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# Knowledge, Attitudes and Practices of the Populations of Dapaong and Its Surroundings in Togo on Sodium/Salt and Potassium Intakes

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## Abstract

**Background:** Food plays an important role in human health. A healthy diet contributes to the improvement of the health of populations. A diet high in sodium/salt and low in potassium has been shown to contribute to cardiovascular disease. The objective of this study was to assess the knowledge, attitudes and practices (KAP) of the inhabitants of Dapaong and its surroundings on dietary intakes of sodium/salt and potassium. **Methods:** This was a cross-sectional study conducted from 1 November to 15 December 2022 involving 400 adults aged 25 to 44 years. Sampling was done using the probability method and the multistage random sampling technique with proportional allocation. These two methods were applied to select villages, households, and primary targets in each locality according to whether the area of residence was urban or rural. The electronic kobocollect questionnaire was administered to people in households and the interview guide was to resource persons, administrators and community leaders to collect the data. **Results:** Overall, 80.25% of the respondents had low knowledge of sodium/salt intakes; 88.50% had poor attitudes towards the use of foods that provide more sodium/salt and 92.75% had behaviours that were not conducive to reducing excessive salt consumption. With regard to potassium, the same trend was observed in the order of 91%, 72% and 73.75%. **Conclusion:** The KAP levels of the people studied were not good. The populations are prone to cardiovascular disease. A multisectoral nutritional intervention would be essential

to improve the knowledge of the populations on sodium/salt and potassium intakes and therefore favourable to the fight against CVD/NCD.

## Keywords

KAP, Sodium/Salt, Potassium, Togo

## 1. Introduction

Dietary intakes high in sodium and low in potassium have been shown to contribute to the development of cardiovascular disease [1] [2] [3] [4]. Reducing the amount of salt/sodium versus potassium in people's diets is considered one of the most cost-effective public health measures to prevent cardiovascular and non-communicable diseases [5] [6] [7]. Globally and in Africa, many studies have shown that salt consumption levels are far from normal, about twice the recommended level [8] [9] [10] [11]. This would explain the high morbidity and mortality rates of non-communicable diseases, making them the leading cause of premature death in the world (32% of all deaths worldwide) [12]. In Togo, a recent study was able to estimate the level of salt consumption at 8g/day in three most populated regions [13]. Another study showed that people consumed more sodium-rich and less potassium-rich foods such as bread and meals with green leafy vegetable sauce, respectively [14]. However, Togo, like other WHO member countries, set itself the goal at the World Health Assembly in 2013 of reducing salt consumption by 30% by 2025 [15]. Progress is being made but efforts must be maintained if these targets are to be met. To better understand salt consumption levels, one of the WHO's recommendations is to assess individuals' knowledge and behaviours related to the consumption of foods that provide salt/sodium and potassium in order to take appropriate action [16]. Similarly, many studies have shown the adequacy of knowledge, attitudes and behaviours of individuals in relation to their dietary intakes of sodium and potassium [17] [18]. Furthermore, in order to optimise strategies for reducing sodium/salt consumption and improving dietary intakes of potassium, health education is one of the recommended effective interventions.

Given that salt intake exceeds the maximum recommended by WHO in Togo and that reduction strategies remain sub-optimal, it is essential to understand the opinion of Togolese populations regarding sodium/salt and potassium intakes in order to implement specific interventions that facilitate healthy food choices.

## 2. Objectives

### 2.1. General Objective

To study the knowledge, attitudes and behaviours of people in relation to dietary intakes of sodium/salt and potassium in the city of Dapaong and its surround-

ings in Togo.

### 2.2. Specific Objectives

- To determine the levels of knowledge, attitudes and behaviours of respondents on dietary sodium/salt and potassium intakes;
- To assess the quality of respondents' knowledge, attitudes and behaviours regarding dietary sodium/salt and potassium intakes;
- To establish relation between respondents' knowledge, attitudes and behaviour and socio-demographic factors.

## 3. Methods

### 3.1. Setting of the Study

The study took place in the town of Dapaong and its surrounding villages in the Savanes region, one of the most populated regions of Togo.

### 3.2. Nature of the Study

This was a cross-sectional, analytical study that ran from 1 November to 15 December 2022.

### 3.3. Target Populations

The target population was adults aged 25 - 64 in the city of Dapaong and surrounding villages. The primary target was the people surveyed in the households and the secondary target the resource persons, decision-makers living in Dapaong.

#### 3.3.1. Non-Inclusion Criteria

Included were all persons aged 25 - 64 years, male and female, living in the study area for at least six months.

#### 3.3.2. Exclusion Criteria

Anyone who did not sign the informed consent form was excluded.

### 3.4. Sampling Methods and Technics

Sampling was done using the probability method and the multistage random sampling technique with proportional allocation. These two methods were applied to select villages, households, and primary targets in each locality according to whether the area of residence was urban or rural. According to the MICS 2017 survey in Togo, urban and rural areas represented 44% and 56% of the population respectively. The 1st degree was made up of villages and city neighbourhoods. From the list of these villages and town districts, 10% were randomly selected. The 2nd stage consisted of household concessions and the 3rd stage consisted of individuals in households. The sampling step was determined by dividing the number of households in the identified locality by the total number of

households to be surveyed in each area. A random number between 1 and the sampling increment was given to the first randomly selected household. The other households were selected by adding the step to the previous number. The head of the household was chosen for the selection of the subjects to be surveyed. When both the father and mother were present at the time of the survey and are all eligible, a simple random selection was applied to identify the successful respondent. For the focus group, 5% (20 persons) were randomly selected from outside the primary target group to take part in the interview. The choice of health facility managers was exhaustive (28/28).

#### 3.4.1. Sample Size

The sample size was calculated by applying the Schwartz formula while considering the prevalence of excessive salt intake at 50% (exact prevalence not known in Togo). By taking into consideration the possibility of refusal (5%), we increased and rounded the size of the sample to n = 400.

#### 3.4.2. Variables in This Study

The variables consisted mainly of questions related to the knowledge, attitudes and behaviours (KAB) of individuals, administered from the survey forms. This was essentially a questionnaire adapted to the standard WHO model used for KAP evaluation studies for reducing the level of salt consumption worldwide [19]. The questionnaire was composed of three sessions. The first session concerned socio-demographic data, the second concerned sodium/salt intake and the third concerned potassium intake. An interview guide and a focus group were also used to collect data from resource persons.

#### 3.4.3. Data Collection Procedures

Before proceeding with data collection, the questionnaires were validated by a team of Togolese nutritionists and socio-anthropologists and then tested in the study area outside the study localities two times before the study. Data collection was done using kobocollect. The forms were set up in the Android phones of the interviewers who were initially trained in the use of kobocollect. In the practice of the training, they were sent to the field to pre-test the questionnaires. Then, they gave feedback to improve and validate the final questionnaire used for the survey. The questionnaire was administered to the respondents in the 400 households and the interview guide to the resource persons, administrators, and community leaders. The focus group interview was conducted with a group of women and men in order to gather their opinions and/or perceptions on strategies to combat salt versus potassium in the community.

#### 3.4.4. Data Processing and Analysis

Qualitative variables were described by proportion and confidence interval (CI) and quantitative variables by mean with standard deviation (SD) or median with interquartile range (IQ). The data were analysed with STATA software version 16.1. All responses were mandatory and missing data were removed from the

database before analysis. The relationship between the knowledge, attitudes and behaviours of the respondents and the socio-demographic factors was analysed by a Pearson's Chi2 test with a significance level of 95%. The quality of the knowledge, attitudes and best practices of the respondents with regard to the use of foods rich in sodium/salt was assessed on the basis of their knowledge of the foods that contain more salt, the health problems associated with excessive consumption of sodium/salt, the amount of salt that should not be exceeded, the importance of reducing sodium/salt intake and the addition of salt in cooking and during meals. The same approach was observed for potassium intakes; this concerned knowledge of foods that provided more potassium, the beneficial effects of consuming potassium-rich foods, the number of portions of fruit and vegetables to be consumed per day, and the importance and frequency of consumption of fruit and vegetables during the week. A score of (1) was given to each correct answer and a score of (0) to each incorrect answer. The levels of knowledge, attitudes and behaviours were calculated by adding up all the correct answers (1) and then relating them to the total number of variables available, respectively for Knowledge, Attitudes and Practices for both sodium/salt and potassium intakes.

### 3.5. Ethical Considerations

This study was carried out on the advice of the ethics committee N˚019/2021/CBRS of 27/05/2021. The agreement of the local authorities (Prefect, Mayor, Regional and Prefectoral Director) was sought before data collection. Information notes were written for the population of Dapaong and its surroundings specifying the dates when the interviewers would be passing through for the collection. The objectives and procedures for data collection were clearly explained to the respondents before the questionnaires were administered. Only subjects who gave their free and informed consent were included in the sample. The data were collected and kept strictly confidential within the study team.

## 4. Resultts

### 4.1. Socio-Demographic Characteristics

A total of 400 people participated in the study after giving their consent (100%). The median age of the respondents was 37 years (30; 49) and 72.25% of the participants were women. The majority of participants lived in the city (65.75%). Of those surveyed, 47.25% had not attended school and most were housewives (42%). Most had never been diagnosed with hypertension (96.50%) and some (20%) had participated in previous studies that assessed salt consumption levels and the quality of food consumed by the population (Table 1).

### 4.2. Sodium Intake: Knowledge, Attitudes and Practices

All respondents reported using salt (99.25%) for salting food and seasoning sauces. The survey revealed that 26.75% of the respondents thought that foods

high in sodium/salt had a serious impact on health and high blood pressure was cited by 89.11% as a health problem related to excessive salt consumption. Half of the participants (50%) felt that they knew which foods provided more salt and a similar proportion (57%) felt that the food that provided more sodium/salt was cooking salt. About 34% knew the amount of salt that should not be exceeded per day (5 g/day). Of the participants, 42.99% thought it was quite important to reduce salt consumption. 44% of the respondents sometimes added salt to their meals.

**Table 1.** Distribution of respondents by Socio-demographic characteristics.

| Socio-demographic characteristics | **Effectif (n)** | **Median (Q1 - Q3)** | **Frequency** |
|---|---|---|---|
| **Age** | 400 | 37 (29.5 - 48.5) | 37 |
| **Sex** | | | |
| Female | 289 | | 72.25 |
| Male | 111 | | 27.75 |
| **Place of residence** | | | |
| Rural | 263 | | 65.75 |
| Urban | 137 | | 34.25 |
| **Level of education** | | | |
| Uneducated | 189 | | 47.25 |
| Primary | 147 | | 36.75 |
| Secondary | 53 | | 13.25 |
| Tertiary | 6 | | 1.50 |
| University | 5 | | 1.25 |
| **Profession** | | | |
| Housewives | 168 | | 42 |
| Retailers | 83 | | 20.75 |
| Farmers | 76 | | 19 |
| Craftsmen | 61 | | 15.25 |
| Other | 12 | | 3 |
| **Religion** | | | |
| Muslims | 133 | | 33.25 |
| Christians | 179 | | 44.75 |
| Animist | 88 | | 22 |
| Hypertensive | | | |
| Yes | 13 | | **3.25** |
| No | 387 | | **96.75** |

### 4.3. Potassium Intake: Connaissance, Attitudes and Pratiques

Among the respondents, 4% knew the beneficial effects of potassium on health; 28% declared that they knew the foods that provide more potassium. The survey revealed that 98.5% of the participants did not know the recommended amount of potassium per day and per person. Only 9% knew the portions of fruit and vegetables to be consumed per day and 75.75% were unable to situate their level of dietary intake of potassium. Secondly, 28% felt it was important to increase their potassium intake. From a practical point of view, 36% felt that they should eat potassium-rich foods several times a week.

### 4.4. Quality of Respondents' Knowledge, Attitudes and Practices on Dietary Intakes of Sodium and Potassium

Overall, the respondents had poor knowledge of salt (80.25%, 95% CI 76.04 - 83.87) and adopted poor attitudes towards the use of foods that provide more sodium/salt (88.50%, 95% CI 84.97 - 91.28). Similarly, they adopted behaviours that were not favourable to reducing excessive salt consumption, *i.e.*, 92.75% (95% CI 89.75 - 94.92).

With regard to potassium, the same trend was observed due to 91% (95% CI 87.76 - 93.76) for the quality of knowledge, 72% (95% CI 67.38 - 76.190) for the quality of attitudes and 73.75% (95% CI 69.20 - 77.84) for the quality of practices favourable to increasing dietary intakes of potassium (Table 2).

### 4.5. Relationship between Socio-Demographic Factors and Respondents' Levels of Knowledge, Attitudes and Practices

#### 4.5.1. Relationship with Sodium/Salt

In this study, age, gender, education, occupation and religion were statistically associated with the quality of respondents' knowledge, attitudes and practices on sodium/salt. This association was significant at the 95% level (p-value < 5%). On the other hand, the place of residence was only significant for the quality of salt use practices (salt added in cooking and during meals, for example). The hypertensive status of the persons surveyed was not statistically associated with the use of salt (Table 3).

#### 4.5.2. Relationship with Potassium

With regard to potassium, the association of Socio-demographic factors with the quality of knowledge, attitudes and practices of the people surveyed was not homogeneous. For example, gender, place of residence, religion and hypertensive status were not statistically associated with the quality of knowledge, but they were for the quality of attitudes (Table 4).

### 4.6. Community Interviews

- In the course of this study, individual and focus group interviews were conducted with influential community members and decision-makers in order to assess their opinions on the issue of consumption of foods rich in sodium and potassium and, above all, on strategies for a healthy diet. Thus:

**Table 2.** Distribution of respondents according to the quality of knowledge, attitudes and practices on dietary intakes of sodium and potassium.

| Sodium/salt intake | Effectif (n) | Proportion (IC 95%) | Potassium/intakes | Effectif (n) | Proportion (IC 95%) |
|---|---|---|---|---|---|
| **Knowledge/sodium/Salt** | | | **Knowledge/Potassium** | | |
| Good | 79 | 19.00 (16.13 - 23.96) | Good | 36 | 9.00 (6.56 - 12.24) |
| Poor | 321 | 80.25 (76.04 - 83.87) | Poor | 364 | 91.00 (87.76 - 93.76) |
| **Attitude/sodium/Salt** | | | **Attitud/potassium** | | |
| Good | 46 | 11.50 (08.72 - 15.03) | Good | 112 | 28.00 (23.81 - 32.62) |
| Poor | 354 | 88.50 (84.97 - 91.28) | Poor | 288 | 72.00 (67.38 - 76.190) |
| **Practice/Sodium** | | | **Pratique/potassium** | | |
| Good | 29 | 7.25 (5.08 - 10.25) | Good | 105 | 26.25 (22.16 - 30.80) |
| Poor | 371 | 92.75 (89.75 - 94.92) | Poor | 295 | 73.75 (69.20 - 77.84) |

**Table 3.** Relationship between socio-demographic factors and the quality of knowledge, attitudes and practices in sodium/salt intake surveys.

| Socio-demographic variables | Effectif | Knowledge (%) | | P-value | Attitud (%) | | P-value | Practices (%) | | P-value |
|---|---|---|---|---|---|---|---|---|---|---|
| | | Good (n = 79) | Poor (n = 321) | | Good (n = 79) | Poor (n = 321) | | Good (n = 79) | Poor (n = 321) | |
| **Age** | | | | **0.0041** | | | **0.0013** | | | **0.0000** |
| [25 - 41] | 253 | 24.11 | 75.89 | | 15.42 | 84.58 | | 2.77 | 97.23 | |
| [42 - 64] | 147 | 12.24 | 87.76 | | 4.76 | 95.24 | | 14.97 | 85.03 | |
| **Sex** | | | | **0.0047** | | | **0.0047** | | | **0.0028** |
| Female | 289 | 16.26 | 83.74 | | 10.73 | 89.27 | | 4.84 | 95.16 | |
| Male | 111 | 28.83 | 71.17 | | 13.51 | 86.49 | | 13.51 | 86.49 | |
| **Place of residence** | | | | 0.1908 | | | 0.4340 | | | **0.001** |
| Rural | 263 | 17.87 | 82.13 | | 10.65 | 89.35 | | 11.03 | 88.97 | |
| Urban | 137 | 23.36 | 76.64 | | 13.14 | 86.86 | | 0.00 | 100 | |
| **Level of education** | | | | **0.0000** | | | **0.0000** | | | **0.0210** |
| No education | 189 | 9.52 | 90.48 | | 4.23 | 95.77 | | 5.82 | 94.18 | |
| Primary | 147 | 13.61 | 86.39 | | 9.52 | 90.48 | | 11.56 | 88.44 | |
| Secondary and | 64 | 64.06 | 35.94 | | 37.50 | 62.50 | | 1.56 | 98.44 | |
| **Profession** | | | | **0.0000** | | | **0.0200** | | | **0.0000** |
| Craftsmen | 61 | 31.15 | 68.85 | | 19.67 | 80.33 | | 0.00 | 100 | |
| Farmer | 76 | 15.79 | 84.21 | | 7.89 | 92.11 | | 22.37 | 77.63 | |
| Civil servant | 12 | 75 | 25 | | 25.00 | 75.00 | | 0.00 | 100 | |
| Housewives | 168 | 10.71 | 89.29 | | 7.14 | 92.86 | | 4.76 | 95.24 | |
| Retailers | 83 | 25.3 | 74.7 | | 25.3 | 74.7 | | 4.82 | 95.18 | |
| **Religion** | | | | **0.0009** | | | 0.1319 | | | **0.0000** |
| Animist | 88 | 6.82 | 93.18 | | 5.68 | 94.32 | | 18.18 | 81.82 | |
| Christian | 179 | 26.26 | 73.74 | | 12.29 | 87.71 | | 7.26 | 92.74 | |
| Muslims | 133 | 19.55 | 80.45 | | 14.29 | 85.71 | | 0.00 | 100 | |
| **Hypertensive** | | | | 0.7594 | | | 0.1864 | | | 0.1221 |
| Yes | 13 | 23.08 | 76.92 | | 0.00 | 100 | | 7.69 | 92.31 | |
| No | 387 | 19.64 | 80.36 | | 11.89 | 88.11 | | 7.24 | 92.76 | |

**Table 4.** Relationship between Socio-demographic factors and the quality of respondents' Knowledge, Attitudes and Practices on dietary intakes of Potassium.

| Socio-demographic variables | Effectif | Connaissance (%) | | P-value | Attitud (%) | | P-value | Pratices (%) | | P-value |
|---|---|---|---|---|---|---|---|---|---|---|
| | | Good (n = 79) | Poor (n = 321) | | Good (n = 79) | Poor (n = 321) | | Good (n = 79) | Poor (n = 321) | |
| **Age** | | | | **0.0240** | | | 0.6708 | | | 0.5696 |
| [25 - 41] | 253 | 11.46 | 88.54 | | 27.27 | 72.73 | | 25.30 | 74.70 | |
| [42 - 64] | 147 | 95.24 | 95.24 | | 29.25 | 70.75 | | 27.89 | 72.11 | |
| **Sex** | | | | 0.0506 | | | **0.0030** | | | 0.4675 |
| Female | 289 | 7.27 | 92.73 | | 23.88 | 76.12 | | 25.26 | 74.74 | |
| Male | 111 | 13.51 | 86.49 | | 38.74 | 61.26 | | 38.74 | 71.17 | |
| **Place of residence** | | | | 0.9030 | | | **0.0000** | | | **0.0003** |
| Rural | 263 | 9.13 | 90.87 | | 16.35 | 83.65 | | 31.94 | 68.06 | |
| Urban | 137 | 8.76 | 91.24 | | 50.36 | 49.64 | | 15.33 | 84.67 | |
| **Level of education** | | | | **0.0001** | | | **0.0164** | | | 0.6391 |
| No education | 189 | 1.06 | 98.94 | | 26.98 | 73.02 | | 26.98 | 73.02 | |
| Primary | 147 | 7.48 | 92.52 | | 23.13 | 76.87 | | 23.81 | 76.19 | |
| Secondary and | 64 | 35.94 | 64.06 | | 42.19 | 57.81 | | 29.69 | 70.31 | |
| **Profession** | | | | **0.0000** | | | **0.0001** | | | 0.2826 |
| Craftsmen | 61 | 14.75 | 85.25 | | 42.62 | 57.38 | | 24.59 | 75.41 | |
| Farmer | 76 | 10.53 | 89.47 | | 26.32 | 73.68 | | 34.21 | 65.79 | |
| Civil servant | 12 | 58.33 | 41.67 | | 75.00 | 25.00 | | 41.67 | 58.33 | |
| Housewives | 168 | 3.57 | 96.43 | | 23.21 | 76.79 | | 23.21 | 76.79 | |
| Retailers | 83 | 7.23 | 92.77 | | 21.69 | 78.31 | | 24.10 | 75.90 | |
| **Religion** | | | | 0.7179 | | | **0.0001** | | | **0.0016** |
| Animist | 88 | 6.82 | 93.18 | | 10.23 | 89.77 | | 40.91 | 59.09 | |
| Christian | 179 | 9.50 | 90.50 | | 34.08 | 65.92 | | 23.46 | 76.54 | |
| Muslims | 133 | 9.77 | 90.23 | | 31.58 | 68.42 | | 20.30 | 79.70 | |
| **Hypertensive** | | | | 0.4135 | | | 0.8211 | | | 0.1221 |
| Yes | 13 | 15.38 | 84.62 | | 30.77 | 69.23 | | 7.69 | 92.31 | |
| No | 387 | 8.79 | 91.21 | | 27.91 | 72.09 | | 26.87 | 73.13 | |

- 80% of health facility managers think that salt reduction and potassium intake can be achieved through mass awareness raising and counselling using role models;
- 20% of them think that laws and disciplinary sanctions for structures that do not respect the salt content of food products would be effective measures to combat this problem;
- 100% of community women interviewed by focus group do not know the recommended quantities of salt and would like to be provided with the necessary tools to quantify salt and potassium intake.

## 5. Discussion

This study showed that the level of knowledge, attitudes and behaviours of the population on dietary intakes of sodium/salt and potassium was not good. The majority of the population did not have the knowledge to reduce salt consumption and increase consumption of potassium-rich foods. The study also revealed behavioural shortcomings such as adding salt to meals, thus indicating the need for behavioural change communication.

### 5.1. Ditery Intakes in Sodium/Salt

The low knowledge of the people surveyed about sodium/salt intakes is similar to that of other studies that used the same evaluation tool as ours [20] [21] [22] [23] and could be explained by the low accessibility of the populations to health programmes, particularly to communication in the community. In most cases, awareness-raising sessions do not focus on CVD issues and even less on nutritional behaviours favourable to the fight against NCDs. Unlike other studies where people's knowledge of salt was much better in urban than in rural areas [24] [25], our study showed that knowledge was low in both rural and urban areas. The value of reducing dietary salt intake and the efforts to reduce it are also found in other studies [26] [27] [28] [29]. These efforts consist mainly of not adding salt to meals. Half of the people who felt they knew about sodium/salt source foods referred mainly to cooking salt, many were unaware that sodium/salt intake could come from other foods they consumed. This perception could be a barrier to initiating action to reduce salt consumption overall [30] [31] [32]. Obviously, the participants of our study were also composed of people who reported suffering from hypertension and among them about 77% had poor knowledge about salt contrary to the results of the study of Vandana Garg *et al.* carried out in India where 44% of the rural participants and 93.1% of the urban participants undergoing treatment, took measures to reduce excessive salt consumption The observations of the present study have important implications for the formulation of appropriate strategies to reduce salt consumption in Togo, where cardiovascular disease is the most common cause of premature mortality and hypertension is the main risk factor. A modest reduction in population dietary salt intake could significantly reduce cardiovascular events and medical costs and should therefore be a public health priority [33] [34] [35].

### 5.2. Ditery Intakes in Potassium

The action of potassium in the fight against hypertension is no longer in question and the consumption of foods rich in potassium remains the best source [36] [37] [38] [39] [40]. In our study, the low level of knowledge of the people surveyed about the skills needed to increase the chances of potassium intake is similar to other studies [41] [42] [43]. It is clear that a handful of people are aware that eating fruit and vegetables is good for their health, but most have difficulty estimating the portions of fruit and vegetables to be consumed per day,

let alone the recommended amount of potassium. This could be explained by the low quality of awareness-raising among the population, especially in non-local languages. The proportion of people who have at most a primary level is predominant in our study, so communication in the local language would be advantageous. Also, most of them did not know which foods were sources of potassium and could not estimate whether they were consuming enough or not. The same observations are made in some studies [44] [45] and could be explained by the lack of importance given to the consumption of foods rich in potassium. Usually many people consume them occasionally or opportunistically or according to seasonal availability.

### 5.3. Strategies for Salt Reduction and Potassium-Rich Food Intake

Studies have shown that increased dietary intake of minerals such as potassium, magnesium and calcium reduces blood pressure in patients with hypertension [46]. Knowing the food sources of these minerals will enable people to adopt the best behaviours through the choice and use of food in the household. In our study, it was shown that the KAP of the people studied was not optimal, contrary to some countries where the knowledge levels were improved following awareness raising in the community [47] [48] [49]. It is therefore necessary to improve the knowledge level of our populations if we want to have healthy behaviours. Most of the socio-demographic factors were statistically associated with the KAP levels of the people studied. Taking these factors into account in the policy and communication plan will help to achieve a better impact of nutrition interventions. Some countries, in addition to mass awareness raising, have implemented policies to reformulate certain manufactured foods with reductions in salt intake at the population level [50] [51] [52]. It is therefore important to think of a multisectoral action if we want to have convincing results.

### 5.4. Strengths and Weaknesses of the Study

The strengths of our study lie in the high participation of the respondents. It was able to determine the different WTP levels of the participants for both sodium and potassium intakes, using a reference tool adapted to the context of our country. Our study was able to make available factual data that policymakers can use to make decisions that benefit people. This experience could be scaled up to the country and also to the African continent. On the other hand, the data provided were based on self-reports and could be a source of bias.

## 6. Conclusion

The results of our study show that the levels of knowledge, attitudes and practices of the people studied on sodium/salt and potassium intakes in the city of Dapaong and its surroundings were not good. The populations are subject to the development of cardiovascular diseases. A multisectoral nutrition intervention including community sensitisation will be effective in improving the knowledge of the populations in favour of the fight against CVD/NCD.

## Conflicts of Interest

The authors declare no conflicts of interest regarding the publication of this paper.

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