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TRADITIONAL FOOD HABITS OF DIFFERENT COMMUNITIES IN THRISSUR DISTRICT

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THESIS

**Submitted in partial fulfilment of the
requirement for the degree of**

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2001**

DECLARATION

I hereby declare that the thesis entitled **“Traditional food habits of different communities in Thrissur District”** 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 to me of any degree, diploma, fellowship or other similar title, of any other University or Society.

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SHYNA, K.P.



*Affectionately dedicated to
my most
loving Achan*

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Introduction

INTRODUCTION

Food habit is an integral part of our culture. Food is a topic on which everybody has his own experience and views and they pass through cultural filters and hence differ from culture to culture.

Though, nature has given ability and opportunity to select food from a wide range, having wide taste, in actual practice, these abilities and tastes are restricted by our culture (Misra, 1986). Original nationality of a person can be easily identified if we acquire knowledge on his food habits and food preferences (Desikachar, 1986).

Traditional foods are foods based on the solid foundation of the culture, customs and natural environment of a country or region or eaten by the people for a long time (Tokuji, 1986). Traditional foods have evolved through centuries taking into consideration of the prevailing climatic conditions, availability of local raw materials and socio-economic conditions (Azizi *et al.*, 1998).

Traditional food products are socially, culturally and economically important. These are developed on the basis of the domestic agricultural produce to meet the nutritional needs of the people and have great potential to develop new food industries. Moreover, traditional foods provide food security, enhance livelihood, improve nutritional and social well being of people around the world, particularly the marginalized and vulnerable groups. However, the traditional food sector is now facing severe competition with the western food products, which have glamorous image among the urban well to do segments.

Being an archaic technology, the interest on traditional foods among the younger generation is decreasing now a days. This attitude is being reinforced by the imported foreign foods and beverages backed by heavy advertisements. Serious health and socio-economic problems have also arisen due to the flood of new food products and lack of proper knowledge about these products.

The vast potential of our classical traditional food technologies and the scientific principles behind the processes and formulations of traditional foods have to be explored and exploited so as to provide food security as well as social and economic well being of people.

Proper efforts are necessary to save the traditional foods from imminent extinction and to preserve the technologies. Moreover, an awareness about the whole gamut of various traditional foods should be created among the younger generation through documentation so as to preserve these valuable technologies. Hence, this study was undertaken to find out the traditional food habits of different communities of Thrissur district and to document the methods of preparation of traditional foods among the people.

Review of Literature

2. REVIEW OF LITERATURE

The literature pertaining to the study on traditional food habits of different communities in Thrissur district has been reviewed under the following heads.

- 2.1. Traditional foods – meaning, concept and definition
- 2.2. Importance of traditional foods
- 2.3. Traditional food habits of different groups
- 2.4. Factors and constraints affecting the use of traditional foods

2.1 Traditional foods - meaning, concept and definition

Food is an integral part of any culture - Bhagavad Gita says: “From food do all creatures come into being”.

The food continues to be the most fascinating area of research for cultural anthropologist. In spite of all the development, it remains dominated by the culture of people both at conscious and unconscious level (Misra, 1986).

Food consumption of an individual is related to tradition, social factors, religion and also the need for proper nutrition (Deman, 1986). According to Desikachar (1986) the original nationality of a person can be easily identified if we acquire knowledge on his food habits and food preferences.

Nature has given ability and opportunity to human beings to select his food from a wide range having wide taste. According to Misra (1986) these abilities and tastes in actual practice are greatly restricted by the culture.

Food dominates in our lives in so many aspects (Rangarao, 2001). According to the author our individuality, living conditions, friendship, family

conditions as well as our self esteem and the vast array of traditions we hold are all influenced by what we choose to eat.

Desikachar (1986) pointed out that although man is willing to accept newer changes and fashions of life with respect to dress, language, transport and even religion, in the matter of food habits he is largely bound by tradition. According to Achaya (1998) the objects of cooking is not simply to produce materials suitable for eating but to confirm the cultural properties of food with those of the eater.

Traditional foods are foods based on the solid foundation of the culture, customs and natural environment of a country or a region of the world and eaten by the people for a long time (Tokuji, 1986). Rao and Srivastava (1998) defined traditional foods as those evolved out of necessity to make maximum use of local foods, utilising available artifacts and expertise and carried down through generations.

According to Lee (1986) traditional food technologies are those proven to be adequate for the specific cultural and social characteristics of a group of people in a certain geographical area. According to Azizi *et al.* (1998) traditional foods have evolved through centuries taking into consideration of the prevailing climatic conditions, availability of local raw materials and socio-economic conditions.

Traditional foods evolved hundreds of years ago are still indispensable for the majority of people (Tyn, 1986). The author also opined that in developing

countries there is great demand for traditional foods since, majority of people depend on it for their daily diet.

According to Prabakar (1986) traditional foods are evolved in order to overcome the monotony in the diet. According to the author the composition and preparation of traditional foods are based on paka sastra or science of cooking.

According to Parpia (1999) traditional Indian foods have developed as a part of atleast forty indigenous cultures over centuries.

Traditional food processing in India began when man ceased to be a food hunter (Potty, 1986). Each and every community in India have their own and distinct food ethos (Achaya, 1998).

According to Pratima (2000) India has been the home for ageless culinary art, and had a rich heritage of a wide variety of traditional foods.

Patil (2000) pointed that Indian society continued to maintain its original food barriers and ate community or regional food, which was their legacy for generations. According to the author caste and religion were the main partitions of society and food and eating habits reflected these divisions clearly.

According to Patil (2000), Indian food is by its every nature, exotic, scintillating and immensely varied. The author also pointed that Indian food becomes one of the top three popular cuisines of the world.

Osman (1986) stressed the importance of manufacturing traditional foods at industrial level after making necessary modification to suit the needs of the importing countries. According to Desikachar (1986) upgradation of traditional technologies to make familiar product is highly beneficial than introduction of

foreign technologies. The production and processing of value added products have to be improved by employing modern processing machinery and quality control techniques (Kumar and Anjaneylu, 1998).

Most of the food consumed by people in India are primarily traditional (Desikachar, 1998). The distinctive groups of Kerala had a distinctive food list (Achaya, 1998). The author also observed that though, dietary injunction are mostly observed by different religions of India, in practice the foods actually consumed are influenced by practices of the surrounding region.

Battcock and Ali (1998) pointed that traditional food products should be recognized, as part of each country's heritage and culture and efforts should be taken to preserve the production technologies.

The need for documenting the wealth of knowledge on traditional food products and research priorities in collaboration with small scale food processing had been stressed by Fellows (1997).

2.2 Importance of traditional foods

In developing countries there is great demand for traditional foods since a majority of people depend on it for their daily diet (Tyn, 1986). According to Deka *et al.* (2000) majority of Indians are traditionally vegetarians by their dietary habits and derive most of their nutrient requirements from plant foods.

Social, cultural and economic importance of traditional food products has been reported by Karki (1986). Traditional foods provide food security, enhance livelihood, improve nutrition and social well being of the people particularly the marginalized and vulnerable groups (Battcock and Ali, 1998).

A fermented and dried vegetable product namely '*gundruk*' was found to be an important item to ensure food security in Nepal especially in remote areas (Karki, 1986; Battcock and Ali, 1998).

According to Battcock and Ali (1998) traditional food products play an important role during shortage of food.

The strong flavour of many of the traditional food products enhances the taste and flavour of a dull, bland and starchy diet (Battcock, 1992).

According to Parades-Lopez (1992) many traditional food products especially fermented products are important to improve digestibility. Yeast fermentation of cereals has been used traditionally to make bread using wheat, rye and oats in the western countries and has been shown to have better bioavailability than the unfermented bread (Sandberg, 1991). Some of the important traditional foods of Ethiopia like *injera*, *shiro*, *dubbe*, *kik* and *kinche* etc. were found to be cheap and played an important role in improving the socio-economic status, and nutrient intake of Ethiopians (Osman, 1986).

Various fermented vegetable protein foods like *iru*, *ogiri*, *ughu*, *ogiri-jybo* and *ogiri-nwan* prepared traditionally by the people of Nigeria have a supplementary value with respect to protein (Odunfa, 1986). Tyn (1986) reported that certain traditional fermented products contributed proteins, calories and vitamins.

A study conducted by Kuhnlein *et al.* (1995) on dietary nutrients of Dene/metis people showed that traditional foods provided a large proportion of

total energy intake and was found to be a major source of carbohydrate and micronutrients in their diet.

In Canada, according to Morrison *et al.* (1995) traditional foods provided a large proportion of total energy intake in their diet and was found to be a major source of carbohydrate, multiple nutrients like zinc and iron.

A study conducted by Kuhnlein *et al.* (1996) on dietary nutrient profile of people of Canadian Baffin Island community showed that traditional food contributed greater amount of dry weight, energy, fat, carbohydrate, calcium and sodium among different age groups.

Tempe, a popular fermented soy food of Indonesia is a low cost highly nutritious food rich in B-complex vitamins (Vaidehi *et al.*, 1996).

Camphell *et al.* (1997) pointed that promotion of traditional foods increases the nutrient intake and decreases the cost of foods. In Nigeria, traditional vegetables were found to be an essential source of proteins, vitamins, minerals and amino acids (Okafor and Guarino, 1997).

According to Battcock and Ali (1998) traditional food products have many nutritional advantages, which surpass western style fast and processed foods. Traditional food plays an important role in the sustenance of human health and well being (Kumar and Anjaneylu, 1998).

Dudh churpi, a traditional milk product popular in North-Eastern parts of India was found to be rich in energy, protein and minerals (Hossain *et al.*, 1999).

There are many traditional beliefs about the medicinal properties of traditional food products. According to Dirar (1992), the Fur ethnic group in Sudan strongly believed that the consumption of traditional fermented foods protected them from various diseases.

A study conducted in Tanzania by Svanberg (1992) had shown that children consuming fermented gruel had a 53 per cent lower incidence of diarrhoea than those with unfermented gruel through inhibition of pathogenic bacteria. According to Frohlich *et al.* (1997) the traditional fermented foods had a protective effect against cancer.

According to Pratima (2000) traditional foods play a vital role in many religious festivals. The author also pointed that, some selected foods are exclusively made for festivals and some of the traditional sweet items like *laddu*, *kheer*, *halwa* are prepared for special offering in temples.

Apart from domestic sale, Indian snack and confections possessed good export potential also. (Venkatesh *et al.*, 1982). *Shrikhand* a fermented sweetened dairy product of pasty consistency, a popular item, in Western India has good market potential in other countries.

According to Karki (1986), traditional technologies should be improved so as to vitalize the national economy and to generate employment. Desikachar (1986) also pointed that processing and marketing of traditional product should be promoted by starting indigenous food industries so as to provide employment opportunities for people.

Hollingsworth (2000) says that one of every seven-dollar over the next decade will spend on ethnic food. The study also predicts that food manufactures will compete for market share in the faster growing ethnic cuisines like Thai, Caribbean, Mediterranean and Indian.

2.3 Traditional food habits of different groups

There are definite rules in each culture as to what composes a meal, how the meals should be served and consumed and thus food is intricately connected with culture of the people (Misra, 1986).

According to Pattanayak (1986) traditional foods varied not only around the world but also within a region. Vegetarianism in countries like India has been adopted mainly due to socio-economic and cultural factors rather than the health benefits of vegetarian diet (Kakade and Agte, 1997).

There are perhaps more customs, rules, taboos, proverbs and superstitions associated with food than anything else in the world (Dwivedi, 2000). According to the author all social events and festivals focus on special meals.

Important traditional foods prepared in Korea from cereals are roasted rice powder also known as *misut powder* an instant rice gruel or drink used as a food for babies and patients, different varieties of rice cakes namely *chaldeok*, *songpyam* and *sirudeok* (Lee, 1986).

Traditional foods such as *baotzs*, *jiaotsc*, *wonton* and *spring roll* prepared from wheat flour dough with stuffings and fillings are popular in China (Lun, 1986). According to the author *steamed bun* and *steamed roll* are the traditional staple foods in North China.

According to Tokuji (1986) rice and processed wheat products like *chapati*, *nan* and *noodles* constitute popular traditional staple foods in Japan, which are considered indispensable in their dietary pattern.

The traditional foods consumed by Pakistanis include cereal based fermented foods like *nan roti* a semi leavened flat bread, *androna* pancake made from rice flour and legume (Shah, 1986).

Dhokla is a fermented food prepared from rice and bengalgram, whereas *khaman* is similar to *dhokla* except that it is made entirely from bengalgram (Steinkraus, 1989).

Several traditional fermented foods and beverage produced at household level in Zimbabwe include fermented maize porridge, fermented milk products like *mukaka* and *amasi* as well as non alcoholic cereal based beverages namely *mahewu*, *tobwa* and *mangisi* (Gadaya *et al.*, 1999).

Ogi, one of the popular maize products obtained by soaking and wet extraction of maize is a traditional food consumed widely in Nigeria (Umoh and Fields, 1981).

Fermented maize products are also widely used as an important breakfast item and as weaning foods in Nigeria (Steinkraus, 1989).

Another traditional food namely *agidi* prepared after cooking *ogi*, the popular maize product is also given to infants and adults in Nigeria (Akpapunam *et al.*, 1997).

According to Aminigo and Oguntunde (2000) in South Western Nigeria grain maize is often consumed after boiling or roasting, while the mature grain is mostly eaten as *ogi* and *agidi*.

Major traditional fermented foods in Thailand includes various products prepared from soyabean like sauce, paste, fermented curd and *thua-rao* which is closely related to steamed natto (Long, 1986).

Popular fermented products in Korea are *meju* and *kochujang* both prepared from soyabean (Lee, 1986).

Kinema is another soyabean based fermented product which is sticky, slightly alkaline with a typical flavour consumed as curry in the Darjeeling hills and Sikkim in India, Eastern Nepal and Bhutan (Tamang, 1998).

Tamang (1996) pointed that *kinema* is similar to other fermented soybean products like *akhoni* of Nagaland, *troombai* of Meghalaya, '*hawaijar*' of Manipur and *bekany-um* of Mizoram.

Tempe, is a popular, cheap and nutritious soyfood of Indonesia (Vaidehi *et al.*, 1996). According to Jeng *et al.* (1998), *tempe* and *tofu*, two important soy products are used as meat substitutes.

Tamea is a popular traditional food of Sudan made from chick pea and is served at breakfast and supper (Kareem, 1986).

Vegetable based traditional fermented food products namely *horn-dong* (fermented stem of red onion), *naw-mai-dong* (fermented young bamboo shoots) and *pak-gard-dong* (fermented leaf of mustard) are generally prepared in Thailand (Tyn, 1986).

Gundruk, a fermented and dried vegetable product in Nepal is produced by shredding and placing the leaves of mustard, raddish and cauliflower in an earthenware pot for 5-7 days for fermentation (Karki, 1986).

Kawal is a strong smelling, protein rich food prepared in Sudan by fermenting the leaves of a wild African legume *Cassia obtusifdica* and is usually cooked in stews and soups and used as a meat replacer (Dirar, 1992).

Tarkhunah a non-fermented food of Iran, prepared from a mixture of barley, tomato, curd and vegetables is used along with bread (Azizi *et al.*, 1998).

Sorbium, an indigenous fermented food produced from succulent bamboo shoots is an indispensable constituent of the diet of Manipur (Giri and Jannejay, 2000).

The most favourite traditional animal food consumed in Burma are *nag-pi* a fermented fish and shrimp sauce, *pone-ye-gyi*, fermented fish and horse gram paste and pickled products of fish, prawn, fruits and vegetables (Tyn, 1986). According to the author *nag-pi* is a relished essential item of normal meal in Burma which has the respectable status of a national food of Burma.

Jeotkal and *sik-hae* are the salt fermented fishery products found in Korea (Lee, 1986).

Mehiawah is a fermented fish product of Iran (Jedah *et al.*, 1999).

Mulah sharmout is a mixture of dried meat, dried okra and onion and is considered as one of the national dishes of Sudan (Kareem, 1986). '*kaidu digla*', a fermented traditional food of Sudan is made from the vertebrae of the backbone of animals after chopping, sun drying and pounding (Dirar, 1992).

Traditional Iranian cuisine has a custom of cooking meat with fruits like pomegranate, dried pomegranate seeds, lemon, raisins and nuts like walnuts, almonds, pine seed and rhuharh (Basaran, 1999).

Kaffir, an important beverage prepared from corn or sorghum is an important cereal based fermented product consumed by people of Ghana (Koleoso and Kuboye, 1986).

Pulque is a milky, slightly foamy, acidic and somewhat viscous beverage of Mexico obtained by the fermentation of *agumiel*, juices of various cacti often called '*Century plant*' (Steinkraus, 1992).

South African *magaw/mahewa* is a traditional sour, nonalcoholic maize beverage popular among the Bantu people of Africa (Hoizapfel, 1989).

Chapathi or *roti* the unleavened bread normally prepared from whole wheat flour is the staple food of more than 60 per cent of Indian population (Kaur and Bajwa, 2000).

Chiroti, a wheat based traditional product popular in southern India is an invariable part of lunch or dinner especially on marriage occasions (Chetana *et al.*, 1996).

According to Rao and Srivastava (1998) *tandoori* also known as *roti* is a traditional baked product common among the diets of India's.

Sorghum is traditionally used in parts of Ragalaseema regions of Andrapradesh, in the form of *roti*, along with rice or a fermented gruel (Vimala *et al.*, 1996).

One of the traditional rice products popular in Assam namely *huraam* is a special product among the Ahom community of Assam (Mishra *et al.*, 2000).

Flaking of rice is a traditional technology, much older than puffed rice (Dastur and Prakash, 1986). The rice flakes also known as *poha* or *avalakki* are conventionally made from paddy after soaking and thinning and the process of flaking is done by pounding with heavy iron pestle (Desikachar, 1986). Flaked or beaten rice is a very popular traditional product consumed either as snack after toasting or frying or after soaking in water and seasoning with spices and vegetables as an item of breakfast (Arya, 1990).

According to Arya (1990) a variety of popped or puffed cereal like *pop corn*, puffed rice like *khell*, *khoi*, *aralu* and *nelpuri*, puffed sorghum called *khul* puffed ragi and barley namely *dani*, *saty* and legume like bengalgram are consumed as snack items by all segments of the Indian population.

Srivastava (1996) reported that popped sorghum and millet flours are traditionally used in weaning mixes in India.

According to Srivastava and Batra (1998) popped products are generally used as snack food either after spicing or sweetening.

Kabuli channa curry is a popular and delicious dish consumed all over India (Sharma *et al.*, 2000).

Papads, a low moisture traditional Indian savoury food item is prepared from blend of pulse flour namely blackgram or greengram, cereal flour and edible starch with other ingredients (Kulkarni *et al.*, 1996).

According to Pruthi *et al.* (1984) *papad* is consumed either after frying or roasting and is popular among almost all sections of community. Among the fried products based on rice and legumes, *chakli* or *murukku*, *tengolal*, *muchorai* and *kodbak* are popular in India (Arya, 1990). *Wadi* is a legume savoury prepared from blackgram or greengram dhal in India (Pruthi *et al.*, 1992). *Mongra*, an important traditional savoury based on bengalgram flour is popular among the people of Northern States of India (Kalra *et al.*, 1996).

Wari is a partially fermented legume based product prepared from split blackgram along with ingredients like dried fenugreek leaves, coriander powder, cumin seeds, red chilli powder and black pepper (Kulkarni *et al.*, 1997). Bawa and Singh (1998) reported that *matar*, a deep fat fried snack prepared from maida is very popular in North India. According to Kalra *et al.* (1998) *mathi* is one of the most important traditional savoury product which is quite popular among the people of Northern states.

Among milk based sweets *gulabjamun* occupies a prominent place, throughout India and is prepared from a mixture of khoa, refined wheat flour and baking powder (Gulhati *et al.*, 1992). *Peda* is a highly popular Indian sweet prepared from khoa - a milk solid (Thakar *et al.*, 1992). *Shrikhand* is a fermented sweetened dairy product of pasty consistency popular in Western India (Rao *et al.*, 1987; Hossain *et al.*, 1999). According to Subramonian *et al.* (1997) shrikhand is made from '*chakka*' obtained by draining of whey from dahi and is kneaded with cream, sugar and other ingredients.

Churpi is a hard variety of cheese, traditionally consumed by the people of Darjeeling hills and Sikkim in India, Nepal and Bhutan (Karki, 1986; Pal *et al.*, 1993; Tamang *et al.*, 1998). *Pinni* is a traditional sweet prepared by roasting urd dhal paste, khoa and sugar and molded into round elliptical shape (Saxena *et al.*, 1996). *Egg halwa* is a traditional Indian sweet dish which is a combination of milk, liquid, whole egg and sugar (Kalra *et al.*, 1998). *Khoa* is an important indigenous heat coagulated and partially dehydrated milk product (Sharma and Lal, 1999).

Chhana based sweet '*Chhana podo*' is a typical milk product from Orissa which is light brown in colour and has sponge cake like texture (Dash *et al.*, 1999).

According to Gupta *et al.* (2000) *mishti doi* is a popular variety of sweetmeal dahi common in the Eastern region of the country.

2.4 Factors and constraints affecting the use of traditional foods

Traditional food products often have a stigma attached to them - they are considered as poor man's food. According to Battcock and Ali (1998) traditional food products are now facing severe competition from mass-produced food products particularly 'Western food' with their glamorous image.

With the intermingling of civilization and modern communication and transport facilities, people have learnt to appreciate the taste of specialised foods and dishes from other countries (Desikachar, 1998).

An increase in urbanization, migration of rural population to urban areas, improvement in literacy, increase in income levels and awareness improved the purchasing behaviour of the consumer (Gopalan, 1994).

Increased purchasing power, change in socio-economic status and lifestyles also contributed for the enhanced consumption of processed and convenience products (Kumar and Anjaneylu, 1998). The changing social scenario among the Indians brought into focus the demand for a variety of convenience foods (Arya, 1998).

Ranjini *et al.* (2000) opined that food consumption pattern have witnessed a major change in the past five decades. The authors observed major changes in the availability of processed foods and in the quantum of convenience foods that has been offered to the consumer.

The culinary practices followed by Indians require preparation of various fresh food items which are more laborious, time consuming and expensive (Desikachar, 1986 and Kareem, 1986).

Osman (1986) observed that quantity of traditional foods produced at industrial level are very small as compared to the total consumption. According to the author the cost of a traditional food fluctuates depending upon its importance and purchasing capacity of the consumer.

Most of the traditional foods are produced on small scale under unhygienic conditions and lack quality control (Tokuji, 1986). The authors also opined that the distribution of some of these products is limited to specific areas because of quick spoilage due to unsanitary conditions.

Very little attention is being paid to hygiene and sanitation during handling and processing of the different traditional products (Goyal and Rajorhia, 1991).

According to Kalra *et al.* (1998) the indigenous food products are mostly manufactured in small scale by local traders. The author also pointed that quality of such products vary from place to place and even batch to batch, because of lack of quality control, which is essential in their preparation.

According to Potty (1986) the small scale industries generally are not aware of the implications of food laws. Hence, traditional food industry has remained mainly in the unregistered and unorganized cottage scale sector. The author has pointed other factors that are attributed for slow development of traditional food sector which include lack of scientific data on the manufacture of traditional foods, unorganized state of the industry, lack of government support and patronage, uncertainties with regard to shelf-life and packaging, shortage and high cost of raw materials, total absence of market support, unhelpful taxation policies, infrastructural limitations, lack of training facilities and reluctance to take up research and development programmes.

Koleoso and Kuboye (1986) reported that many of the technologies currently used in processing of indigenous foods and beverages have remained unchanged for centuries and thus are inadequate to the present requirements.

The major constraints faced by small-scale enterprises are lack of management and technical skills and difficulty in obtaining credit (Senilk, 1996).

According to Rao and Srivastava (1998) traditional products are normally prepared/processed at home or in cottage industries, using local foods and expertise gained through generation. The author also observed that most of the information on technology of traditional food is restricted to a particular region.

Many of the indigenous foods consumed around the world are produced by natural fermentation (Gotchuva *et al.*, 2000). However, it is very difficult to maintain the quality of the product due to lack of scientific knowledge on the specific microorganisms in the production.

Organized food industry is totally deploying their resources on western-oriented food product development and promotion, ignoring the vast array of ethnic foods which are crying for developmental attention from industry and scientific communities (Potty, 2001).

Materials and Methods

3. MATERIALS AND METHODS

This chapter deals with the methods and procedures followed in the various phases of research and the details are presented under the following heads:

- 3.1 Locality of the study
- 3.2 Selection of samples
- 3.3 Plan of study
- 3.4 Methods adopted for the study
- 3.5 Development of tools and conduct of the study
- 3.6 Analysis of data

3.1 Locality of the study

The area under the jurisdiction of Thrissur district formed the locality of the study. From Thrissur district, four wards i.e. two wards from urban area and two wards from rural area were selected purposively for the study. Thus, Poonkunnam and Mannuthy wards were selected from the urban area and Vellanikkara and Puthur wards were selected from the rural area of Thrissur district.

3.2 Selection of samples

From the selected wards community wise sampling frame was prepared to select the sample for the study. The six major communities of Thrissur district namely Nairs, Ezhavas, Namboothiris, Tamil Brahmins, Christians and Muslims were identified based on the population size. From the selected wards 30 families from each of the above six communities were selected randomly and this comprised the sample for the study. Thus, a total of 180 families were selected for

the study. The observations were collected from the eldest female member (above 45 years) of the family.

To conduct Knowledge, Attitude and Practice (KAP) study on traditional foods 50 women below the age of 35 years were randomly selected from Thrissur district.

3.3 Plan of study

Based on the objectives of the study, the plan of the study was designed.

The study comprised

- i) A baseline survey to monitor the socio-economic condition of the families
- ii) A survey of the families to assess their dietary pattern
- iii) Knowledge, Attitude and Practice on traditional foods among younger generation
- iv) Documentation of methods of preparation of traditional foods
- v) Statistical analysis

3.4 Methods adopted for the study

Determination of suitable methods and procedures are very important to get accurate and reliable data. Interview method is a systematic approach by which a person enters more or less imaginatively into an inner life of a comparative stranger (Devadas and Kulandaivel, 1975). According to Bass *et al.* (1978) interview method is the most suitable way to collect data since it proceeds systematically and enables quick recording.

Because of the above reasons, in the present study direct interview method through house visit was adopted to collect the required information on the socio-economic status and dietary habits of the selected families.

Knowledge, Attitude and Practice on traditional foods among younger generation was assessed using pre-tested questionnaires. The procedure adopted for assessing KAP is detailed below.

Knowledge

To test the knowledge, a pool of questions called items were prepared by reviewing literature and through discussions with subject matter specialists. The selection of the items was done on the basis of the following criteria.

1. The items should promote thinking
2. The items should have a certain difficulty index

Thirty nine items (questions) with regard to traditional food habits of different groups were selected to carry out item analysis to develop a standardized knowledge test. The details are given in Appendix-1. They were analysed to check item difficulty and item discrimination. The index of item difficulty reveals how difficult an item is whereas the index of discrimination indicates the extent to which an item discriminates the well informed individuals from the poorly informed ones.

Scores of value one and zero were given to correct and incorrect responses respectively. There was a possibility of respondents scoring maximum of thirty nine for all correct answers and zero for all wrong answers. This was then given to 39 respondents. These respondents were selected randomly and were altogether different from the sample selected for the main study and at the same time had identical conditions.

The scores obtained by the 39 respondents were arranged in descending order of total scores. This was divided into three groups namely G_1 , G_2 and G_3 with 13 respondents in each group. For item analysis, the middle group namely G_2 was eliminated retaining only the terminal ones with high and low scores.

The items in groups G_1 and G_3 were tabulated and the difficulty and discrimination indices were calculated.

Calculation of difficulty index (P)

The index of item difficulty as worked out in this study refers to the percentage of the respondents answering an item correctly. According to Coombs (1950), the difficulty of an item varied for different individuals. In the present study, items with 'P' value ranging from 25 to 75 were considered for final selection for knowledge test.

Calculation of discrimination index (E 1/3)

The second criterion for item selection was the discrimination index indicated by E 1/3. Index of discrimination was calculated by using the following formula

$$E\ 1/3 = \frac{(S_1) - (S_3)}{N/3}$$

Where S_1 and S_3 are the frequencies of correct answers in the groups G_1 and G_3 respectively.

N = Total number of respondents in the sample

Mehta (1958) in using E 1/3 method to find out item discrimination values emphasized that this method was somewhat analogous to and therefore, a

convenient substitute for the phi coefficient as formulated by Perry and Michael (1951).

In the present study the items with E 1/3 value above 0.4 were considered for final selection as definite criteria of selection are not advocated by any researchers. Thus, 10 items with satisfactory P and E 1/3 value were selected for the final format of the knowledge test. The details are given in Appendix-I

Method of scoring

The items selected for the knowledge test were given to women below 35 years. Each respondent was given one score for correct answer and zero score for incorrect answer. Thus the total knowledge score of each respondent was computed. Maximum knowledge score that could be obtained by a respondent was ten and the minimum zero.

Attitude

To check the attitude of the mothers, 30 statements covering different aspects of traditional foods were selected after discussion with the experts and review of literature. This included both positive and negative statements. These statements were administered to the respondents (not the sample). They were asked to respond in terms of agreement or disagreement with the statement in a 5 point Likerts scale viz. are strongly agree (SA), agree (A), undecided (UD), disagree (DA) and strongly disagree (SDA) (Likerts, 1932).

These statements were subjected to item analysis to examine how well each statement discriminates between respondents with different attitudes.

Item analysis

The total score obtained by each respondent was summed up. Each response was numerically scored 5, 4, 3, 2 and 1, reversing the order for negative statements. The respondents were arranged in descending order of total scores. 25 per cent of subjects with the highest score and 25 per cent of subjects with the lowest score were selected for item analysis. To evaluate the responses of the high and low groups to each statement, the 't' value as suggested by Edwards (1957) was calculated as given below.

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

Where

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

\bar{X}_L = The mean score on a given 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 high group

n_L = The number of subjects in low group

The value of 't' is a measure of the extent to which a given statement differentiates between the high and low groups. Any value of 't' equal to or greater than 1.75 was considered. The selected statements were arranged in ascending

order of magnitude and 13 statements having maximum 't' value were selected. The details are given in Appendix II.

Practice

Questions pertaining to various practices with respect to the preparation of traditional foods were developed. This was administered to the respondents. A score of one was given for correct practice and zero for an incorrect one and the total scores were summed up. The selected questions are given in Appendix III.

3.5 Development of tools and conduct of the study

To elicit information on socio-economic status and dietary habits of the families, two questionnaires were developed. The schedule to assess the socio-economic status comprised of information on the type of family, family size, distribution of family according to age and sex, educational and occupational status of the family members, monthly income and expenditure pattern, details of land holdings, crops cultivated, domestication of animals, social participation and information source utilization. The pretested schedule used to collect the above details is presented in Appendix IV.

The schedule to elicit information on the dietary habits of the families included meal pattern, use of traditional foods with respect to social and religious practices, frequency of use of various foods, food preferences, reasons for including traditional foods, foods specially prepared for different age groups and physiological conditions, cultural factors influencing food habits, use of traditional food items during diseased conditions and improvement of health, traditional storage and processing methods adopted, awareness of the preparation of

traditional foods, food items included and omitted during festivals, method of preparation of various traditional food items of different communities, ingredients used, source of different ingredients and details of different household implements used to prepare traditional foods. The questionnaire was pre-tested before field application and the pretested schedule is presented in Appendix V.

A questionnaire was developed to ascertain the knowledge, attitude and practice on traditional foods among younger generation. The details of the questionnaires are given in Appendices I, II and III respectively.

Method of preparation of some traditional foods was recorded with the help of a pocket type tape recorder and the details are given in chapter 5.

Analysis of data

The various statistical techniques used in this study to analyse the results are percentage analysis, chi-square and correlation.

Results

4. RESULTS

The results of the study on traditional food habits of different communities in Thrissur District are presented in this chapter under the following sub headings.

- 4.1 Socio-economic and cultural background of the families
- 4.2 Dietary pattern of the families
- 4.3 Position of traditional foods in the dietary pattern of families
- 4.4 Traditional food practices followed by older generation of different communities
- 4.5 KAP on traditional foods among younger generation

4.1 Socio-economic and cultural background of the families

Socio-economic and cultural background of the families were assessed in terms of type of family, family size, educational status, occupation, monthly income, possession of land, monthly expenditure pattern, indebtedness, domestication of animals, details of kitchen garden, social participation and source of general information.

4.1.1 Type of family and family size

Information on type of family and family size of the different communities are presented in Table 1.

From the table it is clear that majority of the families in the Christian (66.7%), Nair (63.3%), Tamil Brahmin (63.3%) and Muslim (63.3%) communities were of nuclear type while in the Ezhava community nuclear and joint families were found to be equal in number.

Table 1. Details of type and size of family

Details	Number of families					
	Ezhava	Christian	Nair	Namboothiri	Tamil Brahmins	Muslim
<u>Type of family</u>						
Joint	15 (50.0)	10 (33.3)	11 (36.7)	13 (43.3)	11 (36.7)	11 (36.7)
Nuclear	15 (50.0)	20 (66.7)	19 (63.3)	17 (56.7)	19 (63.3)	19 (63.3)
Total $\chi^2 = 2.35^{NS}$	30 (100)	30 (100)	30 (100)	30 (100)	30 (100)	30 (100)
<u>Family size</u>						
Up to 4 members	14 (46.7)	15 (50.0)	18 (60.0)	16 (53.4)	21 (70.0)	18 (60.0)
5- 6 members	10 (33.3)	14 (46.7)	10 (33.4)	6 (20.0)	9 (30.0)	10 (33.3)
7-8 members	1(3.3)	1 (3.3)	1 (3.3)	7 (23.3)	-	2 (6.7)
>9 members	5 (16.7)	-	1 (3.3)	1 (3.3)	-	-
Total $\chi^2 = 141.10^{**}$	30 (100)	30 (100)	30 (100)	30 (100)	30 (100)	30 (100)
Average family size	4.9	5.2	4.7	4.6	3.9	

Number in parenthesis are percentage

** Significant at 1 per cent level

NS – Non significant

Majority of the families in the six communities had up to six members in their families (Table 1). Hundred per cent of the families in the Tamil Brahmin group had up to six members while 80 per cent, 96.7 per cent, 93.3 per cent, 73.7 per cent and 93.3 per cent of the Ezhava, Christian, Nair, Namboothiri and Muslim families respectively had up to six members in their families. Only very few families in the different communities had more than six members.

Statistical analysis indicated that type of family ($\chi^2 = 2.35$) is independent of the community while family size is ($\chi^2 = 141.10$) dependent upon the communities selected for the study.

4.1.2 Marital status of the respondents

Table 2 presents the details regarding the marital status of the respondents. The table shows that, majority of the respondents in each of the six groups were married. About 6.7 per cent in Ezhava, 6.6 per cent in Nair, 3.3 per cent in Namboothiri, Christian as well as Tamil Brahmin groups were unmarried.

4.1.3 Educational status of the respondents

Details regarding the educational status of the respondents in the different communities are given in Table 3.

Among the different communities 13.3 per cent Muslim, 6.7 per cent Christian and 3.3 per cent Ezhava respondents were illiterate. About 46.7 per cent Tamil Brahmin, 36.7 per cent Namboothiri, 36.7 per cent Ezhava, 33.3 per cent

Table 2. Details of marital status of the respondents

Marital status	Number of respondents					
	Ezhava	Christian	Nair	Namboothiri	Tamil Brahmin	Muslim
Married	24 (80.0)	21 (70.0)	20 (66.7)	19 (63.4)	20 (66.7)	22 (73.3)
Unmarried	2 (6.7)	1 (3.3)	2 (6.6)	1 (3.3)	1 (3.3)	-
Divorced	-	-	-	-	-	-
Widow	4 (13.3)	8 (26.7)	8 (26.7)	10 (33.3)	9 (30.0)	8 (26.7)
Total	30 (100)	30 (100)	30 (100)	30 (100)	30 (100)	30 (100)

Number in parenthesis are percentage

Table 3. Educational status of the respondents

Educational status	Number of respondents					
	Ezhava	Christian	Nair	Namboothiri	Tamil Brahmin	Muslim
Illiterate	1 (3.3)	2 (6.7)	-	-	-	4 (13.4)
Lower primary	4 (13.3)	4 (13.3)	2 (6.7)	2 (6.7)	-	3 (10.0)
Upper primary	6 (20.0)	3 (10.0)	6 (20.0)	7 (23.3)	3 (10.0)	10 (33.3)
High school	11 (36.7)	10 (33.3)	5 (16.7)	11 (36.7)	14 (46.7)	10 (33.3)
College and higher education	8 (26.7)	11 (36.7)	17 (56.6)	10 (33.3)	13 (43.3)	3 (10.0)
Total $\chi^2 = 26.42^*$	30 (100)	30 (100)	30 (100)	30 (100)	30 (100)	30 (100)

Number in parenthesis are percentage

* Significant at 5 per cent level

Christian, 33.3 per cent Muslim and 16.7 per cent Nair respondents had studied up to high school level.

The table also revealed that about 56.6 per cent of the respondents in the Nair community had obtained college level education while only 43.3 per cent Tamil Brahmin, 36.7 per cent Christian and 33.3 per cent Namboothiri, 26.7 per cent Ezhava and 10 per cent Muslim had received college level education. Rest of the respondents had attained education up to either lower primary or upper primary level.

Chi-square test revealed that educational status of the respondents depend upon the communities selected for the study ($\chi^2 = 26.42$).

4.1.4 Occupational status of the respondents

Table 4 indicates the details regarding the occupational status of the respondents.

Majority of the respondents in the Christian (66.7%), Nair (66.7%), Namboothiri (76.7%), Tamil Brahmin (76.7%) and Muslim (56.7%) families were unemployed while in the Ezhava group 40 per cent and 6.6 per cent of the respondents were employed in government and private sectors respectively.

In the other groups like Christian, Nair, Namboothiri, Tamil Brahmin and Muslim, 33.4 per cent, 33.3 per cent, 23.3 per cent, 23.4 per cent and 30 per cent were employed either in government or private sectors. Only a minority of the respondents in Ezhava (16.7%) and Muslim (13.3%) communities were working as coolies.

Table 4. Occupational status of the respondents

Occupation	Number of respondents					
	Ezhava	Christian	Nair	Namboothiri	Tamil Brahmin	Muslim
Government	12 (40.0)	5 (16.7)	9 (30.0)	4 (13.3)	5 (16.7)	9 (30.0)
Private	2 (6.6)	5 (16.7)	1 (3.3)	3 (10.0)	2 (6.6)	-
Housewives	11 (36.7)	20 (66.6)	20 (66.7)	23 (76.7)	23 (76.7)	17 (56.7)
Coolie	5 (16.7)	-	-	-	-	4 (13.3)
Total $\chi^2 = 16.69^{NS}$	30 (100)	30 (100)	30 (100)	30 (100)	30 (100)	30 (100)

Number in parenthesis are percentage
 NS – Non-significant

Statistical analysis of the data indicated that occupational status of the respondents is independent of the communities ($\chi^2 = 16.69$).

4.1.5 Monthly income of the families

In Table 5, the details regarding the monthly income of the families are presented.

It can be ascertained that 63.4 per cent, 53.3 per cent, 53.3 per cent and 60 per cent of the families in Ezhava, Muslim, Christian and Nair communities had between Rs.2000-6000 as monthly income while the monthly income of 46.7 per cent of Namboothiri and 63.3 per cent Tamil Brahmin families varied in between Rs.6000 to Rs.10000 per month.

Only 3.3 per cent of families in Ezhava and 10 per cent in Muslim had a monthly income below Rs.2000 and rest of the families in the different communities had an income above Rs.10,000 per month.

Average income of the families varied from Rs.2,280 for Muslim and Rs.10,266 for Tamil Brahmin community.

4.1.6 Availability of land

Details on the availability of land is given in Table 6.

Most of the families in the different communities except Tamil Brahmin owned land ranging from 1 to 100 cents, while 60 per cent of the Tamil Brahmins were found to be landless.

Majority of the Nair (83.3%), Namboothiri (80%), Muslim (68.8%) and Christian (66.7%) families inherited the land from their parents whereas

Table 5. Distribution of families on the basis of monthly income

Monthly income (Rs.)	Number of families					
	Ezhava	Christian	Nair	Namboothiri	Tamil Brahmin	Muslim
Up to 2000	1 (3.3)	-	-	-	-	3 (10.0)
2000-4000	8 (26.7)	6 (20.0)	6 (20.0)	7 (23.3)	1 (3.3)	10 (33.3)
4000-6000	11 (36.7)	10 (33.3)	12 (40.0)	7 (23.3)	2 (6.7)	6 (20.0)
6000-8000	1 (3.3)	3 (10.0)	2 (6.7)	8 (26.7)	9 (30.0)	6 (20.0)
8000-10000	4 (13.3)	2 (6.7)	6 (20.0)	6 (20.0)	10 (33.3)	3 (10.0)
>10000	5 (16.7)	9 (30.0)	4 (13.3)	2 (6.7)	8 (26.7)	2 (6.7)
Total	30 (100)	30 (100)	30 (100)	30 (100)	30 (100)	30 (100)
Average income (Rs.)	5,966	6,844	6,166	7,666	10,266	2,280

Number in parenthesis are percentage

Table 6. Details on the availability of land to the families

Area (in cents)	Number of families					
	Ezhava	Christian	Nair	Namboothiri	Tamil Brahmin	Muslim
0	5 (16.7)	6 (20.0)	6 (20.0)	10 (33.3)	18 (60.0)	14 (46.7)
1-50	16 (53.3)	9 (30.0)	12 (40.0)	13 (43.4)	9 (30.0)	12 (40.0)
50-100	5 (16.7)	5 (16.7)	8 (26.7)	3 (10.0)	2 (6.7)	3 (10.0)
>100	4 (13.3)	10 (33.3)	4 (13.3)	4 (13.3)	1 (3.3)	1 (3.3)
Total	30 (100)	30 (100)	30 (100)	30 (100)	30 (100)	30 (100)
Mode of possession						
Inherited	12 (48.0)	16 (66.7)	20 (83.3)	16 (80.0)	4 (33.3)	11 (68.8)
Purchased	13 (52.0)	8 (33.3)	4 (16.7)	4 (20.0)	8 (66.7)	5 (31.2)
Total	25(100)	24((100)	24(100)	20(100)	12(100)	16(100)

Number in parenthesis are percentage

66.7 per cent of Tamil Brahmin and 52 per cent Ezhava families who had land purchased the land from their own resources.

Chi-square test revealed that availability of land possessed by the families is dependent upon the communities ($\chi^2 = 35.74$).

4.1.7 Possession of domestic animals and kitchen garden

Among the six communities, majority of the families did not possess any domestic animals (Table 7).

In the Tamil Brahmin category, none of the families had domestic animals. The families who had domestic animals reared mainly cattle and poultry in all the five communities.

With respect to kitchen garden also in all the six communities, only a few families had kitchen garden and most of them cultivated mainly green leafy vegetables and other vegetables like chilli, tomato, brinjal etc.

4.1.8 Monthly expenditure pattern

Details regarding the monthly expenditure pattern for various items like food, clothing, education, health, transport, fuel, shelter, recreation, personal expenses, savings and remittance are presented in Table 8.

It can be seen from the table that majority of the families in Tamil Brahmin (96.7%), Muslim (90.0%), Christian (86.7%) and Ezhava (70.0%) communities spent 30-59.9 per cent of their monthly income on food, while 20 per cent of Ezhava families spent more than 60 per cent of their monthly income on food.

Table 7. Details regarding the possession of domestic animals and kitchen garden

Particulars	Number of families					
	Ezhava	Christian	Nair	Namboothiri	Tamil Brahmins	Muslim
<u>Domestication of animals</u>						
Yes	7 (23.3)	8 (26.7)	3(10.0)	5(16.7)	-	9 (30.0)
No	23 (76.7)	22 (73.3)	27(90.0)	25(83.3)	-	21 (70.0)
Total $\chi^2 = 5.50^{NS}$	30 (100)	30 (100)	30 (100)	30 (100)	30 (100)	30 (100)
<u>Kitchen garden</u>						
Present	7 (23.3)	8 (26.7)	9(30.0)	9(30.0)	4(13.3)	6 (20.0)
Absent	23 (76.7)	22 (73.3)	21(70.0)	21(70.0)	26(86.7)	24 (80.0)
Total $\chi^2 = 3.76^{NS}$	30 (100)	30 (100)	30 (100)	30 (100)	30 (100)	30 (100)

Number in parenthesis are percentage

NS – Non-significant

Chi-square test revealed that monthly expenditure pattern on food among the families is dependent upon the communities ($\chi^2 = 40.78$).

Almost all the families in the Ezhava, Christian, Nair and Tamil Brahmin groups spent less than 10 per cent of their monthly income on clothing while 67 per cent and 13.3 per cent of Namboothiri and Muslim families spent in between 10 to 19.99 per cent of their income for this purpose.

All the families in the six communities surveyed spent less than 10 per cent of income towards recreation, health and personal expenses.

Majority of the families in the six communities spent less than 10 per cent of their monthly income on transport, shelter and fuel.

Majority of the families in the six categories spent less than 30 per cent of their income for education while 10 per cent of Christian and 23.3 per cent of Namboothiri families spent in between 30-39.99 per cent of their income for education.

Most of the families in the six communities saved below 30 per cent of their monthly income and almost all the families spent less than 20 per cent of their income for other expenses like remittance of electricity, telephone charge and other miscellaneous expenditures.

4.1.9 Saving practices

Table 9 indicates the details regarding the habits of saving money among the different communities.

Table 8. Monthly expenditure pattern of the families

Item	Groups	Percentage of monthly income							Total
		<10%	10-19.99%	20.29.99%	30-39.99%	40-49.99%	50-59.99%	≥ 60%	
Food	Ezhava	-	-	3 (10.0)	14 (46.6)	2 (6.7)	5 (16.7)	6 (20.0)	30 (100)
	Christian	-	-	4 (13.3)	13 (43.3)	8 (26.7)	5 (16.7)	-	30 (100)
	Nair	-	-	10 (33.3)	12 (40.0)	8 (26.7)	-	-	30 (100)
	Namboothiri	-	1 (3.3)	8 (26.7)	16 (53.3)	5 (16.7)	-	-	30 (100)
	Tamil Brahmin	-	-	1 (3.3)	9 (30.0)	17 (56.7)	3 (10.0)	-	30 (100)
	Muslim	-	-	3 (20.0)	10 (33.3)	8 (26.7)	9 (30.0)	-	30 (100)
Clothing	Ezhava	30 (100)	-	-	-	-	-	-	30 (100)
	Christian	30 (100)	-	-	-	-	-	-	30 (100)
	Nair	30 (100)	-	-	-	-	-	-	30 (100)
	Namboothiri	28 (93.3)	2 (6.7)	-	-	-	-	-	30 (100)
	Tamil Bhramin	30 (100)	-	-	-	-	-	-	30 (100)
	Muslim	26 (86.7)	4 (13.3)	-	-	-	-	-	30 (100)
Transport	Ezhava	29 (96.7)	1 (3.3)	-	-	-	-	-	30 (100)
	Christian	28 (93.3)	2 (6.7)	-	-	-	-	-	30 (100)
	Nair	26 (86.6)	4 (13.3)	-	-	-	-	-	30 (100)
	Namboothiri	27 (90.0)	3 (10.0)	-	-	-	-	-	30 (100)
	Tamil Brahmin	30 (100)	-	-	-	-	-	-	30 (100)
	Muslim	29 (96.7)	1 (3.3)	-	-	-	-	-	30 (100)

Contd.

Table 8. Continued

Item	Groups	<10%	10-19.99%	20.29.99%	30-39.99%	40-49.99%	50-59.99%	≥ 60%	Total
Recreation	Ezhava	30 (100)	-	-	-	-	-	-	30 (100)
	Christian	30 (100)	-	-	-	-	-	-	30 (100)
	Nair	30 (100)	-	-	-	-	-	-	30 (100)
	Namboothiri	30 (100)	-	-	-	-	-	-	30 (100)
	Tamil Brahmin	30 (100)	-	-	-	-	-	-	30 (100)
	Muslim	30 (100)	-	-	-	-	-	-	30 (100)
Shelter	Ezhava	21 (70.0)	9 (30.0)	-	-	-	-	-	30 (100)
	Christian	23 (76.7)	7 (23.3)	-	-	-	-	-	30 (100)
	Nair	25 (83.3)	5 (16.7)	-	-	-	-	-	30 (100)
	Namboothiri	29 (96.7)	-	1 (3.3)	-	-	-	-	30 (100)
	Tamil Brahmin	30 (100)	-	-	-	-	-	-	30 (100)
	Muslim	30 (100)	-	-	-	-	-	-	30 (100)
Education	Ezhava	15 (50.0)	12 (40.0)	3 (10.0)	-	-	-	-	30 (100)
	Christian	18 (60.0)	9 (30.0)	-	3 (10.0)	-	-	-	30 (100)
	Nair	17 (56.7)	10 (33.3)	3 (10.0)	-	-	-	-	30 (100)
	Namboothiri	6 (20.0)	14 (46.7)	3 (10.0)	7 (23.3)	-	-	-	30 (100)
	Tamil Brahmin	7 (23.3)	21 (70.0)	2 (6.7)	-	-	-	-	30 (100)
	Muslim	28 (93.3)	2 (6.7)	-	-	-	-	-	30 (100)
Health	Ezhava	30 (100)	-	-	-	-	-	-	30 (100)
	Christian	30 (100)	-	-	-	-	-	-	30 (100)
	Nair	30 (100)	-	-	-	-	-	-	30 (100)
	Namboothiri	30 (100)	-	-	-	-	-	-	30 (100)
	Tamil Brahmin	30 (100)	-	-	-	-	-	-	30 (100)
	Muslim	30 (100)	-	-	-	-	-	-	30 (100)

Contd.

Table 6. Continued

Item	Groups	<10%	10-19.99%	20.29.99%	30-39.99%	40-49.99%	50-59.99%	≥ 60%	Total
Personal expenses	Ezhava	30 (100)	-	-	-	-	-	-	30 (100)
	Christian	30 (100)	-	-	-	-	-	-	30 (100)
	Nair	30 (100)	-	-	-	-	-	-	30 (100)
	Namboothiri	30 (100)	-	-	-	-	-	-	30 (100)
	Tamil Brahmin	30 (100)	-	-	-	-	-	-	30 (100)
	Muslim	30 (100)	-	-	-	-	-	-	30 (100)
Fuel	Ezhava	29 (96.7)	1 (3.3)	-	-	-	-	-	30 (100)
	Christian	28 (93.3)	2 (6.7)	-	-	-	-	-	30 (100)
	Nair	30 (100)	-	-	-	-	-	-	30 (100)
	Namboothiri	30 (100)	-	-	-	-	-	-	30 (100)
	Tamil Brahmin	30 (100)	-	-	-	-	-	-	30 (100)
	Muslim	30 (100)	-	-	-	-	-	-	30 (100)
Saving	Ezhava	4 (13.3)	6 (20.0)	12 (40.0)	4 (13.3)	2 (6.7)	2 (6.7)	-	30 (100)
	Christian	4 (13.3)	4 (13.3)	15 (50.0)	5 (16.7)	2 (6.7)	-	-	30 (100)
	Nair	5 (16.7)	7 (23.3)	10 (33.33)	4 (13.3)	4 (13.3)	4 (13.4)	-	30 (100)
	Namboothiri	10 (33.3)	9 (30.0)	7 (23.4)	-	3 (10.0)	3 (10.0)	1 (3.3)	30 (100)
	Tamil Brahmin	4 (13.3)	18 (60.0)	7 (23.4)	1 (3.3)	-	-	-	30 (100)
	Muslim	22 (73.3)	2 (6.7)	4 (13.3)	2 (6.7)	-	-	-	30 (100)
Other expenses	Ezhava	15 (50.0)	15 (50.0)	-	-	-	-	-	30 (100)
	Christian	10 (33.3)	20 (66.7)	-	-	-	-	-	30 (100)
	Nair	16 (53.4)	10 (33.3)	4 (13.3)	-	-	-	-	30 (100)
	Namboothiri	18 (60.0)	9 (30.0)	3 (10.0)	-	-	-	-	30 (100)
	Tamil Brahmin	3 (10.0)	27 (90.0)	-	-	-	-	-	30 (100)
	Muslim	7 (23.3)	20 (66.7)	3 (10.0)	-	-	-	-	30 (100)

Number in parenthesis are percentage

From the table, it can be seen that, majority of the families in the different communities had the habit of saving money which varied from 76.7 per cent in the Namboothiri families to 100 per cent among Tamil Brahmin families.

Among the families who saved money most of the families deposited either in banks or in post office. Only a few families deposited money in private chitties.

4.1.10 Type of fuel used by the families

Majority of the families in the Tamil Brahmin (80%) and Christian (53.3%) groups used only LPG gas as the major source of fuel as compared to 30 per cent in Ezhava as well as Namboothiri communities, 40 per cent in Nair and 23.3 per cent in Muslim communities (Table 10). Ordinary chullah was used only by 30 per cent of Muslim, 26.6 per cent of Ezhava, 23.3 per cent Namboothiri, 16.7 per cent of Christian and 10 per cent of Nair communities. Rest of the families used wood, gas or kerosene as the source of fuel for cooking.

4.1.11 Indebtedness of the families

Table 11 furnishes details regarding the indebtedness of the families.

It was observed that majority of the families in the different communities except Muslim did not have any financial liability while 60 per cent of Muslim communities had borrowed money.

The families who had indebtedness, borrowed money either from government or private agencies for the purchase of household articles or for the construction of houses. Only a minority of the families in the Ezhava (11.1%),

Table 9. Saving practices of the families

Particulars	Number of families					
	Ezhava	Christian	Nair	Namboothiri	Tamil Brahmin	Muslim
<u>Habits of saving money</u>						
Yes	26 (86.7)	26 (86.7)	26 (86.7)	23 (76.7)	30 (100)	24 (80.0)
No	4 (13.3)	4 (13.3)	4 (13.3)	7 (23.3)	-	6 (20.0)
Total	30 (100)	30 (100)	30 (100)	30 (100)	30 (100)	30 (100)
<u>Mode of saving</u>						
Post office	8 (30.8)	4 (15.4)	4 (15.4)	2 (8.7)	5 (16.7)	13 (54.2)
Bank	8 (30.8)	6 (23.1)	8 (30.8)	9 (39.1)	15 (50.0)	7 (29.2)
Chitty	-	2 (7.7)	2 (7.7)	-	-	4 (16.6)
Post office and Bank	3 (11.5)	4 (15.4)	2 (7.7)	8 (34.8)	-	-
Post office, Bank and chitty	-	1 (3.8)	1 (3.8)	4 (17.4)	-	-
Bank and chitty	7 (26.9)	4 (15.4)	4 (15.4)	-	-	-
Post office and chitty	-	5 (19.2)	5 (19.2)	-	10 (33.3)	-
Total	26 (100)	26 (100)	26 (100)	23 (100)	30 (100)	24 (100)

Number in parenthesis are percentage

Table 10. Details of type of fuel used by the families

Type of fuel	Number of families					
	Ezhava	Christian	Nair	Namboothiri	Tamil Brahmin	Muslim
Gas	9 (30.0)	16 (53.3)	12 (40.0)	9 (30.0)	24 (80.0)	7 (23.4)
Wood	8 (26.7)	5 (16.7)	3 (10.0)	7 (23.3)	-	9 (30.0)
Wood and gas	10 (33.3)	7 (23.3)	13 (43.3)	13 (43.4)	4 (13.3)	12 (40.0)
Kerosene, wood and gas	-	2 (6.7)	2 (6.7)	1 (3.3)	2 (6.7)	1 (3.3)
Kerosene and wood	3 (10.0)	-	-	-	-	1 (3.3)
Total	30 (100)	30 (100)	30 (100)	30 (100)	30 (100)	30 (100)

Number in parenthesis are percentage

Table 11. Details of indebtedness of the families

Particulars	Number of families					
	Ezhava	Christian	Nair	Namboothiri	Tamil Brahmin	Muslim
<u>Loan taken</u>						
Yes	9 (30.0)	10 (33.3)	10 (33.3)	8 (26.7)	10 (33.3)	18 (60.0)
No	21 (70.0)	20 (66.7)	20 (66.7)	22 (73.3)	20 (66.7)	12 (40.0)
Total	30 (100)	30 (100)	30 (100)	30 (100)	30 (100)	30 (100)
<u>Source of loan</u>						
Government agencies	4 (44.5)	6 (60.0)	7 (70.0)	4 (50.0)	7 (70.0)	5 (27.8)
Private agencies	5 (55.5)	4 (40.0)	3 (30.0)	4 (50.0)	3 (30.0)	13 (72.2)
Total	9(100)	10(100)	10(100)	8(100)	10(100)	18(100)

Number in parenthesis are percentage

Christian (30%) and Tamil Brahmin (10%) borrowed money for educational purposes.

4.1.12 Social participation of the respondents

From the survey it was found that all the respondents in Tamil Brahmin group were members of 'Brahmana Samooham' where as most of the respondents in the Ezhava (93.3%), Muslim (83.3%), Nair (76.7%), Namboothiri (73.3%) and Christian (56.7%) communities were not members of any of the social organizations (Table 12).

All the respondents in the Muslim communities who were members of social organization attended the meetings conducted by the organization regularly while only 50 per cent, 61.5 per cent, 42.9 per cent and 37.5 per cent of Ezhava, Christian, Nair and Namboothiri groups respectively attended the meetings regularly.

4.1.13 Source of general information

Majority of the Nair families (80%) obtained different informations mainly from their friends, neighbours and relatives and from different media like newspaper, radio, television, cinema etc. as compared to 56.6 per cent in Ezhava group, 46.7 per cent in the Christian group, 60 per cent in the Namboothiri group, 43.3 per cent in the Tamil Brahmin group, and 40 per cent in the Muslim group (Table 13).

About 50 per cent and 60 per cent of Tamil Brahmins and Muslims obtained information's only from their friends, relatives and neighbours.

Table 12. Details on social participation of the respondents

Details	Number of respondents					
	Ezhava	Christian	Nair	Namboothiri	Tamil Brahmin	Muslim
Member of Mahila Samajam	1 (3.3)	2 (6.7)	6 (20.0)	3 (10.0)	-	-
Co-operative Society	1 (3.3)	-	1 (3.3)	3 (10.0)	-	-
Brahmina Samooham	-	-	-	2 (6.7)	30(100)	-
Others (Catholic Family Unit, Jesus Club etc.)	-	11 (36.6)	-	-	-	5 (16.7)
No membership	28 (93.4)	17 (56.7)	23 (76.7)	22 (73.3)	-	25 (83.3)
Total	30 (100)	30 (100)	30 (100)	30 (100)	30 (100)	30 (100)
<u>Frequency of attending</u>						
Always	1 (50.0)	8 (61.5)	3 (42.9)	3 (37.5)	-	5 (100)
Sometime	1 (50.0)	5 (38.5)	4 (57.1)	5 (62.5)	24 (80.0)	-
Never	-	-	-	-	6 (20.00)	-
Total	2 (100)	13 (100)	7 (100)	8 (100)	30 (100)	5 (100)

Number in parenthesis are percentage

Table 13. Source of information to the families

Source of information	Number of families					
	Ezhava	Christian	Nair	Namboothiri	Tamil Brahmin	Muslim
Friends, relatives and neighbours	11 (36.7)	9 (30.0)	4 (13.3)	8 (26.7)	15 (50.0)	18 (60.0)
Friends, relatives and neighbours and different media	17 (56.6)	14 (46.7)	24 (80.0)	18 (60.0)	13 (43.3)	12 (40.0)
Friends, relatives and neighbours, different media	2 (6.7)	7 (23.3)	2 (6.7)	4 (13.3)	2 (6.7)	-
Total	30 (100)	30 (100)	30 (100)	30 (100)	30 (100)	30 (100)

Number in parenthesis are percentage

4.2 Dietary pattern of the families

Dietary pattern of the selected families was assessed with respect to the food habits, meal pattern, frequency of use of various foods, food preference, purchase of prepared food, foods specially prepared for different age groups and physiological conditions, use of traditional foods during social and religious functions, diseased conditions and improvement of health, traditional storage and processing methods adopted and details of different household implements used to prepare traditional foods.

4.2.1 Food habits of the families

All the families in Ezhava, Christian, Nair and Muslim communities were found to be non-vegetarians, while all the Namboothiri and Tamil Brahmin families were vegetarians. The details are presented in Table 14.

4.2.2 Meal pattern

Table 15 furnishes details on number of meals per day, number of times cooking is done, decision taken with respect to the menu and equality in food distribution.

It is clear that all the Ezhava, Christian, Nair, Namboothiri and Muslim families took three major meals in a day while 86.7 per cent of Tamil Brahmin families consumed four major meals in a day.

It was found that majority of the families in the six communities selected for the study cooked twice and more than two times in a day. Only 20 per cent 13.3 per cent, 26.7 per cent of the Ezhava, Christian and Muslim families respectively cooked only once in a day.

Table 14. Food habits of the families

Food habits	Number of families					
	Ezhava	Christian	Nair	Namboothiri	Tamil Brahmin	Muslim
Vegetarian	-	-	-	30 (100)	30 (100)	-
Non Vegetarian	30 (100)	30 (100)	30 (100)	-	-	30 (100)
Total	30 (100)	30 (100)	30 (100)	30 (100)	30 (100)	30 (100)

Number in parenthesis are percentage

In majority of the families the menu selection was done by the respondent itself while few families in the different communities gave preference for their children's likes and dislikes for selecting the menu.

In majority of families of different communities cooking was done by the respondents themselves while in few households cooking was done by the daughters or servants.

Equality in food distribution was observed in majority of households in the Ezhava (90%), Christian (100%), Nair (83.3%), Namboothiri (73.3%), Tamil Brahmin (66.7%) and Muslim (80%) communities. Among those families where there was inequality in the distribution of foods, it was seen that they gave preference for the elder and male members of the family.

Statistical analysis revealed that number of meals consumed in a day ($\chi^2 = 28.53$), number of time of cooking meals ($\chi^2 = 24.27$) and equality in food distribution ($\chi^2 = 12.18$) dependent upon the communities while the number of meals cooked daily and decision of menu selection were found to be independent of the communities.

4.2.3 Frequency of use of different food items

The details of frequency of use of various food items by the different communities are presented in Table 16.

All families in the six communities included cereals, other vegetables, milk and milk products, fats and oils, sugar and spices and condiments in their daily diet.

Table 15. Details of meal Pattern

Particulars	Number of families					
	Ezhava	Christian	Nair	Namboothiri	Tamil Brahmin	Muslim
<u>Number of meals per day</u>						
Two major meal	-	-	-	-	-	-
Three major meal	30 (100.0)	30 (100.0)	30 (100.0)	30 (100.0)	4 (13.3)	30 (100.0)
Four major meal	-	-	-	-	26 (86.7)	-
Total $\chi^2 = 28.53^{**}$	30 (100)	30 (100)	30 (100)	30 (100)	30 (100)	30 (100)
<u>Number of times cooking is done</u>						
Once	6 (20.0)	4 (13.3)	-	-	-	8 (26.7)
Twice	14 (46.7)	20 (66.7)	16 (53.3)	12 (40.0)	-	14 (46.6)
Thrice	10 (33.3)	6 (20.0)	14 (46.7)	18 (60.0)	16 (53.3)	8 (26.7)
More than three times	-	-	-	-	14 (46.7)	-
Total $\chi^2 = 24.27^{**}$	30 (100)	30 (100)	30 (100)	30 (100)	30 (100)	30 (100)
<u>Decision on menu plan</u>						
Spouse						
Children	5 (16.7)	8 (26.7)	6 (20.0)	4 (13.3)	0.0	4 (13.3)
Respondents	25 (83.3)	22 (73.3)	24 (80.0)	26 (86.7)	30 (100.0)	26 (86.7)
Total $\chi^2 = 7.14^{NS}$	30 (100)	30 (100)	30 (100)	30 (100)	30 (100)	30 (100)
<u>Person who cook meal</u>						
Respondents	26 (86.7)	23 (76.7)	22 (73.3)	29 (96.7)	26 (86.7)	28 (93.3)
Children	4 (13.3)	4 (13.3)	8 (26.7)	1 (3.3)	4 (13.3)	2 (6.7)
Servant	-	3 (10.0)	-	-	-	-
Total $\chi^2 = 8.58^{NS}$	30 (100)	30 (100)	30 (100)	30 (100)	30 (100)	30 (100)
<u>Equality in food distribution</u>						
Equal food distribution	27 (90.0)	30 (100.0)	25 (83.3)	22 (73.3)	20 (66.7)	24 (80.0)
Unequal food distribution	3 (10.0)	0.0	5 (16.7)	8 (26.7)	10 (33.3)	6 (20.0)
Total $\chi^2 = 12.18^*$	30 (100)	30 (100)	30 (100)	30 (100)	30 (100)	30 (100)

Number in parenthesis are percentage;

* Significant at 5 per cent level;

** Significant at 1 per cent level;

NS - Non-significant

Pulses were included in the daily diet only by Tamil Brahmin group. Most of the Namboothiri (73.3%), Nair (66.7%), and Christian (60%) families included pulses twice in a week.

Among the six communities studied 46.7 per cent, 53.3 per cent, 26.7 per cent and 46.7 per cent of the Ezhava, Christian, Nair and Muslim families included green leafy vegetables occasionally in the diet while rest of the families in these four communities and all families in the Namboothiri and Tamil Brahmin communities included green leafy vegetables once, twice or thrice in a week.

Majority of the families in all communities consumed roots and tubers on a weekly basis. Among these 73.4 per cent Namboothiri families and 80 per cent of Tamil Brahmin families included roots and tubers weekly twice and 53.3 per cent Christian and 40 per cent Muslim families included once in a week.

Only very few families in Ezhava (3.3%), Christian (10%) and Tamil Brahmin (40%) communities used fruits mainly banana in their daily diet. About 70 per cent of Christian families, 43.3 per cent of Nair families and 40 per cent of Namboothiri families used fruits thrice in a week.

Majority of Ezhava (86.7%) and Nair (73.3%) families consumed meat occasionally while 33.3 per cent and 46.7 per cent Christian families consumed meat twice and thrice in a week respectively.

Only 26.7 per cent of Ezhava and 16.7 per cent of Christian families included fish daily while other families in these two communities and most of the Nair and Muslim families also included fish on a weekly basis.

Table 16. Frequency of use of different food items

Food items	Group	Daily	Weekly four	Weekly thrice	Weekly twice	Weekly once	Occasionally	Never	Total
Cereals	Ezhava	30 (100)							30 (100)
	Christian	30 (100)							30 (100)
	Nair	30 (100)							30 (100)
	Namboothiri	30 (100)							30 (100)
	Tamil Brahmins	30 (100)							30 (100)
	Muslim	30 (100)							30 (100)
Pulses	Ezhava	-	7 (23.3)	13 (43.4)	10 (33.3)	-	-	-	30 (100)
	Christian	-	-	3 (10.0)	18 (60.0)	9 (30.0)	-	-	30 (100)
	Nair	-	-	6 (20.0)	20 (66.7)	4 (13.3)	-	-	30 (100)
	Namboothiri	-	-	-	22 (73.3)	8 (26.7)	-	-	30 (100)
	Tamil Brahmins	30 (100)	-	-	-	-	-	-	30 (100)
	Muslim	-	1 (3.3)	9 (30.0)	13 (43.4)	7 (23.3)	-	-	30 (100)
Green leafy vegetables	Ezhava	-	-	-	3 (10.0)	13 (43.4)	14 (46.7)	-	30 (100)
	Christian	-	-	-	2 (6.7)	12 (40.0)	16 (53.3)	-	30 (100)
	Nair	-	-	8 (26.7)	10 (33.3)	4 (13.4)	8 (26.7)	-	30 (100)
	Namboothiri	-	-	4 (13.3)	16 (53.3)	10 (33.3)	-	-	30 (100)
	Tamil Brahmins	-	-	2 (6.7)	21 (70.0)	7 (23.3)	-	-	30 (100)
	Muslim	-	-	-	2 (6.6)	14 (46.7)	14 (46.7)	-	30 (100)
Roots and tubers	Ezhava	-	-	10 (33.3)	10 (33.3)	3 (10.0)	7 (23.4)	-	30 (100)
	Christian	-	-	2 (6.7)	6 (20.0)	16 (53.3)	6 (20.0)	-	30 (100)
	Nair	-	-	3 (10.0)	12 (40.0)	11 (36.7)	4 (13.3)	-	30 (100)
	Namboothiri	-	-	4 (13.3)	22 (73.4)	4 (13.3)	-	-	30 (100)
	Tamil Brahmins	-	-	-	24 (80.0)	6 (20.0)	-	-	30 (100)
	Muslim	-	2 (6.67)	3 (10.0)	6 (20.0)	12 (40.0)	7 (23.3)	-	30 (100)
Other vegetables	Ezhava	30 (100)							30 (100)
	Christian	30 (100)							30 (100)
	Nair	30 (100)							30 (100)
	Namboothiri	30 (100)							30 (100)
	Tamil Brahmins	30 (100)							30 (100)
	Muslim	30 (100)							30 (100)

Contd.

Table 16. Continued

Food items	Group	Daily	Weekly four	Weekly thrice	Weekly twice	Weekly once	Occasionally	Never	Total
Fruits	Ezhava	1 (3.3)	2 (6.7)	2 (6.7)	4 (13.3)	21 (70.0)			30 (100)
	Christian	3 (10.0)	-	21 (70.0)	1 (3.3)	5 (16.7)			30 (100)
	Nair	-	14 (46.7)	13 (43.3)	1 (3.3)	2 (6.7)			30 (100)
	Namboothiri	-	-	12 (40.0)	13 (43.3)	5 (16.7)			30 (100)
	Tamil Brahmins	12 (40.0)	6 (20.0)	4 (13.3)	3 (10.0)	5 (16.7)			30 (100)
	Muslim	-	12 (40.0)	4 (13.3)	3 (10.0)	11 (36.7)			30 (100)
Milk	Ezhava	30 (100)							30 (100)
	Christian	30 (100)							30 (100)
	Nair	30 (100)							30 (100)
	Namboothiri	30 (100)							30 (100)
	Tamil Brahmins	30 (100)							30 (100)
	Muslim	30 (100)							30 (100)
Meat	Ezhava		-	-	-	4 (13.3)	26 (86.7)	-	-
	Christian		4 (13.3)	14 (46.7)	10 (33.3)	2 (6.7)	-	-	-
	Nair		-	-	-	8 (26.7)	22 (73.3)	-	-
	Namboothiri		-	-	-	-	-	30 (100)	30 (100)
	Tamil Brahmins		-	-	-	-	-	30 (100)	30 (100)
	Muslim	9 (30.0)	-	2 (6.7)	5 (16.6)	12 (40.0)	2 (6.7)	-	30 (100)
Fish	Ezhava	8 (26.7)	10 (33.3)	4 (13.3)	2 (6.7)	4 (13.3)	2 (6.7)	-	30 (100)
	Christian	5 (16.6)	3 (10.0)	12 (40.0)	8 (26.7)	2 (6.7)	-	-	30 (100)
	Nair	-	-	6 (20.0)	10 (33.3)	9 (30.0)	5 (16.7)	-	30 (100)
	Namboothiri	-	-	-	-	-	-	30 (100)	30 (100)
	Tamil Brahmins	-	-	-	-	-	-	30 (100)	30 (100)
	Muslim	-	14 (46.7)	13 (43.3)	3 (10.0)	-	-	-	30 (100)
Egg	Ezhava	1 (3.3)	-	1 (3.3)	4 (13.3)	22 (73.4)	2 (6.7)	-	30 (100)
	Christian	3 (10.0)	4 (13.3)	14 (46.7)	7 (23.3)	2 (6.7)	-	-	30 (100)
	Nair	-	-	10 (33.4)	12 (40.0)	4 (13.3)	4 (13.3)	-	30 (100)
	Namboothiri	-	-	-	-	-	-	30 (100)	30 (100)
	Tamil Brahmins	-	-	-	-	-	-	30 (100)	30 (100)
	Muslim	3 (10.0)	16 (53.3)	6 (20.0)	2 (6.7)	1 (3.3)	2 (6.7)	-	30 (100)

Contd.

Table 16. Continued

Food items	Group	Daily	Weekly four	Weekly thrice	Weekly twice	Weekly once	Occasionally	Never	Total
Fats and oil	Ezhava	30 (100)							30 (100)
	Christian	30 (100)							30 (100)
	Nair	30 (100)							30 (100)
	Namboothiri	30 (100)							30 (100)
	Tamil Brahmins	30 (100)							30 (100)
	Muslim	30 (100)							30 (100)
Sugar	Ezhava	30 (100)							30 (100)
	Christian	30 (100)							30 (100)
	Nair	30 (100)							30 (100)
	Namboothiri	30 (100)							30 (100)
	Tamil Brahmins	30 (100)							30 (100)
	Muslim	30 (100)							30 (100)
Jaggery	Ezhava		-	-	-	-	30 (100)		30 (100)
	Christian		-	-	-	-	30 (100)		30 (100)
	Nair		-	-	-	-	30 (100)		30 (100)
	Namboothiri		-	-	-	-	30 (100)		30 (100)
	Tamil Brahmins		16 (53.3)	12 (40.0)	2 (6.7)	-	-		30 (100)
	Muslim		-	-	-	8 (26.7)	22 (73.3)		30 (100)
Spices and condiments	Ezhava	30 (100)							30 (100)
	Christian	30 (100)							30 (100)
	Nair	30 (100)							30 (100)
	Namboothiri	30 (100)							30 (100)
	Tamil Brahmins	30 (100)							30 (100)
	Muslim	30 (100)							30 (100)

Number in parenthesis are percentage

Majority of the Ezhava, Christian, Nair and Muslim families consumed egg on a weekly basis while 3.3 per cent Ezhava and 10 per cent Christian as well as Muslim families included this item in their daily diet.

None of the Tamil Brahmin and Namboothiri families included meat, fish or egg in their diet.

All the families from Ezhava, Christian, Nair and Namboothiri families and 73.3 per cent Muslim families included Jaggery occasionally while Tamil Brahmin families included this item on a weekly basis.

Chi-square test revealed that frequency of use of fruits ($\chi^2 = 99.94$), meat ($\chi^2 = 9.51$), fish ($\chi^2 = 49.02$) and egg ($\chi^2 = 91.76$) among different families dependent upon the community.

The frequency of use of different food stuffs among the selected families of six communities was assessed by the formula suggested by Reaburn *et al.* (1979) (Appendix VI) and the percentage score is presented in Table 17.

The results indicated that the maximum score of 100 per cent was obtained for different food items like cereals, other vegetables, milk and milk products, fats and oils, sugar and spices and condiments among all the six communities.

The food frequency scores varied from 45.55 to 100 per cent for pulses and 43.30 to 76.11 per cent for fruits. For roots and tubers and green leafy

vegetables the scores obtained for six communities were found to be below 50 per cent.

In the case of egg, Muslim families scored the highest score of 73.33 per cent as compared to Christian (66.11%), Nair (48.88%) and Ezhava (37.77%) communities, while Christian families scored the highest (55.55%) for meat as compared to Ezhava, Nair and Muslim groups. Ezhava and Muslim families scored the highest score (72.22%) for the use of fish.

Based on the frequency scores obtained for different food items, the foods were classified into three groups viz., most frequently used (% score above 75%) medium frequently used (% score 50 to 75%) and less frequently used (% score below 50% and never used).

The results (Table 18) indicated that cereals, other vegetables, milk and milk products, fats and oils, sugar and spices and condiments were the most frequently used food items in all the six communities. Pulses, fruits and jaggery were used most frequently by Tamil Brahmin families. Pulses were used medium frequently by Ezhava, Nair and Muslim communities. Fish was used moderately by Ezhava, Christian and Muslim communities while green leafy vegetables was used less frequently by all communities. Except Namboothiri families all the other five communities used roots and tubers less frequently.

4.2.4 Purchase of prepared foods

The frequency of purchase of prepared food items by the different communities was ascertained and the details are presented in Table 19.

Table 18. Frequency of use of food items

Frequency of use	Ezhava	Christian	Nair	Namboothiri	Tamil Brahmin	Muslim
Most frequently used	cereals, other vegetables, fats & oils, milk and milk products, sugar and spice & condiments	cereals, other vegetables, milk and milk products, fats and oils, sugar & spices and condiments	cereals, other vegetables, milk and milk products, fats and oils, sugar and spices and condiments	cereals, other vegetables, milk and milk products, fats and oils, sugar & spices and condiments	cereals, pulses, other vegetables, fruits, milk and milk products, fats and oils, sugar & jaggery and spices and condiments	cereals, other vegetables, milk and milk products, fats and oils, sugar & spices and condiments
Medium frequently used	pulses, fish	fruits, egg, meat, fish	pulses, fruits	roots and tubers, fruits	-	pulses, fruits, egg, fish
Less frequently used	roots & tubers, fruits, egg, green leafy vegetables, meat, jaggery	pulses, green leafy vegetables, roots and tubers, jaggery	green leafy vegetables, roots and tubers, egg, meat, fish, jaggery	pulses, green leafy vegetables, jaggery	green leafy vegetables, roots and tubers	green leafy vegetables, roots & tubers, meat and jaggery
Never used				Egg, Fish, Meat	Egg, Fish, Meat	

Table 19. Purchase of prepared foods

Details	Number of families					
	Ezhava	Christian	Nair	Namboothiri	Tamil Brahmin	Muslim
Purchased prepared foods	10 (33.3)	18 (60.0)	8 (26.7)	8 (26.7)	4 (13.3)	14 (46.7)
Do not purchase	20 (66.7)	12 (40.0)	22 (73.3)	22 (73.3)	26 (86.7)	16 (53.3)
Total	30 (100)	30 (100)	30 (100)	30 (100)	30 (100)	30 (100)
<u>Type of foods purchased</u>						
Vegetarians	6 (60.0)	10 (55.6)	6 (75.0)	8 (100)	4 (100)	9 (64.3)
Both (vegetarian & non vegetarian)	4 (40.0)	8 (44.4)	2 (25.0)	-	-	5 (35.7)
Total	10 (100)	18 (100)	8 (100)	8 (100)	4 (100)	14 (100)
<u>Frequency of purchase</u>						
Weekly	-	4 (22.2)	2 (25.0)	-	-	4 (28.6)
Occasionally	10 (100)	14 (77.8)	6 (75.0)	8 (100)	4 (100)	10 (71.4)
Total	10 (100)	18 (100)	8 (100)	8 (100)	4 (100)	14 (100)
<u>Place of purchase</u>						
Fast food centre	8 (80.0)	-	4 (50.0)	-	-	10 (71.4)
Supermarket and hotels	2 (20.0)	12 (66.7)	4 (50.0)	-	-	4 (28.6)
Bakery and supermarket	-	-	-	8 (100)	4 (100)	-
Hostels and bakery	-	6 (33.3)	-	-	-	-
Total	10 (100)	18 (100)	8 (100)	8 (100)	4 (100)	14 (100)

Number in parenthesis are percentage

Majority of the families in Ezhava (66.7%), Nair (73.3%), Namboothiri (73.3%) and Tamil Brahmin (86.7%) communities did not purchase any prepared foods from outside while 60 per cent of the Christian families and 46.7 per cent of Muslim families used to purchase prepared foods from outside.

All families who purchased food from outside in the Tamil Brahmin and Namboothiri families and most of the Ezhava, Christian, Nair and Muslim families used to purchase only vegetarian items like masala dosa, vada etc., while rest of the families purchased both vegetarian and non vegetarian items like, biriyani, chicken fry, meat cutlet etc. Majority of these families purchased different items occasionally mainly from hotels, super market and bakery.

Chi-square test revealed that purchase of prepared foods from outside is dependent upon community ($\chi^2 = 18.21$).

4.2.5 Preparation of modern food stuffs

From Table 20 it is clear that the Christian (83.3%), Nair (60%), Ezhava (50%), Namboothiri (40%), Tamil Brahmin (46.7%) and Muslim (26.7%) families used to prepare modern food items like noodles, corn flakes etc. occasionally at home while rest of the families in the different communities did not prepare such items.

Chi-square test revealed that preparation of modern food stuffs among different families is dependent upon the community ($\chi^2 = 22.32$).

4.2.6 Foods given during different stages of life

Details regarding the types of foods given during different age groups and special conditions are presented in Table 21.

Table 20. Details of preparation of modern foods

Details	Number of families					
	Ezhava	Christian	Nair	Namboothiri	Tamil Brahmin	Muslim
Prepare modern foods at home	15 (50.0)	25 (83.3)	18 (60.0)	12 (40.0)	14 (46.7)	8 (26.7)
Do not prepare modern food stuff	15 (50.0)	5 (16.7)	12 (40.0)	18 (60.0)	16 (53.3)	22 (73.3)
Total $\chi^2 = 22.32^{**}$	30 (100)	30 (100)	30 (100)	30 (100)	30 (100)	30 (100)

Number in parenthesis are percentage

** Significant at 1 per cent level

From the table it is clear that none of the families in the six communities prepared any special foods for children and adolescents and they preferred to give adult foods for them.

For the pre-school children also majority of the families in the Christian (66.7%), Nair (73.3%), Namboothiri (73.3%) and Tamil Brahmin (50.0%) communities gave adult foods without adding spices and condiments while 66.7 per cent of Ezhava and 53.3 per cent Muslim families gave the same adult food for pre-school children.

During pregnancy special foods were prepared by 86.7 per cent of Tamil Brahmin, 66.7 per cent of Nair, 60 per cent of Christian, 60 per cent of Namboothiri, 53.3 per cent of Muslim and 43.3 per cent of Ezhava families; while rest of them gave usual food prepared in the home for pregnant women.

During lactation also 66.7 per cent Muslim, 63.3 per cent of Tamil Brahmin, 56.7 per cent of Namboothiri, 46.7 per cent of Ezhava, 40 per cent of Christian and 33.3 per cent of Nair families prepared special food items while rest of the families gave the usual family food for lactating women.

Chi-square test revealed that special foods given to pre-school children ($\chi^2 = 15.88$) and pregnant women ($\chi^2 = 13.46$) are dependent upon the communities while the foods given to lactating women is independent of the community.

4.2.7 Preservation of foods

The preservation practices and purchase of processed foods adopted by the different communities (Table 22) revealed that 53.3 per cent to 93.3 per cent of

Table 21. Details of foods given during different stages of life

Details	Number of families					
	Ezhava	Christian	Nair	Namboothiri	Tamil Brahmin	Muslim
Pre-school age						
Adult food	20 (66.7)	10 (33.3)	8 (26.7)	8 (26.7)	12 (40.0)	16 (53.3)
Bland adult food	10 (33.3)	20 (66.7)	22 (73.3)	22 (73.3)	18 (50.0)	14 (46.3)
Total $\chi^2 = 15.88^{**}$	30 (100)	30 (100)	30 (100)	30 (100)	30 (100)	30 (100)
School age and adolescents						
Adult food	30 (100)	30 (100)	30 (100)	30 (100)	30 (100)	30 (100)
Total	30 (100)	30 (100)	30 (100)	30 (100)	30 (100)	30 (100)
Pregnancy						
Usual food	17 (56.7)	12 (40.0)	10 (33.3)	12 (40.0)	4 (13.3)	14 (46.7)
Special food	13 (43.3)	18 (60.0)	20 (66.7)	18 (60.0)	26 (86.7)	16 (53.3)
Total $\chi^2 = 13.46^*$	30 (100)	30 (100)	30 (100)	30 (100)	30 (100)	30 (100)
Lactation						
Usual food	16 (53.3)	18 (60.0)	20 (66.7)	13 (43.3)	11 (36.7)	10 (33.3)
Special food	14 (46.7)	12 (40.0)	10 (33.3)	17 (56.7)	19 (63.3)	20 (66.7)
Total $\chi^2 = 10.58^{NS}$	30 (100)	30 (100)	30 (100)	30 (100)	30 (100)	30 (100)

Number in parenthesis are percentage

* Significant at 5 per cent level

** Significant at 1 per cent level

NS - Non significant

the families in the different communities used to preserve various food items like pickles and vattals at home and this included 53.3 per cent in Christian and Muslim families, 60 per cent in Ezhava and Namboothiri families, 66.7 per cent Nair and 93.3 per cent Tamil Brahmin families.

With respect to the purchase of processed foods from outside it was found that 73.3 per cent Christian and 63.3 per cent Nair families used to purchase various processed food items while majority of Tamil Brahmin (86.7%), Ezhava (63.3%) and Namboothiri (66.7%) families did not purchase any preserved foods from outside.

Chi-square test revealed that preservation practices adopted ($\chi^2 = 14.74$) and the purchase of processed foods ($\chi^2 = 28.75$) from outside dependent upon the different communities.

Regarding the storage of foods, majority of families in all communities stored different food grains in different containers. Only very few families adopted some traditional practices and methods while storing food grains.

4.3 Position of traditional foods in the dietary pattern of families

Traditional food habits and practices of the families of different communities were assessed with respect to the frequency of use of traditional foods, preference given by the family members to traditional foods, cooking devices used to prepare traditional foods, use of traditional foods during specific occasion, improvement of health, physiological condition, purchase of ready made traditional foods and instant mixes to prepare traditional foods, modifications given to prepare traditional foods, practices of giving foods to religious places,

Table 22. Food preservation practices of the families

Details	Number of families					
	Ezhava	Christian	Nair	Namboothiri	Tamil Brahmin	Muslim
Preservation of foods at home						
Yes	18 (60.0)	16 (53.3)	20 (66.7)	18 (60.0)	28 (93.3)	16 (53.3)
No	12 (40.0)	14 (46.7)	10 (33.3)	12 (40.0)	2 (6.7)	14 (46.7)
Total $\chi^2 = 14.74^*$	30 (100)	30 (100)	30 (100)	30 (100)	30 (100)	30 (100)
Purchase of processed foods						
Yes	11 (36.7)	22 (73.3)	19 (63.3)	10 (33.3)	4 (13.3)	15 (50.0)
No	19 (63.3)	8 (26.7)	11 (36.7)	20 (66.7)	26 (86.7)	15 (50.0)
Total $\chi^2 = 28.75^*$	30 (100)	30 (100)	30 (100)	30 (100)	30 (100)	30 (100)
Method of preservation						
Drying	1 (5.6)	-	-	2 (11.1)	-	-
Pickling	16 (88.8)	14 (87.5)	16 (80.0)	14 (77.8)	4 (14.3)	16 (100)
Others	1 (5.6)	2 (12.5)	4 (20.0)	2 (11.1)	-	-
Drying as well as pickling	-	-	-	-	24 (85.7)	-
Total	18 (100)	16 (100)	20 (100)	18 (100)	28 (100)	16 (100)

Number in parenthesis are percentage

* Significant at 5 per cent level

traditional preservation methods and traditional kitchen equipments/utensils used by the families. The results are given in Tables from 23 to 30.

4.3.1 Frequency of use of traditional foods

Frequency of use of traditional foods by the families of different communities is presented in Table 23.

It was found that all the different communities prepared various traditional food items one to four times per week for breakfast. Among this 53.3 per cent of Tamil Brahmin families prepared traditional breakfast items four times in a week. About 83.4 per cent and 86.7 per cent and 70 per cent of the Nair, Namboothiri and Muslim families respectively prepared traditional breakfast items two or three times in a week, while 73.4 per cent and 63.3 per cent of Ezhava and Christian families respectively prepared these items, once or twice in a week.

All the Christian, Tamil Brahmin and Muslim families used to prepare their respective traditional food items for lunch daily while only 46.7 per cent, 60 per cent and 73.3 per cent of the Ezhava, Nair and Namboothiri families were in the habit of preparing traditional items for lunch daily. Rest of the families in these three communities prepared traditional items for lunch either thrice or four times in a week.

Statistical analysis revealed that frequency of use of various traditional food items during breakfast ($\chi^2 = 60.89$) and lunch ($\chi^2 = 19.03$) among different families are dependent upon community.

All the Tamil Brahmin families used to prepare traditional items for evening tea while most of the families in the other communities like Ezhava

Table 23. Frequency of use of traditional foods

Food items	Group	Daily	Weekly Four	Weekly thrice	Weekly twice	Weekly once	Occasionally	Never	Total
Break fast	Ezhava	-	4 (13.3)	4 (13.3)	13 (43.4)	9 (30.0)	-	-	30 (100)
	Christian	-	6 (20.0)	5 (16.7)	9 (30.0)	10 (33.3)	-	-	30 (100)
	Nair	-	4 (13.3)	13 (43.4)	12 (40.0)	1 (3.3)	-	-	30 (100)
	Namboothiri	-	-	14 (46.7)	12 (40.0)	4 (13.3)	-	-	30 (100)
	Tamil Brahmin	-	16 (53.3)	8 (26.7)	6 (20.0)	-	-	-	30 (100)
	Muslim	-	-	5 (16.7)	16 (53.3)	9 (30.0)	-	-	30 (100)
Lunch	Ezhava	14 (46.7)	16 (53.3)	-	-	-	-	-	30 (100)
	Christian	30 (100.0)	-	-	-	-	-	-	30 (100)
	Nair	18 (60.0)	8 (26.7)	4 (13.3)	-	-	-	-	30 (100)
	Namboothiri	22 (73.3)	8 (26.7)	-	-	-	-	-	30 (100)
	Tamil Brahmin	30 (100.0)	-	-	-	-	-	-	30 (100)
	Muslim	30 (100.0)	-	-	-	-	-	-	30 (100)
Evening tea	Ezhava	-	-	-	-	2 (6.7)	28 (93.3)	-	30 (100)
	Christian	-	-	-	-	3 (10.0)	27 (90.0)	-	30 (100)
	Nair	-	-	-	-	-	30 (100.0)	-	30 (100)
	Namboothiri	-	-	-	-	-	30 (100.0)	-	30 (100)
	Tamil Brahmin	30 (100)	-	-	-	-	-	-	30 (100)
	Muslim	-	-	-	-	-	30 (100.0)	-	30 (100)
Dinner	Ezhava	25 (83.3)	5 (16.7)	-	-	-	-	-	30 (100)
	Christian	26 (86.7)	4 (13.3)	-	-	-	-	-	30 (100)
	Nair	23 (76.7)	5 (16.7)	2 (6.6)	-	-	-	-	30 (100)
	Namboothiri	27 (90.0)	3 (10.0)	-	-	-	-	-	30 (100)
	Tamil Brahmin	30 (100.0)	-	-	-	-	-	-	30 (100)
	Muslim	30 (100.0)	-	-	-	-	-	-	30 (100)

Number in parenthesis are percentage

(93.3%), Christian (90%), Nair (100%), Namboothiri (100%) and Muslim (100%) communities prepared traditional snack items for evening tea only occasionally, while few families in the Ezhava and Christian communities prepared snack items once in a week.

Majority of families in all communities namely Ezhava (83.3%), Christian (86.7%), Nair (76.7%), Namboothiri (90%), Tamil Brahmin (100%) and Muslim (100%) communities used traditional foods daily for dinner.

4.3.2 Preference given by family members to traditional foods

Table 24 furnishes the details with respect to the preference given to traditional food items by the families of different communities.

Most of the families in the six communities studied gave preference to traditional food items. All the Tamil Brahmin families gave preference to various traditional food items while in other communities it varied from 73.3 per cent in Nair families to 86.7 per cent in Christian and Muslim families each.

It was also found that the families preferred traditional food items mainly due to its taste, nutritious nature, harmlessness and also to include variety in their menu.

Chi-square test revealed that preference towards the intake of traditional foods among different families are independent of the communities ($\chi^2 = 7.82$).

4.3.3 Cooking device used to prepare traditional foods

When the details of the cooking devices used to prepare traditional food items by the families of different communities was ascertained (Table 24), it was found that most of the families in the three communities namely Ezhava (66.7%),

Table 24. Preference given to traditional foods and cooking devices to prepare traditional foods

Details	Number of families					
	Ezhava	Christian	Nair	Namboothiri	Tamil Brahmin	Muslim
<u>Preference for traditional foods</u>						
Preferred	23 (76.7)	26 (86.7)	22 (73.3)	25 (83.3)	30 (100.0)	26 (86.7)
Not preferred	7 (23.3)	4 (13.3)	8 (26.7)	5 (16.7)	-	4 (13.3)
Total $\chi^2 = 7.82^{NS}$	30 (100)	30 (100)	30 (100)	30 (100)	30 (100)	30 (100)
<u>Reasons for preference</u>						
Most tasty and nutritious	6 (26.1)	10 (38.5)	8 (36.4)	9 (36.0)	18 (60.0)	14 (53.9)
Harmless	10 (43.5)	11 (43.3)	10 (45.5)	14 (56.0)	10 (33.3)	10 (38.5)
Change and variety	7 (30.4)	5 (19.2)	4 (18.1)	2 (8.0)	2 (6.7)	2 (7.6)
Total	23 (100)	26 (100)	22 (100)	25 (100)	30 (100)	26 (100)
<u>Preferred cooking device</u>						
Ordinary hearth	20 (66.7)	15 (50.0)	24 (80.0)	26 (86.7)	5 (16.7)	8 (26.7)
Other cooking devices	-	4 (13.3)	2 (6.7)	4 (13.3)	15 (30.0)	2 (6.7)
Both	10 (33.3)	11 (36.7)	4 (13.3)	-	10 (33.3)	20 (66.7)
Total $\chi^2 = 74.67^{**}$	30 (100)	30 (100)	30 (100)	30 (100)	30 (100)	30 (100)

Number in parenthesis are percentage

** Significant at 1 per cent level

NS – Non significant

Nair (80%) and Namboothiris (86.7%) preferred ordinary hearth while ordinary hearth was used only by 50 per cent, 16.7 per cent and 26.7 per cent of Christian, Tamil Brahmin and Muslim families respectively. Rest of the families in the different communities preferred other cooking devices mainly LPG gas or both ordinary hearth and LPG gas to prepare traditional food items.

Chi-square test revealed that preference towards the kind of cooking device used to prepare traditional foods among different families are dependent of the communities ($\chi^2 = 74.67$).

4.3.4 Time and purpose of use of traditional foods

Most of the families in the various communities studied did not prepare traditional foods during certain months of the year (Table 25). Only few families in Christian (3.3%), Namboothiri (3.3%), Ezhava (6.7%), Muslim (6.7%), Nair (6.7%) and in Tamil Brahmin (26.7%) communities prepared and consumed some traditional foods like Pathila curry, Uluva kanchi, Pal kanchi, Marunnu kanchi etc. during specific months.

Chi-square test revealed that use of traditional foods during specific month among families are independent of the communities ($\chi^2 = 7.84$).

Most of the families in the various communities studied did not use any traditional foods for the improvement of general health (Table 25). About 40 per cent Ezhava, 13.3 per cent Christian, 26.7 per cent Nair, 33.3 per cent Namboothiri, 16.7 per cent Tamil Brahmin and 30 per cent Muslim families

Table 25. Time and purpose of use of traditional foods

Details	Number of families					
	Ezhava	Christian	Nair	Namboothiri	Tamil Brahmin	Muslim
Time of use						
Always	2 (6.7)	1 (3.3)	2 (6.7)	1 (3.3)	8 (26.7)	2 (6.7)
Never	28 (93.3)	29 (96.7)	28 (93.3)	29 (96.7)	22 (73.3)	28 (93.3)
Total $\chi^2 = 7.8409^{NS}$	30 (100)	30 (100)	30 (100)	30 (100)	30 (100)	30 (100)
Purpose						
General health						
Yes	12 (40.0)	4 (13.3)	8 (26.7)	10 (33.3)	5 (16.7)	9 (30.0)
No	18 (60.0)	26 (86.7)	22 (73.3)	20 (66.7)	25 (83.3)	21 (70.0)
Total $\chi^2 = 14.54^*$	30 (100)	30 (100)	30 (100)	30 (100)	30 (100)	30 (100)
As medicines						
Yes	16 (53.3)	9 (30.0)	14 (46.7)	8 (26.7)	4 (13.3)	22 (73.3)
No	14 (46.7)	21 (70.0)	16 (53.3)	22 (73.3)	26 (86.7)	8 (26.7)
Total $\chi^2 = 28.87^{NS}$	30 (100)	30 (100)	30 (100)	30 (100)	30 (100)	30 (100)
Frequency of preparation						
Monthly	-	-	-	-	-	-
Yearly	-	-	-	-	-	-
Occasionally	16 (100.0)	9 (100.0)	14 (100.0)	8 (100.0)	4 (100.0)	22 (100.0)
Awareness about the nutritional advantages of traditional foods						
Yes	4 (13.3)	8 (26.7)	9 (30.0)	10 (33.3)	11 (36.7)	6 (20.0)
No	26 (86.7)	22 (73.3)	21 (70.0)	20 (66.7)	19 (63.3)	24 (80.0)
Total $\chi^2 = 5.79^{NS}$	30 (100)	30 (100)	30 (100)	30 (100)	30 (100)	30 (100)

Number in parenthesis are percentage

* Significant at 5 per cent level

NS - Non significant

prepared various traditional food items like rasayanam, leham and soups for the improvement of health.

Chi-square test revealed that the preparation of traditional health foods among different families are dependent of the community ($\chi^2 = 14.54$).

From Table 25 it is clear that only few families in the Ezhava (53.3%), Christian (30%), Nair (46.7%), Namboothiri (26.7%) and Tamil Brahmin (13.3%) communities were in the habit of preparing various traditional medicines at home while 73.3 per cent of the Muslim families prepared these medicines at home itself.

Preparation of traditional medicines was found to be independent of the community ($\chi^2 = 28.87$).

It is clear from Table 25 that majority of the respondents in all the six communities were unaware about the nutritional importance of the traditional foods. Only few families in Ezhava (13.3%), Christian (26.7%), Nair (30.3%), Namboothiri (33.3%), Tamil Brahmin (36.7%) and Muslim (20%) communities had some awareness about the nutritional importance of some of the traditional foods consumed by them.

4.3.5 Purchase and use of ready made traditional foods and instant mixes of traditional foods

Table 26 gives the details of purchase of ready made traditional foods and instant mixes available in the market.

Among the families surveyed in the six communities 66.7 per cent Christian and 60 per cent of the Nair families used to purchase ready made traditional food items like unniappam, achappam, vattayappam, unda, vellappam

Table 26. Details of purchase and use of traditional food-items and instant mixes

Details	Number of families					
	Ezhava	Christian	Nair	Namboothiri	Tamil Brahmin	Muslim
Purchase of ready made traditional foods						
Yes	10 (33.3)	20 (66.7)	18 (60.0)	12 (40.0)	-	14 (46.7)
No	20 (66.7)	10 (33.3)	12 (40.0)	18 (60.0)	30 (100)	16 (53.3)
Total $\chi^2 = 31.96^{**}$	30 (100)	30 (100)	30 (100)	30 (100)	30 (100)	30 (100)
Frequency of use						
Daily	-	-	-	-	-	-
Weekly	-	2 (10.0)	-	-	-	-
Monthly	4 (40.0)	8 (40.0)	4 (22.2)	-	-	8 (57.1)
Occasionally	6 (60.0)	10 (50.0)	14 (77.8)	12 (100)	-	6 (42.9)
Total	10 (100)	20 (100)	18 (100)	12 (100)	0	14 (100)
Purchase of instant mixes to prepare traditional foods						
Yes	13 (43.3)	15 (50.0)	13 (43.3)	10 (33.3)	4 (13.3)	12 (40.0)
No	17 (56.7)	15 (50.0)	17 (56.7)	20 (66.7)	26 (86.7)	18 (60.0)
Total $\chi^2 = 8.10^{NS}$	30 (100)	30 (100)	30 (100)	30 (100)	30 (100)	30 (100)
Frequency of use						
Daily	-	-	-	-	-	-
Weekly	6 (46.1)	8 (53.4)	7 (53.8)	4 (40.0)	1 (25.0)	2 (16.7)
Monthly	4 (30.8)	2 (13.3)	3 (23.1)	2 (20.0)	1 (25.0)	6 (50.0)
Occasionally	3 (23.1)	5 (33.3)	3 (23.1)	4 (40.0)	2 (50.0)	4 (33.3)
Total	13 (100)	15 (100)	13 (100)	10 (100)	4 (100)	12 (100)

Number in parenthesis are percentage

** Significant at 1 per cent level

NS – Non-significant

etc. occasionally while none of the Tamil Brahmin families used to purchase these items from the market. Very few families in Ezhava (33.3%), Namboothiri (40%) and Muslim (46.7%) communities were also in the habit of purchasing ready made traditional foods available in the market.

Regarding the purchase of instant mixes to prepare traditional foods also most of the families in the Namboothiri (66.7%), Tamil Brahmin (86.7%) and Muslim (60%) communities did not purchase instant mixes to prepare traditional food items. The families who purchased instant mixes like pittu podi, iddli mix, iddiyappa podi, vellayappam mix, dosa mix etc. used to purchase only occasionally.

Statistical analysis of the data revealed that the purchase of ready made traditional foods among the families is dependent of the communities ($\chi^2 = 31.96$) while the use of instant mixes to prepare traditional foods is independent of the communities ($\chi^2 = 8.10$).

4.3.6 Modification made by the families to prepare traditional foods

Details on modifications made to prepare traditional food items by the various communities are presented in Table 27.

From the table it is clear that about 66.7 per cent (Ezhava), 73.3 per cent (Christian), 56.7 per cent (Nair), 43.3 per cent (Namboothiri) and 53.3 per cent (Muslim) families made certain modifications by using instant mixes like rasam powder, sambar powder, chicken and fish masala, spice mixes and drops etc. while preparing the traditional food items, while 80 per cent of Tamil Brahmin families did not make any modifications to prepare traditional foods.

Table 27. Modifications made in traditional food preparation

Details	Number of families					
	Ezhava	Christian	Nair	Namboothiri	Tamil Brahmin	Muslim
Modification made	20 (66.7)	22 (73.3)	17 (56.7)	13 (43.3)	6 (20.0)	16 (53.3)
Not modified	10 (33.3)	8 (26.7)	13 (43.3)	17 (56.7)	24 (80.0)	14 (46.7)
Total $\chi^2 = 21.22^{**}$	30 (100)	30 (100)	30 (100)	30 (100)	30 (100)	30 (100)

Number in parenthesis are percentage

** Significant at 1 per cent level

Table 28. Details of giving food to religious places

Details	Number of families					
	Ezhava	Christian	Nair	Namboothiri	Tamil Brahmin	Muslim
Giving foods to temple/church/ mosque						
Yes	-	8 (26.7)	-	-	-	22 (73.3)
No	30 (100)	22 (73.3)	30 (100)	30 (100)	30 (100)	8 (26.7)
Total	30 (100)	30 (100)	30 (100)	30 (100)	30 (100)	30 (100)
Prepare these foods in home						
Yes	-	8 (100)	-	-	-	22 (100)
No	-	-	-	-	-	-
Total	-	8 (100)	-	-	-	22 (100)

Number in parenthesis are percentage

Statistical interpretation of data revealed that modifications made to prepare traditional foods among the different families are dependent on the communities ($\chi^2 = 21.23$).

4.3.7 Details of giving food to religious places

It is clear from Table 28 that only very few Christian (26.7%) families and 73.3 per cent Muslim families prepared certain traditional foods to give to church or mosque. The Christian families who gave traditional foods to church prepared vattayappam, inderiyappam, pachoru, achappam, unniyappam etc. while the Muslims gave neichoru, biriyani, pathiri, egg curry etc. None of the families in the other four communities gave food to temples.

4.3.8 Possession of traditional kitchen equipments and utensils

Details regarding the traditional household kitchen equipments and utensils owned by the families of different communities are presented in Table 29.

Majority of the families in the Ezhava (73.3%), Nair (80%), Namboothiri (86.7%), Tamil Brahmin (85.3%) and Muslim (80%) communities possessed various traditional kitchen equipments like ammi, ural, ulakka, etc. in the households while only 53.3 per cent Christian families possessed various traditional equipments.

Though, majority of the families in the different communities possessed various traditional kitchen equipments, only very few families used these equipments regularly while majority never used the traditional equipments.

Table 29. Details regarding the possession of traditional kitchen equipments and utensils

Details	Number of families					
	Ezhava	Christian	Nair	Namboothiri	Tamil Brahmin	Muslim
Possession of traditional kitchen equipments						
Yes	22 (73.3)	16 (53.3)	24 (80.0)	26 (86.7)	25 (85.3)	24 (80.0)
No	8 (26.7)	14 (46.7)	6 (20.0)	4 (13.3)	5 (16.7)	6 (20.0)
Total $\chi^2 = 11.89^*$	30 (100)	30 (100)	30 (100)	30 (100)	30 (100)	30 (100)
Frequency of use						
Daily	2 (9.1)	-	2 (8.3)	2 (7.7)	4 (16.0)	2 (8.3)
Weekly	-	-	-	-	-	-
Monthly	-	-	-	-	-	-
Occasionally	3 (13.6)	1 (6.2)	3 (12.5)	3 (11.5)	4 (16.0)	3 (12.5)
Never	17 (77.3)	15 (93.8)	19 (79.2)	21 (80.8)	17 (68.0)	19 (79.2)
Total $\chi^2 = 4.58^{NS}$	22 (100)	16 (100)	24 (100)	26 (100)	25 (100)	24 (100)
Possession of traditional kitchen utensils						
Yes	10 (33.3)	8 (26.7)	20 (66.7)	22 (73.3)	12 (40.0)	8 (26.7)
No	20 (66.7)	22 (73.3)	10 (33.3)	8 (26.7)	18 (60.0)	22 (73.3)
Total $\chi^2 = 25.56^{**}$	30 (100)	30 (100)	30 (100)	30 (100)	30 (100)	30 (100)

Number in parenthesis are percentage

** Significant at 1 per cent level

* Significant at 5 per cent level

Regarding the possession of various kitchen utensils like, bharani, earthenware pots, uruli, kinnam, coconut shell ladle, kalchatti etc., majority of the Ezhava (66.7%), Christian (73.3%), Tamil Brahmin (60%) and Muslim (73.3%) families did not have any traditional kitchen utensils in their house.

Chi-square test revealed that ownership of traditional kitchen equipments ($\chi^2 = 11.89$) and traditional kitchen utensils among the families are dependent upon the community ($\chi^2 = 25.56$).

4.3.9 Rituals, vrathas and fasts observed by the families

Details of rituals observed by the families of various communities before taking meals (Table 30) indicated that 60 per cent of Tamil Brahmin families followed certain rituals like sprinkling of water around the food and offering to Lord Ganapathi or Agni before taking food. This custom was observed only by 6.7 per cent of Ezhava, 10 per cent of Nair and 40 per cent of Namboothiri families. None of the Christian and Muslim families observed rituals before consuming food.

Chi-square test revealed that following rituals among the families are dependent on the communities ($\chi^2 = 28.38$).

All the Muslim families observed fasts (Table 30) during Ramzan month while this type of vrathas or fasts were observed only by 60 per cent of Christian, 53.3 per cent of Tamil Brahmin and 46.7 per cent of Namboothiri families. Most of the Ezhava and Nair families did not observe any fasts or vrathas during specific days.

Table 30. Details of following rituals, vrathas and fasts

Details	Number of families					
	Ezhava	Christian	Nair	Namboothiri	Tamil Brahmin	Muslim
Observed rituals						
Yes	2 (6.7)	-	3 (10.0)	12 (40.0)	18 (60.0)	-
No	28 (93.3)	30 (100)	27 (90.0)	18 (60.0)	12 (40.0)	30 (100.0)
Total $\chi^2 = 28.38^{**}$	30 (100)	30 (100)	30 (100)	30 (100)	30 (100)	30 (100)
Observe vrathas or fasts						
Yes	6 (20.0)	18 (60.0)	8 (26.7)	14 (46.7)	16 (53.3)	30 (100)
No	24 (80.0)	12 (40.0)	22 (73.3)	16 (53.3)	14 (46.7)	-
Total $\chi^2 = 45.89^{**}$	30 (100)	30 (100)	30 (100)	30 (100)	30 (100)	30 (100)

Number in parenthesis are percentage

** Significant at 1 per cent level

Chi-square test revealed that observing vrathas or fasts among the respondents are dependent upon communities ($\chi^2 = 45.89$).

4.4 Traditional food practices followed by older generation of different communities

Different traditional practices followed by the older generation of the different communities with respect to food were ascertained by obtaining information regarding the foods prepared during different special occasions like naming and cradling ceremony of new born, annaprasana ceremony, upanayanam, thirandukuli, marriage, pregnancy, lactation, death, festivals like Onam, Vishu, Thiruvathira, Karthika, Deepavali, Vinayaka Chathurthi, Christmas, Easter, Ramzan, Idul Fither, foods prepared during specific months, during fast, vrathas and rituals and the traditional kitchenwares and utensils used.

It was found that the respondents who are the elder member of the family above the age of 45 years were aware of the various practices detailed above and none of the families belonging to various communities followed all these practices. The practices described by the respondents are discussed in chapter 5.

4.5 KAP on traditional foods among younger generation

The mean scores obtained by the younger generation aged 18-35 years on knowledge, attitude and practice with respect to traditional foods are presented in Table 31.

Table 31. Mean score obtained in KAP test

Test	Mean	Minimum	Maximum
Knowledge	59.00	10.00	100.00
Attitude	77.56	60.00	96.92
Practice	24.12	3.44	68.96

The score obtained in knowledge test varied from 10-100 with a mean score of 59. With respect to the attitude on traditional foods among younger generation the respondents received a minimum score of 60 and a maximum score of 96.92. The mean score was found to be 77.56. The score obtained for practice on traditional foods varied from 3.44 to 68.96 with a mean score of 24.12.

Table 32. Results of regression analysis on KAP on traditional foods

Variable	Regression coefficient	Student 'T' value
Knowledge	1.1353e-001	1.159
Attitude	6.2296e-001	2.323*

Intercept = -30.889; $R^2 = 0.118$; F value = 3.13*

*Significant at 5 per cent level

To study the influence of knowledge and attitude on practice, multiple regression analysis was carried out taking practice as dependent variable and knowledge and attitude as independent variables. The results are given in Table 32. The coefficient of determination ($R^2 = 0.118$) indicating that only 11.8 per cent of the total variation is explained by the independent variables. However the independent variable attitude contributes significantly towards the practice on traditional food.

Simple correlation analysis also carried out and it showed that there was no significant correlation ($r = 0.127^{NS}$) between knowledge and practice. There was a significant positive correlation ($r = 0.304^*$) between attitude and practice.

Discussion

5. DISCUSSION

The present study was carried to find out the traditional food habits of six communities of Thrissur District namely Ezhava, Christian, Nair, Namboothiri, Tamil Brahmin and Muslim. Thirty samples from each community were selected and the informations were collected from the eldest female member of the family. To find out the awareness of traditional foods among the younger generation Knowledge, Attitude and Practice (KAP) on traditional foods were conducted among women below the age group of 35 years. This chapter presents a critical discussion on the major findings and the details are presented under the following headings:

5.1. Socio-economic status of the families

5.2. Dietary pattern of the families

5.3. Traditional food habits of different communities

5.4. Documentation of traditional practices followed by the older generation in different communities

5.5. KAP on traditional foods among younger generation

5.1 Socio-economic status of the families

Joint family system prevalent in premodern society in our country has disintegrated and due to modernization, people are finding it more preferable to establish independent nuclear type families than joint families. Urbanization and changes in social values might have also led to this situation in the family structure of modern society.

In the present study also most of the families in the five communities namely Nair, Christian, Muslim, Namboothiri and Tamil Brahmin and 50 per cent of Ezhava followed nuclear family system. Similar type of families were also found in studies conducted among the families of different socio-economic strata in Kerala (Cherian, 1992; Jose, 1998 and Devi, 2000). Nuclear type families was found to be better than joint families in the improvement of health and development (Saxena, 1986).

In Kerala, unlike other states small family norm has become very popular mainly because of better educational facilities, availability of medical facilities and the constant exposure of public to small family norm through different medias. A small family norm was reported among various groups like farm families (Cherian, 1992; Udaya, 1996), agricultural labourer families (Shyna, 1996) and tribal families (Kattakayam, 1983; Thomas, 1989 and Indira, 1993). However, in the present study, the families of different communities had up to six members and the average family size varied from 3.9 for Tamil Brahmin to 5.2 for Christian communities. The larger family size observed among the families of different communities in the present study may be due to the selective identification of the families to collect the data on traditional food habits in which all the informations were gathered from the eldest female member of the family of above forty five years of age.

Literacy is an important demographic characteristic which is an indicator of the level of advancement of the people. Education is considered to be a catalyst of change, and it's role in the process of national development cannot be

over emphasized (Manorama year book, 1996). The present study revealed that majority of respondents in different communities were educated, eventhough there is difference in the level of education in the different communities. The result was supported by the Census of India (2001) which ranked Kerala as the most literate state with a higher literacy rate of 90.92 per cent (Manorama Year Book, 2001).

About 20-40 per cent of the respondents in different communities were working either in Government or private sectors, which provided an additional income to the families.

The economic status of the families belonging to Muslim, Christian and Nair communities revealed that about 53 to 63 per cent had a monthly income ranging from Rs.2000 to 6000 while in Tamil Brahmin community majority (90%) had a monthly income of above Rs.6000 per month. In contrast to this Karuna (1993) and Verma (1996) reported a mean monthly income of below Rs.3000 among the fish vending families of Thiruvananthapuram district and casual labourers of farm families in Thrissur district respectively.

Land is one of the chief determinants of the resource position of the families. Land is a means of livelihood for the families and it serves as a security when loans are taken and above all ownership of land is a matter of social status for the families. Though, most of the Nair and Namboothiri families were big land lords in the past, due to land reform act and land sealing act they had to surrender their land either to the Government or to the 'kudikidappukar'. The present study also indicated that Nair and Namboodiri families as well as the families of other

communities possessed land upto 100 cents, while most of the Tamil Brahmin families were found to be landless.

Though, domestication of animals is an alternative source of income for the families none of the Tamil Brahmin families and most of the families of other five communities reared domestic animals at home.

Eventhough the items cultivated in the kitchen garden will supplement the food in our daily diet most of the families in the different communities did not possess any kitchen garden in their house holds.

Monthly expenditure pattern of the families of different communities indicated that in most of the families upto 60 per cent of the income was incurred for the purchase of food items. Various studies conducted in different parts of Kerala have also found similar trends in monthly expenditure pattern (Usha *et al.*, 1990; Cherian, 1992; Augustine, 1993; Indira, 1993; Karuna, 1993; Seshadrinath, 1993; Jose, 1998 and Devi, 2000).

As per the general trend observed, Keralities are more concerned on the education of their children. In the present study also next to food, most of the families in the various communities spent money for education. Varghese (1989) also indicated that people of upper income strata spent more money for education.

The tendency of 'hand to mouth' existence was not seen among any of the communities studied. Instead, most of the families had the habit of saving money for future needs.

The study also indicated that less than 20 per cent of the monthly income was spent on clothing, health, recreation, personal expenditure, transport as

well as shelter. Almost same expenditure pattern was reported by Usha *et al.* (1990), Augustine (1993), Karuna (1993), Rai and Sarup (1995) and Devi (2000) in their studies conducted among different segments of population in Kerala.

The families in the different communities except the Muslims were able to make both ends meet with what they earned and indebtedness was not a curse to the families. The few families who had indebtedness borrowed money to meet the unavoidable necessities like construction of the house, education of children, or to purchase indispensable household items, since there was no other alternative to meet such requirements.

Though different women's organizations, voluntary agencies and non governmental organizations are coming up in our state and people especially in the upper income strata are fond of taking membership in such organizations, in the present study it was observed that majority of the respondents in the different communities except Tamil Brahmins had not taken any membership in social organizations. Though, all the families of Tamil Brahmin community were members of Brahmana Samooham - one of their important religious organizations, they rarely attended the regular meetings convened by this organization.

5.2 Dietary pattern of the families

The dietary pattern of the families of different communities indicated that except Tamil Brahmin and Namboothiri families, the families belonging to other communities were non-vegetarians. The communities who were purely vegetarians included milk and milk products like butter, ghee, lassi etc. in their diet. Among the communities who consumed non-vegetarian foods also certain

types of meat were forbidden. Due to the sacred character given to the cow by Hindus they did not include this item in their diet. According to Steward and Amerine (1982) avoidance of pork by Muslims was considered as Muhammed Nabis desire so as to distinguish his followers from pork eating Christians.

Meal pattern of a family is usually influenced by the availability of food, economic resources, geographic region, religion, community and family practices developed over several generations (Mudambi and Rajagopal, 1991). In the present study it was observed that all the Ezhava, Christian, Nair, Namboothiri and Muslim families used to have three major meals daily. However, majority of Tamil Brahmins used to have four major meals. Three major meal a day followed generally by Keralites have been reported by Cherian (1992); Augustine (1993); Jayanthakumari (1993); Jose (1998) and Devi (2000). Tamil Brahmins used to consume four major meals, which included rice at 8 am, 12 noon and 8 pm and tiffin consisting of traditional preparations like iddli, seva or dosa at 2 pm.

Most of the families in the communities selected for the study cooked food two or more than two times in a day. Decision making power with respect to the selection of food and menu was entrusted with the eldest female member of the family who cook the food. However, it was observed that few families of the different communities gave importance for the preference of their children also while deciding the daily menu.

Inequality in the distribution of food is one of the reasons for malnutrition especially among the women of the family who usually cook all the foods required for all the family members and eat whatever is available after giving

to the other members of the family. Usha *et al.* (1990) and Cherian (1992) reported that most of the families in Kerala gave preference to the head of the family while serving the food. However, in the present study it was interesting to note that in the families selected for the study, equality in food distribution was seen among majority of families of different communities.

An analysis of the frequency of use of various food items by the families of different communities indicated that irrespective of the communities all families included cereals, other vegetables, milk and milk products, fats and oils, sugar and spices and condiments in their daily diet. All families used milk in their daily diet especially to prepare coffee, tea or curd.

Among the Namboothiri and Tamil Brahmin families curd is an indispensable item in their diet. Pulses, an important protein rich item especially in a vegetarian diet was consumed by the Tamil Brahmin families daily while all other communities included pulses upto three times in a week.

Vegetables, especially green leafy vegetables and roots and tubers which are rich sources of micronutrients were included on a weekly basis by the families of different communities.

Though, all the families in the different communities except Namboothiri and Tamil Brahmins were habitually non-vegetarians majority of the families included non-vegetarian items like fish, meat and egg in their diet on a weekly basis. However, among Christian, Muslim and Ezhava families the frequency of use of these items was found to be higher than in the Nair families. The findings of the study indicated that the frequency of use of foods like fruits,

meat, fish, roots and tubers and egg depend on the communities selected for the study. The frequency score with respect to the use of foods revealed that the most frequently used items in all six communities were cereals, other vegetables, milk and milk products, fats and oils, sugar and spices and condiments. Augustine (1993) also reported similar findings among families of women in unorganized sector. Tamil Brahmin families used pulses, fruits and jaggery most frequently and these items might be meeting the required protein in their diet. Pulses were included to a moderate extent by the families of Ezhava, Nair and Muslim communities while jaggery was found to be the least frequently used item in other five communities. Fish was found to be a medium frequently used item among Ezhava, Christian, Nair and Muslim communities. Thus, the pulses and non-vegetarian items might be supplying the required protein in their diet. Green leafy vegetables and roots and tubers were used less frequently by all the communities selected for the study. This is in line with the findings of Karuna (1993); Jose (1998) and Devi (2000) who reported the decreased consumption of green leafy vegetables by Keralites.

With the changing life style observed among the Keralites the tendency of eating from hotels and fast food restaurants is becoming a common practice and fashion especially among the middle and upper income strata. Aiyar (2001) has reported the drawbacks and disadvantages of eating foods from outside which led to various food borne diseases and health hazards.

However, in the present study it was found that out of the six communities majority of the families in the Ezhava (66.7%), Nair (73.3%),

Namboothiri (73.3%) and Tamil Brahmin (86.7%) groups did not purchase prepared food items from outside while 60 per cent of Christian families and 46.7 per cent of Muslim families used to purchase prepared foods from outside especially the vegetarian foods like masala dosa, vada etc.

Rapid urbanization and improved socio-economic conditions had brought about changes in the life styles of the families and this has brought a slow and sustained infiltration of Western style in indigenous food habits. Roy (2001) also observed that these changes forced people to give up their traditional food habits of consuming unrefined natural sources and to include high saturated fat containing processed foods leading to various health hazards.

From the present study, it can be seen that majority of the Christian and Nair families and some of the families in other communities prepared some modern food stuffs especially ready to eat foods like noodles and cornflakes at home for children and youngsters. Studies conducted by Khanai (1991) also supported this finding and reported that noodles replaced the traditional dhal bhat and other products. Due to decreased nutritional value of these processed food items, CFTRI warns the excess consumption of such foods which may lead to malnutrition. Preetha (2001) had indicated the importance of original Indian diet consisting of pulses, fresh green leafy vegetables, simple lean meat or fish and lots of fish than the over fried, processed and refined items prevalent in the Western diet. In this study also it was seen that some families prepared Western dishes like pizza, chilli chicken, chicken manjuria once in a while especially during special

occasions. The preparations of modern foods among the families depend on the communities selected for the study.

An indepth study of the foods given during various stages of life indicated that all families prepared weaning foods while some families purchased commercial weaning foods available in the market. Pre-school children consumed adult diet, though the flavour was made bland by some of the families. No special food was given to school going children and adolescents. Bhatt and Dahiya (1985) also reported that majority of the pre-school children in India received only ordinary home diet and their diet was deficient in many nutrients especially protective nutrients like vitamins and minerals. Usha *et al.* (1990) and Jayanthakumari (1993) also reported similar findings among pre-school children of Kerala. Special foods were given to pregnant and lactating women by majority of Muslim, Tamil Brahmin and Namboothiri families.

The present study revealed that 53.3 per cent to 93.3 per cent of the families in the different communities preserved fruits and vegetables at home either by preparing pickles or vattals. Only very few families of Nair and Namboothiri families processed Jack fruits and banana in the form of Chakkavaratty/banana varatty respectively.

The present study indicated that majority of families in the Christian (73.3%) and Nair (63.3%) families used to purchase various processed foods like pickles, jam, jelly, squash etc. while majority of Tamil Brahmin and Ezhava families did not purchase any processed food from the market.

5.3 Traditional food habits of different communities

Indian are enjoying the benefits of modern food consumerism due to greater affluence and increasing influence from both the west and other parts of the world. On the other hand they are reluctant to go off the traditions and food cultures that make up their identity (Rangya, 2001). According to one estimate, the consumption of traditional food in India is more than 30 times the quantity of processed Western style foods like bread, biscuit, jam, ice-cream, soft drinks, chocolates, confectionary and several junk foods (Rao, 2000). Similar to these reports in the present study also it was seen that majority of the families are still preparing and using traditional foods in their diet. Traditional breakfast preparations like iddli, dosa, pittu, noolpittu, pathal, appam, uppuma, pathiri, vellayappam were prepared upto four times in a week by majority of families in the different communities selected for the study.

Majority of the families in the six communities used to prepare their respective traditional dishes like sambar, aviyal, kalan, morucurry, different types of chammanthies, olan, pickles, jack fruit curry, vattals, meat ularthiathu and fish vattichatthu for lunch and dinner. However, only the Tamil Brahmin families prepared various traditional snack items like masaladosa, seva, laddu, appam etc. and other communities prepared items like ada, unda, vada, avalosunda, unniappam once in a while. The frequency of use of traditional food items for breakfast and lunch dependent upon the community.

Substantial differences in food preparations among rural and urban residents were observed by Chuming and Chen (1999) in which families residing

in rural areas tend to consume the basic traditional diet while richer urban residents tend to consume more fast foods and processed foods.

Thus, the present study indicated that majority of families in the six communities gave preference to consume traditional foods. Even though modernization is seen in all parts of the world, man like to maintain his tradition, especially in the matter of food. A study conducted by KSA Technopark also showed that overwhelming majority of Indian consumers prefer to take traditional Indian meals rather than Western food if given a choice (Indian Food Industry, 2001). The emerging demand for ethnic food is also reported in United Kingdom (Meal-Demand-Trends, 1998) largely due to high penetration of ethnic foods in households.

Majority of the families in the different communities preferred to take traditional foods mainly to include variety in their diet, its harmless nature, or due to its high palatability. Though, most of the respondents were unaware about the nutritional significance of traditional foods, it was found that very few families in all the communities gave importance for the nutrient content of the traditional foods.

The items of foods interested to the families varied upon the likes and dislikes, culture, region and their community. Some of the foods which are liked in common by the different communities included unniappam, vada, ada, dosa, pittu, curries like sambar, olan, aviyal and kalan for Hindus; achappam, vellayappam, fish and meat curries for Christians and pathiri, fish and meat preparations, biriyani and naichoru for Muslims.

Most of the families in Ezhava, Nair and Namboothiri communities preferred ordinary domestic hearth to prepare traditional foods rather than the modern cooking devices like LPG stove, electricity, microwave oven etc. The respondents had opined that the particular taste and flavour of traditional dishes will come only when it is cooked in a traditional way. However most of the families in other communities like, Muslim, Christian and Tamil Brahmin preferred either LPG stove or LPG stove and ordinary hearth.

Only very few families in different communities prepared some special foods during specific month.

Local health traditions have become a part of our culture and evolved through many years of experience in the inhabited ecosystem. Most of these traditions are specific to each locality or community. In the present study it was seen that only very few families in the six communities used some traditional food for the improvement of health. This may be due to the difficulty experienced by the family members in preparing the traditional health foods and the availability of ready made health foods in the market.

Regarding the traditional medicinal preparations used for different diseased conditions and physiological stages, it was seen that, Muslim (73.3%), Christian (30%), Nair (46.7%), Namboothiri (26.7%), Ezhava (53.3%) and Tamil Brahmin (13.3%) are still preparing various medicines in their house especially after delivery. It was found that these practices were more common in the families where the children were living with their grand parents.

Ready made traditional foods of different kinds are available in the market now a days. Among the different communities studied majority of the Christian and Nair families used to purchase the traditional foods available in the market, while the families belonging to Tamil Brahmin communities never purchased these items probably may be due to their reluctance in using the foods prepared by other communities and the foods prepared from outside. It was also seen that Tamil Brahmin families used to prepare traditional foods at home also.

Traditional processed and ready to cook foods like, puttupodi, iddlimix, iddiyappam mix, vellayappam mix, dosa mix etc. have been introduced in the market by various small scale industries. These foods are really a boon for the working women. Though, these foods are available in the market the families in the present study used to purchase these items occasionally and they prepared the traditional food items in their house itself.

Apart from the cooking methods, the recipes of traditional dishes including the way of cooking, selection and quantity of ingredients used, type of vessels and fuel have changed considerably over the years with changing trends in taste and awareness about physical fitness.

In the present study also, it was found that majority of families in Ezhava, Christian, Nair, and Muslim communities made certain modifications while preparing traditional foods, whereas majority of the Tamil Brahmin families still followed the traditional methods to prepare their traditional dishes. Though, most of the curry powder like rasam powder, sambar powder, chicken, fish and egg masalas, spice mixes and spice drops are available in the market majority of the

housewives in the different communities purchased these items due to lack of time to prepare such items and also the preparation of these items are found to be laborious and time consuming. At the same time some of our traditional dishes like sambar, rasam, pittu, vellayappam, iddli, dosa, were found to be very popular among the families, though certain modifications in the preparation has been made by the present generation.

During ancient times among Muslim and Christian communities there was a custom of giving prepared foods to church or mosque. Among Christian and Muslim families it is said that the first item of any produce either animal or vegetable foods should be given to church/mosque. However, in the present study it was seen that only very few Christian families followed this tradition while majority of Muslim families gave prepared foods like pathiri and egg curry, naichoru, biriyani etc. to mosque.

Kitchen is a central part of women's life but the time they spend in the kitchen has reduced remarkably over the years. Today due to the multifaceted roles played women as housewife, mother and a member of the workforce, they spend very little time in the kitchen and use different types of labour saving devices, easy to cook and ready made foods and even purchase cooked foods from outside. This may be the main reason for the negligence of our traditional equipments like ammi, ural, attukal etc. by the housewives. Thus, these traditional utensils have become decorative items in most of the families.



The present study also revealed that eventhough, majority of families in different communities possessed various traditional kitchen equipments only very few families used these items daily.

In the case of traditional utensils also majority of the families in Ezhava, Christian, Tamil Brahmin and Muslim communities did not have such utensils, while majority of the Nair and Namboothiri families possessed traditional utensils like earthenware pots, bharani etc. at home, which are their ancestral collections. Only few families used these items daily to prepare various dishes.

Present study revealed that all the respondents in the Muslim communities, 60 per cent of the Christian, 53.3 per cent of Tamil Brahmin and 46.7 per cent of Namboothiri families observed some vrathas or fasts. But most of the families in Ezhava and Nair families did not observe any fasts or vrathas.

It was observed that 60 per cent of Tamil Brahmin, 40 per cent of Namboothiri and few families in Ezhava and Nair communities followed some of the rituals like sprinkling of water around the food and giving food to Lord Ganapathi. Few families in Nair, Ezhava and Namboothiri communities mentioned the habit of offering food to Lord Ganapathi only during special occasions like annaprasana, marriage, birthday and upanayanam. Other few families in Nair and Ezhava communities mentioned giving food to Agni when they prepare payasam or any other special foods at home. Some families in Ezhava group still maintained the habit of keeping food for their forefathers when they prepare special foods or during the day of '*Karkitaka vavu*'.

5.4 Documentation of traditional practices followed by the older generation in different communities

During 'jathaka karma' of a newborn baby Tamil Brahmin used to supply paddy as gift to the downtrodders for the betterment of the child. On the 11th or 27th day during the cradling ceremony of the baby they used to prepare a special dish with a pulse namely 'vella payar' in jaggery syrup. This dish after offering to lord will be supplied to the family members. Tamil Brahmin's believed that consumption of such special dishes offered to God during special occasions like 'jathaka karma' or 'cradling' ceremony will be pure and maintain their spirituality.

During 'cradling' ceremony Tamil Brahmin community used to prepare special item called 'tarappulappam' using rice and jaggery. From the mother's house certain special sweets and savoury items like murukku, laddu, thenkuzhal, maladdu, nelpori, seva, mysore pak, kesari etc. will be brought during special functions like 'upanayanam', 'annaprasana', marriage, pregnancy etc. and these items will be placed in front of the invited guests. Bringing special sweet and savoury items was found to be a custom still followed by majority of the families. During every auspicious occasions like marriage and upanayanam Tamil Brahmins used to keep different food items like plantain, coconut covered with turmeric, sugar, betel leaves and arecanut which is known as 'aradhana thattu' (Plate 1). All the items will be kept in traditional plates made up of brass.

Other communities like Nair, Namboothiri and Ezhava celebrated 'namakarana' ceremony of the child. They used to prepare sadhya and invite close relatives for this function.



Plate 1. Foods in auspicious occasions - Typical traditional 'Aradhana thattu' of Tamil Brahmins

The child's 'annaprasana ceremony' was held on the auspicious day by Nair, Namboothiri, Ezhava and Tamil Brahmin communities when the infant is about six months old. During this day solid food consisting of rice, milk, sugar, honey etc. will be given to the child for the first time. During this auspicious day Namboothiri and Tamil Brahmin communities used to prepare ada and appam with rice flour and jaggery and offer to God. During modern times most of the families of the various communities celebrated 'annaprasana' from temples. During the 'annaprasana' ceremony Namboothiri families used to cook raw rice (3 nazhi) and curries like pulissery, erissery, engithairu and pradhaman. All these items will be kept in an 'uruli'. Finally the sadhya with five to six side dishes and palpayasam will be served by Nair and Namboothiri communities.

Among the Tamil Brahmin community it was found that they used to prepare a special sweet item called 'ammini kozhukatta' on the day when the baby crosses the step of the door for the first time. It is a steamed preparation with a mixture of rice flour, jaggery and coconut scrapings. The dish (like small balls) along with silver coins will be placed on the baby's head and he will be asked to pick it. This custom is conducted either before or after the 'annaprasana' ceremony. However, it was seen that if this is done before 'annaprasana' 'ammini kozhukatta' will be prepared with wheat instead of rice.

For the male child among Tamil Brahmin community there is a custom of shaving the hair when the child is three years old. After shaving the hair completely turmeric paste will be spread over the child's head and this custom is known as 'choullam'. During this function also they used to prepare special dishes.

An important occasion celebrated in a Brahmin family is 'upanayanam' of the boy. This is normally conducted between 7 to 11 years of age and it was believed that this function awards the child the sacred stage of Brahmanya and hence utmost importance is given to this function by the Brahmin community. They celebrated this function, which is commonly known as 'poonool kalyanam'. Before the 'upanayanam' ceremony the child will be given food known as 'kumara bojanam' and the boy will be fed with 'pongal sadam' called 'manga pongal' prepared with raw rice, red gram dhal, turmeric and salt. This is the time the boy starts to study veda and it was a custom to give 'vellachoru' to the boy before starting vedic study which is considered to be good for health. Tamil Brahmins prepare sadhya with 17-21 different delicious items (Plate 2) during this occasion.

Namboothiri families also celebrated upanayanam almost similar to this with different curries, fried preparations and payasam.

From 'upanayanam' to 'samavarthanam' they restrict onion, red chilli and coriander from their habitual diet.

Many of the traditional Brahmin households prohibited the use of onion and garlic from their diet. The myth behind the prohibition of onion and garlic was due to the fact that they considered onion as a non-vegetarian item and garlic as a polluted item. The story behind these believes was that 'Amrit' which was churned up from the milky ocean was given only to Devas and not to Asuras. But due to a misunderstanding this was given to Rahu an Asura. Lord Vishnu cut the head of Asura with his Sudarsana Chakkra and the Amrit along with the blood fell into the ground and became onion due to the red colour of the blood. The Amrith, which



Plate 2. Traditional Upanayanam Sadya of Tamil Brahmins with delicious items

was retained inside Asura's mouth turned to garlic when it fell into the ground. Thus, the Brahmin community believed that onion is a non-vegetarian item since it contained the blood of Asura and garlic is a polluted item since it had the saliva of Asura.

When a girl attains puberty, different communities celebrated this day in a grand manner during ancient times. However, the food prepared seems to vary in different communities. The Tamil Brahmin families prepared a special food called 'thirandu kuli puttu' during this occasion, which required great skill to prepare. After powdering the soaked rice the flour will be fried till it attains a red colour. Slowly add two glasses of boiled water containing one spoon turmeric powder. Mix slowly without forming lumps and cook it by steaming. Melt jaggery in water and mix the jaggery syrup with rice powder. Finally ghee, coconut and cashewnuts will be added. This preparation after offering to God will be given to the girl.

Another preparation namely 'cheeli' is also prepared by Tamil Brahmin's and for this equal quantity of jaggery and gingelly seeds are required. Wash gingelly seeds in water, dry and then fry it till the seeds are broken. Grind the gingelly seeds and mix with jaggery and roll into small balls.

Another practice that was observed by Tamil Brahmin families is that they give fruit and milk to the girl and some quantity she has to toss behind for birds and insects. In addition to these items a huge mound of rice and dhal drunched in ghee will be given to the girl child.

The Ezhava community used to give a raw egg mixed with gingelly oil. Some families used to give ground popped rice with turmeric and sugar which

were rolled into ball shape. On the 7th day the girl will be fed with 'kanji' and 'mezhekupurati' before bath. They used to prepare sadhya for close relatives and family members.

Among the Namboothiri families on the third day the girl is fed with 'paal kanji' and there is a custom called 'puzhukkal vekkuka' in which broken rice is cooked and placed in an uruli. After offering to God it will be shared by the family members.

Nairs used to prepare traditional sadhya on the fourth day. They used to prepare different types of sweets like unniappam, neyyappam, etc. and will be given to the girl by the relatives. Broken rice kanji and puzhukku with different ingredients is another special item among the Nair community which will be given to the girl.

Muslim families used to arrange a feast on the seventh day. They preferred to give non-vegetarian items like meat varattiyathu, liver fry, soup prepared from brain and leg of goat, banana fried in ghee, egg etc.

Marriage is a major event in ones life and sadhya and various dishes prepared play an important part in the ceremony.

Tamil Brahmin families used to prepare different types of sweets and savoury dishes three to four days prior to marriage. The items of their marriage sadhya included rice, dhal curry, ghee, sambar, aviyal, pachadi, olan, thoran, 'puli-inchi', kitchadi, big pappad, rasam, kalan, maladdu, mango pickle and mahani (a kind of tuber) pickle, butter milk, curd, pongal, plantain and payasam. Adapayasam or pradhaman with rice or green gram dhal are also prepared. In

addition to this they serve mysore pak and laddu the two important traditional sweet dishes also. Every item will be served on the leaf in their exact positions. However very few Tamil Brahmin families followed these practices now a days.

In addition to this there is a custom called 'kutty' preparation where five or seven pairs of cone shaped 'kutty' will be prepared with foods like laddu; mysore pak, groundnut, pottukadala, muthusaram, neyappam, biscuit added in sugar syrup or Thenkuzal. All this is prepared during marriage. In addition to this an odd number of 101, 51 or 31 numbers of these items will be brought from brides residence. The items and number may vary according to the economic status of the families. murukku is a must in this occasion where the size may vary from two to 16 rows (Plate 3). Different types of pongal like venpongali, jaggery pongal, yellow pongal are also prepared which is an indication of prosperity.

After the marriage the bride enter to the bridegroom's house by holding 'theradupal' or '*pal* theradupal' which will be handed over to the mother in law. Usually 'theradupal' is preferred in which ghee and coconut scraping are added to the jaggery syrup.

On wedding eve feast of Muslims they prepare nai-choru. This is prepared with rice fried in ghee with onion, clove, cinnamon and cardamon to taste and finally boiled to a finish. The wedding dinner consist of mutton, chicken, fish or prawn biriyani which is finally finished by arranging the separately cooked flesh and the cooked rice in layers and baking with coals above and below. In addition to this a Muslim marriage consists of fried beef or chicken, fried fish pickle, salad, pappad etc.



Plate 3. Special foods of Tamil Brahmins during marriage

A marriage sadhya of Nair and Namboothiri communities include, rice, sambar, olan, kootucurry or erissary, kalan, ginger curd, thoran, 'puli-ingi', aviyal lemon pickle, mango pickle, sarkara upperi, kaya varuthathu, curd, rasam, fried yam, brinjal, jack fruit, pappad and two payasams namely pal payasam or palada and a pradhaman. Traditionally jackfruit payasam or banana payasam are also prepared depending upon the season, and jackfruit thoran is also included in the sadhya.

The sadhya of Ezhava community is also similar to Nair and Namboothiri's but do not contain ginger curd and fried items like yam and brinjal. The usual payasam prepared for a sadhya include either pradhaman with green gram dhal or wheat.

Among the Namboothiri families there is a custom called 'ayine-unu' in which they used to take their marriage sadhya a day before the marriage separately for both bride and bride groom in their home with all the dishes of sadhya including payasam. This custom is still followed in Namboothiri families.

Though, a custom of consuming milk by adding conventional medicinal preparations especially the buds of 'perayal' is followed by the pregnant women of Namboothiri families none of the Namboothiri families selected for the study followed this custom now a days. This preparation is considered to be good for the healthy growth of foetus and will be more beneficial if consumed for maximum days.

In addition to this butter and ghee after chanting certain 'manthras' are also consumed by pregnant women which must be started only by 'velutha

paksham'. It is believed that, it can increase the intellectual power of the baby. This is followed in majority of the families. Tamil Brahmins also have an habit of consuming butter during pregnancy.

Another custom called 'pulikudi' is done on the seventh or ninth month of pregnancy. Among the Namboothiri families the essence of valan and 'njerinjil' added with salt is given. Very few families in Namboothiri community still practiced this custom. Among the Ezhava community different ground sour leaves which is rolled into small balls are given to women. But no one practiced this custom at present.

Among Tamil Brahmin community this custom is celebrated as 'puliyunu' in which 'puliyanjhatham' is prepared. For this tamarind extract will be boiled to form a thick consistency to which salt, jaggery, fried black gram dhal, bengal gram dhal, asafoetida and fenugreek are added. Finally this will be garnished with oil. Fried groundnut and mustard are also added with this. The above preparation is thoroughly mixed with the cooked raw rice and is given to the pregnant lady. The same day sister-in-law hands over 'appam' and 'kozhukatta' prepared with rice flour and jaggery and this food is placed inside the rice bowl and is consumed by both husband and wife at night.

Among the Christian and Muslim families traditionally they used to give, mutton soup, liver varattiyathu etc. for the pregnant lady. After delivery also the lactating mother will be given special herbal foods and other special preparations. But the items of preparation vary depending upon the community.

Some of the traditional food preparations given after delivery and their benefits are given in Table 33.

Table 33. Traditional foods given during lactation

Item	Benefit
1. Onion sauted in ghee	Healing purpose
2. Jaggery added with powders of dried ginger, pepper and ayamodakam	General health
3. Garlic lehyam	General health and milk secretion
4. Onion lehyam	General health
5. Fenugreek cooked in coconut milk to which jaggery and ghee is added	Increasing breast milk and aids in digestion
6. Kozhi marunnu	Blood formation
7. Goat soup	General health
8. Goat varattiyathu	General health
9. Pookkula lehyam	To prevent back ache
10. Paettiratti lehyam	General health and increase breast milk
11. Sauted drumstick leaves to which coconut is added	Milk secretion
12. Jaggery with dried ginger	General health
13. Puli lehyam	General health
14. Broken rice gruel to which coconut is added	General health

Such preparations are common to every community except non-vegetarian foods, which are avoided by Namboothiri and Tamil Brahmin families.

Namboothiris used to prepare a special dish with the essence of the leaves like bittergourd, turmeric, brahmi and kalkandam and this juice they give to the small child, which was believed to give relief from cold.

During death of a family member special restrictions and formalities are observed by different communities.

Among the Tamil Brahmin community during the 'sanchayanam' period i.e. for the two days after the demise no cooking will be done in the house and relatives used to bring the foods for the family members. In the Tamil Brahmin family, after the death of an elderly family member after 'sanchayanam' they prepare different varieties of payasam upto the 'adiyanthiram'. However some restrictions were observed in the items used to prepare curries. Instead of redgram dhal and chilli powder they use only green gram dhal and pepper powder. Green plantain, colocasia, yam, cucumber and vegetables which are available locally, will be used to prepare curry. Upto tenth day there is a custom of placing the favourite foods of the dead person. On the eleventh or twelfth day during 'pithrudakshina', they used to prepare gingelly balls and place it as offering to their forefathers. On the 13th day they arrange a grand feast and invite the relatives and during this feast a special item called 'pithrupachakkary' will be prepared with bittergourd and green plantain.

Among Nair and Namboothiri families a custom called 'kannokku kondubarika' in which relatives will bring different items like rice flakes, coconut, banana, jaggery etc.

Among Namboothiri families 'adiyanthiram' is celebrated on eleventh day of demise while Nairs celebrated on sixteenth day and Ezhava's on twelfth day. Sambar and pappads are avoided for 'adiyanthira sadhya' by Nair and Namboothiri families while Ezhava's avoided only pappads. Pulissery, ginger curd and ada pradhanam will be prepared for sadhya by Nair and Namboothiri families while Ezhava's prepared pradhanam either with wheat or green gram dhal.

At the annual 'shraddha' ceremony among Nair and Namboothiri families' coconut fried erissery and jaggary added ada pradhanam are compulsory items. Among Tamil Brahmin families only yam, colocasia, plantain, bittergourd or cucumber will be used and in each curry they add only one vegetable. Jaggery added greengram dhal pradhanam is a must for this occasion.

Among Christian families, upto 40 days after the death of a person they avoid non vegetarian items from their diet and instead vegetable preparations like, sambar, avial, kootucurry etc. will be prepared. On the 41th day they prepare a vegetable sadhya with payasam. No such food restrictions were observed by the muslim communities.

Onam, one of the most important festivals of Kerala is celebrated among different communities. Usually nonvegetarian foods are avoided during Onam irrespective of the community in Central and South Kerala and a sadhya with 10-15 vegetarian items will be prepared. In addition to this boiled banana is also included in the Onam sadhya. Traditionally, among the different communities, especially Hindus prepare 'varuthupperi' and 'sarkara upperi' with Nendran banana. But now-a-days most of the families in Kerala used to purchase these

items from the market due to lack of time and the preparation seems to be laborious especially for the young and working women.

Among the Nair and Namboothiri families on the day of 'Thiruvonam' they used to prepare a special dish called 'ada' without adding sugar and jaggery for 'Thrikkakkrappan'. Later the ada will be shared by the members of the family.

Among the Ezhava families they used to prepare ada during the 'Utharadam' day.

Vishu is another festival among the Hindu community. Nair families used to prepare 'vishukanchi' and is consumed with 'chakapuzhukku', green mango chutney, and jackfruit seed thoran. For dinner they eat rice with ripe mango curry, jackfruit thoran, erissery and pickle. However, such practices are unknown to the Nair families selected for the study and none of the Nair families practiced such customs.

Ezhava community celebrate vishu by preparing 'vishukkatta' using raw rice cooked in coconut milk to which cumin seed is added which is consumed by dipping in jaggery syrup. Some families in Ezhava group still prepared this item during vishu.

Tamil Brahmin families prepare different foods for different festivals. Deepavali, the festival of the victory of good over evil, is an occasion for sweetmeat like ukara, mysorepak and maladdu among Tamil Brahmin families. Ukara is prepared by adding jaggery syrup and ghee to the roasted and ground bengal gram dhal. It is stirred well till a brown colour is obtained. Mysorepak another sweet item is also prepared with bengal gram flour and sugar in the ratio of

1:2. After roasting the flour it will be added to the sugar syrup which has already reached the thread stage. Stir continuously till it attains the required consistency. Spread on a plate which has greased with ghee. Maladdu - another sweetmeat is also prepared with fried and powdered bengal gram dhal, sugar and ghee.

At Vinayaka Chaturthi, Tamil Brahmins prepare a sweet dish called 'kozhukatta' with rice flour, jaggery and coconut as fillings. It is a favourite item of lord 'Ganesha'. Another type of 'kozhukkatta' is also prepared by Tamil Brahmins in which ground and boiled black gram dhal, coconut, salt, curry leaves, mustard and salted preparations of whole soaked chickpea are used as fillings.

Among the Tamil Brahmin community Tamil New Year (Pongal) is celebrated with boiled rice preparation to which roasted greengram dhal is added and sweetened with jaggery called 'sakkarai pongal'. 'Venn pongal' is another dish prepared from the cooked raw rice and roasted green gram dhal to which fried pepper powder, cumin seed, cashew nut and curry leaves are added.

Among the Tamil Brahmins the festival 'Avani Avittam' is celebrated by preparing a special dish called 'parippu vada' without adding onion and a preparation called 'uppittu' prepared by kneading maida, coriander, coconut scrapings and cooked bengal gram dhal. The mixture is stirred well by keeping on hearth and small balls will be prepared out of the dough and is fried in ghee. This 'uppittu' preparation is also made during the 'Shradda' ceremony. Another dish namely 'ada' with bengal gram dhal and redgram dhal is another item prepared for 'Avani Avittam'.

Sreekrishna Jayanthi is celebrated by preparing 'vella cheeda' by roasting rice flour to which gingelly seeds and coconut scraping are added. These are mixed well, rolled in to small balls and finally fried in ghee.

Karthika is celebrated by preparing 'aval pori' and 'nelpori' in which jaggery and coconut scrapings are added to the rice flakes and popped rice. In addition to this 'neyyappam' is also prepared for this occasion. A particular 'ada' with greengram dhal, black gram dhal, redgram dhal, salt, pepper, bengal gram dhal, red chilli and curry leaves is also prepared for this occasions.

Tamil Brahmin families celebrated 'Navami' by preparing chickpea with jaggery. In some Tamil Brahmin families for the nine days they used to take 'pongal' prepared with rice and greengram.

Muslims celebrated their feast namely Ramsan and Idul Fither by preparing various items. Usually for any special occasions they prepare 'neichoru' or 'biryani', and 'pathiri' with mutton curry. Different types of 'pathiri' include 'kuzhal pathiri' prepared by adding one cup of rice flour to one cup of boiled water to which salt is added. This has to be stirred well without forming lumps. It is rolled into small balls and cooked in tava. 'kaipathiri' is prepared by kneading rice flour, coconut and small onion with hot water. It is more thicker than 'kuzhal pathiri'.

Among Christians there is a custom on 'Mondy Thursday' in which they prepare a porridge with rice flour and jaggery. On Good Friday milk porridge is prepared with rice flour, coconut milk and sugar. 'Osana Saturday' Christians prepare 'kozhukkatta' with rice flour and jaggery.

Traditionally among the different communities, different foods with medicinal values are prepared during specific month especially the month of Karkitaka. But the items prepared vary depending upon the community. It is believed that the month of Karkitaka is suitable to take different medicinal preparations to acquire good health for the rest of the year.

On the eighteenth day of Karkitaka or Adimasam Tamil Brahmin families used to celebrate 'Adiparuku' in which they used to prepare five kind of rice namely curd rice, lemon rice, gingelly rice, coconut rice and jaggery rice. After cooking rice it will be garnished with bengal gram dhal, mustard, green chilli and black gram dhal. After properly mixing, rice will be divided into five portions and the ingredients for each type of rice will be added. For example to prepare lemon rice, lemon juice will be added. For coconut rice fried coconut, for gingelly rice fried and ground gingelly seeds and for curd rice, curd will be added to the cooked raw rice. During Fridays of Karkitaka month Tamil Brahmin families prepare different payasams with green gram, chickpea, red gram dhal or bengal gram dhal.

Nair and Namboothiri families prepare a special item called 'pathilacurry' during Karkitaka in which they use ten different leaves like cowpea, ashgourd, colocasia, pumpkin, 'thazhuthama', 'kavath', 'cheru kizhangu', yam, 'anathumba' and 'neyyunni'. After cutting the leaves, it will be garnished with fried mustard, curry leaves, black gram dhal, turmeric powder and salt and cook till the water is evaporated. Finally coconut scrapings will also added. This dish has to be consumed at least for seven days during the month of Karkitaka. In addition to

this different types of rice gruels like marunnu kanchi, navadanya kanchi are also prepared by some families of Ezhava, Nair and Namboothiri communities. For preparing navadhanya gruel nine types of grains like pea, green gram, bengal gram, horse gram, fenugreek, rice, black gram dhal, mustard and chama rice will be used. After soaking all these grains it will be cooked and jaggery and coconut scraping are also added. 'uluva kanchi', another preparation with fenugreek is also prepared Navara rice is cooked with fenugreek and consumed either by adding jaggery or coconut scrapings.

Muslims used to prepare 'kakkum kaya kanchi'. After taking the fruit from the shell, it will be soaked in water. Ground cumin seed and coconut will be added to the cooked Navara rice and again cooked after adding the fruit. Muslim families also prepare coconut rice. After cooking raw rice ground coconut, onion and cumin seed will be added to prepare coconut rice.

Among the Namboothiri groups, traditionally, they used to prepare 'cheeda' which is prepared by grinding rice, cumin seed, salt and pepper. It is made in to small balls and fried in coconut oil. On the sixteenth day of Karkitaka month, they used to consume the root of 'koduveli' which is ground and consumed along with ghee.

The Christian community traditionally practiced the habit of taking soups prepared with goat, 'pachoru' prepared by adding large amount of coconut in the cooked rice and 'uluva choru'.

Fasts or vrathas make special demand on the food and do not usually involve complete avoidance of food, but observe varying degrees of restrictions.

Muslims, in general are very strict about observing their religious practices. All respondents used to take thirty days of Ramsan Nombu in which they consume food only after sunset. But the whole day they used to prepare various dishes. They ends up the *Nombu* with eating dates or drinking lemon juice. Followed by these, they used to take 'ravakanchi' or 'tharikanchi' which is prepared by cooking rava either in coconut milk or in cow's milk till it become a thick consistency to which sugar, and cardamom are added. Finally it is garnished with onion fried in ghee; Muslims also prepare 'pathiri' with chicken curry, 'jeera kanchi' is another item prepared by Muslims by with ground cumin seed, small onion, coconut and rice. 'Jeera kanchi' is usually eaten with different types of thoran. At 1-2 am in the early morning rice is consumed with fish curry, different vegetable curries, pappad, pickle etc. In addition to this they prepare various other dishes like 'unnakaya' in which a mixture of coconut and sugar will be placed inside boiled and mashed banana. After rolling this in the shape of fruit of semul tree will be fried in ghee. Different types of pathiries, pinjanathappam, muttamala, biriyani, neychoru, aleesa, kalathappam, etc. are also prepared during Nombu period as they invite their relatives in their home.

For a Christian community, they used to take two Nombu or vrathas namely fifty days Nombu for Easter and twenty five days Nombu for X'mas. Like Muslims they do not completely avoid the foods, but have some restrictions in the consumption of certain foods. It is said that the food, which is liked by the person must be avoided from the diet for atleast twenty five or fifty days. As Christians in general are very fond of non-vegetarian items, they used to avoid either fish, meat

or egg or completely the non-vegetarian items from their diet. On the 25th day of Easter Nombu, there is a special food preparation called 'indariappam', which is made by adding rice flour to the well ground coconut, black gram dhal, turmeric, small onion, garlic, cumin seed and salt. Fried coconut pieces and curry leaves are also added and mixed to a consistency of iddli batter. After keeping for three hours it is cooked by steaming.

Fasts commonly observed among the Hindus include, Ekadashi, Shivarathiri, Sankranthi, Thiruvathira, Savithri Noimbu, Somavara Vratham etc. During such occasions rice is completely avoided or partially avoided or some special foods are prepared.

'Ekadashi' is taken for the Lord Vishnu and for this rice preparations are completely avoided but they include milk and different fruits in the diet. Among the Nair and Namboothiri communities chama rice is prepared for Ekadashi. Somavara vratham is generally taken to get good husband. Traditionally among the Hindu community girls at the age of 12 years onwards are used to observe this vratham. It is said that those who are observing Somavara vratham have to prepare their own food, with a clean mind and body in separate vessels which are kept only for this purpose. But such customs are not followed now a days.

'Thiruvathira' is celebrated on the Malayalam month 'Dhanu' (December-January) on the star 'Thiruvathira'. Rice foods are avoided, but fruits and tender coconut water are allowed. The special food prepared on this day include 'koova payasam' and 'thiruvathira puzhuku' among Nair, Namboothiri and

Ezhava communities. There is a myth regarding the preparation of this food. Lord Parvathi for obtaining Lord Siva as her husband practiced a great Tapasya in the jungle for many days with out taking food. The eight women residing in the forest gave their food which included yam, colocasia, plantain, horsegram, gingelly seed, arrowroot and diascoria. Lord Parvathi accepted three items after offering to Lord Siva. This customs is celebrated as 'ettangadi' offering. Another item prepared during thiruvathira is jaggery added 'koova payasam'. Only very few families prepared this item on this occasion now a days.

Among the Tamil Brahmin families during 'Thiruvathira' they used to prepare a food called 'kali' in which rice is fried till it become brown in colour. After powdering the fried rice it is cooked in jaggery syrup. It is garnished with fried green gram dhal. Curry with a tuber called 'kavath' is also prepared.

'Savithri Noimbu' is celebrated among the Tamil Brahmin community during which a special ada is prepared with rice flour filled with jaggery syrup and vellapayar folded in 'plasila' or 'perayal'.

Among the Hindu families the domestic hearth was considered an area of high purity and before entering to the kitchen the women should take bath and housewives are not allowed to enter in the kitchen during their regular menstrual periods. But such rituals and believes are completely vanished from the society.

The traditional kitchen equipments known as 'ural and ulakka' to pound paddy and rice; grinding stones such as 'ammikuzha', 'attukai and kulavi'; 'thirukallu' for grinding; 'muram' of different shapes for winnowing and 'chirava' to scrape coconut and different types of knives were used by the ancestors (Plates 4



Plate 4. Traditional kitchen equipments



Plate 5. Traditional kitchen equipments

and 5). It was seen that most of these traditional equipments are not used by the modern housewives even though some households have such equipments.

Various traditional kitchen utensils made up of clay, iron, copper, brass and stoneware were used most commonly in the households by the grandparents (Plates 6 and 7). Different types of earthenware pots called 'chatti' were common in ancient days in Kerala to prepare delicious fish curries with distinctive flavour and taste. Moreover, this type of pots were non-reactive to tamarind, a common ingredient in fish curries which is highly acidic in nature. Another type of earthen pots called 'kooja' with wide rounded body and a narrow neck was used to cool water especially during summer. Traditionally, rice was cooked in earthenware pots and curdling of milk is also done in the earthen pots.

Next to clay, metal was most commonly used for domestic purposes. India has a huge body of beliefs about the effects of various metals and minerals on the body and it was naturally felt that food cooked in various metals absorbed certain trace minerals and elements beneficial to health (Ramakrishnan, 2000). Iron utensils like 'cheenachatty' was used for frying and preparing thoran 'kalchatty' for preparing morucurry, aviyal etc. and dosa tava for making dosa and chapathy, 'vellayappam chatti with lid' for making vellayppam, 'achappam mould' for preparing achappam and laddles called 'chattukam' are some of the iron utensils used to prepare different items.

Different wood utensils are also used traditionally which include 'marika' for keeping salt and 'marathatta' for collecting curries, 'marapathi' a

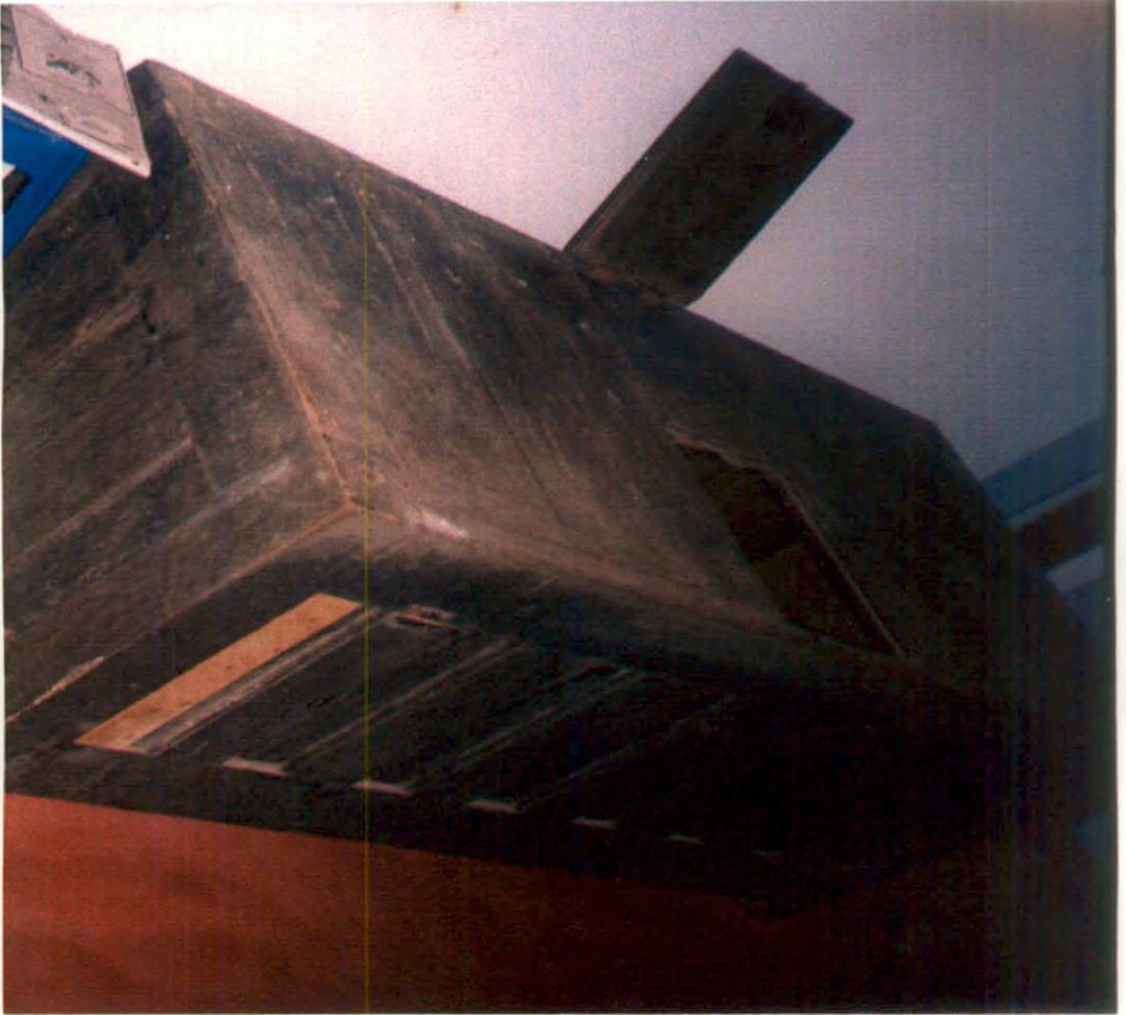


Plate 8. 'Pathayam' - a traditional storage container

bowl used for keeping curries after preparation, 'adapalaka' for draining water from rice, coconut shell laddle for mixing and serving.

Traditional storage vessels like 'bharani' of different kinds for storing pickles, preserves, 'pathayam' for keeping rice and paddy, having two or three compartments were used by the ancestors (Plate 8).

Traditional measuring cups used included 'para', 'edangazhi' and 'nazhi'.

Copper materials like 'chempu', 'vattallam' are the main water containers, 'uruli' of different sizes having a golden colour used to prepare palpayasam or some medicinal preparations which could be made easily with no fear of getting burnt.

5.5 KAP on traditional foods among younger generations

The mean score obtained for knowledge, attitude and practice on traditional foods among younger generation was 59.00, 77.56 and 24.12 respectively.

Multiple Regression and Simple Correlation analysis showed that the variables attitude and practice are positively correlated and it is significant at 5 per cent level. It shows that, there is a tendency for developing traditional practices for those who have attitude towards traditional foods.

Summary

6. SUMMARY

The present study entitled "Traditional food habits of different communities in Thrissur district" was conducted among 180 families who were selected equally and randomly from the six communities namely Ezhava, Christian, Nair, Namboothiri, Tamil Brahmin and Muslim in Thrissur district.

The study carried out threw light on the socio-economic and cultural background of the families, dietary pattern of the families, position of traditional food in their dietary pattern, traditional food practices followed by older generation and knowledge attitude and practice on traditional foods among younger generation.

Information regarding the socio-economic status of the families indicated that majority of the families in Christian, Nair, Namboothiri, Tamil Brahmin and Muslim communities were of nuclear type while in the Ezhava community nuclear and joint families were found to be equal in number. Average family size of the different communities varied from 3.9 for Tamil Brahmin to 5.2 for Christians.

Even though there is differences in the level of education among the respondents of different communities majority were found to be educated.

About 20-40 per cent of the respondents in different communities were working either in government or in private sectors while most of the respondents in other communities were unemployed.

Majority of the families in Muslim, Christian, Ezhava and Nair communities had a monthly income ranging from Rs.2000-6000 while the monthly

income of 46.7 per cent of Namboothiri and 63.3 per cent of Tamil Brahmin families varied in between Rs.6000-10000.

Most of the families in the different communities except Tamil Brahmin owned land ranging from 1 to 100 cents, while 60 per cent of Tamil Brahmin families were found to be landless.

None of the Tamil Brahmin families and most of the families of other five communities reared domestic animals.

Most of the families in the different communities did not possess any kitchen garden in their households.

The major expenditure of the families of all communities was for food followed by the money spent for education. Less than 20 per cent of the monthly income was spent on clothing, health, recreation, personal expenditure, transport as well as shelter and most of the families in the six communities saved below 30 per cent of their monthly income.

Majority of the families in the six communities used either LPG stove or combination of wood, gas or kerosene as the source of fuel for cooking.

Majority of the families in the different communities except Muslims did not have any financial liability. Among the different communities selected for the study all Tamil Brahmins were members of Brahmina Samooham social organization, while in other communities most of them did not have any membership in any of the social organizations.

The dietary pattern of the families of different communities indicated that except Tamil Brahmins and Namboothiris, the families belonging to other communities were non-vegetarians.

Majority of Christian, Nair, Muslim and Ezhava families used to have three major meals a day, while majority of Tamil Brahmin families, had four major meals daily.

Most of the families in the selected communities cooked twice or more than two times in a day.

Equality in food distribution was seen among majority of the families of different communities.

All families irrespective of the communities included cereals, other vegetables, milk and milk products, fats and oils, sugar, spices and condiments in their daily diet.

Vegetables, especially green leafy vegetables and roots and tubers were included on a weekly basis by the families of different communities.

Among Christian and Muslim families the frequency of use of fish, meat and egg was found to be higher than the Nair and Ezhava communities.

Purchase of prepared foods from outside was most common among Muslim and Christian families.

Majority of the families in Christian and Nair communities and few families in other communities prepared some modern foodstuffs in their home occasionally.

Foods given during various physiological stages indicated that all communities prepared weaning foods at home while pre-school children consumed adult diet by making changes in their flavour and texture.

Special foods were given to pregnant women in majority of the households of different communities.

Regarding the preservation of different foods, it was found that 53.3 per cent to 93.3 per cent of the families of different communities preserved fruits and vegetables at home.

Families of different communities still prepared and used traditional foods in their daily diet especially for breakfast, lunch and dinner one to four times in a week.

All the Tamil Brahmin families used to prepare traditional items for evening tea while most of the families in the other communities prepared traditional snack items occasionally.

Majority of the families in the six communities gave preference to consume traditional foods.

Most of the families in Ezhava, Nair and Namboothiri communities preferred ordinary domestic hearth to prepare traditional foods.

Most of the families in the different communities did not prepare any traditional foods during specific month for improvement of health. However, most of the families in the six communities prepared some traditional medicinal preparations especially after delivery.

Few families of different communities used to purchase ready made traditional foods and instant food mixes available in the market occasionally.

Majority of the families in different communities except Tamil Brahmin community made certain modifications while preparing traditional foods.

Few families in Christian and majority of the families in Muslim community followed the practice of giving prepared foods to church and mosque respectively.

Majority of the families in different communities possessed various traditional kitchen equipments like ammi, attukal, ulakka as well as traditional kitchen utensils made with clay, metal, wood etc. but used these items once in a while.

All respondents in Muslim community and majority in the Christian and Tamil Brahmin communities still observed some vrathas or fasts during their religious occasions.

Majority of the families in Tamil Brahmin and few families in other communities followed some of their rituals related to food.

The mean score obtained for knowledge, attitude and practice on traditional food among younger generation was found to be 59, 77.56 and 24.12 respectively.

A significant correlation between attitude and practice showed that there is a tendency for developing traditional practices for those who have attitude towards traditional foods.

Though, various traditional food practices were followed by the older generations of different communities during different occasions, festivals, physiological conditions, improvement of health etc. most of the younger generation did not follow such practices now a days.



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* Original not seen

Appendices

APPENDIX-I

Schedule to elicit information regarding KAP on traditional foods among younger generation

1. Name:

To test knowledge

Sl.No.		P value	E 1/3 value
*1	'Puli-ingi' is a mix of five tastes. Yes/No	46.15	0.61
2	'Jackfruit varattiyathu' can be stored for more than one year. True/False	61.53	-
3	Can you name any traditional medicine given for cold and fever?	46.15	0.30
4	Name the leaves that is used for preparing 'pathila curry' during the month of Karkitaka	10.25	-
5	Kinnathappam is a traditional food item prepared from maida. True/False	51.28	0.15
6	The traditional food item pathiri is prepared with wheat flour. True/False	56.41	0.30
7	Different banana varieties are used to prepare chips. Yes/No	64.10	0.07
8	Iddli and dosai are fermented breakfast items. Yes/No	66.66	-
*9	Palpayasam is prepared with coconut milk. True/False	53.84	0.53
10	To prepare adaprathamana ada can be prepared using equal quantity of rice flour and wheat flour. True/False	46.15	
11	Iddiyappam can be prepared with mildly roasted rice flour mild roasting. Yes/No	51.28	
12	Mysore pak is prepared using rice flour. True/False	64.10	

Contd.

Appendix-I. Continued

Sl.No.		P value	E 1/3 value
13	Traditionally wheat flour is used to prepare 'unniappam'. True/False	61.53	
14	The proportion of rice and blackgram dhal to be used to prepare iddli is 3:1. Yes/No	43.58	
15	Achappam is usually prepared with rice flour. True/False	56.41	
*16	Kuzhalappam is a snack prepared by steaming. Yes/No	48.70	0.53
17	The main ingredient used to prepare jilebi is black gram dhal. Yes/No	25.64	0.15
18	The preservatives used to prepare pickles is gingelly oil. True/False	48.71	
19	One of the cheapest preservation methods used at homescale is sundrying. Yes/No	61.53	
20	Tender mango pickle can be prepared easily without keeping in brine solution. Yes/No	17.44	
*21	Salt and water is taken in the proportion of 1:3 for preparing 'uppumanga'. Yes/No	35.79	0.53
*22	Boiled water is used for preparing 'uppumanga'. Yes/No	46.15	0.61
23	Fresh tender mangoes should be used to prepare 'kadumanga'. Yes/No	41.02	
*24	For the preparation of 'murukku', rice flour and black gram dhal is taken in the proportion of 5:0.5. Yes/No	33.33	0.53
25	Ginger and curd are the main ingredients for the preparation of ginger curd. Yes/No	53.84	
*26	Uluvakanji is prepared during summer season. Yes/No	25.64	0.46

Contd.

Appendix-I. Continued

Sl.No.		P value	E 1/3 value
27	Plantain flower 'chammanthi' can be stored for one week. Yes/No	10.20	
28	For the preparation of kalan a traditional curry - red chilli powder is used. True/False	58.97	
*29	Ripe jack fruit can be stored after drying. Yes/No	43.58	0.53
30	Avalosepodi can be stored for one month. Yes/No.	66.66	
31	Boli is a mix of maida and wheat flour. Yes/No	30.76	
32	Pathiri is a traditional muslim preparation. True/False	30.76	
33	Ghee can be prepared by fermenting whole milk. Yes/No	66.66	
34	Using 'thengin pookula' we can prepare nutritious and health improving laheam for pregnant lady. True/False	38.46	
35	For the preparation of avalosunda well fried riceflakes are used. True/False	42.08	
*36	During the month of Karkitaka drumstick leaves are used. Yes/No	53.84	0.69
*37	Leafy vegetables are used in marriage sadhaya. True/False	48.71	0.41
38	For the preparation of 'vellayappam' traditionally toddy is used. True/False	61.5	-
39	By using mango stone we can prepare different dishes like ada, kumbilappam etc. True/False	28.20	

* The final questions selected for knowledge test.

APPENDIX-II

Schedule to elicit information regarding attitude on traditional foods among young generation

Name: _____

Against each question write any of the following options:

Strongly agree (SA), Agree (A), Undecided (UD), Disagree (DA), Strongly disagree (SD)

Sl.No.		t value
*1	Traditional foods are easily digestible	3.2
2	Traditional food preparations are well balanced	2.05
3	Home made foods are tastier than fast foods	0.98
*4	It is preferable to follow traditional food habits for better health	5.45
5	Home made baby foods are better than purchased baby foods	1.05
6	Traditional foods of all communities should be popularised	1.54
*7	Traditional food preparation and its sale can be taken up as a self employment avenue for unemployed youth	2.41
*8	Foods prepared in traditional utensils are tastier than those prepared in steel/aluminium utensils	2.5
*9	The elder generation developed the traditional food formulae with health considerations	2.33
*10	Traditional foods are developed to make use of the locally available resources in the most effective way	2.61
*11	Traditional foods give thrust on taste habits of people	2.39
12	Traditional food items give thrust to reduce unnecessary expenditure	0.94
13	Traditional foods are very expensive	2.22
14	Traditional food preparations are generally tedious	2.16
15	Traditional foods have generally poor shelflife	0.22
*16	Traditional food items suit only unemployed house wives, who have much leisure time	2.78
*17	Traditional food items are good when no alternative foods are available	3.85
*18	It may be foolish now to spend time and energy to prepare traditional food items, when all item are available in the market	3.13
19	Since we got rid of traditional method of foods, the life expectancy has increased	0.10
20	Modern food habits should be followed for better health	0.33
21	Traditional foods are prepared to suit the climatic conditions of our state	1.10

* The final questions selected for attitude test

APPENDIX-III

Schedule to elicit information regarding practice on traditional foods among younger generation

Name :

1. Describe the preparation of mangostone ada and mangostone kanchi?
2. Mention the storage of mango peel and its different preparations
3. Name the ingredients used for preparing 'marunnukanchi'
4. Describe the method of preparation of uluva kanchi and its eating habits
5. Describe the method of preparation of jackfruit pappad and vattals
6. How do you prepare and store 'uppumanga, kadumanga' in bharani
7. Describe the method of preparation of laheam with small onion
8. How do you prepare plantain flower 'chammanthi'?
9. Describe the method of storing tapioca after sundrying?
10. Name the three types of milk that is used for making 'paal kanchi'?
11. Describe the method of preparation of kalan
12. Mention the traditional practices used before the preparation of colocasia leaves
13. Describe the traditional ways of ripening fruits like mango, jackfruit and plantain
14. Describe the traditional practices followed in homes for curdling of milk during winter season
15. How will you store curd for 3-4 days without much increase in sour taste
16. How will you remove the fibre of plantain pseudostem
17. Write the traditional practices for storing ghee without any spoilage for few days
18. Describe any traditional practices for keeping boiled milk without any spoilage
19. How do you prepare tender pseudostem and 'coconut kambu' pickle
20. Describe the traditional ways of storing jackfruit seeds for longer period

21. Describe the method of preparation of curry leaf chammanthy
22. Describe the traditional way of drying and storing of dried cowpea, mango and bittergourd
23. Describe the preparation of 'chakkavarattiyathu', jackfruit pradhama and jackfruit ada
24. How do you prepare mango 'varattiyathu' and mango payasam
25. Do you prepare any special sadhya or food during birthday or other such occasions?
26. Do you avoid or include any special foods during the occasion of observing vrathas or fasts?
27. Do you prepare any traditional food for religious festivals?
28. Do you use traditional kitchen household implements in your home?
29. Do you use any traditional utensils in your food preparation?

11. Do you have any other source of income? : Yes/No.
 a) If yes, specify :
 b) Amount :
12. Do you have your own land :
 i) If yes, total area :
 ii) Area under cultivation :
13. Specify how you got this land : 1) Inherited
 2) Purchased
 3) Received from Government
 4) Others (Specify)
14. Do you cultivate any food crops in the land : Yes/No
 i) If yes, area under cultivation :
15. Details regarding the cultivation of food crops:

Sl. No.	Name of the crop	Total produce	Quantity used at home	Quantity sold	Income

16. Do you have kitchen garden in your home : Yes/No
 i) If yes, specify

Sl. No.	Items of cultivation	Use of produce			Income
		By the family	Gift	Sale	

17. Do you have any domestic animal : Yes/No
 i) If yes, what are they :
 ii) From where did you get it : 1) Purchased
 2) From Government
 3) Others (specify)

23. Are you a member of any social organisation : Yes/No

a) If Yes, specify :

a. Co-operative society :

b. Mahila samajam :

c) Others (specify) :

b) Do you attend the meeting of these organizations : Yes/No

c) If yes, specify use frequency : i) Always
ii) Sometimes

d) If no, give reasons :

24. General information source

i) Which are the source from which you get information on life, food, health etc.

General : Friends/Neighbours/Family members/Relatives

Media : Newspaper/TV/Radio/Magazines/Meeting/Advertisements/Exhibitions

APPENDIX - V

KERALA AGRICULTURAL UNIVERSITY DEPARTMENT OF HOME SCIENCE

Interview Schedule to elicit information on dietary pattern of the families

1. Serial No. :
2. Name of the respondent :
3. Address :
4. Food habits of the family : Veg./Non-veg.
5. Meal pattern of the family :
 1. One major meal
 2. Two major meal
 3. Three major meal

Daily meal pattern

Meal time	Menu of 1 st day	Menu of 2 nd day	Menu of 3 rd day
1) Early morning			
2) Breakfast			
3) Lunch			
4) Evening Tea			
5) Dinner			
6) Any other			

6. How many times do you cook meals in a day : Once/Twice/Thrice/More than thrice
7. Who does the cooking :
8. Who decides the menu of the family :
 1. Spouse
 2. Children
 3. Yourself
9. Do you give equal importance for family members in food preparation : Yes/No
If No, what is the order of importance?
 - 1.
 - 2.
 - 3.
 - 4.

10. Frequency of use of different food material

Foods	Frequency of use (weekly)						
	Once	Twice	Thrice	Four times	Daily	Occasionally	Never
1. Cereals							
2. Pulses							
3. Green leafy vegetables							
4. Roots and tubers							
5. Other vegetables							
6. Fruits							
7. Milk							
8. Meat							
9. Fish							
10. Egg							
11. Fats & oils							
12. Sugar & jaggery							
13. Spices & Condiments							

11. Do you purchase any prepared foods? : Yes/No

i) If yes : Veg/Non-veg

ii) Reason for purchase :

iii) Frequency of purchase of prepared food:

Sl.No.	Items	Daily	Weekly	Occasionally	Never

iv) From where do you purchase? : Hotels/Fast food shop/others

12. Do you prepare any modern food stuff in your home? : Yes/No

a) If yes, specify :

13. Do you prepare traditional foods in home? : Yes/No

If yes,

a) What are the traditional food items prepared for

Breakfast :

Lunch :

Tea time :

Dinner :

b) What are the traditional foods prepared on special occasion like

Occasion	Foods prepared	Reasons	Foods avoided	Reasons	Foods included	Reasons
Birthday Marriage Death Feasts Others						

c) foods prepared during religious festivals

Festivals	Foods included	Reasons	Ingredients used	Source of ingredients		Foods avoided	Reasons
				Purchased	Home made		
Onam Deepavali X'mas Ramsan Others (specify)							

14. Frequency of use of traditional foods

Foods	Frequency of use (weekly)						
	Daily	Four	Thrice	Twice	Once	Occasionally	Never
Breakfast							
Lunch							
Evening tea							
Dinner							

15. Do the family members prefer to take traditional foods? : Yes/No

i) If yes, reason :

ii) If yes, specify the foods :

iii) If no, give reason :

iv) If yes, can you give the benefits of traditional foods :

16. Do you modify any traditional food preparations in your home? : Yes/No
- i) If yes, what is the reason for modification? :
- ii) Give details of the preparation :
17. Do you give any traditional food to temple/church/mosque : Yes/No
- i) If yes, specify :
- ii) Do you prepare these foods in your home? :
18. Do you purchase any ready made traditional foods available in the market? : Yes/No
- i) If yes, specify :
- ii) Frequency of use :
- iii) Reasons :
19. Do you purchase any instant mixes available in the market to prepare traditional foods? : Yes/No
- If yes,
- i) Specify the items :
- ii) Do you prefer this? :
- iii) Frequency of use :
- If no
- i) Give reasons :
20. Do you prepare any traditional medicine in your-home : Yes/No
- i) If yes, what is the source of information? :
- ii) Give details of preparation :
- iii) Frequency of preparation :
- iv) Period of preparation :

v) Type of utensils used for :
preparation and storage

21. Food items used for different diseases

Disease	Food items included	Reasons	Food items avoided	Reasons

22. Do you use any traditional foods : Yes/No
for the improvement of health
If yes, give details

23. Foods given during special conditions

Conditions	Foods included	Reasons	Foods avoided	Reasons
1. Infancy				
2. Pre-school				
3. School going				
4. Adolescent				
5. Pregnancy				
6. Lactation				
7. Old age				

24. Method of storage of foods

i) Do you store any foods in your : Yes/No
home

ii) If yes, specify

Name of food stuff	Method of storage	Period of storage	Type of vessel used

iii) Do you employ any specific : Yes/No
treatment for storing foods
If yes, specify

25. Details regarding food preservation

i) Do you preserve and food : Yes/No
If yes, give details

- ii) Do you adopt any traditional practices in preserving the foods
If yes, give details : Yes/No
 - iii) Source of information : Mother/Media/Friends/Others
 - iv) Do you purchase any preserved food from outside
If yes (specify) : Yes/No
26. Do you own any traditional household kitchen equipment : Yes/No
- i) If yes, give details
 - ii) Do you use these equipments : Yes/No
 - iii) If yes, frequency of use :
 - iv) Purpose of use :
 - v) If no, give details
27. Do you own any traditional household utensils : Yes/No
- i) If yes, specify
 - ii) Do you use these utensils :
 - iii) Frequency of use :
 - iv) Purpose of use :
28. Type of cooking device used : Ordinary hearth/Kerosene stove/
Gas stove/others
29. Do you prefer ordinary hearth or any other cooking device to prepare traditional foods :
- i) Give reasons

30. Do you follow any cultural practices/ : Yes/No
believes with respect to food

i) If yes, specify with reason

31. Do you have any idea about the : Yes/No
nutritional advantages of
traditional food you consume?

i) If yes, specify the food items

ii) Give advantages

32. Do you prepare any foods during : Yes/No
specific month for health benefit

If yes, give details

33. Do you follow any rituals before : Yes/No
taking meals

If yes, specify

34. Do you observe any vrathas or fasts : Yes/No
during specific days/special occasions

If yes, give details

Specify

Days	Foods included	Reasons	Foods avoided	Reasons

APPENDIX-VI

The formula for the calculation of food frequency scores as suggested by Reaburn *et al.* (1979).

$$\text{Percentage of total score} = \frac{R_1S_1 + R_2S_2 + \dots + R_nS_n}{n}$$

S_1 = Scale of rating (6, 5, 4, 3, 2, 1)

R_n = Percentage of respondents selecting a rating

n = Maximum scale rating

TRADITIONAL FOOD HABITS OF DIFFERENT COMMUNITIES IN THRISSUR DISTRICT

By
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ABSTRACT OF THE THESIS

Submitted in partial fulfilment of the
requirement for the degree of

Master of Science in Home Science
(FOOD SCIENCE & NUTRITION)

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2001

ABSTRACT

A study on the traditional food habits of different communities in Thrissur District was carried among 180 families selected equally from the six communities viz. Ezhava, Christian, Nair, Namboothiri, Tamil Brahmin and Muslim to assess their socio-economic status, dietary pattern, traditional food habits, position of traditional foods in their dietary pattern, traditional food practices followed by older generation and KAP on traditional foods among younger generation.

The result of the study indicated that majority of the families of different communities except Ezhava were of nuclear type with an average family size of 3.9 for Tamil Brahmin and 5.2 for Christians.

Majority of the respondents were educated and 20-40 per cent of them were working either in private or in government sectors. Monthly income of majority of families in Ezhava, Muslim, Christian and Nair communities ranged from Rs. 2000-6000, while among Namboothiri and Tamil Brahmins the income varied from Rs.6000 to 10000 per month.

Most of the families in different communities except Tamil Brahmins owed land. Major expenditure of the families of all communities was for food.

Except Tamil Brahmin and Namboothiri communities all the families of the other four communities were non-vegetarians. Three-meal-a-day pattern was observed in five communities while Tamil Brahmins had four major meals in a day. Equality in food distribution was seen among majority of families in different communities.

All families irrespective of the communities included cereals, other vegetables, milk and milk products, fats and oils, sugar and spices and condiments in their daily diet. Purchase of prepared foods from outside was found to be

common among Muslim and Christian families. Special foods were included in the diet of pregnant women in majority of the families.

Families of different communities still prepared and consumed traditional foods in their daily diet especially for breakfast, lunch and dinner. Most of the families in six communities gave preference to include their respective traditional food items in their diet.

Only very few families in different communities prepared traditional foods during certain specific months for the improvement of health and purchased instant food mixes and ready made traditional foods available in the market.

Most of the families in all the communities prepared and consumed traditional medicinal preparations after delivery. Most of the families in different communities except Tamil Brahmin families made certain modification while preparing traditional food and few Christian and Muslim families gave prepared food to the religious places.

The families who possessed traditional kitchen equipments and utensils used very rarely for household purposes.

All respondents in Muslim communities, and majority of respondents in Christian and Tamil Brahmin communities still observed some vrathas or fasts during religious occasions and majority of the families belonging to Tamil Brahmin community observed certain rituals also.

KAP on traditional food habits among the younger generation indicated that there is a tendency to develop traditional food practices for those who have attitude towards traditional foods. Though the respondents were aware about the various traditional food practices and preparations of their respective communities, the younger generation of the different communities did not follow such practices.