



AN ASSESSMENT OF TEA PROCESSING AND CONSUMPTION AMONG TEA FARMERS' IN MAMBILLA, TARABA STATE, NIGERIA

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ABSTRACT

The study assessed tea processing and consumption among tea farmers' in Mambilla, Taraba State, Nigeria. Simple random sampling was used to select 384 tea farmers in the study area. Data were collected from the respondents with the aid of a structured questionnaire. Simple descriptive statistics, Chi-square and Pearson Product Moment Correlation (PPMC) were the major analytical tools employed in analysing the data. The study revealed that majority of the respondents were male, married and within the age bracket of 31-50 years. The study also revealed that majority of the respondents (55.9%) consumed about 1.44 litres of tea per day and that majority of the respondents (91.4%) consumed the tea in the morning. Majority of the respondents (94.3%) consume home prepared tea and black tea was the most consumed tea by the respondents. Alcoholic drinks, cocoa, and coffee are alternative drinks to tea consumed in the study area. The study further revealed that sex and education influenced the quantity of tea consumed in the study area. It was therefore recommended that there should be intensive enlightenment on the health benefits associated with tea consumption.

Keywords: Tea, Consumption, Consumers, Tea farmers, Beverage, Mambilla.

INTRODUCTION

In Nigeria, the consumption of tea as a beverage is common among different categories of people and households. Consumption of tea in Nigeria is not restricted to consumer households, it is purchased, taken to motor parks, bus stops and is hawked by different classes of people who earn their living through this means (Sowunmi *et al.*, 2009). According to Sowunmi *et al.* (2009), tea consumption is high among the age bracket of 65 years and above and majority of tea consumers preferred Lipton yellow label tea. According to Sowunmi *et al.* (2009) consumers of tea in Nigeria preferred either eateries or "mai tea". Tea is widely consumed all over the world according to Deng *et al.* Li (1998). Tea is second most consumed beverage in the world after water (Nutraingredients, 2004). The general objective of this study was to carry out an assessment of tea processing and consumption among tea farmers in Mambilla, Taraba State, Nigeria. Specifically, the study describes the socio-economic characteristics of the respondents in the study area; and determine the quantity of tea consumed, time, place and type in the study area.

MATERIALS AND METHODS

The study was conducted in North eastern part of Nigeria. Taraba State was purposively selected for the study. Taraba State lies between latitudes 6°25'N and 9°30'N and between longitudes 9°30'E and 11°45'E and covers a total land area of about 54,428 square kilometre (Wikipedia, 2019). The state is located within the tropical zone and has been surrounded by a vegetation of low forest in the southern part and grassland in the northern part. It has a population of about 2.294 million (NPC, 2006). The major occupation of the people of Taraba

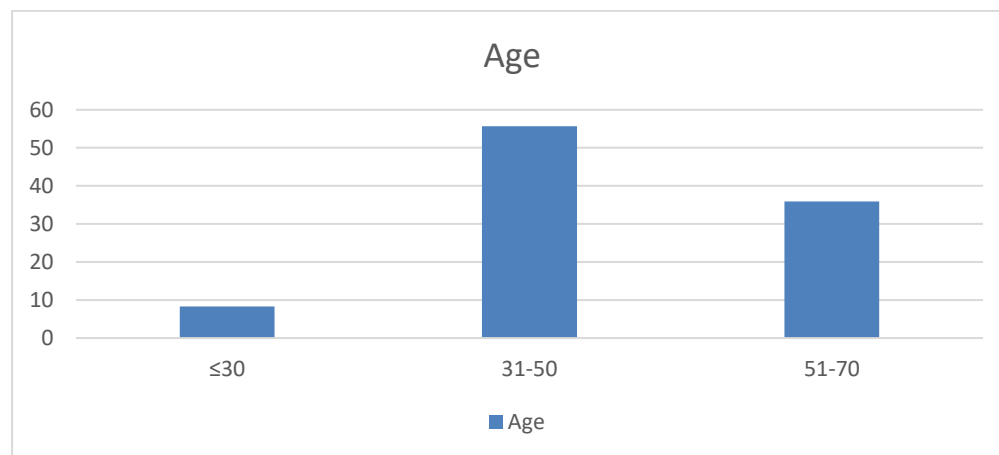
State is agriculture. Cash crops produced in the state include coffee, tea, ground nuts and cotton while the major food crops produced include maize, rice, sorghum, millet, cassava and yam. Mambila in Sardauna Local Government Area of Taraba State was purposively selected. Random sampling technique was used to select 384 tea farmers from the study area. The data was collected from the respondents with the aid of structured questionnaire. The data collected for this study were analysed using simple descriptive statistics, chi-square and Pearson Product Moment Correlation (PPMC).

RESULTS AND DISCUSSION

Socio-Economic Characteristics of the Respondents

Age

Figure 1 shows that 35.9% of the tea consumers were between 51 and 70 years old, while only 8.3% were less or equal to 30 years old. This in agreement with previous study by Sowunmi *et al.*, (2009) that tea consumption is high among the age bracket of 65 years and above. This shows that most of the tea consumers in Nigeria were aged. This may be, because of the caffeine that serves as a mild stimulant of the central nervous system.

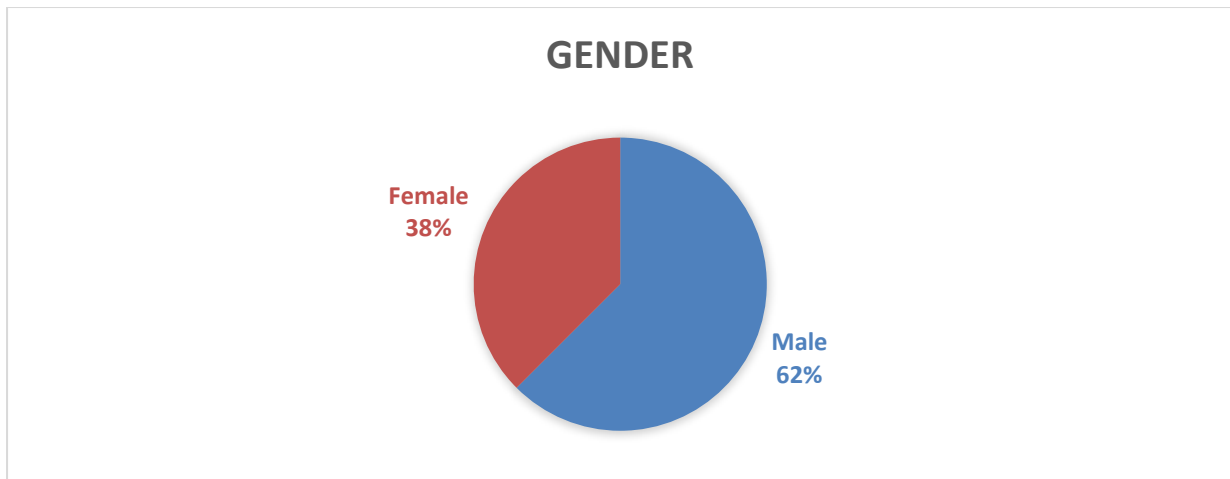


Source: Field survey, 2014

Figure 1: *Distribution of respondents based on age.*

Sex

Figure 2 shows that about 62.5% of the respondents were male while 37.5% were female. This shows that there were more male tea consumers than female in the study area. Involvement of more male in tea consumption may not be far from the fact that, tea consumption is associated with energy booster.

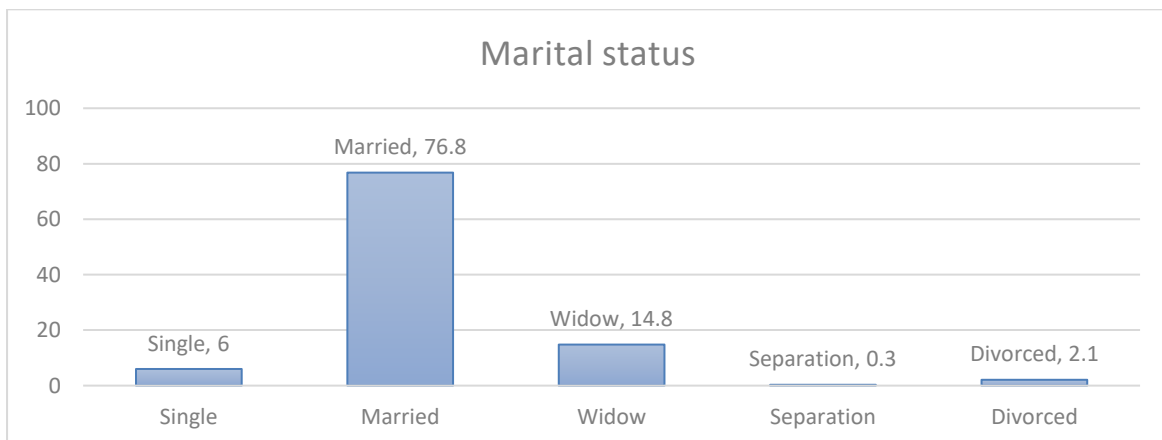


Source: Field survey, 2014

Figure 2: *Distribution of respondents based on sex.*

Marital Status

Majority (76.8%) of the tea consumers are married and (14.8%) were widows while only 6.0% were single. This implies that almost all the tea consumers place high premium on marriage. This may be because; a married tea consumer can easily ask a family member to prepare him a cup of tea. Goldsmith (2005) reported that marriage is a relationship of two or more persons living together to make ends meet.

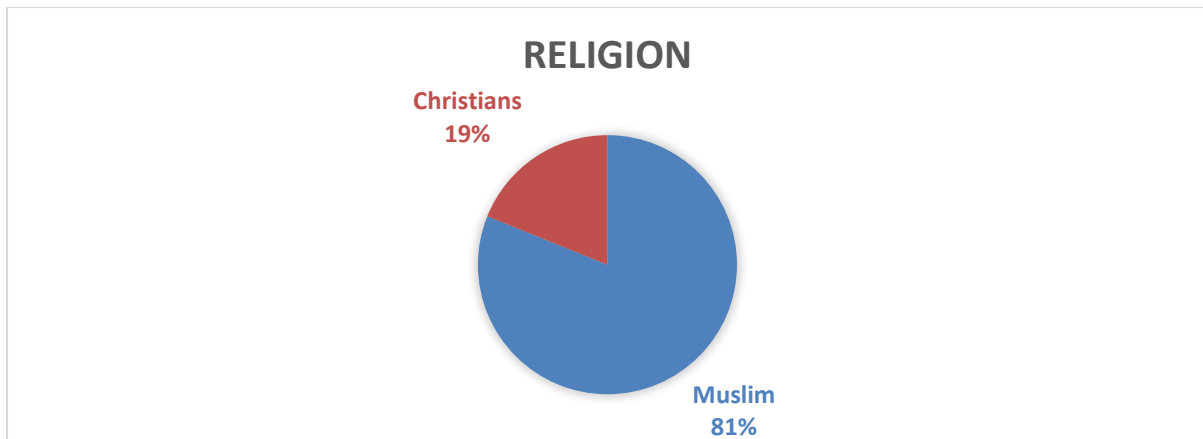


Source: Field survey, 2014

Figure 3: *Distribution of respondents based on marital status*

Religion

It was also revealed that majority (81.1%) of the tea consumers were Muslims, while 18.9% were Christians and none of the respondents interviewed practiced traditional religion. This may not be far from the fact that, the study area is located in the northern part of Nigeria where Islam is the most popular religion among the people. Also, the domination of Muslims among the tea consumers in the study area is as a result of its acceptance as an alternative to alcoholic drink.

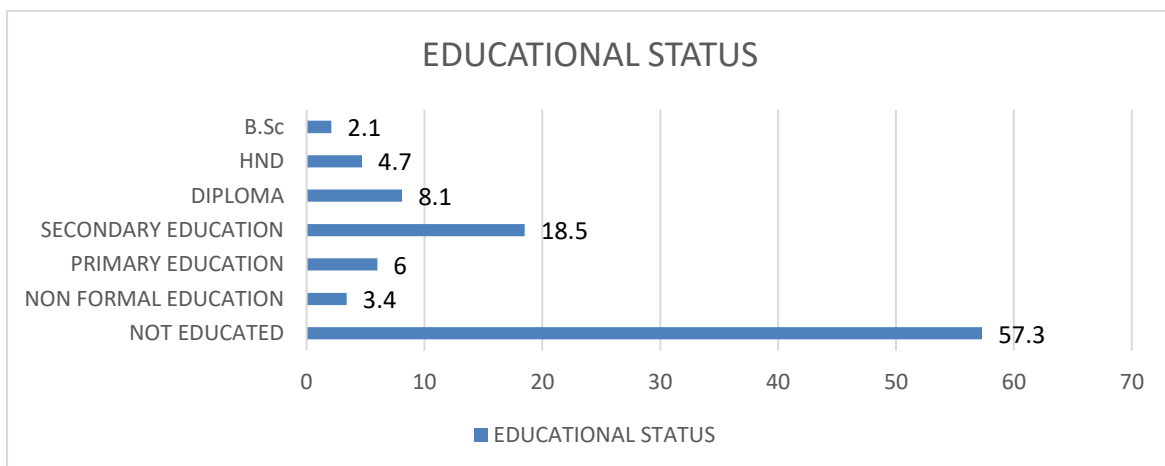


Source: Field survey, 2014

Figure 4: *Distribution of respondents based on religion.*

Educational status

The educational status of respondents revealed that most (57.3%) of the respondents were not educated, while 39.4% of the respondents acquired one or more form of formal education and 3.4% of the respondents have no formal education.



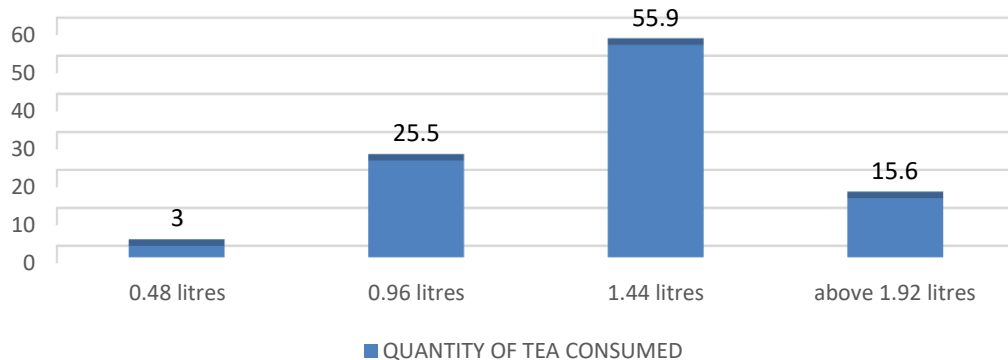
Source: Field survey, 2014

Figure 5: *Distribution of respondents based on educational status.*

Respondents' Quantity of Tea Consumed Per Day

Figure 6 shows that consumers of 1.44 litres of tea per day formed the highest proportion (55.9%) while 25.5% consumed 0.96 litres of tea per day, 15.6% consumed above 1.92 litres of tea per day and 2.1% consumed 0.48 litres of tea per day. Sowunmi *et al.* (2009) stated that tea is consumed hot as a hot beverage during the cold season and taking as ice tea during the hot season. Also, Stephanou (2004) reported that consumers of tea for at least one year or 4 cups of tea per day will not develop high blood pressure. While Costa *et al.* (2002) and Rietveld and Wiseman (2003) believe that consumption above require cups of tea for this category of heart condition patients or major cardiovascular patients and pregnant and breast-feeding mothers can cause an increase in heart rhythm. This implies that required quantity of tea consumption is put at 4 cups per day for normal healthy person and 1 or 2 cups of tea per day for categories of patients mentioned above.

QUANTITY OF TEA CONSUMED



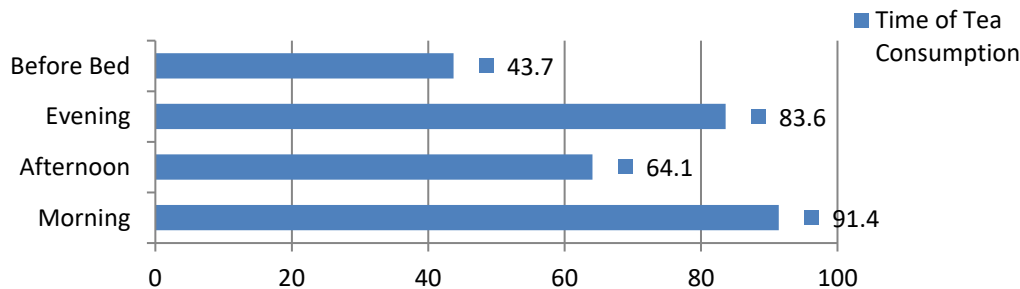
Source: Field survey, 2014

Figure 6: *Distribution of respondents based on quantity of tea consumed.*

Respondents' Time of Tea Consumed Per Day

Figure 7 revealed that morning tea consumers formed the highest proportion (91.4%) in the study area. About 84% consumed tea in the evening, while 64.1% consumed tea in the afternoon. Only 43.7% of the respondents consumed tea before going to bed. The implication is that tea is generally consumed by many during breakfast and also used to warm the body temperature in the morning and evening during harmattan. Therefore, those consuming tea as breakfast sees it as a normal meal not knowing that they also stand to gain the health benefits associated with tea consumption. Also, consumers of tea in the evening may consume it for the evening harmattan which is common among security guards so as to remain alert throughout the night.

Time of Tea Consumption



*Multiple responses

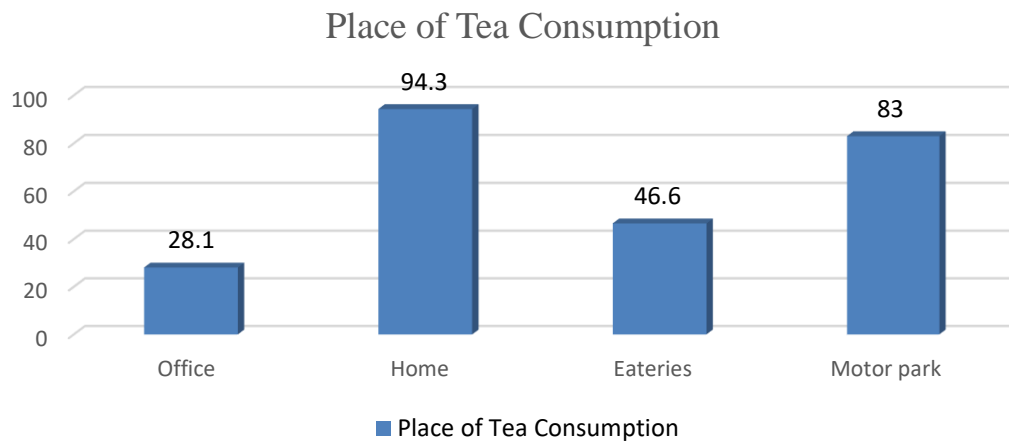
Source: Field survey, 2014

Figure 7: *Time of tea consumed per day.*

Respondents' Place of Tea Consumption

Figure 8 reveals that the high proportion (94.3%) tea consumers take home prepared tea, 46.6% consumed tea at eateries while 28.1% and 21.6% respectively consumed tea in the office and at Motor Park. The domination of tea consumers at home may not be unconnected with the fact that most of the respondents' consumers were married and will easily have access to hot tea at home. Also, eateries offer free tea service to their customers instead of water. Some

of the tea consumers claimed to take tea in the office so as to be mentally alert and that tea consumption make them active throughout the day in office. This finding is consistent with previous study by Sowunmi *et al.* (2009), who reported that tea is consumed at motor park, bus top, office and home and is hawked by different classes of people. This implies that tea can be consumed anywhere convenient and of interest to consumers.



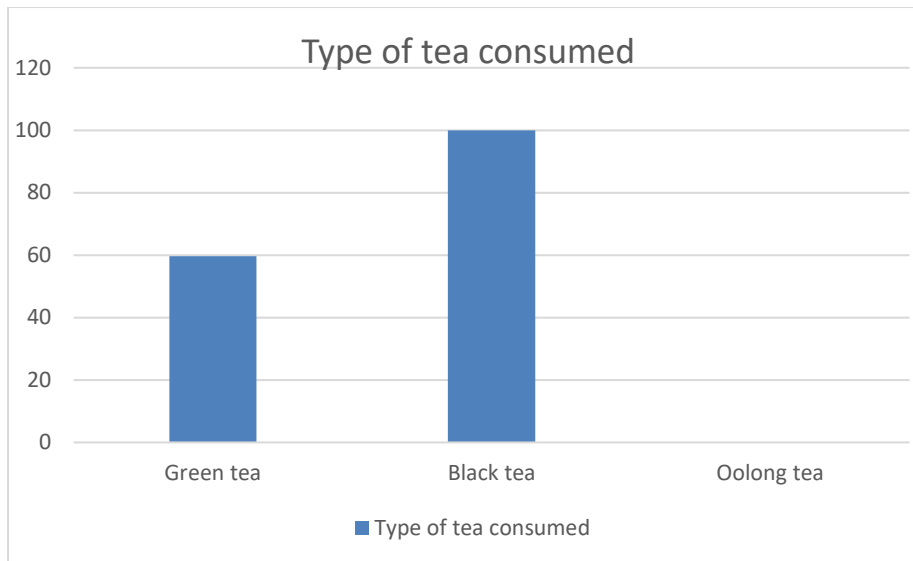
*Multiple responses

Source: Field survey, 2014

Figure 8: *Place of tea consumption*

Respondents' Type of Tea Consumed

Figure 9 shows that all (100%) of the respondents consumed green tea but have never drunk oolong tea. About 59.06% of the respondents consumed green tea. The high proportion of the black tea consumers may not be unconnected with the fact that black tea is one of the commonest and cheapest tea available in Nigerian market. However, green tea is not very common and is very expensive, but of higher health benefits compared to black tea. According to Siddiqui, Afaq Adhami *et al.* (2004), green tea is the best good source of group called catechins. Catechins are more powerful than vitamin C and E in halting oxidative damage to cells and appear to have other disease fighting properties. Furthermore, according to the author, regular consumers of green tea stand the benefit of reduced risk of heart disease and the antioxidants in tea help block the oxidant of LDL (bad) cholesterol, increase HDL, (good) cholesterol and improve artery function. In other words, green tea is richer in terms of health given properties than black tea. This implies that close to half of the respondents were not consuming high quality (green) tea in Nigeria.



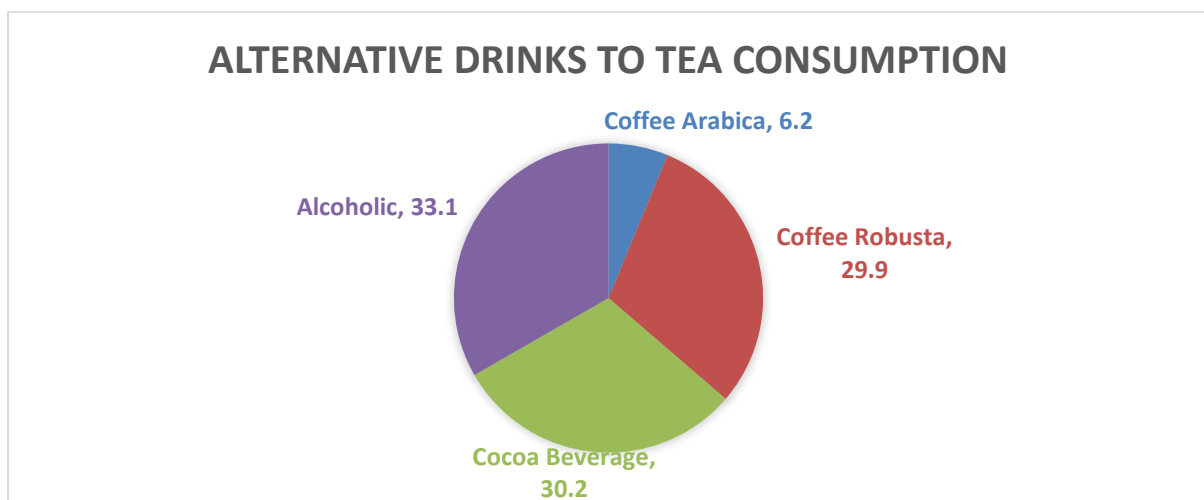
*Multiple responses

Source: Field survey, 2014

Figure 9: *Type of tea consumed.*

Respondents' Alternative Drink to Tea

Figure 10 shows that many (33.1%) of the respondents consumed alcoholic drink, (30.2%) cocoa, (29.9%) coffee robusta (6.2%), coffee arabica as alternative drink to tea. The high consumption of alcoholic drinks and coffee robusta as an alternative to tea among the respondents may not be far from the fact that alcoholic drink is locally brewed and processed locally in the study area. On the other hand, cocoa beverage (Bournvita, Milo, and Ovaltine) is one of the commonest beverages that are found in Nigeria market. All these alternative drinks were consumed for the purpose of warming up the body temperature.



*Multiple responses

Source: Field survey, 2014

Figure 10: *Alternative drinks to tea.*



Relationship between Socio-economic Characteristics and Quantity of Tea Consumed

Table 1 revealed that only marital status and religion of the respondents were not significant factors in tea consumption, while sex and education of the respondents were significant factors in tea consumption ($p < 0.01$). Data in Table 1 showed that sex of the respondents ($X^2 = 19.47$, $p \geq 0.05$) influenced the quantity of tea consumed in the study area. This is probably because tea consumption is associated with health benefits. This is in line with Siddiqui *et al.* (2004) assertion that regular consumers of tea stand the benefit of reduced risk of heart disease and block bad cholesterol and increase good cholesterol and improve the entry function.

Also, there was an indication that education of the respondents ($X^2 = 54.15$, $p \geq 0.05$) had positive influence on quantity of tea consumed. As the consumers level of education increases, the quantity of tea consumed increases. This implies that a consumer that is highly educated will be widely informed on the health benefits of tea consumption and consequently consume a good quality of tea. This is supported by Ola (2009) that education is generally believed to be the bed rock of development.

Marital status of respondents ($X^2 = 7.21$, $p \geq 0.05$) was not significant factor of the quantity of tea consumed in the study area. This indicates that, irrespective of whether an individual is single or married, the quantity of tea consumed in the study area was not affected. This might be because tea is offered free like water in almost all the eateries in the study area due to weather condition. Also, Table 1 revealed that religion of the respondents ($X^2 = 3.53$, $p \geq 0.05$) was not a significant factor of the quantity of tea consumed in the study area. This implies that, the religion of an individual either Islam or Christianity does not influence the quantity of tea consumed in the study area. This may not be unconnected with the fact that tea is offered free in almost all the eateries, is non-alcoholic and also associated with health benefits.

Table 1: Relationship between socio-economic characteristics and quantity of tea consumed

Socio-economic variables	X ² value	Df	P value	Decision
Sex	19.47	1	0.00	Sig
Education	54.15	6	0.00	Sig
Marital status	7.21	3	0.65	Not sig.
Religion	3.53	1	0.60	Not sig.

Source: Field survey, 2014

CONCLUSION AND RECOMMENDATIONS

In the foregoing, the study examined from a historical perspective the fundamental role of some socio-economic characteristics of the tea consumers in Nigeria. The result available also revealed that the quantity of tea consumed by tea consumers, place, time and type of tea consumed in the study area. The consumers of tea in the morning with home tea consumers were high. The statistical result revealed that only marital status and religion of the respondents were not significant factors in tea consumption, while sex and education of the respondents were significant factors in tea consumption ($p \geq 0.01$). Based on the findings, the study recommended that there should be intensive enlightenment campaign on the health benefits associated with tea consumption by both printing and electronic media so as to promote tea consumption in the study area. The need to step down the tea cultivation to low land areas and promote local processing of both black and green tea in the study. It is hoped that, the recommendation given in this study, if given careful consideration, will help to increase tea consumption and improve health status of the tea farmers.



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