

## COMMUNITY HEALTH WORKERS: PERCEPTIONS ON FOOD IN THE CONTEXT OF THE FAMILY HEALTH STRATEGY

Carla Rosane Paz Arruda Teo\*

Lucimare Ferraz\*\*

Fernando Cembranel\*\*\*

### ABSTRACT

This study aimed to understand the perceptions of community health workers on healthy eating and the challenges of food and nutrition security in their working area. It is a qualitative study in which data were collected through semi-structured interviews with seven workers in a Family Health Strategy in Chapecó-SC. Data were organized and analyzed by using Minayo's thematic content analysis, and the results were interpreted according to the conceptual dimensions of Food and Nutrition Security. Relevant aspects about healthy eating were highlighted: variety and freshness, meal frequency/fractioning, quantity. As for challenges to food and nutrition security, the categories were: inadequate eating habits, resistance to change, hygiene and poor food preservation, lack of access to food. The workers proved to have an expanded perception on food and nutrition security. But dimensions such as food availability, sustainability and the right to food were not mentioned by participants, suggesting their political and scientific qualification concerning the complexity of the food and nutrition security phenomenon in its various dimensions.

**Keywords:** Community Health Workers; Family Health; Food and Nutrition Security.

### INTRODUCTION

In primary care some actions, individual and collective, are developed in order to meet the health needs of a population. This work is carried out by a multidisciplinary team that seeks, through a comprehensive care, to promote, to protect and to restore health and to prevent diseases <sup>(1)</sup>.

The Community Health Workers (CHWs) work in this scenario, and are always committed to actualize and to strengthen the Family Health Strategy (ESF) <sup>(2)</sup>. They play a crucial role on health actions, being fundamental to the achievement of ESF <sup>(3)</sup>. There are five major skills that guide the actions of the CHWs: health team integration with the population, planning and evaluation of health care, preventing and monitoring groups, preventing and monitoring risks and also the promotion of health, always reinforcing the individuals' capacity to seek conditions favorable to health <sup>(4)</sup>.

It is recognized that CHWs performance had a major impact in reducing malnutrition and child mortality, especially in the North and

Northeast of Brazil <sup>(5)</sup>. This worker plays a key role in the ESF, linking users to health systems, as well as presenting the demand of the population to health services. In this context, CHWs are extremely important because they act complementing the service through health education and by monitoring and since they are directly inserted into the reality of the public served, which facilitates the guidelines and results in well-being and quality life for the population <sup>(6)</sup>.

Currently, despite favorable indicators of reduction of malnutrition and low birth weight, there is a significant increase of overweight and obesity in Brazil <sup>(7)</sup>. This nutrition transition, observed in national studies <sup>(7)</sup>, puts into play the need to broaden the discussion on the role of CHWs in promoting proper eating habits and therefore the food and nutrition security.

The broader concept on food and nutrition security refers to the realization of the universal right to regular and permanent access to adequate quality food in sufficient quantity, without representing impairment of access to other essential needs. It is based on food practices that promote health, that respect

\*Nutritionist, PhD in Food Science, Professor of the Graduate Program in Health Sciences, Universidade Comunitária da Região de Chapecó / Unochapecó, carlateo@unochapeco.edu.br

\*\*Nurse, PhD in Sciences / Public Health, Professor of the Graduate Program in Health Sciences, Universidade Comunitária da Região de Chapecó / Unochapecó, lferraz@unochapeco.edu.br

\*\*\*Nutritionist, Specialist in Human Nutrition, Universidade Comunitária da Região de Chapecó / Unochapecó, cedoma10@unochapeco.edu.br

cultural diversity and that are environmentally, culturally, economically and socially sustainable<sup>(8)</sup>. At this point, we highlight the complexity of the phenomenon to which this concept refers, suggesting its disaggregation in dimensions, namely availability, access and consumption of food, living and health conditions, law and regularity of access, vulnerability and sustainability<sup>(9)</sup>.

It appears, therefore, that a healthy diet is the point on and around which the definition and implementation of food and nutrition security is built. Moreover, Carneiro et al<sup>(10)</sup> note that the food and nutrition security is an open concept, which is constantly evolving, and that needs to be included in the CHWs work context. According to these authors, the CHWs do not often realize food as a determinant of health status, which limits the deployment of their work in more concrete actions in the search for improvements in living and health conditions of the population.

From this perspective, and considering that the CHWs' assignments include a list of actions focused on health promotion<sup>(4)</sup>, this study sought to understand the perceptions of these workers on healthy eating and on the challenges of food and nutrition security in their working area.

## METHODOLOGY

This is a qualitative study of descriptive exploratory type, performed in 2011, in a unit of the ESF in Chapeco (SC). After approval of the Health Department of Chapeco, the researchers approached the CHWs of this ESF in their workplace, inviting them to participate in the study after enlighten them about the objectives and procedures involved. It is noteworthy that in this process the preservation of the participants' identity was ensured. Then, participants were asked to sign the Informed Consent Forms (ICF).

The study participants included seven community agents of the ESF, and the information was obtained through semi-structured interviews in pre-scheduled local and time, according to each CHW's availability. The interview script consisted of six questions prepared in accordance with the conceptual

dimensions of Food and Nutritional Security, so that the research objective was encompassed.

For the analysis of responses, we applied the thematic content analysis, which was based on a three-step sequence proposed by Minayo<sup>(11)</sup>. The pre-analysis step comprised the choice of issues to be analyzed from the resumption of the research objectives, determining the record units, i.e. the keyword, the sentence or the theme within the context unit of each question to be examined. Next, the material exploration step was performed by means of several readings, seeking, from the context units, the record units defined in the previous phase. In this step, we tried to reach the core of text comprehension from the recording units, coding, classification and aggregation of data, according to criteria of convergence and divergence of meanings, which generated categories<sup>(11)</sup>.

Finally, in the step of processing and interpretation of data, after the identification of record units and after grouping these units into categories, we started the process of inference and interpretation according to the literature and the proposed objectives<sup>(11)</sup>.

The participants' speeches were presented throughout the text by fragments followed by the abbreviation HCW (Health Community Worker) and a number regarding the order of the interview, in order to present the main findings of this study.

This research was approved by the Research Ethics Committee of the Community University of Chapecó/Unochapecó (opinion number 227/10) and by the Municipal Health Department of Chapecó (SC) and we adhered strictly to all ethical principles related to the research involving human beings.

## RESULTS AND DISCUSSION

The CHWs, during interviews, were inquired about what they considered to be a **healthy eating**, and three **categories** were identified by analyzing their answers: variety and freshness, frequency and fractioning, and quantity. The mention of the variety and freshness of food was present in the speeches of all respondents, as illustrated by the extracts below:

It is consuming all kinds of foods, fruit, vegetables, eating a bit of everything. (HCW 4).

It means fresh food. (HCW 2).

It is a diet based on vegetables, carbohydrates etc. (HCW 1).

Some important issues emerge from these statements, as the fact that the quality of being healthy appears closely linked to the variety of food, and it is appropriate to point out that, in fact, the diversity of the diet is an intrinsic dimension of the healthy eating concept, as shown by the *Guia Alimentar Para a População Brasileira* (Food Guide for the Brazilian population) <sup>(12)</sup>. However, despite the CHWs have verbalized this association with variety, the food mentioned by them are predominantly fruit and vegetables, which may indicate that respondents are aware that these foods are recognized as healthy eating markers and that nevertheless these types of food present, historically, average consumption by the population far below the minimum recommended <sup>(7)</sup>. In addition, the mention of these foods can be a reinforcement of the other aspect of healthy diet indicated by them: fresh, not processed food.

This perception of healthy eating as a diet based on fresh, more natural food, is consistent and current, as it is agreed that these foods are healthier and more representative of traditional food practices, culturally established. In this sense, the Household Budget Surveys (*Pesquisas de Orçamento Familiar*), conducted periodically in Brazil for decades, have indicated continuing decline in the consumption of staple food in parallel to increased consumption of industrialized products such as cookies, bread, tinned food and soft drinks, which is closely linked to the nutritional transition phenomenon <sup>(7)</sup>.

Returning to the guidelines of the Food Guide <sup>(12)</sup>, a healthy diet consists of three basic types of foods: a) roots, tubers and grains, preferably wholefood, b) fruit and vegetables, and c) leguminous and other protein-rich vegetables. The Guide concludes by stating that small amounts of meat, eggs, milk and milk products complement healthy eating, reinforcing the idea that no specific food alone is able to provide the nutrients needed for good nutrition.

In this sense, realizing that a healthy diet depends, among other factors, on the variety and on the small amount of industrialized food is of

utmost importance for the development of health promotion activities for families assisted by CHWs. However, we must point out the absence of any reference, in the CHWs' speeches, to the other food groups that feature healthy eating, especially rice and beans, that are typical in Brazilian food culture.

Another category identified by respondents was the frequency and fractionation meals, which was indicated as an important component of healthy eating habits, as shown by the following fragments:

Healthy foods at right times. (CHW 2).

Eating at least three times a day [...]. (CHW 3).

If possible, eating six times a day with moderation. (CHW 5).

The frequency and the appropriate fractionation of the meals are very important aspects of a healthy diet. Prolonged fasting is linked to a series of metabolic changes, since "the fractionation of the meals is inversely related to weight gain and consequent health risks"<sup>(13:76)</sup>. The combination of number and frequency of meals contribute to biological implications, and it is also an indicator of the condition of food and nutrition (un) safeness, as the experience of hunger, which is a characteristic of severe insecurity, is manifested in reducing the number of meals <sup>(14)</sup>.

According to guidelines for healthy eating promotion it is recommended, among other practices, to have at least three main meals a day, interspersed with small snacks <sup>(12)</sup>. In this study, CHWs expressed awareness on the importance of the frequency and appropriate fractionation of meals for health promotion, and this probably permeates the care to the population of their ascribed area.

Transcending more prescriptive questions about healthy eating, it is important to note that the interviewees' discourse denote the perception of regularity that comprises this concept. In other words, by indicating in the statements that a healthy diet should include aspects relating to frequency and fractionation of food consumption, participants point to the importance of regularity of this consumption, which requires regular access to food.

It is noteworthy that one of the statements of the CHWs addresses the need to prevent the

exaggeration in food consumption, which refers to the other category identified in this study: the quantity. In the CHWs' speeches, there was only this and one more mention (shown below) to the quantity as a category related to healthy eating:

Eating in well-divided proportion, without overeating. (CHW 1).

It is also noteworthy that in the two lines in which the quantity is mentioned, the CHWs refer to the prevention of overeating. This shows that respondents have a perception accordant to the current epidemiological panorama, in which overweight and its comorbidities are incorporated as expressions of food and nutrition insecurity, resulting in a less healthy diet. In the same direction, the recent findings of Sarti, Claro and Bandoni <sup>(15)</sup> refer to a progressive substitution of food shortage by excessive consumption, characterizing the process called nutritional transition, a phenomenon that affects quite unevenly different regions of the planet and that is foundational in building the concept of healthy and proper eating.

In the course of the interviews, the HCWs were also asked which **challenges to food and nutrition security** they considered to be present among families in their area. It is assumed that the recognition of these challenges is indicative of the meanings attributed to this construct. At this point, the following **categories** have been identified CHWs' speeches: inadequate eating habits, resistance to change, hygiene and poor preservation of foods, and lack of access to food conditions. The interviewees' discourse fragments that illustrate these categories are presented as follows.

Having breakfast based on brioche, cassava fried in grease, bread with honey and sausage. (CHW 4).

In this testimony, the CHW refers to inadequate feeding practices, showing that, for him, these practices are a challenge to food security. This demonstrates the ability to identify eating habits that are harmful to health and also an expanded perception on food security. This perception breaks the paradigm that the insecurity condition is synonymous only of hunger, and realizes that food and nutrition security presupposes food practices that promote health <sup>(8)</sup>.

Following the same logic, the CHWs justify the indication of unhealthy eating practices as challenges to food security through the worsening of morbidities:

Diabetic and hypertensive patients who eat fried cassava for breakfast [...]. (CHW 5).

A diabetic patient with high triglycerides ate everything, and I explained that he would have to reduce consumption of sweets and fatty food or reduce them at most until his health improves. (CHW 6).

The CHWs demonstrate recognizing, to some extent, food as a determinant of health-disease process. However, this perception is limited, in terms of scientific knowledge, to the consumption of fruit and vegetables as a base of healthy practices and to the consumption of fried and fatty foods as the essence of unhealthy eating. This indicates the importance to design training strategies directed to these workers, for the development of activities that promote healthy eating.

It is noteworthy that all CHWs interviewed reported having directed families regarding eating habits and their relationship to health and disease. However, they express that, among the challenges to food security, people show great resistance to change, as the following statements:

We talked to a patient about the importance of good nutrition and she disagreed, and said that she used to live better when she cooked with grease and not oil, among other things. For her, life was fine that way and there was nothing to be changed. (CHW 1).

In my microarea [...] most are German descendants, so it is a bit hard to interfere. But I give guidance, yes. (CHW 5).

The difficulty of adherence of the people to diet changes, reported in this study, is common. According to Boog <sup>(16)</sup>, confronting this situation is not only linked to the professionals' competence to guide the user, as it has long been set that only information is not enough to mobilize people to adopt healthier lifestyles. Food choices depend on the human cultural systems and in this study, respondents demonstrated awareness of the influence of culture as a determinant on eating habits and on

the greater or lesser ease of approaching it, with a view to changes.

Another challenge related to food security that was emphasized by CHWs in their speeches relates to poor hygiene and food preservation. This situation is experienced in daily work practice of these workers, as the following reports:

The poor conditions of hygiene and food preservation. Poor housing and sanitation. (CHW 3).

Families eat in dirty places, including children. They have no bathroom, poor hygiene, sour food, without the minimum conditions to be consumed. (CHW 4).

[...] I visited a house and a person had the food on the stove and there were rats, flies; they would probably eat later. (CHW 7).

The perception of inadequate hygiene as a condition that challenges the achievement of food security is relevant, because it is evidence for possibility of action in this context, since food contamination has great potential to result in food poisoning. In this case, there is an urgent need to identify the barriers for safety in food handling by people economically disadvantaged, and to address the knowledge gaps on this issue in these populations, using culturally appropriate tools for food security education <sup>(17)</sup>.

It is also important to consider the perception expressed by CHWs, in the above statements, about the relationship of living conditions with the food and nutrition (in) security. This perception is identified when interviewees mention, among the challenges perceived, lack of bathroom and the appalling housing and sanitation conditions. In this sense, one of the dimensions of the complex phenomenon of food and nutrition security is the dimension of living and health conditions, as the fight against adversity in this field affects the health of the population and, therefore, the proper use of biological nutrients from food <sup>(18)</sup>.

Another challenge to food and nutrition security, as highlighted by CHWs, is the lack of access conditions to food in sufficient and appropriate quality and quantity, especially given the economic weakness of assisted families, as expressed in the following fragments:

Several families that I visit eat only rice and beans, everyday. (CHW 7).

Most patients in my area do not have money to buy healthy foods. (CHW 2).

Reports of CHWs show that, for them, socioeconomic status is an important social determinant of access to adequate and healthy food, which is widely discussed in the literature, since the income is taken as the main factor related to food and nutrition (in) security <sup>(18)</sup>. Respondents indicate that they perceive access and variety of food as aspects limited by the scarcity of financial resources. In addition, the CHWs report that low income prevents the acquisition of healthy foods. We conclude, based on this and on previous speeches, that by healthy foods workers mean fruits and vegetables.

Given the strong relationship between socioeconomic fragility and food and nutrition insecurity due to lack of access to food, it is necessary to understand that the person undergoing financial difficulty changes the quality of their food, to preserve scarce resources for acquiring higher quantity of lower-cost food and/or foods with higher power of satiety, usually the most caloric ones <sup>(19)</sup>. This is the flow of causality that explains, at least in part, the most dramatic increase in overweight and obesity rates in the poorest strata of the Brazilian population in recent years <sup>(7)</sup>. On the other hand, a more exacerbated stage of economic weakness implies extreme decrease in the amount of food accessed by the family, fulfilling the experience of hunger, which characterizes the most severe degree of food and nutritional insecurity <sup>(14)</sup>.

Another interesting finding of this study, which was somewhat unexpected face to the proposed objectives, is that the lack of financial resources of the population to access to food generates between CHWs respondents, a feeling of impotence to this problem, as shown by this statement:

I have already oriented, but there is no solution. Patients in my working area do not have money to buy healthy foods. (CHW 7).

Access to food and eating healthy is an indicator of social status. From this perspective, it is highlighted that food is one of the main objects from which the subjects may think their

condition in society, which reinforces the political dimension of food issues. The lack of access to food reveals food and nutrition insecurity, a condition that greatly impacts the well-being, quality of life and self-esteem of families <sup>(19)</sup>. On this point, the CHWs point out that the lack of money also generates psychosocial insecurity, which reveals, again, a broaden perception of food and nutrition (in) security, as shown in the following statements:

When a person is not sure about whether they will have food to eat tomorrow, they get angry, nervous and very discouraged. What hope can a person have, if they have no job, no education, nothing? (CHW 7)

Most often, this [lack of financial resources] distresses mothers, which in many cases are the heads of their houses. They have to work, or find the solution by placing children in full-time at school, which ensures four meals on a day. (CHW 6)

Because they go to work thinking that the next day there will be nothing to eat, and this can cause disease to them and their family. And often, it can lead them and their children to steal, to violence, drugs; we experience this every day. (CHW 4).

The reports indicate that respondents have perception of the determinants of food and nutrition insecurity and of the most vulnerable groups such as women, especially those who assume the role of head of the family, as mentioned above and proven in the literature on the subject <sup>(18)</sup>. Respondents also recognize the role of policies of other sectors - not health - in addressing food and nutrition insecurity, as expressed by the mention of the school as strategic environment of access to food.

The reports from CHWs show the relationship between food and nutrition insecurity and poor living conditions, as well as the fact that the uncertainty of access to food can cause emotional and social discomfort. On this point, it has been highlighted <sup>(19)</sup> the importance of evaluating the psychological components involved in the cases of food and nutrition insecurity, as the uncertainty as for access to food in a near future cause worry and anxiety, featuring insecurity in less severe degrees.

The complexity that involves the problems of lack and excess of nutrition, the arrangements and combinations between them, in different

contexts <sup>(20)</sup>, reinforces the need for trained professionals to promote health from food issues in a broader perspective that considers not only the nutritional aspects, in a prescriptive way, but also the social, environmental and cultural aspects. It is important to consider that the responsibility of guiding families is delegated to CHWs <sup>(6)</sup> and that other professionals of the ESF, such as doctors and nurses, have reported difficulties in dealing with eating problems such as lack of theoretical knowledge and lack of approach techniques. These limitations reflect the urgency to (re) discuss the ESF professional staff composition <sup>(16)</sup>.

In short, the current nutritional panorama seems to demand from services and health professionals a set of actions and practices that should be increasingly broader and contextualized to local singularities. It is worth noting in this context the important role that preventive health services - especially through the CHWs - can play <sup>(20)</sup>.

## FINAL CONSIDERATIONS

In this study, CHWs expressed reasonably expanded awareness about food and nutrition security, addressing issues related to the dimensions of access and regularity of access to food, living conditions and health and healthy food consumption. However, the dimensions of food availability, sustainability and the right to food were not even mentioned.

Although workers have shown enlarged understanding with respect to empirical knowledge of some of the main determinants of food and nutrition (in) security, their perceptions were limited regarding the conceptual framework available and also from the perspective of scientific knowledge that underlies practices that promote healthy eating. Therefore, some challenges remain, such as the political and scientific qualification of CHWs as the complexity of the food and nutrition security phenomenon in its various dimensions.

Finally, in reflecting on the role of CHWs in promoting food and nutrition security of families assisted by the ESF, it should be noted that the nutritionist is the professional responsible for actions of promotion and intervention with a view to adequate food to

families assisted by the ESF. However, when there is a multidisciplinary team work on food and nutrition, it is possible to achieve a significantly larger number of inhabitants in the

community, especially from the CHWs, who are currently considered core elements of health promotion.

---

## AGENTES COMUNITÁRIOS DE SAÚDE: PERCEPÇÕES SOBRE ALIMENTAÇÃO NO CONTEXTO DA ESTRATÉGIA SAÚDE DA FAMÍLIA

### RESUMO

Este estudo teve por objetivo conhecer as percepções de agentes comunitários de saúde sobre alimentação saudável e sobre os desafios à segurança alimentar e nutricional em sua área de atuação. Consiste de estudo qualitativo em que os dados foram obtidos por meio de entrevistas semiestruturadas com sete agentes em uma Estratégia Saúde da Família no município de Chapecó (SC). Os dados foram organizados e analisados pela análise de conteúdo temática proposta por Minayo, e os resultados interpretados segundo as dimensões conceituais da Segurança Alimentar e Nutricional. Foram apontados aspectos relevantes sobre a alimentação saudável: variedade e frescor, frequência/fracionamento, quantidade. Quanto aos desafios à segurança alimentar e nutricional, as categorias foram: hábito alimentar inadequado, resistência à mudança, higiene e má conservação dos alimentos, falta de condições de acesso aos alimentos. Os agentes demonstraram ter uma percepção ampliada sobre segurança alimentar e nutricional. Porém, dimensões como disponibilidade de alimentos, sustentabilidade e direito à alimentação não foram mencionadas pelos participantes, sugerindo-se sua qualificação política e científica quanto à complexidade do fenômeno da segurança alimentar e nutricional em suas várias dimensões.

**Palavras-chave:** Agentes comunitários de saúde. Saúde da família. Segurança alimentar e nutricional.

---

## AGENTES COMUNITARIOS DE SALUD: PERCEPCIONES SOBRE LA ALIMENTACIÓN EN EL CONTEXTO DE LA ESTRATEGIA SALUD DE LA FAMILIA

### RESUMEN

Este estudio tuvo el objetivo de conocer las percepciones de agentes comunitarios de salud sobre alimentación saludable y sobre los retos a la seguridad alimentaria y nutricional en su área de actuación. Consiste en un estudio cualitativo en que los datos fueron obtenidos mediante entrevistas semiestructuradas con siete agentes en una Estrategia Salud de la Familia en la ciudad Chapecó – Santa Catarina - Brasil. Los datos fueron organizados y analizados por el análisis de contenido temático propuesto por Minayo, y los resultados interpretados según las dimensiones conceptuales de la Seguridad Alimentaria y Nutricional. Fueron señalados aspectos relevantes sobre la alimentación saludable: variedad y frescor, frecuencia/fraccionamiento, cantidad. En cuanto a los retos a la seguridad alimentaria y nutricional, las categorías fueron: hábito alimentario inadecuado, resistencia al cambio, higiene y mala conservación de los alimentos, falta de condiciones de acceso a los alimentos. Los agentes demostraron tener una percepción ampliada sobre seguridad alimentaria y nutricional. Sin embargo, dimensiones como disponibilidad de alimentos, sostenibilidad y derecho a la alimentación no fueron mencionadas por los participantes, sugiriéndose su calificación política y científica en cuanto a la complejidad del fenómeno de la seguridad alimentaria y nutricional en sus varias dimensiones.

**Palabras clave:** Agentes comunitarios de salud. Salud de la familia. Seguridad alimentaria y nutricional.

---

### REFERENCES

1. Brasil. Ministério da Saúde. Política Nacional de Atenção Básica. Brasília (DF); 2012.
2. Schmidt MLS, Neves TFS. O trabalho do agente comunitário de saúde e a política de atenção básica em São Paulo, Brasil. *Cad Psicol Soc Trab*. 2010 set; 13(2):225-40.
3. Costa SM, Araújo FF, Martins, LV, Nobre LLR, Araújo F M, Rodrigues CAQ. Agente Comunitário de Saúde: elemento nuclear das ações em saúde. *Ciênc Saúde Coletiva*. 2013 jul; 18(7):2147-56.
4. Santos LPGS, Fraccolli LA. O agente comunitário de saúde: possibilidades e limites para a promoção da saúde. *Rev Esc Enferm USP*. 2010 mar; 44(1):76-83.
5. Svitone EC, Garfield R, Vasconcelos MI, Craveiro VA. Primary health care lessons from the Northeast of Brazil: the Agentes de Saúde Program. *Rev Panam Salud Publica*. 2000 maio; 7(5):293-302.
6. Galavote HS, Prado TN, Maciel ELN, Lima RCD. Desvendando os processos de trabalho do agente comunitário de saúde nos cenários revelados na Estratégia Saúde da Família no município de Vitória (ES, Brasil). *Ciênc Saúde Coletiva*. 2011 jun; 16(1):231-40.
7. Instituto Brasileiro de Geografia e Estatística. Pesquisa de Orçamentos Familiares 2008-2009: avaliação nutricional da disponibilidade domiciliar de alimentos no Brasil. Rio de Janeiro; 2010.
8. Brasil. Conselho Nacional de Segurança Alimentar e Nutricional. A segurança alimentar e nutricional e o direito humano à alimentação adequada no Brasil. Brasília (DF): Consea; 2010.
9. Leão M, organizador. O direito humano à alimentação adequada e o sistema nacional de segurança alimentar e nutricional. Brasília (DF): Abrandh; 2013.

10. Carneiro DGBC, Magalhães, KLO, Vasconcelos ACCP, Cruz PJSC. O agente comunitário de saúde e a promoção da segurança alimentar e nutricional na estratégia de saúde da família: reflexões a partir de uma experiência educativa. *Rev APS*. 2010 out/dez; 13(4):510-17.
11. Minayo MCS. O desafio do conhecimento: pesquisa qualitativa em saúde. 12ª ed. São Paulo: Hucitec; 2010.
12. Brasil. Ministério da Saúde. Secretaria de Atenção à Saúde. Guia Alimentar para a População Brasileira. Departamento de atenção Básica. 2ª ed. Brasília (DF): Ministério da Saúde; 2014.
13. Costa MCS, Brito LL, Lessa I. Práticas alimentares associadas ao baixo risco cardiometabólico em mulheres obesas assistidas em ambulatórios de referência do Sistema Único de Saúde: estudo de caso-controle. *Epidemiol Serv Saúde*. 2014 mar/set; 23(1):67-78.
14. Marin-Leon L, Francisco PMSB, Segall-Corrêa AM, Panigassi G. Bens de consumo e insegurança alimentar: diferenças de gênero, cor de pele autorreferida e condição socioeconômica. *Rev Bras Epidemiol*. 2011 set;14(3):398-410.
15. Sarti FM, Claro RM, Bandoni DH. Contribuição de estudos sobre demanda de alimentos à formulação de políticas públicas e nutrição. *Cad Saúde Pública*. 2011 abr; 27(4):639-47.
16. Boog MCF. Dificuldades encontradas por médicos e enfermeiros na abordagem de problemas alimentares. *Rev Nutr*. 1999 set/dez; 12(3):261-72.
17. Quinlan JJ. Foodborne Illness Incidence Rates and Food Safety Risks for Populations of Low Socioeconomic Status and Minority Race/Ethnicity: a review of the literature. *Int J Environ Res Public Health*. 2013; 10(8):3634-52.
18. Santos JN, Gigante DP, Domingues MR. Prevalência de insegurança alimentar em Pelotas, Rio Grande do Sul, Brasil, e estado nutricional de indivíduos que vivem nessa condição. *Cad Saúde Pública*. 2010 jan; 26(1):41-9.
19. Panigassi G, Segall-Corrêa AM, Marin-León L, Pérez-Escamilla R, Sampaio MFA, Maranhã LK. Insegurança alimentar como indicador de iniquidade: análise de inquérito populacional. *Cad Saúde Pública*. 2008 out; 24(10):2376-84.
20. Rocha L, Gerhardt TE, Santos DL. Desnutrição e excesso de peso em crianças menores de cinco anos no meio rural de Arambaré, RS: (des)construindo idéias, repensando novos desafios. *Cienc Cuid Saude*. 2007 abr/jun; 6(2):206-14.

---

**Corresponding author:** Carla Rosane Paz Arruda Teo. Avenida Senador Attilio Fontana 591-E, CEP 89809-000, Cx. Postal 1141, Efapi, Chapecó/SC, Brasil. E-mail: carlateo@unochapeco.edu.br.

**Submitted:** 08/03/2013

**Accepted:** 02/03/2015