# Food and nutrition security: interfaces and decrease of social inequality

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## Abstract

Many changes have occurred in the form society is fed throughout history. With growing urbanization, everyday in big cities have been characterized by eating practices that prioritize speed, economy and practicality, often at the expense of quality, quantity, nutritional, social and ethical aspect that food represents. While many still lack access to food, particularly a result of social inequalities situation emerges a dietary pattern, characterized by excessive consumption of processed foods rich in sugar and fat, causing changes in the world and epidemiological profile of the population. The contrast between diseases caused by excessive food and hunger results in situations of food and nutrition insecurity, generating dehumanization and increasing inequalities. Studying all foci and related approaches is necessary, as this issue is critical when it concerns humanization, respect and ethical conduct of human beings, government and communities.

**Keywords:** Food and Nutritional Security. Consumption. Food Consumption. Inequalities. Social Inequity.

## Introduction

Since the 1930s, the humanities have formally admitted their interest on the topic "food". According to Burke,[1] that was triggered by the founders of the *Annales* school, historia Marc Bloch and Lucien Fébvre.

Bloch wrote an essay on the history of food, as part of the work *Encyclopédie Française*. Later on, Fernand Braudel[2] brought great contributions to this topic, especially in his research on the history of material culture, when studying food types, such as rice and wheat, as products present on the European daily routine between the fifteenth and eighteenth centuries. In Brazil, much progress has been made in recent years in research on food in studies of Anthropology, Sociology and History.

From this perspective, this article aims to address issues related do food consumption in the light of its history and culture, especially with regard to Food and Nutrition Security in how it relates to political, economic and social interfaces. And with regard to this topic, seeking data on feeding practices, food production, and consumption, is key to the understanding of hunger, obesity, and consumption.

## Food, nutrition and contemporary society

According to Santos[3], food and nutrition relate both to feeding practices, which are guided by production, availability and access, and to how organisms process and use their food, and how they deal with their own health issues.

Ongoing changes in society's eating habits in recent decades in the West are associated with speed, money saving, and practicality, often at the expense of quality, quantity, and the social, cultural and ethical aspects of food, resulting in the dehumanization of individual and social relations, and continually increasing social inequality. In this new working society, where time is money, the emphasis is on the "irrationality" of eating behaviors, bringing about obesity, new eating rituals, and the consumption of processed foods.

Food insecurities, associated with such behavior, have arisen with different types of problems, such as hunger, obesity, diseases associated with bad diet and consumption of low-quality food or that can be harmful to human health, as well as the predatory food production in relation to the environment, unreasonable prices and and the imposition of eating patterns that do not respect cultural diversity.

For Pipitone[4] and Garcia[5], the ongoing process of industrialization has brought significant changes to eating habits, especially with regard to large cities. These changes were intensified by increased working practices, independence of women, and the Green Revolution, which has made "traditional" practices be replaced by new dietary practices that simplify work and save preparation time.

A paradox is laid. On one hand, there is an eating practice profile characterized by excess consumption of foods rich in fats, sugars and processed products with high energy density;  on the other hand, hunger and malnutrition, caused by the unavailability and scarcity of food, or by poor eating practices associated with unclear awareness on nutrition.

Almeida[6] and Levy-Costa[7] consider that the predominant model of food production has also favored the eating paradox of this new society. After all, the availability of processed products standardizes eating practices with fast meals rich in processed and precooked food, often generating a hidden hunger and providing high prevalence of chronic diseases such as obesity, hypertension, type II diabetes and dyslipidemia.

According to a document from the Conselho Nacional de Segurança Alimentar e Nutricional - CONSEA[8] (National Council of Food and Nutrition Security), the contrast between diseases caused by excess food and hunger leads to situations of food and nutrition insecurity. Nutritional benefits are not solely related to nutrients, but also related to Food and Nutrition Security (FNS). In addition to the regular and ongoing acquisition of food, with good quality and in adequate quantities, nutritional benefits include the basics of dietary practices to promote health, respecting cultural diversity and the environment, and in such manner that they can be inexpensive and socially sustainable.

The concept of Food Security came to light on the Second World War, when Europe was devastated and unable to produce their own food. According to Belik[9], this concept has been built taking into account three main aspects: quantity, quality, and regularity in the access and availability of food. Thus, for instance, there may be large amounts of food being produced in a given region, but if people can not have access to them, the situation of Food Security is not well-established.

Likewise, especially regarding the good quality of food, the population can not be subjected to any risk from contamination, spoilage, or any problems arising from foods that have expired. Food quality also relates to the ability to consume them in a dignified manner. In other words, allowing people to eat in a clean environment, and following the traditional rules of hygiene.

With regard to the definition of Food Security, we must not fail to address the issue of regularity. This means that people need to have constant access to food (at least three meals a day). According to Pessanha[10], identifying and assessing these issues is critical from an ethical perspective, after all, even if the population has regular access to food, as mentioned above, it is not considered to be risk-free.

In our approach, we can not fail to also mention food sovereignty and sustainability. The applicability of the concept of food sovereignty started to strongly emerge in a discussion on Food Security in 1996. During the World Food Summit, on the parallel civil society forum held in Rome, food sovereignty was claimed with great emphasis. This concept seeks to give importance to the food sovereignty of countries and is associated with the generation of employment and reduced dependency on imports and price fluctuations from the international market. Food sovereignty attaches great importance to the preservation of culture and the eating habits in any country, thus, it should be addressed in an ethical and committed manner, according to Belik[9]. It incorporates concepts related to the preservation of the environment, the exclusion of pesticides, and which do not agree with extensive production in monocultures. It is possible to assess here the effects and perceptions of GM foods and of all technicist cultures.

According to this author, the concept of Food Security gives rise to different interpretations and one can not ignore the importance of policies regarding this matter, as tools that can channel the productive forces. As for food supply, Food Security requires that enough food is available in a sustainable manner and respecting food culture, that it is physically and economically accessible to the population, and that it provides healthy options. In order to do so, among other aspects, society natural resources must be used with good criteria and in a sustainable manner, safe and efficient technologies need to be applied, along with government policies that encourage the production and marketing of healthy, inexpensive foods that are compatible with the local food culture.

Considering food demand, Food Security antecipates the assurance that everyone will have the ability to identify and adopt healthy eating options. This requires, among other things, reasonable minimum income levels (or capacity of consumption) for the population and a universal access to basic knowledge on the relationship between diet and health, nutritional composition of foods and dietary recommendations.

Awareness is particularly relevant in societies where traditional eating patterns are not entirely healthy, and / or where traditional healthy dietary patterns are being replaced by less healthy patterns, either by changes in the price structure of food and / or in the income level of the population, or by virtue of aggressive advertising strategies for unhealthy food.

The study and monitoring of the Food Security of a society are complex, since there are several elements that define it. The monitoring and assessment of food supply should be basically carried out for its *per capita* availability, type, nutritional facts, sanitary quality, compliance with legal regulations (expiry dates and nutritional labeling), range of marketing, and the price of food offered for consumption. Unhealthy foods should also be similarly monitored with regard to how much is being produced, which marketing strategies are being used, and whether or not they comply with legal restrictions on food advertising. Income, power of self-consumption, food preferences, awareness on food, nutrition and health, and the food consumption patterns of the population should all be studied and monitored for food demand.

Ultimately, it is essential that every single element is carefully assessed, because in order to promote food security conditions for society, humanization and reduced inequalities, different actions must be taken for the upcoming challenges.

Considering the nutritional transition process, characterized by the increase of overweight in contrast with malnutrition, observed in adults, children, and adolescents, and its negative consequences in future stages of life, it is important to monitor the food and nutrition situation of the population from the perspective of humanization and reduced inequalities.

## Eat?

Eating has always been a great individual and collective concern for humanity, since it is supposed to meet one of humans basic needs for survival. And, because it is also an expression of human desire, food should not just be seen as means to acquire nutrients, but it should also be pleasureful and prestigious, a valuable resemblance of comfort, as Sloan,[11] Carneiro[12] and Poulain[13] all agree.

Thus, in Brazil, the application of the right to food regulation – enacted by Constitutional Amendment 64, which included the right to eat in the human social rights, as set out in Article 6 of the Constitution, on February 5, 2010 – is exhibited by the Food and Nutrition Security (FNS). The FNS aims to ensure everyone's right to regular and permanent access to good quality food in adequate quantities, without compromising access to other basic needs. It is based on health promoting dietary practices that respect cultural diversity and that are environmentally, culturally, economically, and socially sustainable, as provided by the CONSEA.[14]

The FNS is closely linked to a public policy, through CONSEA – a mediating instrument used between the government and society as a means to assist the Presidency in creating policies and

defining guidelines for the country to secure the human right to food. Its goal is to fulfill the duty of the State to respect, protect, promote, provide, advise, monitor, supervise, and assess the application of the human right to having adequate food, as well as ensure mechanisms for its enforceability. And based on the principles of comprehensiveness, intersectionality, equity, social participation, and coordination between emergency and structural measures, as well as on the seven guidelines, the FNS imposes a public policy, also known as National Policy on Food and Nutrition Security, provided by CONSEA from 2009.[15]

However, behavior that refer to food goes beyond the biological and nutrition aspects, food is full of historical, social, cultural and psychological aspects. For Santos,[3] "feeding is a nutritional task, and eating is a social task, since it is linked to attitudes, habits, protocols, behaviors, and situations", thus food is not neutral. Cultural structures of eating behaviors are built in childhood, not necessarily through the direct teaching of parents.

The history of eating behaviors expands beyond the history of food, its production, distribution, preparation and consumption. What you eat is as important as when, where, how, and with whom you eat. The family meal is a ritual conducive to the transmission of values, through learning manners, especially at the table. It is when the boundaries of every child's world are defined, and the attitudes of their social group are accepted as standard, they will become adults that eat just as society has taught them. Therefore, eating habits become simultaneously resistant and open to changes, because such transformation will follow the dynamism of society, initial family habits, experiences through contact with other cultures; new dietary practices are added to consumption patterns, from the perspective of Franco[16] and Pineyrua.[17]

Eating behaviors and habits, also built from the local availability of products, represent the symbolism and the logic of practices, family values, and the conditions and social relations of groups, peoples, and nations. Asserting itself as cultural identity, each of these aspects determines the quality, presentation and schedules of meals. For Carneiro,[18] when sharing food, humans show civility; eating is the source of socialization. The availability of particular food over another is never random, it results from the relations of power and prestige.

Some significant examples of that can be found in great Greek poems that describe huge heroic events, such as in the Homeric poems. These poems make reference to the offer of the best portions of food to visiting guests. Montanari[19] brings another example, in Celtic literature, furious struggles are chronicled among the heads of rival clans or antagonistic tribes to obtain the best pieces of meat.

## Urbanization and food

With the changing in lifestyles in the years 1950-1960, resulting from industrialization and urbanization, according to Flandrin & Montanari[20], there is a massive displacement of rural populations to the cities, bringing about very high production costs for the urban workforce, in particular because it became difficult to supply food to commercial areas and industrial centers.

Industrialization also provided for the Green Revolution, based on large-scale food production with high technology, seeking to achieve high productivity to meet the demand of regions where hunger prevailed. Increased productivity, greater resistance to diseases and pests, decreased time needed to produce and distribute new crops have maximized the depletion of natural resources, coupled with the loss of biodiversity, and have opened a large new market for large multinational that produce seeds, fertilizers, and pesticides. According to Cavalli,[21] they may also have contributed to a number of new health issues, such as increased allergies and resistance to antibiotics.

It is also important to consider, as Flandrin e Montanari[20] have warned us, that from the 1960-1970s the increasingly inclusion of women in the labor market, among other factors, have decreased available time for the preparation of family meals. Thus, this set of events – industrialization, urbanization, women's independence, professionalism, increased variety and access to agrifood established by the Green Revolution – has led to the deregulation of dietary practices and the increased number of meals eaten out of home, at work, at school and other collective facilities.

Guivant[22] claims that traditional food stores, markets, and butchers began to play a secondary role since then. A preference for supermarkets emerged for grocery shopping, powered by the pursuit of time saving and convenience. Fast food companies and similar businesses, characterized by the ability to prepare and serve meals in a short period of time increased in number. For Castelli,[23] the spirit of "McDonaldization" led these companies to a maximum of productivity and efficiency, meeting the needs of today's society.

In parallel with the accelerating pace of life and the rise of fast food, Miele & Murdoch[24] claim that people became less familiar with traditional cooking, and the preference of most of them changed from regional and local dishes to international. Thus, for Oliveira,[25] changes in dietary patterns, mainly as a consequence of policies that have favored the option for the capitalist economic development model, have led to the creation of new patterns of production and consumption.

The diagnosis made by CONSEA[15] has pointed to the confluence of four systemic crises (economic, food, energy and environmental) that are interrelated in their main causes and impacts, and also require systemic and coordinated responses. The economic crisis has contributed to

significantly limit lower class power to purchase food and has increased the number of hungry people around the world, in addition, it affects the credit system and the availability of resources for social programs and programs that support family and local agriculture. The crisis of economy, energy, and food have negatively affected the trends of reduced poverty and inequality that have existed for some years in many countries of Latin America and the Caribbean, where the number of hungry people started to increase again in 2009.

Domestic impacts of the crisis revealed the high degree of external exposure of the countries from this region, even though they are major food producers. In the food and economic crises, clear evidence has been found of the failure of the State minimum theses and deregulation of economic activities that have dominated the economic and political scene for decades. Similarly, energy and environmental issues are caused, among other factors, by lack of regulation on the use of resources and their impact on common or public goods. The weakness of developing countries, such as Brazil, which until recently chose the path of trade liberalization and economic deregulation, contrasts with the reappearance of a pattern in which national governments (or regional blocs like the European Union ) regained importance with their respective instruments of regulation for agrifood markets.

In addition to this, there is the Brazilian epidemiological and nutritional situation, where numbers are increasing for diseases and deaths related to the poor quality of diet. Moreover, vulnerable population groups present ongoing lack of vitamins and minerals, and malnutrition; such conditions reach in a different manner, but equally significant, all age groups, income groups and regions. Paradoxically to the Brazilian data on malnutrition, overweight and obesity, as well as non-communicable diseases resulting from them, started to take part on the framework of public health in Brazil, also common to low-income populations. Therefore, food profile keeps on following a globalized pattern of low cost food supply, but weak in nutritional quality.

According to research conducted by Caballero & Popkin,[26] Brazilian society, along with the rest of the world, is currently experiencing a period called nutritional transition, in that, despite hunger and malnutrition are still present, excess weight and chronic diseases, due to changes in dietary patterns and physical activity, are increasing.

Adequate diet, in quality and quantity, provides the energy and nutrients needed for the perfect development and functions of the organism, and health maintenance. Inadequate diet is a risk factor for malnutrition and micronutrient deficiencies. Moreover, overeating is associated with the occurrence of obesity and its comorbidities, such as diabetes, hypertension, cardiovascular diseases, among others.

## Policies on Food and Nutrition Security

The Brazilian government, based on the National Policies for Food and Nutrition Security, has tried to apply a set of planned actions to ensure the availability and access to food for the entire population, providing nutrition and health.[27] CONSEA, by means of its seven guidelines, establishes the involvement of both the government and the organized civil society in different sectors or areas of activity – health, education, labor, agriculture, social development, environment, among others – and in different spheres – production, marketing, quality control, access and consumption. After all, Food and Nutrition Security is there to ensure that all people must have access to good quality food in adequate quantity, permanently, and without compromising access to other essential needs, based on healthy eating practices, thus contributing to a dignified existence.

The policy of FNS moves forward in taking actions and developing programs through different sectors, when promoting the principles of intersectorality, joint actions between the Government and society; providing equity to overcome economic, social, gender and ethnic inequalities, which are still creating discrimination especially against African descendants and Native Brazilians; expanding and articulating structure actions and emergency measures and budget and management.

According to that same document by CONSEA[27], FNS also acts on the spheres of production and availability of food, access to food and supplies, and food and nutrition. These dimensions express the two basic components of the FNS policy: the food component (related to the availability, production, marketing, and access to food) and the nutritional component (related to dietary patterns: where, how, and when to eat, what is chosen, how to prepare, and what to consume, and the biological utilization of food).

It is through guidelines aimed at good quality of diet – safe, healthy foods that do not cause diseases and improve human quality of life in adequate quantities, without compromising access to other essential needs; along with the right to health, education and work; based on dietary practices that promote good health, right to information, explicit and safe labeling; that respect cultural diversity and that are environmentally, culturally, economically and socially sustainable, representing the right to food preservation as heritage – that humanization and reduced inequalities will occur.

Family farming, the pursuit of sustainability, the recovery of meal socialization, the respect for biodiversity, the preservation of taste heritage, and the teaching of traditional eating habits for children, these are all strategies that will strengthen Food and Nutrition Security in Brazil and worldwide.

As part of the advances made in the fighting against poverty and social inequality in Brazil, access to food has expanded in the lower income strata of the population, as a result of public policies created to expand formal employment and minimum wage recovery for purchasing power and its repercussions on the benefits of social security and assistance, and with the aid of the *Bolsa Família* (Family ) program, which has provided wide range income transfer.

As examples of intersectoral developments, the Family Farming Food Acquisition Program (Programa de Aquisição de Alimentos da Agricultura Familiar - PAA) stands out along with the recent redesign of the National School Diet Program (Programa Nacional de Alimentação Escolar - PNAE). It is also relevant to mention the prospect of joining public food equipment with local systems (popular restaurants, food banks, community kitchens and others), besides expanding and leveraging actions on food and nutrition to the level of primary health care.

## Final Remarks

In face of the nutritional transition, it becomes increasingly important and necessary to use academic research as a tool to examine food and nutrition issues, to monitor and plan actions on behalf of human health, to provide theoretical basis for the analysis of hunger, obesity, limited access, unlimited consumption, inequality generated by the lack and excess of food, humanization and dehumanization of eating behaviors.

The multidisciplinary relationship of nutrition, sociology, and history strengthens this matter, considering that humans represent what they eat, and, through eating, they determine how their living space will be arranged. Establishing economic, environmental, social, political and historical intersections is essential to bring awareness to the evolution of nutrition, and thus reduce large existing inequalities.

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