

## Socioeconomic perception and knowledge of the consumption of *Ablo*, a cereal food fermented of Benin

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**ABSTRACT:** The *Ablo* is a cereal food fermented. It is considered like a humid, slightly, salty and sugary bread, cooked steam and sold under shape of ball. The objective of the survey is to have present quantitative and qualitative data on the consumption of *Ablo* in Benin. The methodology adopted to consist in doing an investigation of land in some townships of the center (Abomey, Bohicon, Covè) and of the south (Abomey-Calavi, Comè, Cotonou) Benin by the consumers of *Ablo*. The results of our investigations showed that the *Ablo* is a food descended of the informal sector of street food. The consumers of *Ablo* are of all age and all socio-professional category. The consumers are of three categories to know the population, the promoters of feast and the hotels and restaurants. The *Ablo* is consumed to the snack for the majority and is served to hot accompanied of pimento or frying more of fish or meat fried.

**KEYWORDS:** *Ablo*, Benin, investigation, socio-economy, consumption.

### 1 INTRODUCTION

A sufficient food constituted of several types of products permits the satisfaction of the needs of the organism. The cereals (corn (*Zea mays*), sorghum (*Sorghum bicolor*), rice (*Oryza sativa*), wheat (*Triticum spp*), thousand (*Pennisetum spp.*) make integral part of the food tradition of the peoples of Africa, in particular of Benin. They are used alone or in combination, sometimes in substitution in numerous traditional culinary preparations. Indeed, in the big cities of Benin, the tendency to the combination or to the substitution of the cereals concerns many traditional foods as *Gowé*, *Akpan*, *Ablo*, ... [1].

*Ablo*, slightly sugary humid bread, produce from the dough fermented of corn or rice, procure substantial income to the transforming women ([2]; [3]). This humid bread in the shape of wad is very consumed very in Benin, especially in the big city ([4]; [5]; [6]; [7]; [8]).

The sector of the traditional transformation of the food commodity plays a strategic role in the national food security by the transformation of the local products; the food provision by the preparation of food locally known on the cultural plan and the use of the women of which the transformation of foods being their main source of income in the urban zone [9].

The daily income generated by the trade of street food raised an amount between 1.500 and 15.000 francs CFA by seller [10]. The contemporary life style is very distant of what made itself in the past. Thus, hurried by the time, the increase of the number of unmarried people, mono-parent family and women that work, drove to deep changing in the preparation of food and the habit of consumption.

The sector of the street food takes a dimension however all particular in the African urban center where the fast urbanization and the economic difficulty encouraged the increase of the number of seller of food on the public way [11].

However, it is a sector of activity implying important add money and supplier of job to a large proportion of the population, including women and the whole family ([12]; [13]; [14]).

According to the [11], the sanitary safety of street food is crucial. It concerns food in general and fermented food in particular. This sector has been defined by the [11] as the sector especially producing foods and drinks loan to be consumed, prepared and sold by sellers, in the street and in the other similar public places. By this channel, the system of urban restoration also offers a lot of traditional foods to base of the local products that of the dish and the new practices either improved, adapted to the need and the weak income many urban residents.

The survey initiated to collect the present information relative to the consumption of *Ablo*. It has for objective to have quantitative and qualitative data on the consumption of *Ablo* in Benin.

## 2 MATERIALS AND METHODS

### 2.1 MATERIALS

The investigations have been done in some townships of the center (Abomey, Bohicon and Covè) and of the south (Abomey-Calavi, Comè and Cotonou) Benin by the consumers of *Ablo* with the help of a questionnaire integrating questions of order sociocultural and economic. The figure 1 above presents the positioning of the investigation zones on the card of Benin.

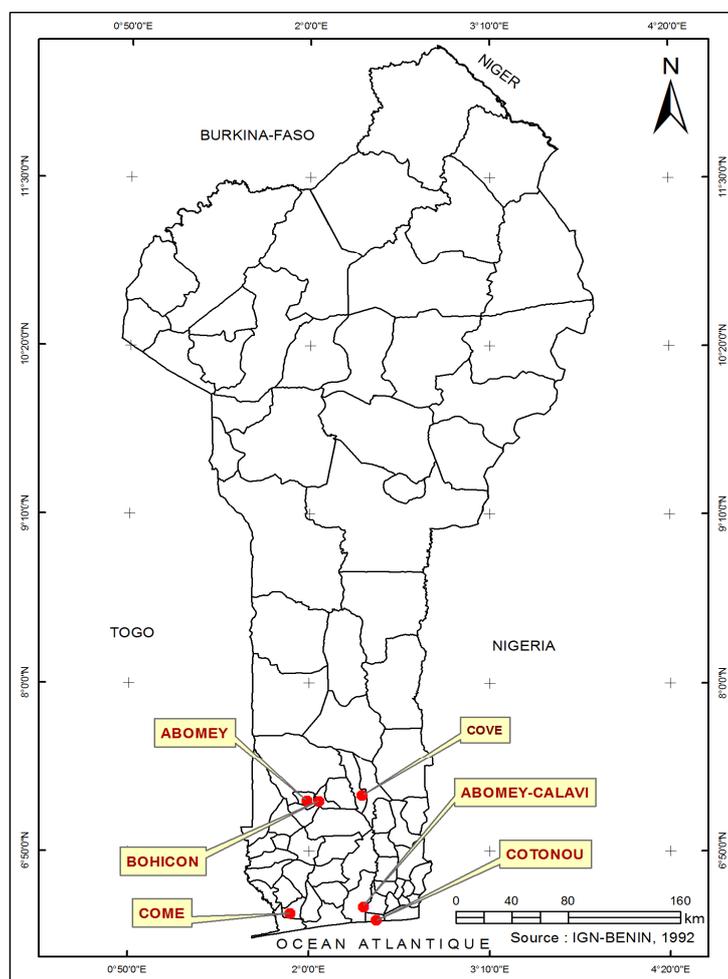


Fig. 1. Card of positioning of the investigation zones

## 2.2 METHODS

### 2.2.1 SAMPLING OF THE INVESTIGATIONS

The adopted methodology has been centered on investigations of land that took place mainly in four phases under shape of semi - structured interviews on the base of a questionnaire. The four phases were the following: the exploratory phase, the phase of sampling, the phase of collection of the data and the phase of analysis of the data. The number of them investigated has been determined from the formula of [15]:

$$N = U_{1-\alpha/2}^2 \times \frac{pi(1-pi)}{d^2}$$

N : size of the sample

pi : proportion of transforming " specific n " by type of data on the whole " NT " of the actors of the path (pi = n/nT)

d : margin of the mistake fixed to 5%.

U<sub>1-α/2</sub>: value (1,96) of the normal law table for a line of confidence of 95%.

The size of the sample gotten was of 73 consumers of Ablo. The proportion of the consumers of Ablo investigated by township is indicated above in the table1.

**Table 1. Distribution of respondents by municipality**

Municipality	Population	Number of women	Rate of poll	Consumers	Percentage of respondents
Abomey	92 825	47 990	0.05	4	5.17
Abomey-Calavi	655 965	34 003	0.38	28	37.50
Bohicon	170 604	89 474	0.10	7	9.90
Comè	79 665	41 407	0.05	4	5.17
Cotonou	678 965	353 590	0.39	28	39.70
Covè	50 235	26 251	0.03	2	2.60
Total	1 728 166	892 715	1	73	100

Source: [16]

### 2.2.2 STATISTICAL ANALYSIS

The software Microsoft Excel XP has been used to do the descriptive statistics calculations. The software MINITAB served to analyze the data of investigation. The retained significance level is of 5% (p <0.05).

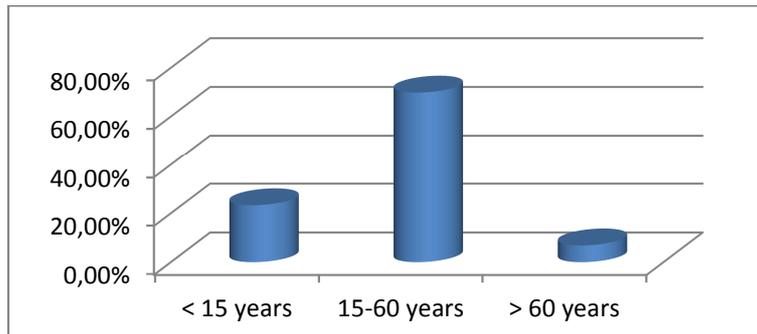
## 3 RESULTS

*Ablo* is a dough fermented steam firing. Originally, the *Ablo* is prepared from the corn following a traditional process including a stage of spontaneous fermentation of the mixture gotten from the mawè and water. According to the producers and sellers, the *Ablo* is comparable to humid bread presenting a whitish color, a pleasant aroma and a sugary and slightly acidic flavor.

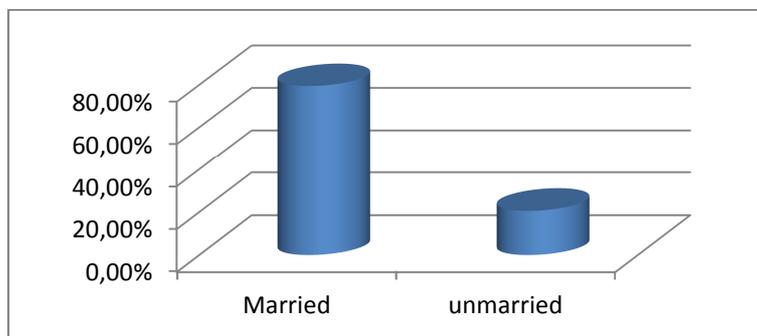
The original technology of production using the corn solely came of the Mina and of the Watchis from the departments of the Mono and the Couffo to the south of Benin. These populations are border of the neighboring Togo and transmitted thanks to the brewing the technology of production to the Togolese population.

Intended to consumption to the domestic scale in the worry to vary the dish, the *Ablo* became thereafter a commercial product. The merchandising influenced the evolution of the technology with the introduction of another raw material notably rice used like substituting partial or complete and of ingredients as salt, sugar, the flour of wheat and the yeast.

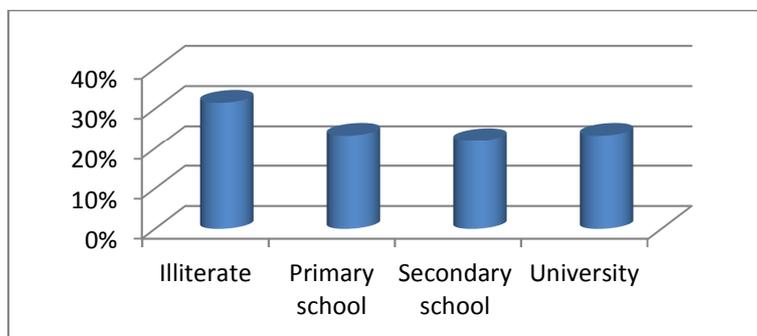
The figures 2, 3, 4, 5, 6, 7, 8, 9, 10, 11 12 and 13 present the sociocultural and economic information below relative to the consumption of *Ablo*.



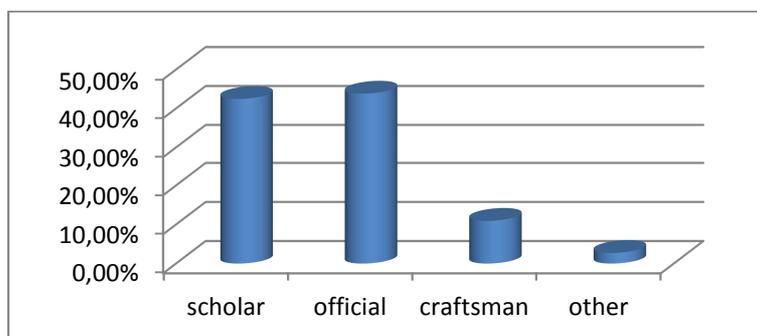
**Fig. 2.** Diagram of distribution of consumers according to age



**Fig. 3.** Diagram of distribution of consumers according to their matrimonial situation



**Fig. 4.** Diagram of distribution of consumers according to education



**Fig. 5.** Diagram of distribution of consumers according to their social status

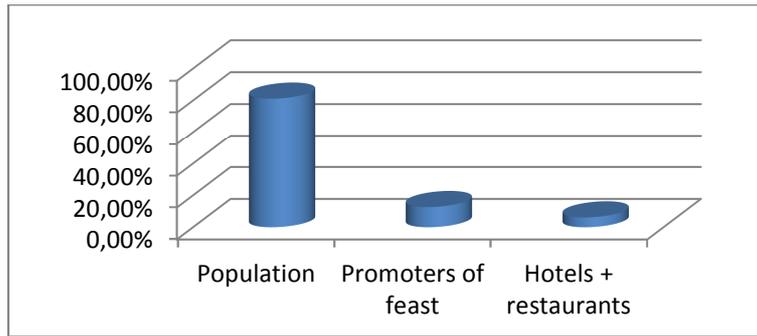


Fig. 6. Diagram of distribution of consumers

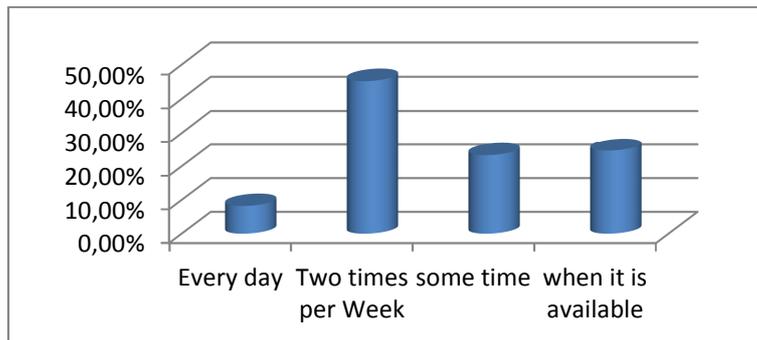


Fig. 7. Diagram of distribution of consumers according to their frequency of consumption

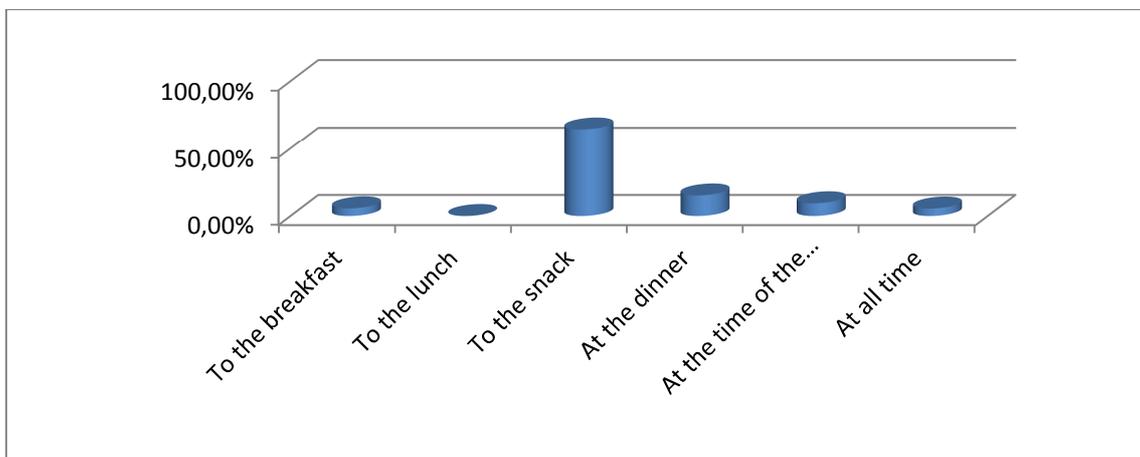
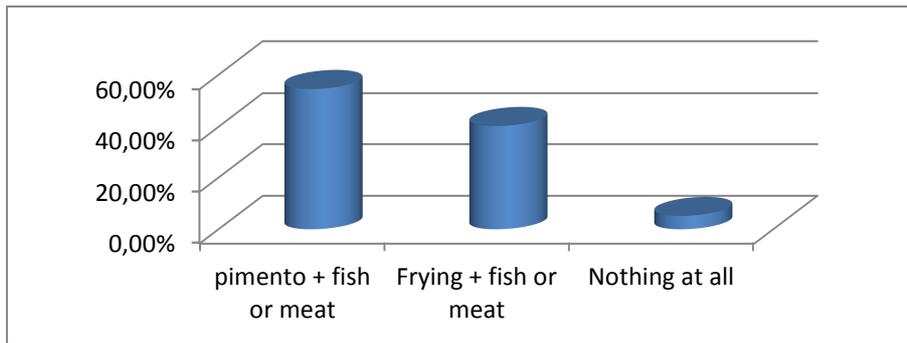
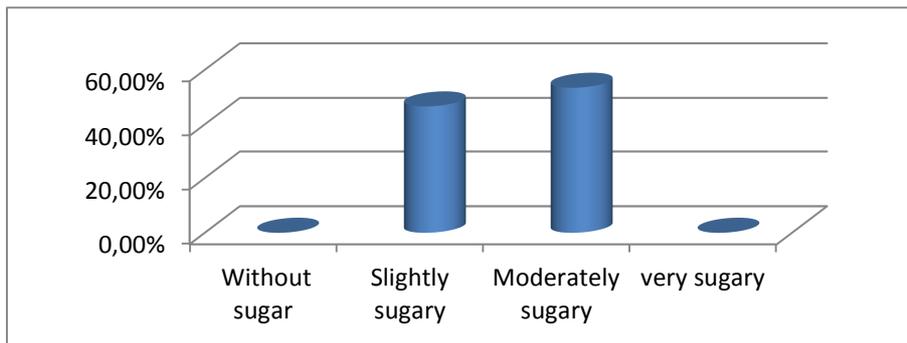


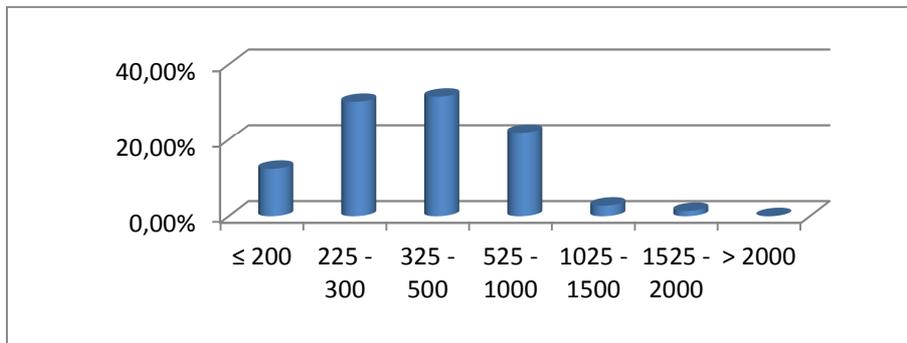
Fig. 8. Diagram of distribution of consumers according to opportunity of consumption



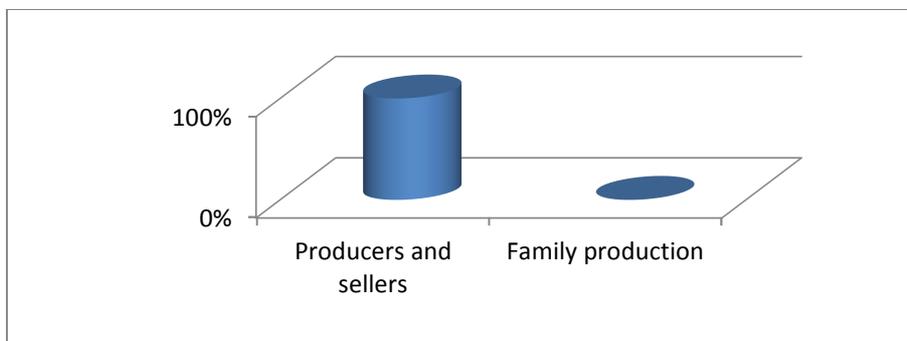
**Fig. 9.** Diagram of distribution of consumers according to dish of accompaniment



**Fig. 10.** Diagram of distribution of consumers according to appreciation of the sugar rate



**Fig. 11.** Diagram of distribution of consumers according to quantity bought in FCFA to every consumption



**Fig. 12.** Diagram of distribution of consumers according to source of procurement

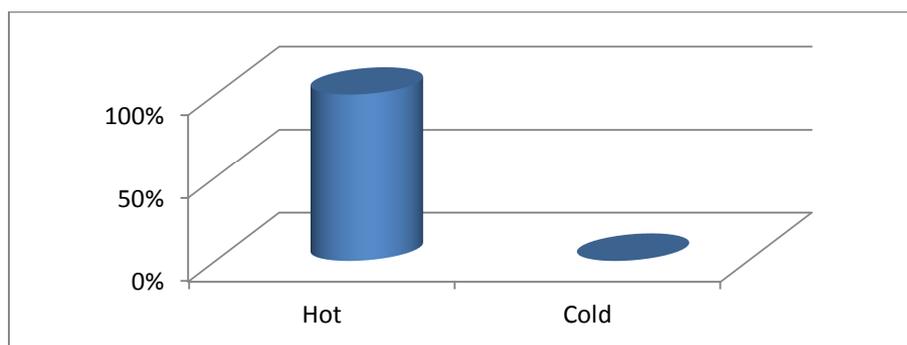


Fig. 13. Diagram of distribution of consumers according to temperature of consumption

#### 4 DISCUSSION

The results of investigation show that the *Ablo* is a food descended of the informal sector of street food. The consumers of *Ablo* are of all age (figure1) and of all socio - professional category (figure5). It explains the obstruction of the population for the *Ablo* and confirms the results of ([3]; ([17])). They are for most bridegrooms (79.45%). The majority (32%) is illiterate. It is due to the fact that the population of Benin is in majority illiterate. These results are compliant to those of [16] who showed that the population of Benin is close to 60% illiterate.

The population, the promoters of feast and the restaurants and hotels represent 81.16%, 12.66% and 6.18% of the consumers respectively. The weak proportion (6.18%) of the restaurants and hotels are due to the fact that the product is not part of their menu. Thus, the *Ablo* is sold in these centers that on order of the users.

45.20% of the consumers take the *Ablo* two times per week (figure7) and 64.38% consume it to the snack (figure8). What justifies the behavior of the producers in urban surroundings that begin the production around 16 hours PM. These results are compliant to those of [3].

They consume the *Ablo* only or accompanied of pimento or frying more meat or fish (face 9). The majority (54.33%) use pimento. This behavior especially explains itself by the fact that pimento is offered free by the seller whereas frying is paying. Indeed, the manufacture of frying requires more ingredients.

53.42% of the consumers prefer that the *Ablo* is fairly sweetened. The majority often has an included consumption between 225 and 1000 francs CFA (figure11). They get a stock all (figure12) among the producers and sellers and consume it to hot (figure13). It explains the behavior of the producers and sellers of *Ablo* who adopted some means to preserve the product hot. Thus, the *Ablo* is preserved in icebox in urban surrounding and in sachet in Comè.

#### 5 CONCLUSION

The survey shows that the *Ablo* is a food descended of the informal sector of street foods. The consumers of *Ablo* are of all age and all socio - professional category. The consumers are of three orders to know: the population, the promoters of feast and the hotels and restaurants. The *Ablo* is consumed to the snack for the majority and is served hot accompanied of pimento or frying more fish or meat fry.

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