



## **Is food a personal choice for the Aged? A study on the influential factors affecting choice of food among female older adults in Sri Lanka**

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### **Abstract**

Factors affecting food selection are varied for different age groups. It is very important to investigate to what extent those factors are applicable to older adults from different socio economic background since food has direct relationship with quality of aging. The aim of this study was to identify the influential factors in choice of food among female older adults in Sri Lanka. Survey was carried out using a questionnaire(n= 106) and semi structured interviews (n=25). Respondents were selected from both rural and urban areas. Price, nutrition , ease of digestion and hypoallergenic proved to be most influential factors to female older adults in choosing food; factors like cooking time, Calorie value and containing fibre have marked as not important. The survey concludes higher educated female older adults valued health more than did lower educated group. The findings of this study would be useful especially for geriatric dieticians.

**Key words : food, female adults, choice, Aging, nutrition, Price**

### **Introduction**

The world is currently passing the year which reports the highest life expectancy in human history. Increment of life expectancy and longevity, reduction of infant mortality and control over fertility rates are considered as miracles in medical field in 20<sup>th</sup> century. These medical advancements caused in population imbalance with the rapid growing of one category - aging population. Sri Lanka is considered as the country of the South Asia which has the highest aged population. In 2018, as estimated by United Nations statistics current population is 20,971,313 and 9.67% of its population is above the age of 65 years.

Women generally live longer than males – on average by six to eight years. This difference is partly due to an inherent biological advantage for the female, but it also reflects behavioural differences between men and women. (observatory, 2019) Over the past 30 years women have been living longer. In 1984, a woman's life expectancy was 78. Today, women on average live to 81 — and that number continues to rise. However, the life expectancy of American women ranks far below Asian and European women, whose life expectancies range from 87 to 90 years.(health, 2019)Life expectancy at birth, female (years) in Sri Lanka was reported at 78.61 years in 2016, according to the World Bank collection of development indicators, compiled from officially recognized sources. Although life expectancy is higher for women, many are unable to enjoy their later years because they struggle to meet their basic needs.289,271 excess women in 2012 and it will reach to 559,436 women in 2037. (Madies, n.d.)

In Sri Lanka, as other south Asian countries, women have very close relationship with food. Women's role closely associates with food in both social and cultural context. In the stone era women were occupied in gathering while men were hunting. Even in modern society where gender equality and gender roll changing is highly discussed and practice, most of the Sri Lankan women are engaged in cooking and related domestic activities. Current aging population of Sri Lanka have been highly engaged with agricultural activities and related food processing activities in their early life. Even when women is old or weak to prepare her own food, she is supposed to cook for spouse within the Sri Lankan cultural context – cooking is a female work. This attitude and practice have made great effect towards the food choice of older women.

This study has been conducted with the following objectives.

- To identify the influential factors in choice of food among female older adults in Sri Lanka
- To understand the impact of age related changes on the food preference of older females
- To identify specific food adoption strategies used by older females

## **Research Methodology**

The survey was conducted in Western Province Sri Lanka via homes for the elders and community. Elderly homes were identified considering the researcher's easy access for the area. The house holds provided access and supported for researchers in recruiting participants to take part in the study were selected. 15 participants were selected from 3 elderly homes. The rest of the participants were living in their homes alone (n=50) and others with their children (n=31). Representation of older adults from elderly homes were confined to 15 assuming that they have very limited food choice.

### **Likert scale Questionnaire**

Likert Scale was used as the main tool of data collection. Due to its psychometric nature, likert scale questionnaire was used in this survey. Rather than selection "yes/no", respondents were given specific choices based on "not important" or "very important" on all the questions in the survey. The options included were not important at all/A little important/ moderately important/ very important. The scales are anchored by not important at all and very important. Four options measure respondents' agreement level with a variety of statements.

36 factors affecting food reference were selected for the questionnaire through brainstorming sessions, focus groups and a review of existing literature with particular emphasis paid to factors affecting food choice and changing food preferences from the view of older adults.

The first part of the questionnaire contained six background factors - age, health condition, and monthly income, and location, place of living and physical condition (dependent/independent). The other part of the questionnaire contained 36 factors covering food preference mainly under four themes – health factors, social factors, personnel factors and economic factors. The questions were read out to respondents by the researcher and marked the response in order to avoid the confusion.

Some factors were explained hence some of the respondents could not clearly understand the meaning. The questionnaire were filled by the researcher in private room of respondents house where as living room was used at elderly homes.

### **Semi structured interview**

35 respondents out of total sample were selected under convenient sampling method to interview in order to gather qualitative data assuming that interviews are essential in measuring older adult's opinion and attitudes towards food preference. Only 25 interviews have been utilized for the purpose as the rest of the interviews are not completed. Female adults' opinion and attitudes regarding food choice, preference and access were discussed in detail. Semi structured guideline was developed and followed by the researcher in order to keep the research to the track. It nearly took two hours to complete one interview. 8 participants took more than 2 sessions to complete the interviews as they were ill and difficult to concentrate and speak for a long time.

## Results

106 female older adults participated for the survey. For the convenience of data analysis they were categorized into 3 aged groups.

60 – 65 years	-	42
65 – 70 years	-	30
Above 70	-	34

Health statuses of the adults closely associate with their life style. Main changes occur in old age are relevant to their food pattern. Four main health conditions were identified among the respondents. Greater portion of them (n=95) had reported diabetics, 90 of them were suffering from hypertension, 89 of them had cholesterol and 10 of them reported renal disease.

In the sample surveyed, 75 respondents represented urban areas and rest were from semi urban areas and 57% of them were living by own, 29 % of them were living with children and 14% of them were from elderly homes. 48 respondents were widows and 70% of them were living by their own. Monthly income of the respondents was varied. 30 respondents' owed pension/ interest of saving/ insurance and 12 were reported no income and 44 of them reported monthly income above 5000 Rupees. When analyse about the physical condition of the respondents it was obvious that 68 of them were able to manage their own house hold work like cooking, cleaning and washing. However they have been deviated from Sri Lankan traditional methods of cooking such as grinding grains or chilies, pounding rice and chopping fire wood and have adopted more convenient cooking strategies. Only a small number of the female adults surveyed were still cooking with fire wood due to non - affordability of gas or electricity or due to their practice of cooking from their childhood.

According to the data analysis respondents have identified 9 factors are very influential for their preference for food. Most voted was factor was “healthy” and it was 93% (Figure .1)

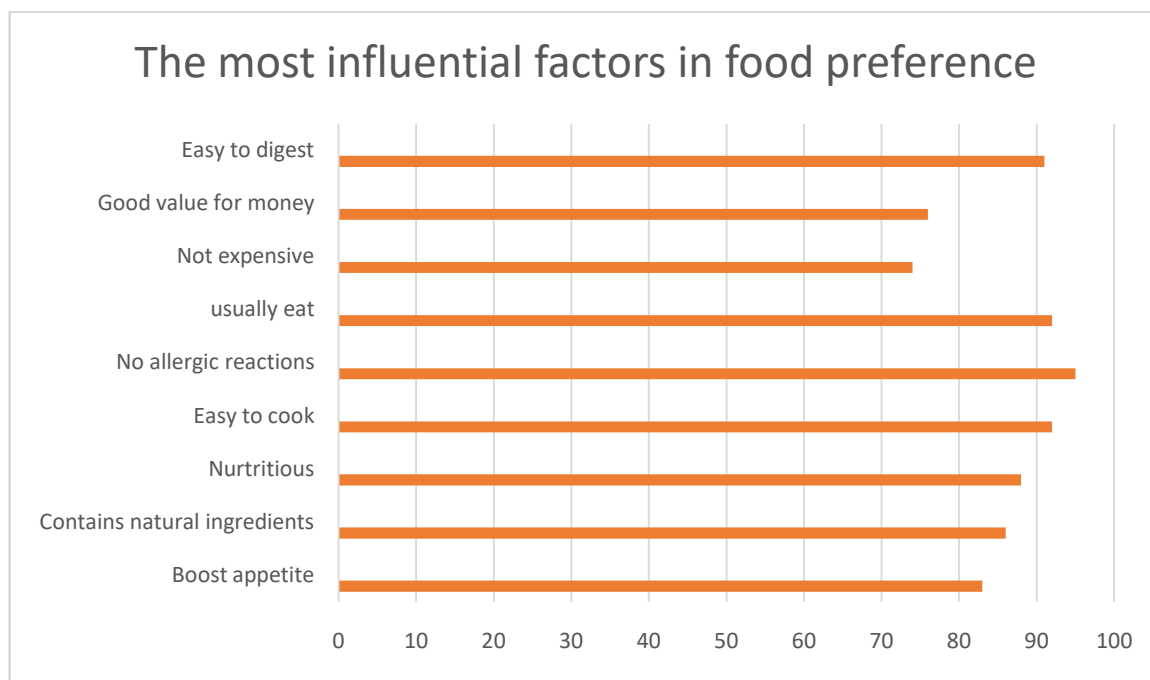


Figure .1 The most influential factors in food preference

Also Participants were very keen on the food which can boost their appetite. All most all participants reported a reduction in the amount of their food intake. And it was the main culprit of skipping meals. However as they were having lots of medicines after meal, any food that “feel like eating” was important.

### Moderately important factors

Although it was greatly discussed taste and smell are major component of food, the respondents have not taken it very seriously but moderately important. 64% of them declared taste of the food is fairly a big matter while more than half (59) saying nice smell of food persuade them moderately. This may be due to their knowledge and acceptance towards age related changes.

**Little important factors**

Contains no additives/ artificial ingredients, Contains lots of minerals and vitamins and the food which are good for skin/teeth and hair were other factors that they considered as moderately important. Out of the list given in the questionnaire respondents have marked Low in fat (N=75), Cheer up / helps to relax (N=58), Help to control weight (N=69) advertised in media commercials have little impact on their food choice (73%)

**Not important factors**

Although easy to cook considered as most influential factor, respondents did not want to buy or eat pre - cooked food or processed food. Main reason behind that was that type of food were considered as unhealthy and artificial. One respondent stated that

*“I always used to serve fresh and warm food to my husband and my children. I never agree with the heat and eat concept. Pre –cooked food always make me sick”*

They recognized some factors that never interfere with their choice of food. (Figure 2)

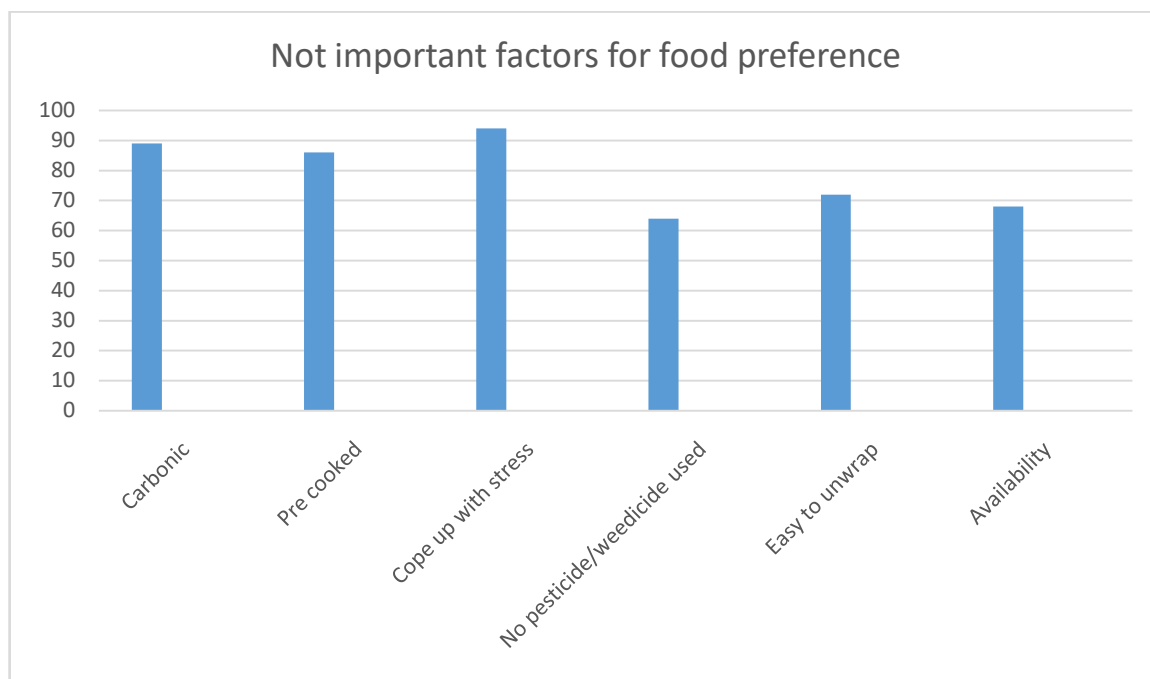


Figure 2: Not important factors for food choice

**Discussion**

Many factors influence female older adults’ food preference and eating behaviour. In this study it was identified that age related physical changes as well as psychological changes are very prominent factors for female adults. Hence food choice cannot be considered as a personnel phenomenon. ‘Being their own’ or having no one to cook for have demotivated older women from cooking. This was very serious with the women who have lost their spouses at young old stage. This loneliness (both psychological and physical) is a key factor in healthy eating as they feel cooking for themselves and eating alone is not worth. Participant 6 expressed her views on that;

***“I prepare only one curry which is easy to prepare and rice for me and I take same meal for both breakfast and lunch. I used to prepare healthy food for my husband as I wanted to look after his health. He is no more. Now I feel very lazy to cook for myself.”***

Most of the women surveyed used to cook and eat dhal considering the availability, price and its simplicity to prepare. That could be cooked either with water, coconut milk or oil. Data reports that respondents do not take taste and smell of the food as very important factors for their food preference. However they greatly consider the feeling of appealing as a major factor to choose the food. In their discussions they mentioned that they consume less food because of low appetite. This was very common among elders at elderly homes. 79% of them complained about their lowering appetite due to same variety of food served to them.

The findings of study indicate that their concern of healthy food is due to the health related problems they suffer from. Some expressed their worry for not concerning to have a balanced and nutritious diet, consuming high sugar food and not been active when they were young.

During survey, participants discussed their concern on “heavy” or “acidic” foods due to digestion complications, dysphagia due to age related changes. It was identified that they have desire to convert to vegetarian life style or an increased keenness for fish and giving up meaty food (65%).

***“When I was young I ate pork with relish. But now I have found my digestive system is not strong enough to accept those food. Now I only depend on vegetarian food and feel very relax”. (Participant 71)***

Their concern on ‘easy to digest’ has reduced the portion size and some food types. Popular food in Sri Lankan culture like Jack curry, long beans and eggplant have been identified as hard to digest by older women. They reported that they have experienced various types of inconveniences after having such food.

All most all the participants were accepted that the nutrition is very influential factor of food selection. Their knowledge on balanced diet and nutrition is admirable but the knowledge of the calorie value of the food is unsatisfactory. Although the protein requirement is high in old age, the majority was not aware of. Some respondents did not want to have protein in animal food form, therefore meeting their daily protein requirement was challenging.

It was clear that availability and food access were relevant factors of food preference; this covered several aspects such as the cost of food, availability in market or home garden, transport to supermarkets, seasonal food variation and good value for money. Majority of the respondents (76%), except the adults from elderly home agreed the cost of food is very influential factor in food choice.

***“I usually go to Sunday fair in the evening with my husband; when sellers are to finish their selling we can buy vegetable at a lower rate. Of course dry fish or other poultry items are not affordable for us. My children buy them for us. But we do not encourage them as they also have financial difficulties. (Participant12)”***

***“My doctor recommended me a particular brand name for a food supplementary, but I keep trying the cheaper one. (Participant 7)”***

Greater portion of participants had some kind of support with food, by family, friends, or neighbours with food shopping, transport to the supermarket or shops. Buying food was completely strange for women at elders’ homes and they were confined to what they are served. However on several occasions adults raised the importance of eating a varied diet, not eating the same day menu of the home. However their concern on nutritious diet was fulfilled with practices of those elderly homes.

***“I like things, especially if they’re cooked for my choice. I’d eat anything ... I eat more or less anything. (Participant 14)”***

It was significant that respondents have treated being carbonic, use of pesticide /weedicide are not important factors in their food preference. The concept of carbonic food was bit strange to them although they have been occupied in cultivations or at least running a home garden. They were of the opinion that in contemporary agriculture sector using pesticide and weedicides has to be accepted. But some accepted the fact that there should be a relationship between overly use of pesticides / weedicides to increase the risks of cancers or renal

disease. This understanding was due to the awareness programmes conducted by medical officers at medical clinics they participated.

It was observed that the food related work done by older female has been disturbed by diseases or difficulties and that has made them dependent.

*“I suffer from severe rheumatoid arthritis for five years. Now I have to seek others help to cut leaves for mulling. I can’t keep the handful of leaves tightly and cut into tiny pieces. I recently bought a slicer for that after seeing TV advertisement. To my worry my crooked fingers do not let me to operate it” (Participant 78)*

This situation was common with the female adults suffering from renal disease, heart disease and Parkinson’s and some participants without those diseases. Their preference for food were seriously affect by the dependence caused. Some women declared that they buy the prepared food items which are easy to open or unwrap. This was applicable from a cup of yogurt to tin of milk powder supplement.

## **Limitations of the study**

The limitation of the study should be accepted. This study geographically limits to Western province Sri Lanka. Factors affect food preference are varied according to some ones geographical background. Also there is no -representation in Tamil community due to the researchers limited knowledge of the Tamil language. Therefore the cultural diversity point of view also has been excluded.

If focus group discussions had been used as the research methodology more attitudes and food preference factors could be identified. The importance of some of the factors like calorie value, packed in environmental friendly way, helps to cope up with stress .etc had to be explained in detailed. It was felt that respondents mealy ranked some of the factors without giving a serious thought.

## **Conclusions**

This survey explores significant insights into food preference of females in later life. Female adults who are living alone had greater limitations for food preference. Food preparation for themselves and consumption alone for female adults provided no satisfaction. Social isolation and loneliness have been caused in changing consumption patterns. Cooking helped female adults in maintaining their independence at their later life. Cooking for others were always pleasure even in the mildest of age related difficulties. Before choose or serve food, adults preferences for food should be considered. This practice is seldom implement in elderly homes Sri Lanka. Hence the findings of this would be very significant for geriatric dieticians and nutritionists.

## **Suggestions**

- Improve adult’s awareness on balance food intake with physical activity - the more active they are the more food they need. The size of their meal portion should be monitored, if adult is less active smaller serving should be chosen.
- As the vegetable and fruits are available in Sri Lanka, adults must encourage to choose high fibre options, aim for five servings of fruit and vegetables every day to avoid age related digestive issues.
- The female older adults who are living by own and reluctant to prepare food should be introduced with alternatives pre – cooked, easy to prepare or food supplementary in order to secure their nutritional need.
- More support should be provided for independent cooking for older women
- It is proven that social isolation and loneliness declines appetite of older adults. More attention should be paid on social aspect of food especially in Elderly homes.

- Unsatisfactory knowledge on the importance of protein food was reported. Adults must provide with variety of protein rich food each day. If any adult is refusing to eat protein sources from animal food, nuts, grains can be added to their meals lavishly.
- Help in choosing right type of new market items that are aiming adults as they are very convenient in preparation and nutritious.

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