       |            |
| 5. Lactation                   |            |
| 6. Old age                     |            |

**Mark on priority basis your reasons for purchasing convenience foods**

1. Saving time
2. Easy to prepare
3. Profitable
4. Nutritious
5. Liked by family members
6. Does not know to make
7. To show prestige
8. Children's interest/likes
9. Non availability of device in your home
10. Saving energy
11. Saving fuel
12. Easy Handle
13. More tasty
14. Reduce work/effort of home maker

### APPENDIX – III

**KERALA AGRICULTURAL UNIVESITY  
COLLEGE OF AGRICULTURE, VELLAYANI  
DEPARTMENT OF HOMESCIENCE**

Title of thesis :- Attitude of urban and rural home makers towards convenience foods

**Schedule to assess the attitude of urban and rural homemakers towards convenience foods**

Indicate the extent of agreement of disagreement with the following statements.  
(SA-Strongly Agree, A- Agree, UN-Undecided, DA-Disagree, SDA-Strongly Disagree)

| Sl. No. | Statements  | SA | A | UN | DA | SDA |
|---------|---|----|---|----|----|-----|
| 1.      | Convenience foods are a boon to employed home makers                              |    |   |    |    |     |
| 2.      | Convenience foods are more preferred by lazy people                               |    |   |    |    |     |
| 3.      | Though costly, convenience foods ensures, top quality, variety, taste and flavour |    |   |    |    |     |
| 4.      | Convenience foods could spoil the health in the long run if you use it regularly  |    |   |    |    |     |
| 5.      | Many convenience foods are produced under unhygienic conditions                   |    |   |    |    |     |
| 6.      | Convenience food give more energy than any other foods                            |    |   |    |    |     |
| 7.      | Convenience foods do not contain essential nutrients                              |    |   |    |    |     |
| 8.      | Convenience foods may cause diseases  |    |   |    |    |     |
| 9.      | Convenience foods should not be advised to children                               |    |   |    |    |     |
| 10.     | Convenience foods are too costly when compared to other foods                     |    |   |    |    |     |
| 11.     | Convenience foods are used mostly by elite people                                 |    |   |    |    |     |
| 12.     | Convenience foods can be used as a supplementary food                             |    |   |    |    |     |
| 13.     | Convenience food is not advisable during disease conditions                       |    |   |    |    |     |
| 14.     | Convenience foods can not be given to old people                                  |    |   |    |    |     |
| 15.     | Convenience food preparation does not need any recipes                            |    |   |    |    |     |

**APPENDIX –III Contd....**

|     |   |  |  |  |  |  |
|-----|---|--|--|--|--|--|
| 16. | Convenience foods are easy to digest than other foods |  |  |  |  |  |
| 17. | Convenience foods are indispensable in daily diet     |  |  |  |  |  |
| 18. | Convenience foods are more nutritious                 |  |  |  |  |  |
| 19. | Though costly, convenience foods promotes health      |  |  |  |  |  |
| 20. | Convenience foods are suitable for quick cooking      |  |  |  |  |  |

**APPENDIX IV**

**KERALA AGRICULTURAL UNIVERSITY  
COLLEGE OF AGRICULTURE, VELLAYANI  
DEPARTMENT OF HOMESCIENCE**

Name of Subject: "Attitude of urban and rural homemakers towards convenience foods.

**Schedule to elicit perception on economy of convenience foods**

Indicate the extent of agreement or disagreement with the following statements.  
(SA- Strongly agree, A-Agree, UN-undecided, DA- Disagree, SDA- Strongly disagree)

| Sl.No | STATEMENTS   | SA | A | UN | DA | SDA |
|-------|--|----|---|----|----|-----|
| 1     | It is cheaper to buy packaged and processed convenience foods  |    |   |    |    |     |
| 2     | Convenience foods are very costly compared to home made foods  |    |   |    |    |     |
| 3     | Convenience foods are very economical since it saves fuel and can be stored for long                   |    |   |    |    |     |
| 4     | Convenience foods are costly and there are no parameters to determine the quality of convenience foods |    |   |    |    |     |
| 5     | Convenience foods are nutritious/ tastier/easy to store although it is costly                          |    |   |    |    |     |

**ATTITUDE OF URBAN AND RURAL  
HOMEMAKERS TOWARDS  
CONVENIENCE FOODS**

**BY**

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**ABSTRACT OF THE THESIS  
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## ABSTRACT

A study entitled the “Attitude of urban and rural homemakers towards convenience foods” in Thiruvananthapuram district was conducted to assess the attitude of urban and rural homemakers towards convenience foods with reference to their consumption pattern and perception on economy of convenience foods.

The study was carried out in urban and rural wards of Thiruvananthapuram district. Hundred families each from urban and rural area were selected for the study.

Consumption pattern of convenience foods, attitude towards convenience foods and perception about economy of convenience foods were taken as the dependent variables. Age of the respondents, type of family, family size, educational status of the respondents, occupational status of the respondent, annual income of the family and the respondents, mass media contact, extension contact, monthly expenditure and dietary pattern were taken as the independent variables.

The results revealed that the monthly expenditure on convenience foods was more among the urban families than in rural families. Frequency score was also high among the urban homemakers.

Considering the attitude towards convenience foods, the mean score of the attitude in urban homemakers were high when compared to rural homemakers. The same is in the case of perception about the economy of convenience foods.

It was found out that occupation of the respondents, income of the respondent, income of the family and monthly expenditure pattern had positive significant association with the monthly expenditure on convenience foods and frequency of purchase of convenience foods.

Correlation analysis showed that most of the selected independent variables had a positive significant relationship with the dependent variables.

It was observed that the urban home makers ranked saving time aspect as the first while in rural area first preference was easy to prepare. There was wide variations in the ranking pattern of urban and rural homemakers when the reasons for using convenience foods were considered.

Comparative analysis of the convenience food used in special occasions and physiological conditions revealed that the urban and rural families used convenience foods more in the occasion of birthday and in the pre-school / school age.

Multiple regression analysis showed that majority of the variables had no significant effect on the attitude towards convenience foods, perception on economy of convenience foods and percentage of the total monthly food expenditure spent on convenience foods.