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Ethnoentomology: socio-cultural aspects of the acceptability of insects as food by the urban population of Brazzaville city in Republic of the Congo

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ABSTRACT

The present article addresses an aspect of entomophagy for the current urban population of Brazzaville city, capital of the Republic of the Congo. It recalls, firstly, the interest in entomophagy, which was emphasised by the FAO in 2013. Concerning the Brazzaville city, cultural and religious practices of the current inhabitants attract attention and have in particular been analysed, as well as their sociodemographic and dietary characteristics. Caterpillars, orthopterans, termites and beetle larvae were discussed in particular. In this study, the questionnaire was used as a data collection tool. The results showed that the acceptability or not of insects as food by the non-native populations of Brazzaville depends on their country of origin, their ethnicity and their length of residence ($p < 0.001$). Insect consumption is highly positively correlated with the presence of preferred insects from the country of origin on the market ($r = 0.837$; $p < 0.001$). There is a very significant negative correlation between the number of years of residence in Brazzaville and the consumption of insects by non-native populations ($r = -0.306$; $p < 0.001$). People who consumed insects in their country of origin either maintained the habit of insects' consumption (59.50%), or lost this habit (13.90%). The others (3.00%) who do not consume insects in their region have integrated entomophagy into their eating habits following cultural contact with entomophagous populations. Therefore, cultural contact has a negative or positive influence on entomophagy.

Keywords: Ethnoentomophagy, eating habits, non-native population, cultural mixture, Brazzaville.

RÉSUMÉ

Ethnoentomologie : aspects socioculturels de l'acceptabilité des insectes comme nourriture par la population urbaine de la ville de Brazzaville en République du Congo

Le présent article aborde un aspect de l'entomophagie pour la population urbaine actuelle de la ville de Brazzaville, capitale de la République du Congo. Il rappelle, en premier lieu, l'intérêt de l'entomophagie, intérêt qui fut souligné par la FAO en 2013. Concernant la ville de Brazzaville, les pratiques culturelles et religieuses des habitants actuels de la ville retiennent l'attention et ont en particulier été analysées, ainsi que leurs caractéristiques sociodémographiques et d'alimentation. Les chenilles, les orthoptères, les termites et les larves des coléoptères ont été abordés en particulier. Le questionnaire était utilisé comme outil de collecte des données dans le cadre de cette étude. Les résultats ont montré que l'acceptabilité ou non des insectes comme aliments par les populations allochtones de Brazzaville dépend de leur pays d'origine, de leur ethnité et de leur durée de résidence ($p < 0,001$). La consommation des insectes est positivement très corrélée par la présence des insectes préférés de la contrée d'origine sur le marché ($r = 0,837$; $p < 0,001$). Il existe une corrélation négative très significative entre le nombre d'année de résidence à Brazzaville et la consommation des insectes par les populations allochtones ($r = -0,306$; $p < 0,001$). Les sujets consommateurs des insectes dans leur contrée d'origine ont soit maintenu l'habitude de consommation des insectes (59,50 %), soit ont perdu cette habitude (13,90 %). Les autres (3,00 %) non consommateurs des insectes dans leur contrée ont intégré l'entomophagie dans leurs habitudes alimentaires suite au contact culturel avec les populations entomophages. Donc le contact culturel a une influence négative ou positive sur l'entomophagie.

Mots-clés : Ethnoentomophagie, habitude alimentaire, population allochtone, brassage culturel, Brazzaville.

INTRODUCTION

Ethnoentomophagy is a theme that is addressed in several hundred articles and books. If we take into consideration only the Republic of the Congo, more than ten articles exist. We will quote a few as examples: the updating of the key to determining the last stage caterpillars consumed by local populations (Mabossy-Mobouna et al., 2022), the consumption and methods of preparing edible caterpillars in the Republic of the Congo (Mabossy-Mobouna et al., 2021), the improvement of nutritional value by the inclusion of *Imbrasia truncata* pastes (Mabossy-Mobouna et al., 2017). It is already known that entomophagy, which literally means the consumption of insects and their products, is considered a promising strategy to solve problems related to global food insecurity and poverty reduction (Stack et al., 2003; Gahukar, 2011). Interest in entomophagy exploded following the publication by the FAO in 2013 of a reference document discussing future prospects for insect consumption. This dietary practice is positioned as an option likely to respond to the nutritional and environmental concerns of the planet (Bourgault, 2018). The food consumption of insects therefore not only has nutritional benefits, but also environmental benefits. Thus, consuming proteins from insects would reduce greenhouse gas emissions (Kim et al., 2020). All these advantages explain the need for the general public to adopt this practice of entomophagy. However, cultural barriers, such as food prohibitions and taboos, can constitute an obstacle to the promotion of entomophagy. Indeed, entomophagy is linked to the cultural and religious practices of people, particularly in Africa, in certain regions of Asia and in Latin America (Bourgault, 2018). Western culture is very unfavorable to entomophagy unlike the African tradition where insects have been eaten since the dawn of time. Thus, van Huis (2016) considers that the attitude of Western eaters is one of the major barriers to the integration of entomophagy. Their generalized negative attitude towards the consumption of insects leads to the rejection of this practice. Likewise, Bessa and his collaborators note that insects are not included in the cultural diet of Western countries unlike countries where entomophagy is an integral part of the culture (Bessa et al., 2020). Furthermore, the change in the living environment can cause a disruption in habits in terms of supply, culinary preparation, and the transmission of values. Environmental change therefore modifies the systems of socio-cultural organization of food, the practical and symbolic logics, the more or less harmonious arrangement between past and present, the maintenance or abandonment of habits or customs. Indeed, modernization and civilization often characterized by the globalization of Western culture and technology towards developing countries have consequences, among other things, in the change in the eating habits of the populations they pass through. Socio-cultural studies are common in urban areas. The city is a socio-cultural crossroads where diverse peoples and cultures come together. It is also the

place where almost the majority of food consumed both in rural areas and in other countries and continents is sold. African cities are cosmopolitan places. There are several ethnic groups and several expatriates, both African, Asian and Western. As people migration, they bring their cultures with them, including eating habits. In contact with other cultures, certain peoples modify or even abandon their cultures in favour of foreign or local cultures. Note that in certain countries, the nutritional transition leads populations to abandon their previous entomophagic cultures (Ramos-Elorduy, 2009).

The present study's aim is to determine the influence of aspects of cultural contacts on the acceptability or refusal of the consumption of insects as food by the non-native population of Brazzaville city in Republic of the Congo.

MATERIAL AND METHODS

Type of study

To achieve conclusive results, we held a descriptive and analytical survey in Brazzaville city, capital of the Republic of the Congo, one of the large cities in the Congo Basin, whose population is a significant insects' consumer.

Study population

The population concerned in this study was that of various households in the nine districts of Brazzaville city. It was made up of adults aged between 19 and 80 years old.

Sampling

Simple first-stage random sampling was used. The survey was carried out in 370 households, 41 households per district. The person answering the survey questions had to be a non-native person and have lived in Brazzaville city for at least five years. All persons approached whose age was less than 19 years or more than 80 years, all those with a length of residence of less than five years in Brazzaville city and all persons who refused to participate in the survey, were excluded.

Data collection

The information collected concerned knowledge of edible insects, the consumption of these insects and food taboos. In consumption, research focused on the influence of socio-economic level, ethnic mixing (negative or positive) and seniority in the city on the acceptability of insects as food by the non-native population. Information was collected in the field, from October 2023 to December 2023, using a previously established questionnaire.

Data processing and statistical analysis

The data collected in the field were processed and entered with the SPSS 27 software. The production of the raw tables was done with the Excel 2018 software. The

quantitative variables were expressed in the form of mean (\bar{x}) \pm standard deviation (s) while indicating the extreme values (minimum and maximum). Qualitative variables were expressed in numbers and percentages. The chi-square test was used to compare the proportions to prove the independence or association between the subjects surveyed and some of the variables such as length of residence and origin country. Linear regression was used to highlight the factors influencing insect consumption. The determination of the degree of significance was carried out at a threshold of 5%.

RESULTS

Socio-demographic and economic characteristics of participants

The sample studied did not approach a normal distribution; given the mode, the distribution shifted towards age groups below the average. The most representative age group was 25 to 54 years (75.2%), followed by 19 to 24 years (22.7%); the least representative was that of those aged over 54 (2.30%). This is therefore an essentially active population. The difference in age group between the subjects interviewed was very significant ($p < 0.001$). In addition, the female population surveyed had an average age of 30.04 ± 8.73 years, slightly lower than the average age of the sample while the average age of the male population was higher than the average of the sample (33.15 ± 8.60 years). The difference in average ages between women and men is significant ($F=11.88$; $p < 0.001$). Concerning the person's profession, three categories of well-defined professions were listed among the subjects who participated in the survey, namely employees, subjects exercising a liberal

function and the unemployed. It appears that more than half of the subjects who responded to the survey (65.10%) did not have a permanent job. There were more subjects exercising liberal functions (29.50%) than employees (5.40%) with a very significant difference ($p < 0.001$). Regarding the length of residence in Brazzaville, the results of the survey show that half of the respondents (50.00%) already had a length of residence in Brazzaville of 5 to 10 years. This was followed by subjects who had already lived more than 20 years in Brazzaville city (31.60 years); subjects who had a residence of 16 to 20 years were the least representative (5.90%). The average length of residence was 16.60 ± 12.32 years. The difference in length of stay between the respondents is very significant ($p < 0.001$). Out of a total of 370 subjects surveyed, 83.80% of the subjects who responded to the survey originated from of Central Africa, with 37.3% natives (Congolese coming from the hinterland) and 46.80% originated from other Central African countries, mainly Central Africans (28.6%), followed by Congolese from the DRC (16.5%). The rest of the population surveyed consisted mainly of subjects from West Africa (16.20%) with Mali in the lead (6.2%) followed by Guinea Conakry (5.1%). The difference between the subjects surveyed according to their country of origin is very significant ($p < 0.001$). Out of a total of 370 subjects surveyed, 201 subjects or 54% had indicated their ethnic group of origin. There were a total of 27 ethnicities among these subjects. For the nationals, the Mbochi (14.5%) and the Lari (14.5%) were the most representative followed by the Teké (7.5%). Among foreigners, the Fulani were the most representative (14.0%) followed by the Bambara (7.5%) with a very significant difference ($p < 0.001$).

Table 1. Distribution of participants according to their socio-demographic and economic characteristics

Variables	Characteristics	n=370	Percentage (%)	Average \pm standard deviation (years)	p-Value
Age (years) (370)	19-24	80	22.70	$31,60 \pm 8.80$	<0.001
	25-54	264	75.00		
	55- 64	5	1.40		
	65 and more	3	0.90		
Sex	Male	182	49.20	33.15 ± 8.60	<0.001
	Female	188	50.80	30.04 ± 8.73	$F=11.88$
Profession	Salaries	20	5.40		
	Liberal function	109	29.50		
	Unemployed	241	65.10		
Country of origin	Natives	138	37.30		<0.001
	Immigrants	232	62.70		
Nationalities	Congolese	137	37.00		
	West Africans	60	16.20		
	Others from Central Africa	173	46.80		
Length of stay in Brazzaville (years)	5-10	185	50.00	16.60 ± 12.32	<0.001
	11-15	46	12.40		
	16-20	22	5.90		
	More than 20	117	31.60		

Foods usually eaten in the surveyed households

The foods usually consumed in the survey households are diverse and vary very significantly from one household to another ($p < 0.001$). Some are local foods, others are foods

from West Africa. West African immigrants living in Brazzaville maintain their eating habits despite the distance from their place of origin and the length of time they have settled in Brazzaville. They prefer cereals and

cook them according to their traditions. There are only two groups of insects that are usually consumed in the households of the respondents, caterpillars and termites,

but with a very low consumption rate (8.40%) and a predominance of caterpillars (7.90%).

Table 2. Distribution of types of food usually consumed by participants in this survey

Variables	Foods	Effectives	Percentage (%)	p-value
Types of food commonly consumed in respondents' households	Bushmeat	31	8.50	<0.001
	Fish	21	5.70	
	Rice with <i>saka saka</i>	3	0.80	
	<i>Saka saka</i> and bread	3	0.80	
	<i>Too</i> and couscous	22	6.00	
	<i>Too</i> and rice	7	1.90	
	<i>Saka saka</i> and cassava	7	1.9	
	<i>Gnetum africanum</i>	9	2.50	
	Fish with <i>saka saka</i>	23	6.30	
	<i>Saka saka</i>	32	8.70	
	Sorrel and <i>Gnetum</i>	15	4.10	
	<i>Gnetum</i> and <i>foufou</i>	1	0.30	
	Fish and <i>Gnetum</i>	4	1.10	
	Cassava	100	27.30	
	<i>Lvgali</i>	3	0.80	
	<i>Foufou</i>	22	6.00	
	<i>Tiep bou dien</i> with couscous	8	2.20	
	<i>Tiep bou dien</i>	2	0.50	
	<i>Too</i> and sweet potato leaves	11	3.00	
	<i>Too</i> and sweet potatoes	1	0.30	
	Asparagus	2	0.50	
	Fern buds	1	0.30	
	Bananas and cassava	3	0.80	
	Asparagus and sorrel	1	0.30	
	Caterpillars	29	7.90	
	Termites	2	0.50	
	Vegetables	1	0.30	
Couscous	2	0.50		
Total		366	100.00	

Traditional insect consumption habits

All the surveyed people admitted knowing at least one edible insect. Among them, 75.70% out of a workforce of 370 consumed insects in their countries of origin and 24.30% never had this habit. Those who were used to consuming insects did so either for their organoleptic qualities, or because in their culture they consume insects, or they had learned that insects are sources of good proteins. Those who did not consume them cited several reasons, including saying that insects do not contribute anything to the body, insects contain allergens causing vomiting or damage to their crops, or that insects are 'impure' for consumption.

Presence of taboos or food prohibitions regarding insects in culture

Only a small number of participants (3.20%) admitted to knowing food prohibitions or taboos in their culture concerning the consumption of insects. All these prohibitions were cultural, not linked to any pathological reasons.

Presence of insects from the region of origin in the city

of residence and availability

Most people surveyed (89.40%) recognized edible insects on the market in their village, region or country of origin. These are caterpillars (76.22%), orthoptera such as locusts, grasshoppers and crickets (65.41%), termites (22.70%) and finally beetle larvae (13.00 %).

Consumption of insects in the residing city

In Brazzaville city, the consumption rate of insects by respondents was only 38.10%, almost half of the consumption rate before migration (75.70%). Among these, the subjects surveyed who continued to consume insects in the city of residence represented only 35.10% of the number of respondents. There was a reduction in insect consumption rate by 40.60%. Those who had acquired the habit of consuming insects were 3.00%. The change in eating habits had an impact on the consumption of insects for 40.30% of the subjects who participated in the survey.

Availability of insects on the market in the city of residence and their qualification

Regarding the food availability of insects almost all of the

respondents (80.80%) admitted that insects were available on the market in their new city of residence. The presence on the market of insects from their countries of origin was acknowledged by 88.90% of the subjects who took part in the survey. Out of a total of 370 respondents who qualified insect consumers, only 0.50% described insects as food

for the poor. For 9.20% of respondents, insects were expensive and constituted a food for rich people. However, the majority of respondents (90.30%) described insects as any other food intended for human consumption.

Table 3. Distribution of participants according to knowledge and consumption of insects

Variables	Characteristics	n=370	%	p-value
Knowledge of insects	Yes	370	100	
	No	00	0.00	
Eating insects	Yes	290	75.70	<0.001
	No	90	24.30	
Reasons for eating or not eating insects	Good protein	136	36.75	<0.001
	A valuable food	15	4.05	
	Of no value	10	2.70	
	Causes vomiting	10	2.70	
	A customary food	50	13.50	
Existence of taboos	Change of habit	149	40.30	
	Yes	12	3.20	<0.001
	No	354	95.70	
Don't know	4	1.10		
Presence of insects locally	Yes	239	88.90	<0.001
	No	41	11.10	
Insect consumption in the city of residence	Yes	141	38.10	<0.001
	No	229	61.90	
Availability of insects on the market	Yes	299	80.80	<0.001
	No	71	19.20	
Insect Qualification	A food of the poor	2	0.50	<0.001
	A food of the rich	34	9.20	
	A food like any other	334	90.30	

Factors influencing insect consumption by the non-native population

The results obtained indicate a correlation of the consumption of insects by the non-native population of Brazzaville and the profession, the country of origin, the consumption habits of insects in the country of origin, the availability of insects on the market, the presence on the insect market in the country of origin, the presence of preferred insects on the market and the number of years of residence in Brazzaville. This is shown by the linear regression equation ($y = ax + b$) where y = Consumption of insects by the non-native population and x = independent variable. Likewise, the unstandardized regression coefficient indicates that the country of origin, the consumption habits of insects in the country of origin, the availability of insects on the market, the presence on

the market of insects from the country of origin, the presence of preferred insects on the market have a positive effect on insect consumption; the number of years of residence in Brazzaville has a negative effect. However, according to the Durbin-Watson statistic the correlation is not acceptable for occupation, eating habits, food taboos, ethnicity and availability of insects on the market because for these variables the statistic is not between 1 and 3. The country of origin explains 25.00% of the variation in insect consumption by the non-native population of Brazzaville, the presence on the market of preferred insects explains 83.70% of this variation in insect consumption, the length of residence explains 18.80% variation in consumption and the presence on the market of insects from the country of origin explains 13.60% of this variation.

Table 4. Table of linear regressions of insect consumption

Dependent variable	Independent variables	Non-standardised coefficient	R ²	R ² Adjusted	F	Statistics of Durbin-Watson
Insect consumption by the non-native population	Profession	0.020	0.010	0.007	0.060	0,856
	Country of origin	0.502	0.250	0.248	<0.001	1.250
	Ethnic group	0.021	0.079	0.076	<0.001	0,968
	Insect eating habit	0.314	0.079	0.075	<0.001	0.857
	Food taboos	0.383	0.020	0.017	0.007	0.827
	Length of stay	-0.017	0.188	0.185	<0.001	1.100

Insect availability	0.332	0.073	0.0070	<0.001	0.806
Presence of insects locally	0.429	0.136	0.132	<0.001	1.420
Favorite insects	0.143	0.837	0.837	<0.001	1.100

Impact of migration

Concerning the impact of the migration on the consumption of insects, 40.30% affirmed that their migration from the country of origin to Brazzaville city had an impact on the consumption of insects, i.e. by losing the habit of consuming insects or by integrating the consumption of insects into their eating habits. The results of the surveys showed that 4.30% of Malian nationals and 11.20% of Congolese who were displaced from their countries of origin to Brazzaville had lost the habit of consuming insects. While 100% of Benin nationals surveyed, 0.70% of CAR nationals and 8.10% of DRC nationals had acquired the habit of consuming insects. For the Guinean, Senegalese and Chadian nationals who participated in the survey, cultural contact had no

influence on the consumption of insects. The loss of the habit of consuming insects was due either to their inaccessibility because they were too expensive for such a small quantity, or to cultural contact with ethnic groups who do not consume them. Subjects who consumed insects in their country of origin either maintained the habit of consuming insects (35.10%), or lost this habit (40.60%). Others (3.00%) who do not consume insects in their region have integrated entomophagy into their eating habits following cultural contact with entomophagous populations. There is a very significant negative correlation (Pearson correlation) ($r = -0.443$; $p < 0.001$) between the number of years of residence in Brazzaville and the consumption of insects by non-native populations.

Table 5. Effects of migration and cultural mixture on insect consumption

Variables	Characteristics	Effectives	Percentage (%)	p-value
Impact of displacement	Yes	149	40.30	<0.001
	No	221	59.70	
Cause of the changes (149)	Accessibility	4	33.30	<0.001
	Loss of habit	8	66.70	
Pre-displacement consumption rates by country of origin	Benin		00.00	<0.001
	Congo		92.60	
	Guinea Bissau		00.00	
	Guinea Conakry		00.00	
	Mali		4.30	
	CAR		91.30	
	DRC		86.90	
	Senegal		00.00	
	Chad		50.00	
	Sample		75.40	
Post-displacement consumption rates by country of origin	Benin		100.00	<0,001
	Congo		81.40	
	Guinea Bissau		00.00	
	Guinea Conakry		00.00	
	Mali		00.00	
	CAR		92.00	
	DRC		95.00	
	Senegal		00.00	
	Chad		50.00	
	Sample		61.50	

The impact of migration negatively affected the consumption rate of the different types of insects available on the market (Table V). For all these edible insects, consumption rates were greatly reduced during the respondents' stay in Brazzaville. The reduction rate was

46.80% for caterpillar consumption, 19.20% for termites, 17.80% for crickets, 3.80% for *Oryctes/ Augosoma*, 30.40% for locusts, 2.70% for grasshoppers and 1.60% for *Rhynchophorus*.

Table 6. Consumption rate of different types insects by participants before and during the stay in Brazzaville

Type of insect	Pre-stay consumption rate (%)	Rate of consumption during the stay (%)	Rate of reduction (%)
Caterpillars	71.60	24.80	46.80
Termites	22.70	3.50	19.20

Crickets	21.60	3.80	17.80
<i>Oryctes/Augosoma</i>	8.10	4.30	3.80
Locusts	48.70	1.60	30.40
Grasshoppers	3.20	0.50	2.70
<i>Rhynchophorus</i>	1.90	0.30	1.60

Factors influencing the acceptability of insects as food

Statistical tests showed that the acceptability of insects as food is significantly influenced ($p < 0.001$) by the country of origin of the participant, their ethnic group of origin and their insects consumption habits; social status has no significant influence ($p = 0.301$) on the acceptability of insects as food.

Table 7. Statistical test of factors influencing the acceptability of insects as food

Variables	p-value
Country of origin	<0.001
Ethnicity of origin	<0.001
Insect eating habit	<0.001
Profession	0.301

DISCUSSION

Cultural contact can have a positive or negative impact on food consumption. This is the case for the caterpillars' consumption in African cities. The study carried out in Brazzaville showed that certain populations consumed insects in their culture and that they, following migration or cultural contact, lost the consumption habit. This explains the difference in the consumption rate before and after the migration. This abandonment of the consumption of insects could be due to mixing with ethnic groups who do not consume them. This observation was made by Mabossy-Mobouna et al. (2021) during an investigation carried out in Pointe-Noire where some people of the Lari ethnic group had lost the habit of consuming caterpillars following their contact with subjects of the Vili ethnic group, who did not consume insects. On the other hand, some subjects have acquired the habit of consuming insects, especially caterpillars following cultural contact. This is the case for certain subjects from the Likouba, Moye and Likouala ethnic groups, who do not consume the caterpillars, and the Senegalese nationals surveyed. The majority of West African immigrants living in Brazzaville maintain their eating habits despite the distance from their place of origin and the length of time they have settled in Brazzaville. They prefer cereals (rice, millet, sorghum, etc.), poultry and canned milk because they cannot obtain fresh milk, which is a rare product in Central Africa. Indeed, humans may prefer symbolic foods that are valued and organoleptically acceptable, but without nutritional benefit. In general, individuals tend to eat in the same way as members of the social group to which they belong. The family unit plays a very important role in the acquisition of eating habits. Insect consumption was positively correlated not only with the presence of insects from the country of origin on the market but more with the presence of preferred insects. Indeed, eating habits acquired since childhood in accordance with the cultural norms of society are not entirely lost when an

individual changes environment. There are those that we preserve and which are qualified as markers of cultural identity: they make it possible to affirm the cohesion of the group and have a demarcative value for each culture vis-à-vis its neighbour. They are alive in the individual regardless of their distance from their original group. They contribute consciously or unconsciously to the perpetuation of cultural identity. The consumption of insects by the non-native population of Brazzaville also depended on the country of origin. This observation is similar to that made by Calvo (1997) during a study carried out in France, where certain Africans who, despite their length of residence in France, were still linked to the eating habits of their countries of origin. The abandonment of insect consumption could be due to the change in socio-economic status. Indeed, in traditional societies, ritual foods, taboos, prohibitions had the function of explaining on the material level differential gaps based on birth, between groups and individuals. Today, the social groups with which we claim to identify by adopting a particular dietary style are based mainly on economic criteria, on education and monetary income. This results in food mimicry which is one of the ways of identifying with envied social categories. We affirm, through the quantity or choice of food, the socio-economic status of consumers. Regarding the consumption of insects, some people who do not consume caterpillars consider entomophagy as the diet of uncivilized men (Bani, 1993). Food allows us to distinguish social classes. Indeed, the monetization of the economy has made the diet, eating well, an external sign of wealth, a symbol of the socio-economic level. Monetary income becomes one of the important explanatory variables of the evolution of dietary behaviour. Some subjects refuse to accept insects as food due to food taboos and prohibitions. Indeed, food prohibitions clearly show the symbolic and magical role of food. The ban on consuming this or that food reveals more symbolism than its nutritional qualities. Most societies have defined a certain number of prohibited foods based on certain categories or life circumstances.

CONCLUSION

Food is a social phenomenon where symbolic aspects, preferences, choices, availability, monetary income and technological level intervene. The interrelationships of all these aspects determine dietary patterns. However, cultural contacts can have an impact on the acceptability or not of the food consumption. Regarding entomophagy, the cultural contact between the indigenous populations of Brazzaville and the non-indigenous populations has had an impact which is either negative (loss of the consumption habit) or positive (integration of entomophagy into eating habits). However, nationals of

certain countries, especially those from West Africa, have remained indifferent to entomophagy, despite cultural contact.

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