# FOOD (IN) SECURITY OF QUILOMBOLA COMMUNITY IN THE NORTH OF MINAS GERAIS

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### **ABSTRACT**

Food insecurity is a problem that affects thousands of people around the world, and may be even more expressive in traditional quilombola communities. This study has the objective of describing the situation of food (in) security of a quilombola community in the north of Minas Gerais. This is a descriptive and cross-sectional study developed during the second half of 2012 by means of approach in home visit. We investigated the socioeconomic status, the participation in cash transfer programs, the nutritional status of individuals, the intake of fruits and vegetables and the prevalence of food (in) security. We found the predominance of illiterate individuals, beneficiaries of the *Bolsa Família* Program, and low socioeconomic status. Excess weight was prevalent in 25% of respondents. The food intake in relation to fruits and vegetables was reported by the majority in a frequency ranging from one to three times per month. Food insecurity was present in 83,3% of respondents. We concluded that the situation of food and nutritional insecurity is highly prevalent in the quilombola community. Accordingly, one should highlight the importance of implementing public actions and policies that ensure improvement in the living and health conditions.

Keywords: Food and nutritional security. Food intake. Social vulnerability. Vulnerability in health.

## INTRODUCTION

The quilombo communities are groups of former quilombos, constituting a representation of the strength of black Brazilians. Are located in various regions of the country, especially in rural areas, present a relative degree of geographic isolation and live social inequalities and striking health <sup>(1)</sup>. Are characterized as groups that fight for the improvement of living conditions and the preservation of their customs, beliefs and traditions. These communities are marked by historical processes of discrimination and exclusion and face a very different socioeconomic reality of the Brazilian population <sup>(2)</sup>.

From a legal standpoint, the quilombolas communities were officially recognized by the State in 1988, article 68, the Transitional Constitutional Provisions Act <sup>(3)</sup>. Only in 2003/2004 were considered as target audience of Social assistance programs and actions <sup>(4)</sup>.

In Brazil, the quilombolas communities experience a situation of gravity as regards living conditions and food and nutritional security. When discussing food and nutritional

security (SAN), there is talk of living conditions and adequate nutrition, considering its multiple dimensions. The organic law on food and nutritional security describes the SAN consists of the realization of the right of all the regular and permanent access to quality food, in sufficient quantity, without compromising access to other essential needs, based on food healthpromoting practices, which respect cultural diversity and that are social, economic and environmentally sustainable (5). Considers that factors such as the lack of land ownership, the absence of a monetary income, the increase in diseases. environmental issues, the marginalization and illiteracy also compromise the quilombolas communities in the country SAN (6).

In Brazil, the national research by Household sample (PNAD) of 2013<sup>(7)</sup> showed that 25.8% of households Brazilians still living some degree of food insecurity. In Minas Gerais, estimates show that 18.4% of households were food insecure, the State with the highest average in the region Southeast of the country.

The food safety and nutritional conditions of Quilombola communities in the country are still

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little explored, although currently the debate about the health of this population comes emerging as major issue in politics of the country. First, a nationwide study called Nutritional Call Quilombola <sup>(8)</sup> held a national diagnosis of socioeconomic profile of this portion of the Brazilian population, in which it noted that the majority of individuals of these communities is poor, illiterate and live in poor environmental and health conditions.

In 2011, the evaluation research of the situation of food and nutritional security in Quilombolas Communities in physical form (9) revealed that more than half of the population is studied has features of food insecurity when the evaluation is conducted through the parameter: If the adult belonging to a family of some of the Quilombola communities spent all day without eating or just made a meal the day because there was no food in the House (55.6%). Regionally, it was possible to significant differences perceive communities in terms of housing conditions, education, labour market integration, access to social programs, and access and children's anthropometry food consumption. In General, the higher the isolation and estrangement of capital and urban centers, are conditions, food security and access to social programs and services (9).

In this sense, considering the regional particularities as regards the conditions of SAN of Quilombola populations, there was the need for the realization of this study, since it will help to provide subsidies for the creation of policy, technical and operational strategies that allow the improvement of the living conditions of these communities.

In Minas Gerais, about 40% of the quilombola communities s, recognized by the Palmares Foundation, are located at the North of the State. Thus, this study aimed to describe the situation of (in) food security of individuals of a population Is in Norte of Minas Gerais.

### METHODOLOGY

It is of a descriptive and transversal study, developed during the second half of 2012 in a quilombola community in Norte of Minas Gerais. The study population was composed of 24 families residing on the farm Brejo Grande, located in the city of Indaiabira, Minas Gerais. The community exists approximately 180 years, inhabit on average in place 115 people and the main source of income is from agriculture family base.

Participated in this study the quilombolas adults, heads of families, who reside on the farm Brejo Grande and who have agreed to participate in the survey through the signing of the informed consent form, and If the individual was illiterate, it was captured a Dactyloscopic identification systems printing. As a criterion of exclusion, the subject not located in up to three attempts at his residence were automatically excluded from research.

The data were collected using some existing structured instruments applied by two previously trained nutrition academic, in own residence of the subject of research, in previously established schedules, according to the availability of interviewees. Contact the community was conducted via Quilombola Association.

The questionnaires used were: to identify the socio-economic level, we used the Brazil Economic Classification criterion (CCEB) (10) and, for assessment of nutritional status, weight and height measurement for the later calculation of Loss Corporal Mass (IMC) (11). The consumption of fruit and vegetables was evaluated through the questionnaire of food consumption frequency (QCF) and analyzed according to the recommendations suggested by the Guide to the Brazilian population (12). It should be noted that prior to the application of these instruments, filed a brief questionnaire, prepared by the researchers, in which there were questions of identification of individuals as: age, sex, education and what are the benefits received by the Government.

In continuity, for assess the level of food insecurity, was used the scale of food insecurity (EBIA). The EBIA consists of 15 questions closed plants, with answer Yes or no, about the experience in the last three months of food insufficiency in its various levels of intensity, ranging from concern that the food might be missing until the experience of spending a whole day without eating (13).

The data analysis occurred through descriptive statistics on average, frequency and percentage through Microsoft Excel ®, version 2007 for Windows ®.

The study complied with the ethical precepts, being approved by the Research Ethics Committee of the Educational Association of Brazil-CEPSOEBRAS under number 78315/2012, obeying all the precepts of the resolution 466/2012<sup>(14)</sup> of the National Council of Health at all stages of its implementation.

## RESULTS AND DISCUSSION

Participated in this study 24 individuals, being each of them representative of a family in quilombola community.

As the s-demographic characteristics, it was observed a predominance of individuals female (75%), illiterate (54.2%), belonging to the class and/or low income (54.2%), mean age of 46.8 years with range of 23 to 86 years (table 1). Observe the prevalence of families with less favorable economic conditions, already reported in other studies with Quilombola populations in the region (15.16), and that can be associated with the high prevalence of food insecurity. It is expected an increase in the proportion of the State of food insecurity, related to low socioeconomic stratum, illiteracy and conditions of greater social vulnerability (17.18).

**Table 1.** Sociodemographic characteristics of a population is in Norte of Minas Gerais. Indaiabira, MG, 2012.

Variables	Total sample $(n = 24)$		
	N	%	
Sex			
Male	06	25	
Female	18	75	
Schooling			
Illiterate	13	54.2	
1 the 2 years	07	29.2	
3 the 4 years	03	12.5	
5 years or more	01	4.1	
Socio-economic classification			
Class C1	01	4.2	
Class C2	02	8.3	
Class D	08	33.3	
Class And	13	54.2	
Family Scholarship Program			
Yes	17	70.8	
No	07	29.2	

Among the 24 individuals surveyed, the prevalence of the beneficiaries of the Family allowance program was 70.8%, and the monthly income transferred in the average value of R \$ 140.00 (\$ 44,59). The benefit of retirement was cited by 20.8% with monthly income on average value of R \$ 622,00 (\$ 198,09). Among respondents not receive 8.4% any kind of benefit. Considering the situation of socially vulnerable families quilombolas, it is necessary to include integral public policies in these communities. Among the Federal programs, the Bolsa Família is the social program of greater coverage in the traditional communities and considered an important point for improve the living conditions of the

families (19). In a study with remaining communities of quilombos in the State of Alagoas, was found that 76% of households were assisted by Family allowance program. This benefit of income transfer to households could positively impact Maroons under the conditions of nutrition and health of children (19)

In table 2, are presented the characteristics of nutritional status and consumption of fruits and vegetables of the quilombola populations. Analysis of the nutritional status, it was observed that the average BMI of respondents was 22.3 kg/m<sup>2</sup> (range of 15.5 kg/m<sup>2</sup> to 28.8 kg/m<sup>2</sup>), 4.2% being classified with low weight, 70.8% eutrophic and 25% overweight. It is

observed that the nutritional status of the quilombola community follows the trend's current, with an increase of overweight and obesity in the population <sup>(20)</sup>. In study with adults residing in quilombolas communities in the city of Vitória da Conquista, Bahia, to describe anthropometric profile of the population, it was also high prevalence's of overweight and obesity, 31.8% and 10.2%, respectively <sup>(21)</sup>.

It is considered a quilombola health risk since the overweight is a contributing factor in the increased rates of morbidity and mortality. In communities, the Anthropometry can be considered an important epidemiological tool, providing an estimate of the prevalence and severity of nutritional changes and if translated into a biological reflex the situation of food and nutritional insecurity. The use of nutritional indicators enhances the detection of individuals at high risk for metabolic disorders and related diseases (22).

Fruit and vegetable consumption was reported by 75% of respondents, with relative frequency 1 to 3 times per month. The Ministry health Brazil recommends of consumption, at least three servings of fruits and three servings of vegetables daily, for a total of 400 g per day of these foods (12). There is evidence of a pattern of lower probability of daily consumption of fruits and vegetables in families classified in serious food insecurity, revealing that these foods are, the quilombolas communities, sensitive to food insecurity (19). In further investigation about the consumption of fruit and vegetables/vegetable in quilombolas communities, also found low frequencies, featuring greater exposure of this population to factors that lead to obesity (22).

The less healthy food consumption is more common among individuals with food insecurity. It is suggested that families with limited means tend to buy food with high energy density and high fat content (23, 24.25). And, so, this can be one of the factors which confirm that food insecurity and obesity are strongly associated.

The nutritional situation is an important tool in which can provide support for the initiative of decisions related to public policies with the aim of social welfare, especially those of food and nutritional security. The prominence of such instrument is the recognition that the nutritional status will ensure the observation of living condition and pattern of morbidity in a population group <sup>(8)</sup>.

**Table 2.** Nutritional status and consumption of fruits and vegetables from a population in Quilombola at North of Minas Gerais. Indaiabira, MG, 2012.

Variables	Total sample $(n = 24)$		
	N	%	
Nutritional status			
Low weight	01	4.2	
Eutrophic	17	70.8	
Overweight	06	25.0	
Consumption of			
fruits and			
vegetables			
1 time a week	02	8.3	
2-3 times a week	04	16.7	
1-3 times per	18	75.0	
month			

The table 3 presents information about food security, present in only 16.7% of families quilombolas. It was observed that 83.3% of households were classified in a State of food insecurity, with 60% presented mild food insecurity, followed by 15% in moderate food insecurity and 25% in serious food insecurity situation. The high level of food insecurity in this study confirms the situation vulnerable families quilombolas. In studies with Quilombola communities conducted in Tocantins States (1) and Goiás (26), have also been observed high levels of food insecurity in families, 85.1% and 75.2% respectively.

**Table 3.** Distribution of frequencies related to variable food (in) security, according to Brazilian Range of food insecurity (EBIA). Indaiabira, MG, 2012.

Variables	N	%
Food Insecurity	20	83.3
Take	12	60.0
Moderate	03	15.0
Serious	05	25.0
Food Security	04	16.7

The Quilombola communities are a reality in Brazil, however, yet there are few studies on the health profile of this population, and how to organize to deal with their local difficulties (15.27). The health professional must seek this

information so that it can intervene effectively in the conditions of life of this community.

### FINAL CONSIDERATIONS

Food insecurity was heavily present in the quilombola community studied. There was a high percentage of families in poverty and/or extreme poverty, represented by the predominance of class and the high rate of illiteracy and participation in income transfer program. As for the nutritional status, the degree of overweight of individuals, next index increase being these people and indicating a nutritional transition, as well as in

the remainder of the Brazilian population. And yet the low consumption of fruits and vegetables, whose intake is considered inadequate to meet the recommended requirements to these families for the maintenance of good health and promoting the quality of life.

Stresses the importance of further studies in relation to other variables interfere in the situation of food insecurity, so that they can support the implementation of actions and public policies, both as structural emergency, geared toward families and Maroons found in food insecurity.

## (IN) SEGURANÇA ALIMENTAR DE COMUNIDADE QUILOMBOLA NO NORTE DE MINAS GERAIS

### **RESUMO**

A insegurança alimentar é um problema que atinge milhares de pessoas no mundo, e pode ser ainda mais expressiva nas comunidades tradicionais quilombolas. Este estudo tem como objetivo descrever a situação de (in) segurança alimentar de uma comunidade quilombola do norte de Minas Gerais. Trata-se de um estudo descritivo e transversal, desenvolvido durante o segundo semestre de 2012 por meio da abordagem em visita domiciliar. Investigou-se o nível socioeconômico, a participação em programas de transferência de renda, o estado nutricional dos indivíduos, o consumo de frutas e verduras e a prevalência de (in) segurança alimentar. Constatou-se predominância de indivíduos analfabetos, beneficiários do Programa Bolsa Família e nível socioeconômico baixo. O excesso de peso foi prevalente em 25% dos indivíduos entrevistados. O consumo alimentar de frutas e verduras foi reportado pela maioria em frequência de uma a três vezes ao mês. A insegurança alimentar esteve presente em 83,3% dos indivíduos entrevistados. Conclui-se que a situação de insegurança alimentar e nutricional é altamente prevalente na comunidade quilombola. Dessa forma, ressalta-se a importância da implantação de ações e políticas públicas que garantam melhoria nas condições de vida e saúde.

Palavras-chave: Segurança alimentar e nutricional. Consumo de alimentos. Vulnerabilidade social. Vulnerabilidade em saúde.

## (IN) SEGURIDAD ALIMENTARIA DE LA COMUNIDAD QUILOMBOLA EN EL NORTE DE MINAS GERAIS

### **RESUMEN**

La inseguridad alimentaria es un problema que alcanza a miles de personas alrededor del mundo, y puede ser aún más expresiva en las comunidades quilombolas tradicionales. Este estudio tiene como objetivo describir la situación de (in) seguridad alimentaria de una comunidad quilombola del norte de Minas Gerais. Se trata de un estudio descriptivo y transversal, desarrollado durante el segundo semestre de 2012 mediante visita domiciliaria. Se investigó el nivel socioeconómico, la participación en programas de transferencia de ingreso, el estado nutricional de los individuos, el consumo de frutas y verduras y la prevalencia de (in) seguridad alimentaria. Se constató un predominio de personas analfabetas, beneficiarias del Programa Social Bolsa Familia y con nivel socioeconómico bajo. El exceso de peso prevaleció en el 25% de los encuestados. El consumo alimentario de frutas y verduras fue reportado por la mayoría en una frecuencia de una a tres veces al mes. La inseguridad alimentaria estuvo presente en el 83,3% de las personas entrevistadas. Se concluye que la situación de inseguridad alimentaria y nutricional es altamente prevalente en la comunidad quilombola. De esta forma, se resalta la importancia de la implementación de acciones y políticas públicas que aseguren la mejora de las condiciones de vida y salud.

Palabras clave: Seguridad alimentaria y nutricional; Consumo de alimentos; Vulnerabilidad social; Vulnerabilidad en salud.

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