PUBLIC HEALTH PAGES





Teresa González de Cossío, Juan Rivera Dommarco, Gladys López Acevedo, Gloria M, Rubio Soto, (eds). Nutrición y pobreza. Política pública basada en evidencia. México: Banco Mundial/Secretaría de Desarrollo Social, 2008.

The Minister was awakened at 5:30 in the morning by the sound of his cell phone ringing. It was the Prime Minister.

-Minister, it's good that you are already awake. I would like to ask you to do something very important -The prime minister said hurriedly-. As you may remember, in the coming month I will be attending the Summit of Countries Fighting for the Flora and Fauna of Plentiful Rivers; it is a very important meeting at which I will have the opportunity to speak of our country's accomplishments in this area to leaders from all over the world. It occurred to me that for this occasion we could launch a new program to increase

the number of carp, European lobster and harlequin frogs, like the ones on my ranch, in the largest rivers in the south of the country. I already spoke to the Minister of Foreign Affairs and asked him to begin the procedures to import, if necessary, some of these species from abroad. I also spoke recently to the Minister of Finance, asking him to look into ways to finance this important project. I would like you to prepare a draft summary of this program, which will be coordinated within your department; please have it ready by next Monday morning. Best regards.

The Prime Minister spoke at the summit about the importance of biodiversity, water and life, and he announced the introduction of the Special Program for Protected Fresh-Water Species, the first of its kind in the world. With this program they hoped not only to increase the density of fauna in the country's rivers, but also to strengthen the economy and tourism in the region in the future. The budget for the first year of the project was 100 million dollars; it generated 20 positions in the ministry and began operation in the eastern part of the country, as suggested by members of Parliament from this region.

It is naïve to think that public policy, in any part of the world, would not be affected by the vagaries of the political situation of the time. Public policy decisions are made in the midst of serious time restrictions, multiple pressures, and often looking for results in the short-

term. That is the nature of these types of decisions.

Furthermore, those of us who design programs, strategies and public actions are human beings with strengths and weaknesses. Unfortunately, there is no Divine Law describing the path to follow in order to improve academic achievement, reduce poverty, increase the salary of the rural worker, reduce global warming, improve the quality of education, avoid epidemics, etc. Instead, what we have been doing since the beginning of time are experiments in trial and error. Sometimes public policy actions are successful, and other times they fail to yield results. All of this obviously depends on how these public actions are carried out.

For this reason, it is essential to have science, technology, and information involved in the process of designing public policy. Programs and strategies will have better results when their actions have been evaluated and their problems and successes documented. Therefore the publication of the book Nutrition and Poverty: Evidence-based Public Policy comes as good news for those who make decisions in public policy programs and strategies; it strives to "contribute to the improvement of public policies in nutrition, especially those geared toward populations living in poverty. [It] provides current information on the nutritional status of the Mexican population

and analyzes the evidence regarding the appropriateness, focus and effectiveness of the main programs that combat poverty with nutrition-based objectives (which have been implemented in the country)...".

The first chapter of the book, written by some of the most experienced nutrition researchers in the country – Juan Rivera, Teresa Shamah, Salvador Villalpando, Lucía Cuevas, Verónica Mundo and Carmen Morales Ruan- describes the current nutritional situation of Mexico's population. Chapter 2 is written from the public perspective, pointing out the advances and challenges in the country's social development policy, specifically in the area of nutrition. Chapter 3 gives a review of actions, programs and strategies that have been carried out in the country's recent history to strengthen diet and nutrition. The reader can witness the changes in focus that have been made in order to solve this problem over the years. The final chapters, using the most advanced evaluation methods, demonstrate the results that have been achieved in some of the most important programs. Above all they describe the elements which have been effective and what remains to be done.

The book answers questions like the following: What are some of the nutritional characteristics of the Mexican population? What are the age and gender characteristics of the malnourished? Are there differences between the nutritional conditions of different geographical areas? What percentage of the Mexican population is overweight and obese? What recent strategies have been implemented to combat malnutrition? Have they all worked? For nutritional reasons, which is better: to provide food baskets or cash to the poor? What role does nutrition education play in the success of those programs? What mistakes have been made, and what more needs to be done? The book covers a lot of useful topics, bringing together information that has been scattered in numerous recent documents.

Responses to these questions can make it easier for those who have to design and redesign nutrition-based programs in the country. The book reminds us that the problem of chronic malnutrition persists in rural communities, especially among indigenous populations. It also points out that the lack of micronutrients in children and the increase in obesity in all groups of the population are some of the most important topics on the agenda of nutrition policy in this country today. Tackling these problems involves revising the nutritional content of the programs that are currently providing food to children. The book also documents the necessity to create different policy actions for different types of nutritional problems.

The book shows that in the area of nutrition it is not necessary to start from zero when designing public policies. The evidence that we need in order to create more efficient and effective interventions already exists. The book does not claim that science is a substitute for policy in public policy decisions. Rather, it seeks to encourage public discussions that take into consideration the evidence already presented. Achieving this would be a major advancement in the performance of public policies. We hope that other areas of public policy have the vision to invest in science, information and evidence to design actions, programs and strategies, thus minimizing unfounded efforts and those based only on good intentions.

The Special Program for Protected Fresh-Water Species had major problems during its second year of operation. Despite the fact that its budget increased by 30% compared to the previous year and despite a major effort from the operators, there was a drastic reduction in the number of animals of the imported species due

to the fact that they were not accustomed to the local climate, especially the high temperatures in the eastern part of the country. The native species were also affected due to the transmission of diseases brought in by the imported species. When the program was terminated in its third year, there had been a reduction in the density of the fauna in the rivers in which it was implemented. The Prime Minister and the Minister continued working tirelessly for the benefit of their citizens.

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World Cancer Research Fund, American Institute for Cancer Research. Second Expert Report, Food, Nutrition, Physical Activity and the Prevention of Cancer: A Global Perspective. United Kingdom: WCRF/AICR, 2001.

The report, "Food, Nutrition, Physical Activity and the Prevention of Cancer: A Global Perspective," is an icon of scientific publications that evaluate and systematize the existing evidence on the cause and effect relationship of food, nutrition and physical activity and their implications on the prevention of cancer. It has diverse components that are worth highlighting, primarily because they explicitly define specific recommendations to support the de-

velopment of population policies for the prevention of cancer.

This report represents an exhaustive review of the epidemiological, clinical and experimental evidence that demonstrates the relationship between food, physical activity and the incidence and mortality of diverse types of cancer and other chronic diseases. It describes a very large strength of association for atherosclerosis, cardiovascular diseases and hypertension, and the evidence is highly suggestive for certain types of cancers, including esophageal, stomach, colon, breast, lung and prostrate cancers. The report also discusses the influence of alimentation on the predisposition to dental cavities, chronic hepatopathy, obesity and non-insulin-dependent diabetes mellitus, as well as on osteoporosis and the progression of chronic renal insufficiency.

Another important component included in this report is the association between environmental exposure and cancer. In general, we know that endogenous causes for cancer exist –those related to an individual's genetic heredity— as well as exogenous or external causes, such as environmental pollution, tobacco, diet and certain infections. Factors also exist related to lifestyle, such as obesity and physical activity.

While the etiology of cancer is multifactorial, and for many anatomical locations there is limited knowledge as to primary risk factors, epidemiological studies suggest that most cancers -between 65 and 70%are produced by factors associated with lifestyle, particularly diet, body composition and physical activity, as well as with tobacco use and the excessive consumption of alcohol. In fact, as much as 30% of cancers appear to be directly related to nutrition and another 30% to tobacco. Therefore, quitting smoking and modifying eating patterns are key to the primary prevention of cancer.

While it is evident that nutritional factors are not the only cause of cancers that appear in different locations, nor are they the most responsible factors, extensive scientific evidence indicates that a more appropriate diet could reduce both the incidence and development of different types of cancers. Indeed, diet and nutrition appear to be implicated, to a greater or lesser extent, with the appearance and development of breast, colon, urinary bladder, prostate, esophagus, stomach, lung, uterine neck, endometrial, ovarian, gall bladder, liver and pancreas cancers.

The list is long enough, and some of the cancers represented here are so significant and frequent so as to warrant taking into account daily alimentation. Thus, dietary characteristics, composition and nutrients that are associated with diverse types of cancers are widely discussed in "Food, Nutrition, Physical Activity and the Prevention of Cancer: A Global Perspective." Discussed in great detail are the amount of calories in the diet, its fat content, vegetable fiber, alcohol, calcium, vitamins E and C, vitamin A and beta carotenes, folic acid and selenium, citric fruits and green-leaf and cruciferous vegetables.

This report has been developed thanks to a strategic alliance between the World Cancer Research Fund International and the American Institute for Cancer Research. It was compiled by 21 top-level researchers in the field worldwide, with the support of independent observers. Most significantly, members of this committee include, among others, committee chair Michael Marmot of the University College London, UK and Walter C. Willett of the Harvard School of Public Health, Boston, MA, USA, as well as leading researchers from countries on five continents. Also very important is the participation of two of the principal players in the nutrition study in Latin America, Dr. Juan Rivera of the Mexican National Institute of Public Health and Ricardo Uauy of the Institute of Nutrition and Food Technology, Santiago, Chile.

"Food, Nutrition, Physical Activity and the Prevention of Cancer: A Global Perspective" is part of a 27-year-long initiative, representing the most current and comprehensive analysis of the literature on diet, physical activity and cancer. It builds on the foundation first established by the WCRF global network in 1982 to analyze, interpret and publicize the available scientific evidence to help individuals reduce their risk of developing cancer. Thus, in 2001 the WCRF/AICR set itself a new objective to systematically review and assess the body of evidence on diet, physical activity and cancer and to publish a Second Expert Report. This report is the largest study of its kind and its conclusions are as definitive as the available evidence allows. The initiative has generously made the report available to consult directly at http:// www.dietandcancerreport.org/.

The methodology for this Second Expert Report was based on 20 specially commissioned systematic literature reviews (SLRs). The methods specified in the manual were subject to a testing process for reproducibility. As a result, the manual was modified and it served as the basis for all the literature reviews of food, nutrition, physical activity and the risk of cancer for all relevant cancer sites, as well as of weight gain, overweight and obesity.

Among the principal contributions made by the Second Expert Report, "Food, Nutrition, Physical Activity, and the Prevention of Cancer: A Global Perspective" are its recommendations for public health policies for the prevention of cancer. These recommendations offer not only an individual perspective on the primary prevention of cancer but also have a large influence on public policies for each region.

The report features eight general and two special recommendations: 1) body fat - be as lean as possible, within the normal range of body weight, 2) physical activity as part of daily life, 3) limit consumption of foods and drinks that lead to weight gain, specifically limit energy-dense foods and avoid sugary drinks, 4) eat mostly foods of plant origin, 5) limit intake of red meat and avoid processed meat, 6) limit alcoholic drinks, 7) processing, preparation limit consumption of salt and avoid mouldy cereals (grains) or pulses (legumes), 8) dietary supplements - aim to meet nutritional needs through diet alone, 9) breastfeeding (special recommendation) – mothers to breastfeed and children to be breastfed, and 10) cancer survivors (special recommendation) should follow the recommendations for cancer prevention

From its inception in the early 1980s, the WCRF global network has consistently been a pioneer and a leader in research and education on food, nutrition, physical activity and the prevention of cancer. The network has a special commitment to the creation of the most reliable science-based recommendations and their translation into information on which to base the actions of professionals, communities, families and individuals. The network includes the following organizations:

1. World Cancer Research Fund International (www.wcrf.org) is the association that co-ordinates the global network. The greatest impact can be achieved when allied organizations work together. Founded in 1999 and based in London and the US, WCRF International maximizes the potential of each member organization and strengthens their work. The development of the Second Expert Report is an example of all members of the

- global network coming together to achieve a common goal, in the interests of the network and all its members, and to further their joint mission.
- 2. Founded in 1982, the American Institute for Cancer Research (www.aicr.org) was the first organization to focus exclusively on the link between diet and cancer, and became the first member of the WCRF global network. Located in Washington, DC, AICR is now one of the largest cancer charities in the USA, funding scientific research and offering a wide range of education programs.
- 3. World Cancer Research Fund UK (www.wcrf-uk.org) became the second member of the global network when it was established in 1990. Based in London, it is the UK's leading charity in the field of diet, nutrition and cancer prevention and is responsible for raising awareness of the diet and cancer link among scientists, public health officials, media and the general public.
- 4. Wereld Kanker Onderzoek Fonds (WCRF NL) (www.wcrf. nl) began work in 1994 in the Netherlands as the third member of the global network. Based in Amsterdam, it is the only Dutch charity specializing in cancer prevention by means of food, nutrition, physical activity and associated factors, and has already made a major contribution to the acceptance of this message in the Netherlands.
- 5. World Cancer Research Fund Hong Kong (WCRF HK) (www. wcrf-hk.org) began work in 2002. As traditional Chinese diets have become more western, patterns of cancer incidence are changing. WCRF HK is playing a vital role, especially in working with government health departments in Hong Kong, to disseminate edu-

- cation and research programs on cancer prevention.
- 6. Fonds Mondial de Recherche contre le Cancer (WCRF FR) (www.fmrc.fr), founded in 2004, is the most recent member of the WCRF global network. Based in Paris, WCRF FR is developing its research and education programs, working with likeminded organizations to disseminate the vital information to help people make healthy choices and thus reduce their risk of cancer.

At the WCRF Global Network. our aim is not only to analyze and interpret the latest scientific findings in the field of diet, physical activity and cancer but also to share those findings with researchers, policy makers, health professionals and the general public. Thus, "Food, Nutrition, Physical Activity and Cancer: A Global Perspective," and its companion report, "Policy and Action for Cancer Prevention," are being communicated via launch conferences around the world, including a February 26th, 2009 launch of "Policy and Action for Cancer Prevention" at an international press conference at the Royal Society in London. Press activities also took place in the USA, Hong Kong, China, the Netherlands and France.

In summary, "Food, Nutrition, Physical Activity and the Prevention of Cancer: A Global Perspective" uses a systematic review to document and hierarchize the strength of association between diet and cancer and the recommendations that should invariably form part of population policies, programs and interventions for the prevention of chronic diseases and cancer. Because it provides scientific evidence for decision-making, this report should be widely disseminated in different fields, particularly academic, legislative and public policy.

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