

CONSUMER ATTITUDES TO EDIBLE FROG (*Rana esculenta*) MEAT IN SOKOTO METROPOLIS, SOKOTO STATE, NORTH-WESTERN NIGERIA

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ABSTRACT: A cross sectional study was undertaken in Sokoto metropolis North-western Nigeria to determine attitudes to consumption of edible frog meat (*Rana esculenta*). A multi-stage sampling technique was used to select a total of 90 respondents from the largest Local government Areas to the smallest administrative unit (area) that make up the Sokoto metropolis. Respondents' were assessed using two self-reporting attitudinal evaluation techniques; latent semantic analysis and semantic differential scale, semantic analysis of respondents' comments revealed that 93.3% had positive attitude, 6.7% had negative attitude, toward edible frog meat consumption, on a semantic differential scale Ganda was considered Good (+2.33), Healthy (+7.00) and Delicious (+2.33) and Nutritious (+4.67); thus indicated that frog meat is not food item; but remains a product with a high potential for trade and nutritional important.

Key words: Attitude, Consumption, Frog (*Rana esculenta*) meat, Latent Semantic Analysis, Semantic Differential.

INTRODUCTION

Frogs are classified as amphibians. Amphibians are essentially a tropical group of animals and well represented in Nigeria (1). They are the first group of vertebrate animals to make a serious attempt at life on land. Their history is long and complex. Few people realize how ancient frogs are, for 190 years, the ancestors of modern frogs have roamed (if not rule) the earth looking much the same as they do today. The secret of their success is their amazing adaptability (2). They can, in general, move, feed and breathe equally well on land and in fresh water. But nearly all amphibians return to water to breed. Like all amphibians, frogs are cold blooded meaning that their body temperature changes with the temperature of the environment. When temperature drops, some frogs dig and burrow underground or in the mud at the bottom of the ponds. (3). Frogs like to be near ponds which have plenty of algae and plant near the edge usually with shallow edges so that they can easily climb out. In general, the common frogs seem to prefer ponds which have water flowing in and out of them (4). Human population is growing very rapidly, creating a significant and increasing demand for additional animal protein. This demand can only be met most easily by rapidly increasing source of animal protein which includes frog

production. The demand for frogs is of vital importance to man, most especially in developing countries like Nigeria where other animal protein from chevon, pork, poultry meat and eggs are limited in supply due to low level of animal husbandry or because their cost price is becoming too expensive to afford. Therefore, frogs could become an eminent source of protein to the populace in substitution for other forms of animal protein. Frog culture is an important economic activity in Thailand with high demand for the product in foreign market such as Malaysia, Singapore, Hong Kong, Japan, Germany and France (5). The demand for frog product is lower in Nigeria compared to other countries like India and France because the production of frog is yet to be popular in Nigeria, high prices of the little available product and the low income of the people especially in the rural areas. Despite the socio-economic, nutritional and health importance of frogs and frog meat, little attention is paid to its scientific study here in Nigeria. Related studies were scanty. There is a need to study the attitude of people toward consumption of frog meat.

METHODOLOGY

A multi-stage sampling technique was used to select a total of 90 respondents from the five Local government Areas that make up Sokoto metropolis. In the first stage nine wards were selected proportionately; three wards from each of Sokoto North and Sokoto South (being the Local Government Areas that are wholly within the Metropolis) and one location from each of Wamakko, Kware and Dange Shuni. In the second stage one area were randomly selected from each of the wards and in the third stage 10 respondents were selected from each area using convenient sampling. Two self-evaluating attitude assessment methods; Latent semantic analysis, (source) and semantic differential scale (Osgood,) were used in the first instance subjects were asked to freely comments on their feelings towards consumptions of frog meat. In the second stage Semantic differential scale was used to assess their attitudes to frog meat in which four evaluative adjective namely; good, delicious, healthy and nutritious. The adjective were sorted from the comments on the latent semantic procedures.

The comments from the first stage of the study were separated into three semantic classes' positive, indifferent and negative attitude. The semantic differential scale was analysed according to (6). Average semantic distances of each adjectives was subtracted from 14 to obtain

the differential of which a positive different indicated a positive attitude and a negative different indicate otherwise.

RESULTS AND DISCUSSION

ATTITUDE OF CONSUMER TOWARD EDIBLE FROGS

The result in Table 1: shows that 93.3% of the subjects had negative attitude towards edible frogs as a source of meat and only 6.7% of the subjects had positive attitude toward edible frog as a meat source.

Table 1: Distribution of respondents according to their attitudinal disposition towards Consumption of Edible frog meat

Positive		Negative	
Evaluation	Frequency	Evaluation	Frequency
Interesting	1	I cannot eat frog meat	20
I like it if processed well	1	It is not part of our culture	17
Important	4	I don't like it	18
		Bad	21
		It is a dirty Animal	7
		Religiously rejected	1
Proportion (%)	6.7		93.3

The result obtained in Table 1 above may be true, as it could be a reflection of religious belief or faith of the respondents in the study area which are mostly Muslims and as religion limits the consumption and production of some particular meat such as pork meat in the study area. Although that it was claimed that some Islamic sects of viewed frog meat as 'Haram, neither Halal nor Haram' and not be eaten.

The result in Table 2: shows that subjects had positive attitude towards edible frog's meat on a semantic differential of +2.33, + 2.7 and +4.67 for good delicious and healthy while a semantic differential of +7.0 was recorded for nutritious.

Table 2: Semantic attitude of consumers towards edible frog meat

Feelings	Mean	Differential
Good	11.67	+2.33
Nutritious	7.00	+7
Delicious	11.67	+2.33
Healthy	9.33	+4.67

The result presented in (Table 2) above, indicates that subjects considered Edible frog meat to be Good, Delicious and Healthy, which may be so as a as result of the economic importance

attached to frog meat in the study area, as it is highly demanded for by other subjects outside the study area. In the case of frog meat nutritious being neutral in the study area has earlier been discuss in the result obtained on the dispositional attitudes of subjects to edible frog meat in the study area.

CONCLUSION

Many subjects in the study area have negative attitudes towards frog meat consumption considering it to be a dirty animal. Also haven't Islamic knowledge on legacy of eating frogs and frog meat products, therefore there is an ambiguity of being it Halal nor Haram in Islamic view and considered it as unacceptable be majority of the subjects while very little of the Frog meat and its products are consumption in the study area. Notwithstanding the unacceptability of the frog meat and it products in the study area, yet the quantities purchased by consumers from others parts of the Nigeria are relatively higher in the study area, Hence frog meat and its products are of high economic potential in the study area.

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