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# Assessment of Dietary habits of the Aged in Nkawie in the Atwima Nwabiagya District of Ashanti Region

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#### **Abstract**

The aged are among the vulnerable groups in the population due to degenerative factors that affect their food intake, metabolism and immune functioning increasing their risk to malnutrition, chronic diet related diseases and infections. Maximum attention is required to manage their food intake and provide other social support systems to improve their general wellbeing. A survey research design was used for this study. The target population for the study was the aged which included both males and females at Nkawie in the Atwima Nwabiagya District of the Ashanti Region who were 60 years and above, and were made up of both literates and illiterates. Stratified and convenience sampling techniques were used to select one hundred (100) aged people in the study area. The main instrument used for the data collection was a semi-structured questionnaire. The data collected were entered and analysed using the Statistical Package for Social Sciences (SPSS) and descriptive statistic of means, frequency distribution and percentages. The study revealed that good eating habits play a major role in the ageing process of the aged. It is recommended that, there should be an intensive education on healthy eating habits and regular exercise which is necessary for all people to ensure that the body is kept young and active.

#### Keywords

Assessment, Dietary, Habits, Aged, Nkawie, Ashanti Region

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#### 1. Introduction

The elderly are often considered as those who have advanced in age and still going through the process of ageing which is a privilege in life. In Ghana, an old person is seen as one who is 60 years and above because it is at this age that people retire from active employment or public service. However, the signs of ageing begin to appear in most people between 30 and 40 years. Signs of ageing include thinning and greying of hair, skin losing its elasticity, spot pigmentation and weight gain [1]. According to them, ageing has two phases namely positive and negative ageing. On the positive

side, increasing age brings greater experiences and expanded opportunities for wisdom or skills. The aged are thus regarded as a store house of wisdom. On the negative side, the aged are regarded as people who are weak and economically unproductive [1].

The aged are gradually becoming a fast-growing population group. Basically, general improvement in the life expectancy of the elderly has increased over the past 25 years [2]. A 1984 survey of world population showed that there were more than 376 million people in the world aged 60 years and above: and this number is expected to rise to 590 million by the year 2020. Three hundred and two (302) million of these people

\* Corresponding author E-mail address: bordohlity@yahoo.co.uk (P. Arthur) are believed to be found in developing countries [3]. There is the need for concern rooted in the fact that the situation in Ghana is indifferent, since current records for Ghana indicate that those aged 64 years and above are about 3% of the population and this figure is expected to double by the year 2010. Most of these age groups are dependent on the more active younger generation [3].

Although lifespan has not changed, life expectancy has increased dramatically over the past century [4]. It was reported that the implication will be an increased proportion of the aged population of which most of them may be weak and frail who need to be cared for. He reiterated that avoiding continually rising health care cost and maximising satisfaction with life requires postponing and minimising chronic illness which are mostly due to decrease in functioning of the various body organs and nutritional status one has built in life. Some current hypotheses on ageing suggest the following possible causes: errors in DNA copying accumulate, connective tissues stiffen, damage cell components build up, and electron-seeking free radical compounds break down cell parts. However, hormonal and immune systems do not function well as the autoimmune responses and high blood glucose damage key body compounds [4]. Researchers are also studying the possibility that excess energy intake may be a factor to premature death. However, he observed that diet can play a major role in solving some of these processes for mankind to benefit from increasing life expectancy [4].

This bleak picture has brought the aged group into focus at national, regional and international levels. Concern for the well-being of the elderly is not buried in emotions but it is well substantiated by the fact that they are very susceptible to physical, social, psychological and financial stress. The everincreasing number of the aged has made them become a vulnerable group in our society. The rapid increase and changing conditions of life due to socio-economic pressures, accelerated growth of urbanisation has hitherto provided support and care for the elderly. This situation has given way to the emergence of the nuclear family system which has no or very little support for the elderly.

In Ghana, the aged are held in reverence. They are regarded as not only custodians of our customs but are also believed to be endowed with immeasurable wisdom. In view of this, they are made the family heads, advisors, and judges, care providers and also play a significant role during arbitration. All these positive facts conclude that efforts must be made to improve on the health of the ageing population even though on the negative side, the aged are considered to be a dependent group. It came as a timely intervention, therefore, when the 35th World Health Assembly was called to address the needs of the elderly and to reallocate resources to carry

out research into the social, economic, health care and nutritional problems of the elderly. It is within the confines of such a study that I wish to undertake a research into the eating habits of the elderly most of whom live under suboptimal nutrition especially in Ghana. The principal aim of this study is to research into the eating habits of the elderly at Nkawie in the Atwima Nwabiagya District of Ashanti to address some of their nutritional problems.

Ageing characterises all lives and the effect is the gradual loss of functioning cells from many organs and tissues. It is therefore reasonably assumed that these effects can be counteracted or minimised by individuals through healthy eating practices. The changes that occur in ageing have implication on the nutritional status of older adults which is said to be contributing factor of malnutrition in most of the aged persons. The aged at Nkawie in the Atwima Nwabiagya District of Ashanti Region have for a long time had their fair share of nutritional problems. Most of them live in abject poverty with little or nothing to feed on. Their problems are compounded by chronic disabilities, loneliness, depression, loss of sight, and other physical factors which affect their nutritional habits. These factors have serious repercussions on their health and social status and in general, hasten their journey to the grave. Thus, for most people, old age is not a "golden age" because it is filled with physical and psychic pain. Nutrition plays a vital role in the ageing process and therefore the study of eating practices on the aged population at Nkawie in the Atwima Nwabiagya District of Ashanti Region is a step in the right direction. The study will help to reveal the contribution of nutrition in relation to the health status of the aged taking into consideration their eating habits.

#### 2. Review of the Literature

Ageing is a psychological process that we all go through. He added that we even begin to age from the period of conception. Therefore, ageing is not necessarily becoming grey haired. Being an old woman in a developing country like Ghana to many appears a life of abject poverty and total dependence on family members [5]. Old age is not all losses; there is a lot to be gained by being old if good health habits including good nutrition is practised. The aged is endowed with sense of integrity, fulfilment, wisdom and guidance for the young ones [6].

A pattern of eating includes the foods deemed acceptable and the time periods and setting in which foods are consumed [7]. She explained that the development of eating pattern begins with the family but it is modified as a child grows into adulthood. Loneliness tends to affect the eating pattern of the aged. Food habits are about choice and preference of food [7]. It is the development of taste for certain types of foods as

a result of continuous choice of such foods and it may be due to influential factors including income, culture, concerns about health, religion and social values [8].

Habit is something you do over and over again until you do it without thinking about it, and the aged may get into the habit of eating certain kinds of foods to relieve loneliness or sadness. They also pointed out that wellness should be the goal for life and should be equated to good health. Wellness does not only mean physical well-being but also emotional, mental and social well-being as well [9]. A wellness plan includes the following:

Choosing and eating varieties of nutritious foods.

Exercising regularly.

Getting plenty of sleep.

Learning to handle stress.

Avoiding harmful substances such as alcohol, tobacco and other drugs. Nutrients needs must depend on the age, sex and how active the person is [9].

Food patterns to how meals and snacks are eaten throughout the day and when they are eaten [10]. The aged skip some of the meals for the day which affect their nutritional health status and general well-being. She also attributed the nutritional problems of the aged to changes in food habits and patterns due to physiological changes that occur in ageing and loneliness. She suggested that errors in food selection are less serious in the young who can recover from such mistakes than the elderly and that when you feel best, you can enjoy life more [10]. Food pattern is the way food is selected, prepared and when it is eaten. However, they were of the view that eating patterns of older adults may be influenced by ethnic background or religious beliefs [11]. Eating patterns depend on a variety of factors such as food appeal, physical health, economic status, activity level, functional abilities and psychosocial, cultural and environmental influence [12]. This implies that, changes in any one of these factors will affect the nutritional status of the older adults.

Healthy elderly people's dietary patterns and the food eaten are not likely to be that much different from what is known about those of younger people [13]. Eating pattern is the number of times foods or meals are selected, prepared and served to the family members, however, they claimed that in the family, the adult becomes a gatekeeper and controls the type and availability of food to the family [13]. However, with proper planning the elderly can plan to meet the nutrient requirements of the family. Older adult shift their main meal of the day from the evening to noon. This is because they are more active in the afternoon than during the evening, and adult prefer to eat five or six smaller meals during the day instead of three large ones [15]. Many factors affect the food

choices and eating habits of older people including whether they live alone or with others at home or in an institution. Men living alone for example, are likely to consume poorer quality diets than those living with spouses. Older people who have difficulty in chewing or have lost taste sensitivity may no longer seek a variety of food [16].

Instead of loneliness and sadness preventing people from eating certain kinds of foods; it may rather get people into eating certain kinds of foods to relieve the sadness and loneliness [9]. Others also explained food pattern as the number of times one eats in a day and how he chooses to eat such foods. However, it has been revealed that errors in food selection are less serious in the young because they can recover from such mistakes than the elderly as it will be late to correct the errors [9]. A study reported that at one time or the other, an older person experiences, grief, fatigue, loneliness, depression, anxiety, helplessness and rage which tend to affect the eating habit [5].

Majority of the aged population in Ghana are being confronted with many challenges including health problems, depression, poverty and other physical factors such as dentition problems, lost of sight, hearing impairment and problems with sense of taste and smell. These and many other factors affect choice of food by the aged [6]. Eating behaviours and dietary quality are influenced by the type of food grown in the area. Food consumed at home or away from home, at restaurants and fast food establishments can negatively affect the nutrition quality and family meal patterns [17].

## 3. Methodology

The survey research design was used for this study. The total population of the District was 237,610 comprising 115,312 females and 122,298 males. However, the population of the elderly (60 years and above) in the District was 19,188 representing 8.07%, comprising 8,260 females and 10,928 males [18]. The target population for the study included all the aged people at Nkawie in the Atwima Nwabiagya District of the Ashanti Region who were 60 years and above, and were made up of males and females, literates and illiterates.

Stratified and convenience sampling techniques were used to select one hundred (100) aged people at Nkawie in the Atwima Nwabiagya District of the Ashanti Region for the study. Stratified random sampling was employed because it gives higher precision since every part of the population gets a better representation. Also, the population was heterogeneous and had definite strata or classes. The district was sub-divided into 5 strata. The questionnaire was pilot tested at Abuakwa; one of the suburbs of the regional capital to fine tune the questionnaire before it was used for the actual work. Fifty (50) illiterates of the aged group were assessed on their eating habits and life style using the questionnaire

designed for the study from each stratum. The procedure was repeated for the aged literates. The researchers therefore interviewed 50 males and 50 females of which each group constituted 25 literates and 25 illiterates.

The main instrument used for the data collection was a semistructured questionnaire. The questionnaire was administered personally to the respondents. Whereas some participants were able to complete the questionnaire themselves, others who could not write were assisted by filling in their responses. Respondents who needed further clarification were assisted to ensure that the questions were answered rightly. With the illiterate respondents, the researchers assisted them by interpreting the questionnaires from English language to a Ghanaian language (Twi). The total interview time for each subject varied between 30 minutes and 1 hour.

The data collected were entered and analysed using the Statistical Package for Social Sciences (SPSS) and descriptive statistic of means, frequency distribution and percentages. Data was considered in terms of meal frequency and the regular use (intake) of selected food items: breakfast, lunch, supper and snack and other selected food such as fruits, vegetables, meat and poultry, dairy products, fish, cereals, roots and tubers, fats and oils and alcoholic and non-alcoholic beverages.

### 4. Findings and Discussions

Dietary habits of the Aged in Nkawie in the Atwima Nwabiagya District of Ashanti Region are presented under this section based on the research question- What is the dietary habit of the elderly at Nkawie?

# 4.1. The Number of Times the Aged Ate in a Day

Table 1. Number of times aged ate in a day.

| Desmonso    | Responden | ts      | Total          |
|-------------|-----------|---------|----------------|
| Response    | Males     | Females | Percentage (%) |
| Once        | 3         | 3       | 6              |
| Two times   | 30        | 28      | 58             |
| Three times | 15        | 16      | 31             |
| Four times  | 2         | 3       | 5              |
| Total       | 50        | 50      | 100            |

The study revealed that in table 1, majority of respondents (58%) ate twice in a day with thirty-one percent (31%) eating their first meal of the day at 9 o'clock in the morning; twenty percent (20%) ate their first meal by 8am; fourteen percent (14%) ate their first meal of the day by 7am while the rest had their first meal of the day between 10 am – 12 mid-day. The findings also showed that 56% respondents ate their last meal of the day between five to six (5-6) o'clock in the evening. Twenty-six percent (26%) respondents ate their last meal of the day between three to four o'clock in the evening and 18% ate their last meal of the day after 7 o'clock in the evening. The

study also showed that because a majority of the respondents ate late in the morning, they were not able to eat the three main meals of the day; breakfast, lunch and supper. There were mixed responses to the question as to when they ate the first and last meals of the day. The male respondents ate earlier than the female respondents particularly those who were married. As they served their male spouses before they take their turn to eat and also, they were involved in household chores which tend to prolong their eating time. Generally, the respondents ate their last meal by 6pm which was an indication of good eating habit if they go to bed after 3 to 4 hours.

Some of the respondents indicated that they did not feel-like eating very early in the morning. Others responded that cooking was a problem while others attributed this to financial difficulties and loneliness. The finding is consistent with the explanation of eating patterns and food habits of the elderly [7]. He indicated that "a pattern of eating includes the foods deemed acceptable and the time periods and setting in which foods are consumed, but it is modified as a child grows into adulthood. This may be due to influential factors including income, culture, loneliness, concern about health and religious values.

Majority (49%) of the respondents skipped 6 -8 meals in the week; 23% skipped 3-5 meals a week and 14% of the respondents skipped 0 - 2 meals in the weeks. Among the reasons for skipping meals was that some of them solely depend on close relatives who were working outside the home therefore they come home late to cook for them. The findings compare favourably with a similar study postulated that, the aged skip some of their meals for the day which affect their nutritional health status and general well-being, and attributed the nutrition problems of the aged to changes in food habits and patterns due to physiological changes that occur in ageing and loneliness [10]. This finding also confirms a study on the Nutrition Situation of the Elderly in Ghana: A Case Study published in "Asian Journal of Medical Sciences" that when the aged are not institutionalised they may skip some of their main meals for the day due to factors including loneliness, low income and chewing difficulties [19].

#### 4.2. Preferred Food of the Elderly

Table 2. Preferred food for the respondents.

| Type of Food  | Respondent | Total % |          |
|---------------|------------|---------|----------|
| Type of Food  | Male       | Female  | 10tal 76 |
| Fufu          | 29         | 31      | 60       |
| Ampesi        | 10         | 7       | 17       |
| Banku/ Kenkey | 3          | 2       | 5        |
| Rice          | 2          | 2       | 4        |
| Oto           | 3          | 5       | 8        |
| Nuhuu         | 3          | 3       | 6        |
| Total         | 50         | 50      | 100      |

Sixty percent of the respondents (60%), who were interviewed through the semi-structured questionaire,

preferred fufu to ampesi, banku, rice, oto and nuhuu. The order of preference of the dishes was ampesi (17%), Oto

(8%), nuhuu (6%), kenkey (5%) and rice (4%) (Table 2).

#### 4.3. The Number of Times Preferred Foods Were Eaten in a Week

**Table 3.** Number of Times Preferred foods were eaten by Elderly in a week (Male).

| Number of times ea | aten in a week |    |               |      |               |     |             |    |
|--------------------|----------------|----|---------------|------|---------------|-----|-------------|----|
| T                  | Everyday       |    | Three times a | week | Two times a w | eek | Once a week |    |
| Type of Food       | Respondents    | %  | Respondents   | %    | Respondents   | %   | Respondents | %  |
| Fufu               | 28             | 56 | 13            | 26   | 5             | 10  | 4           | 8  |
| Ampesi             | 15             | 30 | 12            | 24   | 12            | 24  | 31          | 62 |
| Oto                | 3              | 6  | 3             | 6    | 4             | 8   | 39          | 78 |
| Nuhuu              | 3              | 6  | 3             | 6    | 5             | 10  | 39          | 78 |
| Banku/Kenkey       | 7              | 14 | 7             | 14   | 8             | 16  | 28          | 56 |
| Rice               | 4              | 8  | 9             | 18   | 7             | 14  | 30          | 60 |

Table 4. Number of Times Preferred foods were eaten by Elderly in a week (Female).

| Type of Food | Everyday    |    | Three times a v | veek | Two times a we | ek | Once a week |    |
|--------------|-------------|----|-----------------|------|----------------|----|-------------|----|
| Type of Food | Respondents | %  | Respondents     | %    | Respondents    | %  | Respondents | %  |
| Fufu         | 27          | 54 | 14              | 28   | 6              | 12 | 3           | 6  |
| Ampesi       | 15          | 30 | 14              | 28   | 7              | 14 | 14          | 28 |
| Oto          | 6           | 12 | 6               | 12   | 12             | 24 | 26          | 52 |
| Nuhuu        | 5           | 10 | 10              | 20   | 11             | 22 | 24          | 48 |
| Banku/Kenkey | 8           | 16 | 6               | 12   | 9              | 18 | 27          | 54 |
| Rice         | 5           | 10 | 7               | 14   | 11             | 22 | 27          | 54 |

Majority of the respondents (males – 56%) ate fufu everyday. Table 3 shows that 54% male respondents ate fufu everyday, 26% ate fufu three times in a week, 10% ate fufu two times in a week and 8% ate fufu once in a week. In comparison with the female respondents, Table 4 shows that 54% ate fufu everyday. Twenty-eight (28%) ate fufu three times in a week; 12% ate fufu two times in a week and 6% ate fufu once in a week.

The aged respondents in Nkawie preferred fufu and "ampesi" (boiled plantain) to kenkey, banku, rice and "nuhuu". It was observed that fufu and ampesi were ethnic dishes for the people in Ashanti region, although all the respondents indicated that there had been some changes in the choice of certain kinds of foods due to some problems they encountered after eating certain kinds of foods. These problems included palpitation,

heart burns, stomach ache and indigestion. This agrees with a research finding that, food patterns may relate to previous diseased symptoms experienced by consumers [11]. However, the eating patterns of the older adults are influenced by ethnic background and religious beliefs. The findings also confirmed with a similar study that, eating patterns depended on a variety of factors such as food appeal, physical health, economic status, activity level, functional abilities and psychosocial, cultural and environmental influences [12].

Further assessment was made to find out how the aged selected food commodities from the six main food groups in Ghana. These included cereals and grains, starch roots and plantains, meat and animal products, fruits and vegetables, legumes, nuts and pulses, and fats and oils.

#### 4.4. Number of Times Respondents Ate Cereals and Grains

Table 5. Number of times respondents ate cereals and grains per week (Male).

| Town of Council | Once a day |    | Twice a day | Twice a day |           | week | Once a week |    |
|-----------------|------------|----|-------------|-------------|-----------|------|-------------|----|
| Type of Cereal  | Frequency  | %  | Frequency   | %           | Frequency | %    | Frequency   | %  |
| Maize           | 10         | 20 | 8           | 16          | 10        | 20   | 22          | 44 |
| Millet          | 5          | 10 | 5           | 10          | 10        | 20   | 28          | 56 |
| Rice            | 10         | 20 | 9           | 18          | 13        | 26   | 16          | 32 |
| Wheat           | 16         | 32 | 8           | 16          | 19        | 38   | 7           | 14 |

Table 6. Number of times respondents ate cereals and grains per week (Female).

| Type of Cereal | Once a day |    | Twice a day | Twice a day |           | ı week | Once a week |    |
|----------------|------------|----|-------------|-------------|-----------|--------|-------------|----|
| Type of Cereal | Frequency  | %  | Frequency   | %           | Frequency | %      | Frequency   | %  |
| Maize          | 10         | 20 | 6           | 12          | 11        | 22     | 23          | 46 |
| Millet         | 3          | 6  | 2           | 4           | 10        | 20     | 35          | 70 |
| Rice           | 12         | 24 | 4           | 8           | 14        | 28     | 18          | 36 |
| Wheat          | 14         | 28 | 5           | 10          | 15        | 30     | 16          | 32 |

Tables 5 and 6 show the number of times respondents ate cereals and grains per week. An average of 45% respondents (males and females) ate maize once in a week, 63% ate millet once in a week, 34% ate rice once in a week and 23% ate wheat once in a week. Majority of the respondents ate cereals and grains once in a week. Maize and rice were the preferred cereals. Millet is the least preferred cereal because 70% ate it

once in a week. Although all the respondents had eaten cereals and grains within the week, it was evident that the frequency at which the aged ate cereals in a day was low. This indicates that cereals and grains are not staple foods for the respondents in the Atwima Nwabiagya District of Ashanti Region. However, wheat-based products including bread and doughnuts were eaten together with breakfast meals.

#### 4.5. Number of Times Starchy Root, Tubers and Plantain Were Eaten Within the Past Week

Table 7. Number of times the elderly ate roots, tubers and plantain within a week (Male).

| Respondents   |             |    |            |            |           |      |             |    |
|---------------|-------------|----|------------|------------|-----------|------|-------------|----|
| Roots, Tubers | Twice a day |    | Once a day | Once a day |           | week | Once a week |    |
| & Plantain    | Frequency   | %  | Frequency  | %          | Frequency | %    | Frequency   | %  |
| Potatoes      | 0           | 0  | 0          | 0          | 0         | 0    | 5           | 10 |
| Yam           | 3           | 6  | 9          | 18         | 15        | 30   | 23          | 23 |
| Cocoyam       | 1           | 2  | 6          | 12         | 10        | 20   | 33          | 66 |
| Plantain      | 11          | 22 | 31         | 62         | 5         | 10   | 3           | 6  |
| Cassava       | 5           | 10 | 28         | 56         | 9         | 18   | 8           | 16 |

Table 8. Number of times the elderly ate roots, tubers and plantain within a week (Female).

| Roots, Tubers<br>& Plantain | Respondents |    |            |            |           |                    |           |    |
|-----------------------------|-------------|----|------------|------------|-----------|--------------------|-----------|----|
|                             | Twice a day |    | Once a day | Once a day |           | Three times a week |           |    |
|                             | Frequency   | %  | Frequency  | %          | Frequency | %                  | Frequency | %  |
| Potatoes                    | 0           | 0  | 0          | 0          | 0         | 0                  | 1         | 2  |
| Yam                         | 2           | 4  | 10         | 20         | 15        | 30                 | 22        | 44 |
| Cocoyam                     | 6           | 12 | 9          | 18         | 11        | 22                 | 24        | 48 |
| Plantain                    | 15          | 30 | 26         | 52         | 7         | 14                 | 2         | 4  |
| Cassava                     | 3           | 6  | 27         | 54         | 16        | 32                 | 4         | 8  |

Tables 7 & 8 show the number of times the respondents ate starchy roots, tubers and plantain within a week. Majority of the respondents (males & females) 57% ate plantain at least once a day, 22% ate it twice a day, 12% ate plantain three times in a week while 5% ate plantain once in a week. The above results also reveal that 55% ate cassava at least once a day, 25% ate cassava three times in a week and 12% ate cassava once a week. Only 6% ate potato a week.

Respondents ate cocoyam and yam as well within the week. However, plantain and cassava are the most preferred. The respondents ate cassava more than other roots and tuber crops. This agrees with the findings that respondents preferred fufu and ampesi to all the dishes stated in the questionnaire. This is because plantain and cassava are the main ingredients used in preparation of fufu and ampesi as these are ethnical dishes for Ashanti people.

#### 4.6. Number of Times Meat and Animal Products Were Eaten Within a Week

Table 9. Number of times the elderly ate animal foods within a week (Males).

|                     | Respondents |    |            |    |             |        |             |    |  |  |  |
|---------------------|-------------|----|------------|----|-------------|--------|-------------|----|--|--|--|
| <b>Animal Foods</b> | Twice a day |    | Once a day |    | Three times | a week | Once a week |    |  |  |  |
|                     | Frequency   | %  | Frequency  | %  | Frequency   | %      | Frequency   | %  |  |  |  |
| Beef                | 0           | 0  | 10         | 20 | 22          | 44     | 18          | 38 |  |  |  |
| Mutton              | 0           | 0  | 13         | 26 | 18          | 36     | 19          | 38 |  |  |  |
| Goat meat           | 0           | 0  | 7          | 14 | 17          | 34     | 26          | 52 |  |  |  |
| Poultry             | 0           | 0  | 11         | 22 | 12          | 24     | 27          | 54 |  |  |  |
| Fish                | 15          | 30 | 27         | 54 | 5           | 10     | 3           | 10 |  |  |  |
| Bush meat           | 0           | 0  | 9          | 18 | 13          | 26     | 28          | 56 |  |  |  |
| Eggs                | 2           | 4  | 12         | 24 | 18          | 36     | 18          | 36 |  |  |  |
| Milk                | 0           | 0  | 22         | 44 | 13          | 26     | 15          | 30 |  |  |  |

|                     | Respondents |    |            |            |           |        |             |    |
|---------------------|-------------|----|------------|------------|-----------|--------|-------------|----|
| <b>Animal Foods</b> | Twice a day |    | Once a day | Once a day |           | a week | Once a week |    |
|                     | Frequency   | %  | Frequency  | %          | Frequency | %      | Frequency   | %  |
| Beef                | 0           | 0  | 13         | 26         | 15        | 30     | 26          | 52 |
| Mutton              | 0           | 0  | 6          | 12         | 9         | 18     | 35          | 70 |
| Goat meat           | 0           | 0  | 5          | 10         | 10        | 20     | 35          | 70 |
| Poultry             | 0           | 0  | 7          | 14         | 11        | 22     | 32          | 64 |
| Fish                | 13          | 26 | 18         | 36         | 15        | 30     | 4           | 8  |
| Bush meat           | 0           | 0  | 6          | 12         | 10        | 20     | 34          | 68 |
| Eggs                | 0           | 0  | 16         | 32         | 13        | 26     | 21          | 42 |
| Milk                | 0           | 0  | 14         | 28         | 14        | 28     | 22          | 44 |

Table 10. Number of times the elderly ate animal foods within a week (Females).

Tables 9 & 10 present the number of times respondents ate animal foods in a week. Quite a large number of respondents did not eat beef, mutton, eggs, poultry, goat meat and milk twice in a day. None of respondents ate beef, mutton, eggs, poultry, goat meat and milk twice in a day; however, 28% of respondents ate fish twice in a day. Forty-five percent (45%) of the respondents ate fish at least once a day, 36% drank milk once a day, and the following figures represent the rest of the animal foods eaten once a day by the respondents: eggs (24%), Beef (19%), mutton

(19%), poultry (18%), bush meat (15%) and goat meat (12%). The result also reveals that the males (44%) drank milk in a day more than the female (28%) respondents. Meat and animal products, legumes, nuts and pulses were the main sources of protein foods. It was observed that majority of the aged respondents (73%) ate fish as their main source of protein food as compared to the other protein foods. They explained that fish could be easily flaked, chewed and swallowed as compared to meat. Milk was also consumed by the respondents.

#### 4.7. Number of Times Fruits Were Eaten Within a Week by the Aged

Table 11. Number of times the aged ate fruits within a week (male and female).

|            | Percenta | Percentage (%) of Respondents |   |             |    |            |          |      |  |  |  |
|------------|----------|-------------------------------|---|-------------|----|------------|----------|------|--|--|--|
| Fruits     | Once a d | Once a day                    |   | Twice a day |    | nes a week | Once a v | veek |  |  |  |
|            | F        | M                             | F | M           | F  | M          | F        | M    |  |  |  |
| Orange     | 20       | 15                            | 5 | 8           | 15 | 16         | 10       | 11   |  |  |  |
| Banana     | 9        | 9                             | 5 | 6           | 14 | 16         | 22       | 21   |  |  |  |
| Pineapple  | 7        | 11                            | 2 | 2           | 13 | 10         | 28       | 27   |  |  |  |
| Pear       | 7        | 6                             | 2 | 2           | 12 | 11         | 29       | 31   |  |  |  |
| Apple      | 7        | 8                             | 0 | 2           | 9  | 8          | 24       | 32   |  |  |  |
| Pawpaw     | 7        | 9                             | 3 | 2           | 10 | 10         | 30       | 29   |  |  |  |
| Watermelon | 7        | 4                             | 0 | 0           | 13 | 9          | 30       | 37   |  |  |  |

Table 11 shows the various fruits and the number of times they were eaten by the respondents within the week. Thirty-five percent (35%) of the respondents ate oranges at least once a day, 31% ate oranges three times in a week and 21% ate it once in a week. Oranges, banana, pawpaw and avocado pear were the major fruits grown at Nkawie in the Atwima Nwabiagya District of Ashanti Region. Even though majority

of the respondents had eaten the listed fruits more than once in a week, they reiterated that they ate them only when they were in season. Generally, their fruit intake was poor as majority ate fruits once in a week. Their choices of foods were based on local foods grown in their area rather than those grown in the other parts of the country and foreign foods.

#### 4.8. Number of Times Respondents Ate Fats and Oils Within a Week

Table 12. Number of times respondents ate fats and oils within a week.

|                    | Percentage (%) of Respondents |    |         |             |   |                    |    |      |  |
|--------------------|-------------------------------|----|---------|-------------|---|--------------------|----|------|--|
| Fruits& Oils       | Once a day                    |    | Twice a | Twice a day |   | Three times a week |    | veek |  |
|                    | F                             | M  | F       | M           | F | M                  | F  | M    |  |
| Butter             | 0                             | 0  | 2       | 3           | 0 | 2                  | 0  | 0    |  |
| Margarine          | 6                             | 9  | 26      | 21          | 7 | 7                  | 11 | 13   |  |
| Palm oil           | 26                            | 26 | 7       | 10          | 6 | 4                  | 12 | 10   |  |
| Other Cooking oils | 12                            | 12 | 19      | 11          | 8 | 14                 | 11 | 13   |  |

The above responses show the number of times that respondents ate fats and oils within a week (Table 12). It is

evident that the commonest fats and oils which the respondents used in meal preparation is palm oil. Fifty-two percent (52%) of respondents used palm oil daily in their

meal preparation as against 24% for other cooking oils. Concerning butter and margarine, 15% of respondents ate margarine daily while no respondent used butter in meal preparation. They explained that margarine is used in bread making in Ghana instead of butter. Analysing the number of times respondents ate fats and oils which are also a good source of energy for proper functioning of the body, it was

clear that palm oil was the most preferred amongst all the fats and oil groups. Respondents complained about challenges confronting them concerning consumption of fats and oils foods. Almost all the respondents complained of indigestion, palpitation, heart burns and other problems associated with digestion. Butter was the least consumed.

#### 4.9. Number of Times Respondents Drank Beverages Within a Week

Percentage (%) of Respondents\* Beverage Once a day Once a week Twice a week Never M F M M F M F Tea 18 18 26 18 11 6 7 15 10 11 23 12 23 Cocoa 6 0 Coffee 15 0 17 6 10 2 8 42 2.1 55 23 38 53 Total 43 46 32

**Table 13.** Number of times the elderly drank beverages in a week.

The study has revealed that male respondents drank tea and coffee very often as compared to their female respondents. It was observed that 36% males drank tea once a day as against 12% females. Thirty percent (30%) male respondents drank coffee once a day while no female (0%) drank coffee once a day (table 13). The female respondents preferred cocoa to tea and coffee.

The three main types of beverages which were normally drunk in the morning at breakfast were also investigated. The results of the study revealed that a large number of both male respondents preferred coffee and tea compared to their female counterparts who preferred to drink cocoa.

With regards to the recommended food intake, the findings revealed that the aged respondents were very cautious about their physical wellness because they chose and ate varieties of foods from all the six groups. They explained that they have been following the nutrition education offered by their health personnel and other mass media including television and radio programmes. The findings were supported by a scientific that, consumption of diversified diets would maximize the probability of consuming all nutrients in adequate amounts and the healthy practice throughout life may minimize the onset of chronic diseases in older adults [20].

# 5. Conclusion and Recommendation

The study revealed that good eating habits play a major role in the ageing process. It has also confirmed that ageing is a developmental process and that there is nothing one can do to stop it. However, one can slow down the ageing process through good eating habits acquired earlier in life, though

genetic factors and other environmental factors may play a significant role in one's life.

It is recommended that, there should be an intensive education on healthy eating habits and regular exercise which is necessary for all people to ensure that the body is kept young and active. This could be ensured through Nutrition educators and other health interventions. The education could be done through appropriate educative, informative and entertaining programmes in the form of workshops, seminars, talk shows and fora. Nutrition educators should publicize the need for good nutrition as the major means of slowing down the ageing process and also a healthy ageing process. This will enable people to develop positive attitude towards successful ageing.

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<sup>\*</sup>M - Male F -Female.

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