

# Experiences in food and nutrition policies

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## Introduction

**M**EASURES to fight hunger and malnutrition have been studied by several authors who have dedicated themselves to recording the history of domestic policies in the field of food and nutrition (Musgrove 1990; Vasconcelos 2005) and the impact of specific programs, such as the National School Food Program [Programa Nacional de Alimentação Escolar, PNAE] (Mazzilli 1987, Spinelli & Canesqui 2002, Ometto et al. 2003) and the Workers Food Program [Programa de Alimentação do Trabalhador, PAT] (Burlandi & Anjos 2001, Veloso & Santana 2002, Savio et al. 2005), among others more short-lived.

Contributions from the literature on the subject invariably include the requisite analyses of the social context of the families or individuals assisted by the programs that compose current policies (Campino 1985). The association between hunger and poverty is underscored (Castro 2004) and shows that this problem requires structured policies combined with indispensable emergency actions to fight immediate hunger (Vasconcelos 2005).

This understanding emerged not only in universities and governments, but also in society as a whole, firmly establishing the issue of food and nutritional security in the agenda of government officials in Brazil and other countries, who are mobilizing to seek strategies to fight the lack of food and its effects (Domene 2003).

The challenges of finding a solution to social unbalance, that hinders the democratization of opportunities (Castro et al. 2004) and exposes a large number of citizens to risk situations, may, however, compromise more generic proposals, especially those conceived in isolation and that disregard the context in which malnutrition occurs.

Some successful actions, developed with embodied follow-up mechanisms, indicate possible ways to follow and will be presented below. Knowledge of these experiences – and, especially, of their operational limits – should guide our steps to improve programs and policies in this area and optimize the public resources used in their maintenance.

### **PNAE and PAT –**

#### **Two icons in public food and nutrition policies**

School meals programs stand out among national public policies in the area of nutrition, not only for their duration (50 years as of 2005) but especially for their comprehensiveness, as a result of the creation, in 1979, of the PNAE, currently available in 5,560 cities in 27 states, assisting approximately 36 million students in nursery and elementary schools. The federal government reimburses city governments R\$ 0.18 per student/day, so that the municipal authority in charge of the program can buy foodstuffs. The funding also extends to students from Indian tribes and quilombola communities [whose members descend from 19<sup>th</sup> century runaway slaves], for whom the reimbursement is R\$ 0.34 student/day.

This complies with what the 1988 Brazilian Federal Constitution establishes: Article 208 determines that proper nourishment is a right of students.<sup>a</sup>

Another equally eminent food policy is the PAT, which completed 25 years in 2002 and assists 8 million workers in 103,000 companies all over Brazil (Mazzon 2001, *apud* Savio et al. 2005). National literature offers plentiful assessments of the program, particularly regarding its nutrition goals (Burlandy & Anjos 2001, Veloso & Santana 2002), so we will not deal with this policy here.

#### *Modernization of the PNAE*

Efficiency gains in any long-lasting policy require conceptual changes in planning its actions, so that their execution reflects changes in society. Today we can say that the social services model, supported by the transfer of funds from one program to another, is outdated and that food and nourishment, conceived as a human right, can be dealt with in school with the participation of civil society and the guarantee of social control.

Such modernization has led the PNAE to be acknowledged one of the world's largest school food programs. The PNAE assists every student currently enrolled in a nursery/elementary public or philanthropic school of Brazil, and has recently been extended to assist students from Indian and quilombola communities (Resolution #45 of 10.31.2003, #38 of 8.29.2004, and #21 of 5.27.2005, altered by Resolution #32 of 8.10.2006).

Another sign that the PNAE has become a fully mature program is the transfer of responsibilities, which were previously centralized, to a system of

joint management by federal, state, and local governments. This system has now gone way beyond the mere allocation of financial resources to become a supplement of education itself.

This type of management aims to assure the principles of universality, continuity, and decentralization, promoting social participation to provide egalitarian assistance. The project's guidelines make every attempt to respect regional habits and the agricultural vocation of each municipality. In addition, by encouraging the exercise of social control, it allows each partner to follow up on the actions of the others, assuring that high quality food is offered to every student and supplies them with 15% of their daily nutritional requirements.

These actions help to promote the students' growth and development, assist the process of learning/teaching, contribute to the creation of healthy food habits and make local economies more dynamic by creating jobs and income in the production, transportation and processing of foodstuffs.

The challenges from this commitment, however, are proportionate to the expected benefits.

Initially, there is an acknowledged demand for the qualification of managers and the School Food Councils [Conselhos de Alimentação Escolar, CAE], who assure that resources are allotted exclusively to the program. Part of the effectiveness of their action depends on establishing simple but thorough legislation and the revision of the text of some resolutions by the National Education Development Fund [Fundo Nacional de Desenvolvimento da Educação, FNDE], the agency of the Ministry of Education that manages the PNAE, is a concrete action that heralds advances in this area.

Other strategic measures will emerge from the data of a nation-wide study scheduled for 2006. Adopting measures that take into account *negative externalities*, as Torres & Marques (2004) called the local characteristics that contribute to the failure of national policies, is key for the success of such policies.

The presence of nutritionists that can effectively follow up on the program in every municipality is another goal that will help monitor and evaluate the execution of the PNAE, and enable the implementation of a food and nutrition educational program in schools, and eventually, also of nutritional monitoring.

#### *Measures already incorporated into PNAE's management*

Processes that have already begun to achieve the aforementioned goals include:

- Reassessment of the program's ongoing principles, guidelines, and objectives.
- Development of the InfoCAE system for on line registration and improvement of the relationship between the CAE and the FNDE.

- Design of a national survey of consumption and nutritional profiles of the students assisted by the program, funded by the Ministry of Culture and FINEP. Joint inspection with the Federal Controller's Office and the Public Prosecutor's Office. The participation of the Federal Council of Nutritionists and regional nutrition councils.
- Organization of regional and national events to enable counselors and call attention to the program in international events, making for the exchange of experiences.

Citizens and managers can find information on management monitoring at the Web site of the National Fund for Education Development (Fundo Nacional de Desenvolvimento da Educação, FNDE), <[www.fnde.gov.br/home/index.jsp](http://www.fnde.gov.br/home/index.jsp)>. Strengthened social control is encouraged with guaranteed manners of participation, including public audiences and enablement programs offered by school food councils.

In order to strengthen the PNAE, this whole set of actions is constantly monitored.

### **Recent policies: Bolsa Alimentação [Food Vouchers]**

Strategies to fight poverty through the adoption of conditional income transference programs were tried out by several administrations and, since the 1990s, Brazil has created several federal programs, including the Bolsa Escola [school vouchers], Bolsa Alimentação [food vouchers], Programa de Erradicação do Trabalho Infantil [child labor eradication program] and Vale-Gás [gas vouchers].

The Bolsa Alimentação program was created in 2001 as Programa Renda Mínima [Minimum Income Program], and its main goal was to reduce child malnutrition by means of R\$ 15.00 monthly transfer to each beneficiary – who had to be identified as low-income, nutritionally-challenged citizens. The program's potential beneficiaries were children up to 7 years of age, pregnant and lactating women. Their families had to commit themselves to a positive health agenda that included growth and development follow up of children, immunization of children and pregnant women, and participation in nutrition and health educational actions. The program, when implemented in every one of Brazil's 5,561 municipalities, hoped to assist 2.7 million children and approximately 800,000 pregnant and lactating women.

One of the main goals of income transference programs is to combat poverty-induced hunger. The amelioration of these families' quality of life, especially regarding what and how they eat, has a huge potential to improve nutritional indicators (and this lies behind the logic of associating income transference strategies for the poorest families with the nutrition of their children).

Recent experiences in some Latin American countries, such as Mexico's Programa de Educación y Salud (Progres), provide evidence of the potential

impact of income transferences on food expenditures and on the nutritional quality of the diet for the beneficiary families.

However, it must not be assumed that these programs will swiftly lead to the families' heightened well-being and to the abatement of their poverty if they are not accompanied by the fomenting of healthy practices, especially regarding infant and child care. This awareness led to the proposal of binding the concession of benefits to the family's commitment to desirable actions, e.g., rigorous observance of the vaccination timetable.

### *Evaluation of impact*

In order to estimate the program's impact, beneficiaries (children, pregnant and lactating women with per capita family income below R\$ 90) were matched and compared with eligible individuals in households excluded from the program because of registration errors (e.g., the accidental separation of files or preexisting registries with conflicting information on the same family). The socioeconomic and demographic data of the families are shown on Table 1.

Table 1  
Socioeconomic and demographic characteristics of families in assessment studies of the Bolsa Alimentação Program (2003)

	Beneficiaries	Control Group
Number of people in family	5.66	5.55
Inferred per capita income (R\$)	75.89	71.06
Literate family heads	35.8%	36.6%
Families with children aged 0 to 7	95.9%	87.2%
Families with children aged 7 to 15	59.1%	78.7%

The sample was obtained by matching beneficiary and non-beneficiary families from four municipalities in Brazil's northeast (recipient of 60% of the program's benefits): Teotônio Vilela (Alagoas), Mossoró (Rio Grande do Norte), Itabuna and Teixeira de Freitas (Bahia). The data was collected after six months of income transference (869 families) and, later in 2003, after two years of transference (743 families).

The anthropometric survey and the data on food consumption, on access to and demand for health services, and on children's body growth clearly reveal the program's positive impact, as described below.

### **Marginal propensity to consume food**

This econometric indicator shows the percentage of each transferred monetary unit used to purchase food. After six months of transference, the PMCA varies between 55% and 74%, higher values than those found in other international programs, such as the Food Stamps in the United States and

the Food for Education in Bangladesh, which varied between 30% and 42%, and 34% and 41%, respectively. In Brazil, two years after the beginning of the program, the average difference between family expenditure on food (R\$ 24.53) is larger than the program's average monetary transfer (R\$ 20.39). In this case, the PMCA is deemed more than 100% and change can be seen in the original pattern of consumption, as families reserved a greater share of their other resources to purchase food.

### **Consumption**

In the period under consideration, there was an increase of almost three food items per beneficiary family: 24.2 items in the control families (excluded from the program) versus 27 in the families receiving monetary complementation. After 24 months of transference, an analysis of the correlation between expenditures by food group and the composition of the diet of children up to 2 years of age shows that intrafamily distribution of food is better among beneficiary families, with a greater variety of foods and foods of better nutritional value.

### **Anthropometry**

The anthropometric data were obtained from 1,481 children after six months of transference and from 1,423 children after 24 months of transference, and showed no significant statistical differences ( $p < 0.05$ ).

However, the results of retrospective analysis of "Cartão da Criança" (growth charts) records indicate significant statistical differences in weight gain patterns of beneficiary children in the 24-month period. According to regressions made with anthropometric data of children up to 5 years of age, each additional month the family received food vouchers translated into an 8-gram weight gain among beneficiary children ( $p < 0.001$ ).

Likewise, the indicator of the gravity and frequency of nutritional deficits shows that beneficiary children, initially in the worst situation, recovered more quickly and that, at the end of the period under consideration, there were no differences vis-à-vis the children from control families. See Figure 1.

Among the various aspects of the program that were studied, the impact on econometric indicators stands out, making it easy to see that the largest share of family resources is used to purchase foodstuffs and increase the variety of their diet. The absence of a baseline survey may have impaired part of the analyses and we see that, after six months, there seems to have been less weight gain among children of the beneficiary families than of the excluded, a situation that was reversed at the end of the period under consideration. Another factor of confusion may have been the fact that children from both groups were not fully comparable at the onset, as shown by an analysis of nutritional recovery using data from the "Cartão da Criança" and field anthropometry.

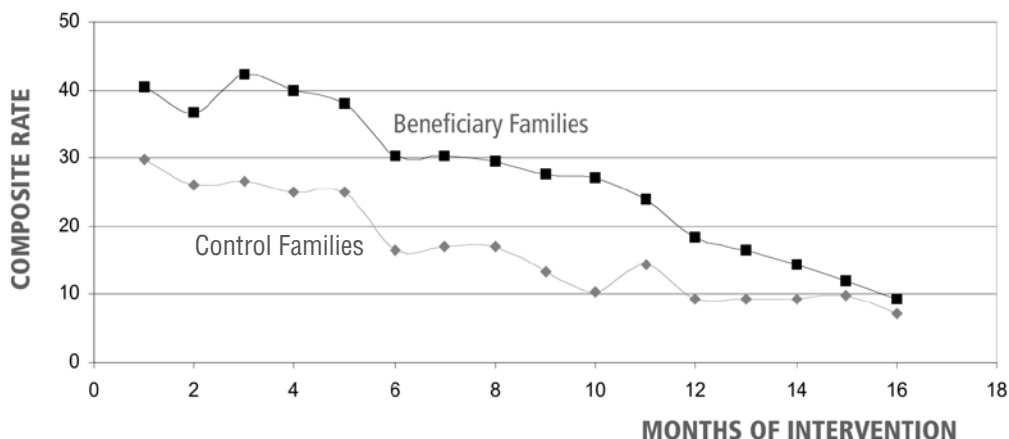


Figure 1  
Evolution of the indicator of gravity and frequency of nutritional deficits in beneficiary and non-beneficiary children of the Bolsa Alimentação Program, 2001 to 2003

In other countries, the expectation of falling malnutrition is likewise confirmed, as can be seen in Mexico's Progresa, where beneficiary children gained 1 centimeter in height compared to non-beneficiaries, although in this case nutritional supplements were also used.

Even with such limitations, the results of the study of Bolsa Alimentação's impact show that conditional income transference programs have a promising potential for promoting children's body growth and, consequently, for nutritional recovery.

### Nutrition education: the "I Learned, I Taught" Program

The "I Learned, I Taught: A Practice in Education" program was conceived as part of the Development of Juvenile Citizenship Programs for Prevention and Combat of Maternal & Infant Malnutrition [Formação de Programas de Cidadania Juvenil na Prevenção e Combate à Desnutrição Materno-Infantil], proposed by the Center for Nutritional Recovery and Education [Centro de Recuperação e Educação Nutricional, CREN] of the São Paulo Federal University.

Its aim is to mobilize and enable secondary schools for actions to prevent and fight infant and child malnutrition. Funded by the Ministry of Social Development and Fight Against Hunger and aided by the Minas Gerais Department of Education and regional school boards, it boasts recent success experiences in 53 schools in northern Minas Gerais.

The program's first premise is that schools are *loci* of change, a public space that contributes to insert individuals in the reality around them through the exercise of truth and knowledge of one's self and the world. Secondly, the program is interdisciplinary as a means to reunify knowledge. The third



premise is the establishment of the collective identity, understood as a reference group that retains the personal traits of the individuals that compose it.

Finally, the program encourages youth involvement, helping young people participate in actions dealing with problems that concern the common good.

### *Indicators of the Minas Gerais experience*

The experience in the state of Minas Gerais enabled 53 secondary school teachers, nine technicians from the regional school boards and nine health professionals. The course's modules included pedagogy, nutrition, social services, and psychology, and nine projects were developed to guide local actions. In addition, a document was prepared for the regional school boards outlining work proposals for technicians in the schools. The actions of the 62 multipliers enabled by the program eventually mobilized 1,251 teachers, 990 of which took local enablement courses.

The numbers of this mobilization indicate how much health and nutrition issues were incorporated by teachers and schools into their educational practice. After the project, 67.6% of the schools included nutrition and health in their educational plan and 20.54% were proceeding to develop the plan. With regard to youth involvement efforts, 65,7% of the students had a positive response to actions carried out in school and 63% to those in the community.

### *Facilitating and hindering aspects*

Several factors that influenced the development of the project were beyond control by the steering team, including the timing of the actions. The dynamics of school work is guided by what is called *período letivo* [school term] and *ano letivo* [school year]. It was not possible for the project to adjust to the school "timing"; so, for instance, it was started on the eve of the July recess and one of its most significant moments coincided with the year-end vacation.

The "I Learned, I Taught" project has several successful traits and its methodology can be applied to other situations that aspire to the same goals. Its achievements include:

- a) Teachers mobilized and committed to the project, even in school environments not always conducive to such initiatives (that is, involving voluntary work performed outside the school year and personal expenses).
- b) Students mobilized and committed to the initiatives.
- c) Projects to intervene in local realities and to serve as "letters of intention" for actions and improvement of local quality of life.
- d) Incorporation of nutrition and health programs to the school curriculum supported by the students action..
- e) Acceptance of the project by the State Department of Education and attempts to give it continuity.



- f) Positive evaluation, regarding both the proposal and its execution, by educational experts who studied the project.

One last, but no less important factor should be weighed in to assess the success of the project and the possibility of applying it to other educational systems: the fact that it was developed in Minas Gerais. That state's educational system is one of the largest in Brazil, with educators of acknowledged critical capacity and recognized historical presence – one has only to see its literary production and its analyses of the mechanisms of pseudo-reforms, that is, despite the many changes that are made, everything remains the same in education.

Another aspect to bear in mind is that the people of Minas Gerais are endowed with a cultural identity that, perhaps more than other national groups, enable them to issue community judgments with relative consensus. In other words, adherence or rejection is more a group than individual thing, unlike what usually occurs in other large urban centers, where the overriding trend is the pulverization of identities, not the plurality and unity around the constituent values of a culture ethos.

Certainly, a project like “I Learned, I Taught” – with its methodology founded on absolute respect for the individual and its belief that human beings have an intrinsic desire for humaneness, solidarity and partaking that, if mobilized, can contribute to improve life in society and, as a result, the quality of collective human life – is a huge contribution to the ideal of creating a new Brazilian and universal order.

### **Experiences of the private sector: the “Eat Well” Program**

This program, originally called “Eat Well for R\$ 1.00” [“Alimente-se Bem com R\$ 1,00”], was conceived in 1999 by SESI's regional São Paulo department. The program's goal is to offer inexpensive recipes that make full use of foodstuffs and, thus, promote health and thrift.

Designed to assist blue-collar workers and their families, it was later expanded to the community as a whole, given its positive reception in several municipalities, not only in the state of São Paulo. The program's initial motivation resulted from a survey of consumption patterns with 1,600 workers in northern São Paulo that found that 62% of this group received an inadequate supply of nutrients.

The proposal was founded on nutrition education. SESI's nutritionists began developing formulas with low-cost, highly nutritious ingredients, and produced the first publication with 100 recipes – whose sensory quality was highly praised the public that attends SESI's events.

#### *The program's strategy*

Aiming to prove the feasibility of meals that are prepared using parts of foods that are usually discarded, a pilot restaurant was opened in São Paulo's

Vila Leopoldina neighborhood. For a 90-day trial period, the restaurant served free lunch. With an approval rating of 98%, the restaurant reopened after the trial period for the general public, offering meals for R\$ 2.00. The cost of materials did not exceed R\$ 1.00 and the menu included rice, beans, meat, a side dish, two types of salad, bread, fruit juice, and dessert.

To emphasize the program's educational focus, and considering the restaurant's positive results, hands-on courses were then offered free of charge to the families of blue-collar workers and the community. These courses were attended by an average 400 people a month, in classes of 25.

### *Design of the courses*

The courses are given in four weekly 2,5-hour classes and twelve recipes from the program's book are prepared. The theoretical content covers the following topics:

- Definition of the program.
- Basic notions of the various foods and their functions.
- Nutritious value of foods.
- Food purchase planning principles.
- Identification and preservation of foods.
- Food and hygiene.
- Full use of foodstuffs.

In 2003, SESI decided to invest in educational kitchens and 23 were opened in the institution's activity centers in São Paulo. The first kitchen outside SESI's premises was in the city of Birigui, at the head office of the city's Union of Footwear Workers, as a partnership between this union, SESI and the Trade Union of Footwear and Garment Industries from the same city. Today there are forty educational kitchens in operation.

In 2002, six mobile units were built on adapted trucks, with capacity for 400 students per month.

### *A new format for educational restaurants and partnerships to improve the proposal*

In 2004, when the initial goals of the educational restaurants were achieved, the first stage of the "Eat Well for R\$ 1.00" program came to an end. In 2005, the program underwent changes, but kept its main purpose, namely, food education. The educational restaurants were restructured and renamed "experimental kitchens". New and lavishly illustrated books were published, with additional recipes presented in a highly attractive manner.

In 2002, hoping to expand knowledge of the use of non-conventional parts of foods for human consumption, the program formed a partnership with the Paulista State University (UNESP) in Botucatu, to develop bromatological analyses of the macro and micronutrients of the ingredients used in the recipes (such as skins, stalks and stems) to assure their innocuousness.

With a team of 106 nutritionists, the program is now called “Alimente-se Bem” [“Eat Well”] and has established many successful partnerships in order to grow. This is an example of how the production sector can contribute with effective and quality food education efforts, becoming an important partner in public policies in this area.

### **The role of community radio in public health policies**

Communication is seen here as one of the central elements in the execution of any public policy, particularly those regarding health. With this understanding, we see community radios as a medium with high appeal in Brazil and the world. Its technical features (short-range broadcasting, for instance) make it ideal for the dissemination of public policies.

We hope to show the importance of community radio in educational efforts in the area of food and nutrition. We take it for granted that, to improve the effectiveness of such efforts, one must adapt the information and the actions, inasmuch as they interact with different social and cultural scenarios in each territory. There is no ready-made pattern in community radio to disseminate information on health and nutrition; rather, it is an open door, with huge a potential to contribute to this purpose.

#### *Considerations on mass communication*

The concatenated chain of a public policy – planning, execution, assessment – must include a stage where information is disseminated in order to transfer to beneficiaries the derivative elements of that policy and include them in the process of evaluation or feedback. The Rosetta Stone, with religious guidance engraved in three different languages, is a prime example of the basic communication principle, namely, the need for intelligibility. This is one of the fundamental assumptions that public policy makers must take into account.

Mass communication should be understood as the transmission of a set of symbols based on principles and values of a certain social group to another specific population group that embodies distinct social and cultural values. Individuals, in turn, capture the information in a particular manner, giving it a meaning that derives from their personal history, beliefs and values, as well as their formal education. Each individual and each community claims the information in their own peculiar fashion.

On the other extreme, the term “mass” establishes, from the very start, a rupture between the transmitter, who elaborates the information, and those who receive it – the mass. In this case, transmission and reception do not maintain the dialogistic character of direct communication between two people. Such asymmetry can be used in favor of the objective of the communication, mobilizing the receivers and, if possible, stimulating them to change their behavior – or, in this case, helping them to adopt positive health practices.

Other characteristics should be taken into account by managers when contemplating the use of “mass media” as an integral part of implementing public policies: *mass* implies not only quantity, but also a plurality of receivers (public domain and unrestricted); it does not mean an inert heap of people, but rather specific individuals in specific social-historic contexts, with varying degrees of understanding and representation in their lives. Reception is an active process, whereas mass implies increased accessibility to symbolic forms in time and space.

If we assume intentionality in conveying health information, we must take into account that the *lato sensu* management of information does not always follow democratic principles and is not always in tune with the needs of the population. On the contrary, the cartelization of information, particularly as conveyed by newspapers and television, became evident after World War II, when news agencies made large deals to organize their injunctions. An example: the Associated Press relinquished covering facts in Europe in order to have exclusive rights on journalistic information in the United States. Journalistic interests are expressed by the number of offices of these agencies, as shown on Table 2. This division reveals no interests based on the development of social demands.

Table 2  
Distribution of the main offices of international press agencies  
in the post-World War II period

- 
- Reuters: 150 countries
  - AFP (Agence France-Press): 129 countries
  - AP (Associated Press): 108 countries
  - UPI (United Press International): 92 countries
  - <40% of offices in Europe
  - <10% in Africa, Middle East and developing countries
- 

*Source:* Thompson (2002)

Community media, guided by the needs of each locality, clashes head-on with this general trend of the press and, therefore, is potentially more adequate to convey health information.

In this scenario, one must prize the mechanisms to communicate and disseminate local interests, including community radio, as established by Law 9,612 of 2.19.1998.

### *Context of health policies*

The victory of opposition parties in the 1986 state elections stimulated the sanitation reform movement and allowed the 1988 Constitution to include health issues in the chapters dedicated to social security. The Constitution

goes even further: taking one concept of health as a starting point, it expands institutional actions and oversees all legislation regarding the promotion, protection, and recovery of health. With this new paradigm, the Brazilian sanitation reform was conceived to operate in three axes:

The first axis is conceptual and doctrinaire, and conceives health not only as the absence of disease, but also as the result of the conditions of life. Health, then, is achieved through economic and social policies that reduce or eliminate the risk of hazards and also provide access to health services. It is, therefore, a relative equilibrium, territorially-based and time-linked, that necessarily incorporates the other side of the equation, namely, the availability of health professionals to fulfill the needs of the people. Inherent to this arrangement is the participation of the community, which must be understood in its various forms and moments – such as the definition of priorities, the defense of rights already obtained or, still, the effort to enhance the operational possibilities of the health system.

The second axis is political, and conceives health as the citizens' right and ascribes to the State the obligation of providing it, "with no discrimination or conditioning factors". In this sense, one must inevitably recognize that health is closely related to the manner by which people attain their livelihood (work) or satisfy their needs (consumption), and both dimensions are within the scope of responsibility of State policies.

The third and last axis is strategic-operational and propounds the reorganization of the health systems, establishing as guidelines the integrality of all health efforts, the participation and control of society, and decentralization with a single unit of command in each government sphere.

In keeping with this new decentralized context, the process of municipalization advances. Yet, only after the 8<sup>th</sup> National Health Conference in 1986 would the Ministry of Health consolidate the role of municipalities in health care management. Reordering the social services model begins by redefining the role of the federal and state governments, and by providing feasible managerial instruments for municipalities. Appropriate forms of control and evaluation are established, based on epidemiological indicators and on linking health services to users, prioritizing the participation of the people. The territory becomes a key concept of both the sanitation reform and of this new model.

But the concept must be defined more precisely. There are at least two broad currents of thought that develop it differently. The first understands territory in a naturalistic manner, as a full and complete physical space. Territories – or territories-soil, as they are known – are defined by geopolitical criteria. According to this interpretation, health is sustained by the clinical model. The second perspective, coherent with the idea of promoting health as a process, sees the territory as a space being permanently built, as the product of social dynamics where individuals are social entities

in a political arena. The territory of a municipality is a never-ending one, for it is constantly being built and rebuilt.

### *Community radio as a vehicle for health education*

Some numbers must be examined to assess the feasibility of community radios as vehicles for health education as compared to other types of media, such as printed newspapers. The 2000 census revealed that 13,3% of the Brazilian population between 15 and 64 years of age were still illiterate, which translates into 16 million citizens. Electricity is found in 94% of the homes, but the average lighting is equivalent to only 40 watts, which makes reading at night particularly difficult (not to mention the problems of visual impairment). On the other hand, 99.99% of the population has at least one radio at home.

According to the World Association of Community Radio (AMARC), today there are 16,000 community radios in Brazil. This figure is contested by the Ministry of Communication, whose working number is 8,000. But, according to the Brazilian Association of Community Radiobroadcasting (ABRACO), there are 30,000 such stations. While there is no consensus on the number of community radios, everyone agrees it is quite significant.

An important aspect that should be taken into consideration by educational policies is the fact that direct bonds of trust are established between the listeners and the communicators of these small radio stations, most of which broadcast in low potency FM, with a range of approximately 1 kilometer. They usually maintain close relationship with local Residents Association, and have no commercial advertisers or sponsors.

An example of this means of communication being put to good use is the work carried out by the Rede da Pastoral da Criança [Children's Pastoral Network], which spreads messages through 1,600 community radios. Another interesting statistic comes from the School of Public Health of the University of São Paulo, whose courses have enabled more than 400 community radios since 1999 just in the Greater São Paulo.

These elements, taken together, make community radio broadcasting a convenient and territorially relevant form of mass information.

### **Conclusions**

The conclusions of the workshop promoted by the Nutrition and Poverty Study Group of the Institute of Advanced Studies of the University of São Paulo point strongly towards nutrition education as the priority among the strategic projects aimed at reversing the current combination of malnutrition and its ill effects.

This article has given an account of experiences assessing the major results of this combination. Two large-scale State initiatives – the National School Food Program and the Bolsa Alimentação – show the importance





*Farmer Novasto Alves da Rocha shows his plate with rice and beans in Guaribas, Piauí.*

of monitoring the short- and long-range management of the policy's work. The PNAE, now more than 50 years old, undergoes constant readjustments to fulfill new demands derived from its increased coverage and by advances in knowledge about nutrition and health. The implementation of the income transference program led to improvements in the patterns of food consumption, especially among children up to 2 years of age.

The educational experiences show that it is possible to implement actions based on knowledge of the local/regional characteristics of the group to be assisted, and obtain consistently positive results. The work of the Center for Nutritional Recovery and Education [Centro de Recuperação e Educação Nutricional, CREN] with the "I Learned, I Taught" program illustrates the importance of real-life experience to capture the concepts that lead to behavioral changes and the acquisition of proper food practices. The "Eat Well" program is an example of how support from the production sector can translate into successful partnerships.

Finally, we discussed the role of the media in health education, highlighting the potential of community radios to stimulate the adoption of healthy lifestyles, including those related to food and nutrition.





*Technicians from the Banco de Alimentos NGO carry fresh breads from a bakery.*

## Note

- 1 Article 208 of the 1988 Brazilian Federal Constitution states: “The duty of the State towards education shall be fulfilled by ensuring the following: [...] VII – assistance to elementary school students by means of supplementary programmes providing school material, transportation, food and health assistance.” [cf. <<http://www.v-brazil.com/government/laws/titleVIII.html>>.]

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*ABSTRACT* – Strategies to fight hunger and malnutrition have been directly associated to the prevention their ill effects, in particular chronic diseases and obesity. This complex epidemiological scenario requires medium- and long-term projects and, simultaneously, immediate and creative measures for emergency situations when there is no food available. The proposals of the public and private sectors, of universities and non-governmental organizations, are often ineffective, despite the commitment and integrity of the proponents, leading to detrimental consequences both to community and to the initiative. This paper reports on some successful experiences and includes elements to analyze the main problems involving food and nutrition policies and ways to overcome them. This work was prepared by researchers, public policy makers and technicians as a result of the interdisciplinary workshop they attended in 2005. It is offered by the Nutrition and Poverty Study Group of the Institute of Advanced Studies of the University of São Paulo, and its goal is to contribute to improve public policies in this area.

*KEYWORDS* – Nutritional Policy, Hunger, Malnutrition, Interdisciplinary Approach.

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This text has been translated by Carlos Malferrari. The original in Portuguese – “Experiências de políticas em alimentação e nutrição” – is available at [http://www.scielo.br/scielo.php/script\\_sci\\_serial/Ing\\_pt/pid\\_0103-4014/nrm\\_iso](http://www.scielo.br/scielo.php/script_sci_serial/Ing_pt/pid_0103-4014/nrm_iso).

Received on 5.22.2006 and accepted on 7.10.2006.