J Exp Food Chem
Volume 6:2,2020
DOI: 10.37421/2472-0542.2020.6.141

Journal of Experimental Food Chemistry

ISSN: 2472-0542 Open Access

Awareness, Acceptability and Information sources' Assessment of Wooden and Non-Wooden Kitchen Utensils' Making in IDO and South-West Local Government Area of Oyo State

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Abstract

Wood has been safely used for centuries in contact with food but is usually questioned because of its microbiological behavior compared with smooth surfaces. A kitchen utensil is a hand-held, typically small tool or utensil that is used in the kitchen, for food related functions. Versatile and durable, wood doesn't chemically react with foods or scratch like metal, unlike plastic, it won't melt or absorb flavors.

The study was conducted to examine the acceptability of wooden products for kitchen utensils' making by the dwellers of Ido local government and Ibadan South-West local government areas of Oyo State. Data were collected with the aids of structured questionnaires which were distributed among fifty (50) respondents from each of the local governments which give a total of 100 respondents and analyzed using simple descriptive statistics, frequency and percentage.

The results showed that all the respondents used both kitchen and non-wooden kitchen utensil. Based on the results from the respondents in each of the local governments, it showed that 52.0% of the respondents in Ido local government used wooden kitchen utensil such as wooden spoon, wooden cups, sauce, turning stick etc. in their various homes while 28.0% of the respondents used non-wooden kitchen utensil such as iron spoon, plastic spoon, plastic plates, saucer etc. Also, in South-West local government 8.0% of the respondents used wooden kitchen utensil such as wooden spoon, wooden cups, wooden saucer, wooden turning stick etc. in their various homes while 8.0% of the respondents used non-wooden kitchen utensils like iron, metals, steel and plastic such as spoon, plates, saucer etc. The respondents noticed a reaction or effect while using the wooden and non-wooden kitchen utensil. 34.0% of Ido respondents observed that non-wooden kitchen utensils rust when not dried properly and also it leaches inside the food during mixing while used on fire and 18% of Ido respondents also observed that non-wooden kitchen utensils such as plastic materials like spoon melt and re-shaped when still used on fire. It means it is a poor conductor of heat. This result also shown the benefit of using the wooden kitchen utensil. 48% of Ido respondents showed that wooden kitchen utensil is cheap, majority find it difficult to get. In South-West 22.0% of the respondents indicated that it is cheap and it is easy to get. This implies majority of the respondents in South-west using non-wooden kitchen utensil observed the effects such as rusting, melting and leaches in the food which can be harmful to the health of the respondents. This study revealed that majority of the respondents preferred wooden kitchen utensil due to the risk that is involved when using other materials such as plastics and metals/iron for making kitchen utensils. Wooden kitchen utensil will contribute immensely to the health of human when used.

Keywords: Wooden kitchen utensil • Non-wooden kitchen utensil poor conductor • Awareness • Acceptability

Introduction

A kitchen utensil is a hand-held, typically small tool or utensil that is used in the kitchen, for food related functions. Versatile and durable, wood doesn't chemically react with foods or scratch like metal, unlike plastic, it won't melt or absorb flavors. Wooden kitchen utensil/ wooden food contact materials serve important functions in every aspect of food preparations and collectively constitute the most frequently utilized cookware [1]. Certain utensil made of wood are required in a cooking outfit, a molding board of hardwood and a smaller wooden cutting board being particularly necessary in every kitchen, bowls in which to chop food, rolling pins and mixing spoons are usually made from hardwood and when such wood is used for them they are entirely satisfactory [2].

Wooden utensils are soft in handling and more suitable for cooking. Wood is a natural material which does not undergo corrosion in the presence of water. Unlike iron, wood is a poor conductor of heat, hence, it is easily used in hot medium with the no incident of burns.

Wood in direct contact with food is found in other forms such as kitchen utensils, chopping boards, crates and baskets for harvesting, storage and transportation. In particular, "light wooden packaging" is used for crates, baskets, boxes for fruit and vegetables, seafood, fish, and dairy products. Today, wooden light packaging is made from raw

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Received: July 14, 2020; **Accepted**: July 28, 2020**; Published**: August 03, 2020

material obtained from sustainably managed forests. In Europe, there are 80 million hectares of forest, 80% of which are managed sustainably and only 64% of the annual increment of these forests is taken. This packaging responds to consumer requirements, such as sustainable development, as well as in terms of natural packaging and food protection by ensuring food safety. In Europe, wood as a food contact material is subject to "Regulation (EC) No 1935/2004 of the European Parliament and of the Council of 27 October 2004 on materials and articles intended to come into contact with food and repealing.

There are variety of trees whose wood possess unique structural, physical and mechanical properties that allows for the manufacture of different wood kitchen utensil and wood based food contact materials including mortar, pestle, grinding bowl, grinding pestle, roller, chopping board, banku ladle and wooden spoon [3,4]. Wood as kitchen utensils and interiors material have limitations, there has been a gradual shift to steel and metal owing to their plasticity and flexibility [5]. The advancement in technology has create more improvement and fantastic design in the utilization of wood. Fortunately its utilization as one of the major materials in kitchen utensil in Nigeria is gaining ground. Apart from its aesthetic value obtained from different tree species that are been used to make them, they are easy to get. The rural dwellers can easily produce them to enhance better life and improve their standard of living through income generation (e.g. mortar and pestle, Stirring stick, Scoop etc.). It is therefore to identify various wooden kitchen utensils and other materials used in the kitchen, examine the factors influencing usage of any utensils by the users in the study area, identify the benefit and constraint of using wooden materials to the other kitchen materials and exhibit all preferred utensils (in wooden form) in the study area to the society [6,7].

Materials and Methods

Study area

This research was conducted in Ido Local Government and Ibadan South-West Local Government area of Oyo State.

Ido is a Local Government Area in Oyo State, Nigeria with it headquarter in Ido town. It has an area of 986 km^2 and a population of 103, 261 at the 2006 census. It covers the area spanning Apata, Ijokodo, Omi-Adio, Akufo and Apete.

Ibadan South-West is a local government area in Oyo state, Nigeria. Its headquarters is in Oluyole Estate in Ibadan. It has an area of 40 km^2 and a population of 282,585 at the 2006 census.

Materials

A total of 100 copies of structured questionnaires were administered to the end users. Using a simple random sampling technique, 10 copies of questionnaires was administered to respondents from each of the selected ward; the retrieved questionnaires were subjected to statistical analysis using simple descriptive, frequency and percentage.

Results and Discussion

The result in Table 1 below is the distribution of the socio-demographic of the respondents which includes: location, gender, marital status, educational status, occupation and household size. The result shows that there was equal distribution in the sampling size in the two local governments which gives 100 respondents in the study area.

Table 1: Distribution of socio-economic characteristics wooden kitchen and non-wooden utensil.

	Frequency		Percentage	
	Ido	**South-West**	**Ido**	**South-West**
Location	50	50	50	50
Total	50	50	100	100
Gender				
Male	17	13	34	26
Female	33	37	66	74
Total	50	50	100	100
Marital status				
Single	13	8	26	16
Married	9	37	18	74
Widowed/Widower	10	4	20	8
Divorced	13	-	26	-
Separated	5	1	10	2
Total	50	50	100	100
Educational status				
Primary	6	-	12	-
Secondary	16	23	32	46
Tertiary	20	20	40	40
No formal education	8	7	16	14
Total	50	50	100	100
Occupation				
Farming	12	-	24	-
Trading	14	9	28	18
Civil Servant	15	29	30	58
Artisan	9	12	18	24
Total	50	50	100	100

These result shows that 34.0% of the respondents in Ido were male and 66.0% were female in Ido, while in South-West 26% were male while 74% were female. This implies that majority of the people using both wooden and non-wooden kitchen utensils were female both in Ido and South-West. The usage of wooden and non- wooden kitchen utensil has no significant on gender because both male and

female used wooden and non-wooden kitchen utensil in their various homes.

Also 74% of the respondents in South-west were married while in Ido just few percentage (18%) were married, in Ido 26% of the respondents were single while in South-west 16% were single. 20% of the respondents in Ido were widowed and 8% of the respondents in South-west were widowed. In Ido 26% of the respondents were divorced while no respondents in South-west were divorced. 10% were single in Ido while 2.0% were also single in South-west.

The distributions of the respondents according to educational status were also presented in Table 1 below. The level of education of the respondents showed that 36.0% and 46.0% had secondary education in Ido and South-West. 40.0% and 40.0% had tertiary education in both Ido and South-West. In Ido and South-West 16.0% and 14.0% had no formal education. While 12.0% had primary education in Ido. No respondents in South-West had primary education. This implies that majority of the respondents were educated both in South-west and Ido.

Location	**Frequency**		**Percentage**	
Which of the kitchen utensil do you use	Ido	South West	Ido	South West
Wooden	26	4	52	8
Non-Wooden	10	4	20	8
Both	14	42	28	84
Total	50	50	100	100
Noticeable effect when using non-wooden kitchen utensil				
It rusts inside the food and react with pot when metal spoon scrap metal pot	17	9	34	18
It reacts with heat when plastic spoon melt inside spoon	9	19	18	38
1 and 2	10	11	20	22
No Observation	14	11	28	22
Total			50	100

In addition to that, 24.0% of the respondents in Ido were farmers while no respondents in South-west were farmers. Also 28.0% and 18.0% were traders in Ido and South-west respectively. Also 30.0% and 58.0% of the respondents were civil servant. 18.0% of the respondents in Ido were artisan while 24.0% were artisan in South-west. This showed that majority of the respondents in South-west were civil servant while majority of the respondents in Ido were into trading and farming.

Table 2 below showed the distribution of the respondents according to the usage of wooden and non-wooden kitchen utensil. In Ido and South-west 52% and 8% used only wooden kitchen utensil while 20.0% and 8.0% of the respondents used non-wooden kitchen utensil in Ido and South-west. Also in Ido and South-west 28.0% and 84% of the respondents used both wooden and non-wooden kitchen utensil. This showed that most of the respondents were aware of wooden kitchen utensil.

In Ido, 34.0% of the respondents noticed that non-wooden kitchen utensil (metals) rusts when not dried properly and also leached inside the food and scrap the pot while mixing food together in the pot while in South-west 18.0% noticed rusting of non-wooden kitchen utensil (metals) when not dried properly and also leached inside the food and scrap the pot while mixing food together in the pot. 18.0% of the respondents in Ido noticed that when using non-wooden utensils (plastic material) to mix food together, it melts inside the food and even loose shape while 38.0% of the respondents in South-west noticed the same thing as well. Also 20.0% and 22.0% in both Ido and South-west also observed the effect in 1 and 2 while 28.0% and 22.0% did not observed any reaction when using non-wooden kitchen utensil.

Source: Field survey, 2018

In Figure 1 above showed that majority of the respondents (34.0%) used Orogun (Stirrer) only while 24.0% used both Igbako (Saucer) and Orogun (Stirrer). Also 18% of the respondents used Igbako (Saucer) only. 14%of the respondents used Igbako (Saucer), Orogun (Stirrer), Mortal and Pistil. Also 6% of the respondents used bowl and plates while 4% used rolling pin and chopping board respectively.

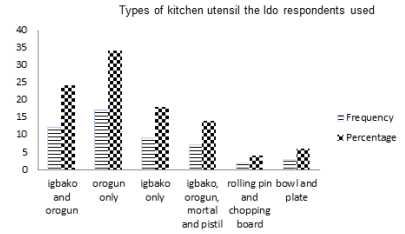

Figure 1: Distribution of the respondents in Ido based on types of kitchen utensil they used at their various home.

Source: Field survey, 2018

In Figure 2 above shows the distribution of the respondents based on types of kitchen utensil they have in their various home in South-west. It was observed that 32% of the respondents were using igbako, orogun, mortal and pistil while orogun only had 18% of the respondents. Also 14% of the respondents had rolling pin and chopping board in their various home while 4.0% and 6.0% of the respondents had igbako only and igbako and orogun only. 10% had dish drainer, 6.0% had bowl and plate while 8.0% had other things.

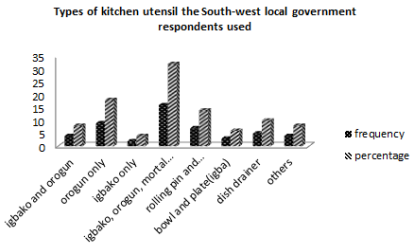

Figure 2: Distribution of the respondents in South-west based on types of kitchen utensil they used.

Source: Field survey, 2018

Figure 3 above showed that majority (48.0%) of the respondents preferred wooden kitchen utensil because it is cheap while 30.0% of

the respondents preferred it because it is beautiful and attractive, also 8.0% and 8.0% of the respondents preferred it because it is stronger and durable while 16.0% of the respondents preferred all the qualities (all of the above).

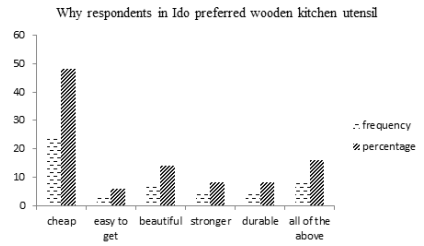

Figure 3: Distribution of the respondents in Ido local government based on why they prefer wooden kitchen utensil

Source: Field survey, 2018

In Figure 4 above showed the result of the respondents in South-west why they preferred using wooden kitchen utensil. It showed that 22.0% of the respondents preferred using it because it is cheap while 18.0% used it because it is easy to get in the market. Also 14.0% of the respondents preferred it because it is very beautiful while 8.0% and 10.0% preferred it because it durable and unique. 12.0% of the respondents preferred all the qualities that is cheap, easy to get, beautiful, strong, durable and unique.

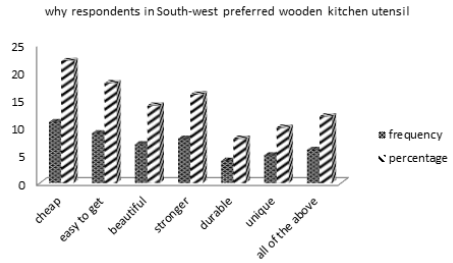

Figure 4: Distribution of the respondents in South-west on why they preferred wooden kitchen utensils.

Source: Field survey, 2018

In Figure 8 above shows the distribution of the respondents why they prefer other material not made up of wood. 30% and 30% of the respondents preferred using non-wooden kitchen utensil because it is cheap and easy to get while 18% and 12% of the respondents preferred it because it is beautiful and stronger than wooden one. Also 4.0% and 2.0% of the respondents preferred it because it is durable and cheaper.

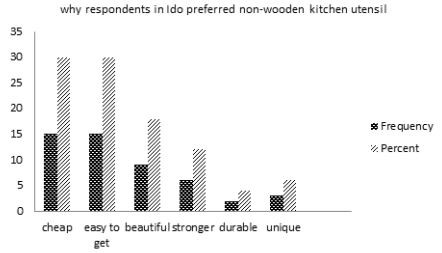

Figure 5: Distribution of the respondents in Ido based on why they prefer non-wooden kitchen utensil in Ido local government.

Source: Field survey, 2018

In Figure 6 shows the results showed the distribution of the respondents in South-west based on why they preferred non-wooden kitchen utensil. It was indicated that 26.0% of the respondents preferred non-wooden kitchen utensil because it is easy to get while 20.0% of the respondents said it is durable. Also 16.0% and 14.0% indicated that it is cheap and stronger while 6.0% said it is beautiful and also 2.0% of the respondents said it is unique while 16.0% of the respondents indicated all of the above that is they like all the qualities it possess.

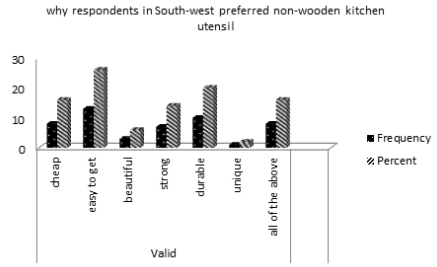

Figure 6: Distribution of the respondents in South-west based on why they preferred non-wooden kitchen utensil.

Source: Field survey, 2018

The result of the table above showed that majority (54%) of the respondents in South-west prefer it to non-wooden kitchen utensil because it is cheap while 28% of the respondents indicated that it is expensive. Also 18% of the respondents indicated that it is moderate (Figure 7).

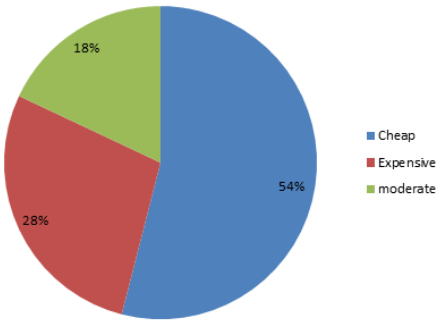

Figure 7: Distribution of respondents based on why they prefer it to non-wooden kitchen utensil in terms of cost in south west.

Source: Field survey, 2018

The result of the table above showed that majority (58%) of the respondents in Ido local government prefer it to non-wooden kitchen utensil because it is cheap while 32% of the respondents indicated that it is expensive. Also 10% of the respondents indicated that it is moderate (Figure 8).

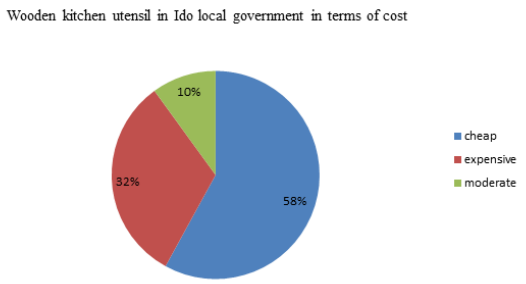

Figure 8: Distribution of respondents based on why they prefer it to non-wooden kitchen utensil in terms of cost in ido local government

Source: Field survey, 2018

Table 3 above shows that 31% of the respondents get the kitchen wooden utensil in the market while 26% of them said it is not always available and 43% of the respondents cannot get it at all in the market.

Table 3: Distribution showing availability of wooden kitchen utensil in the study areas.

Availability in the market	Frequency	Percentage
Yes	31	31
No	26	26
Not at all	43	43
Total	100	100

Conclusion

According to food safety and inspection service, pots, pans, and other tools used in cooking often do more than just hold the food. The materials that they are made from can have significant effect on the food materials. Some metallic utensils leach into to the food thereby causing contamination. Corrosion is also a commonplace with metallic utensils (United State department of Agriculture, food safety and inspection service).

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How to cite this article: Oreoluwa Ajayi. "Awareness, Acceptability and Information sources' Assessment of Wooden and Non-Wooden Kitchen Utensils' Making in IDO and South-West Local Government Area of Oyo State". J Exp Food Chem 6 (2020) doi:10.37421/2472-0542.2020.6.141