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## Tropical urban nutrition: a workshop report

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The workshop's theme responded to the emerging realization that: (1) in the postwar years, most of the population and community-based studies in international human nutrition in developing countries have focused on rural populations: (2) that the population of the world is rapidly moving toward urbanization, with 80 per cent of the population of Latin America expected to live in urban or periurban areas by the year 2000, and (3) that little effort has been devoted to the study of the nutritional problems of the cities of third world nations.

The participants who attended the workshop represented a mix of professionals and students with widely differing and complementary experiences. Many lived and worked on the Indian Subcontinent representing the cities of Karachi, Dacca, Bombay, Delhi, Calcutta and Colombo. Others came from Jamaica. Still others work in urban communities of Latin America including Mexico City, Guatemala City, Lima, Rio de Janeiro and São Paulo. The workshop was constructed around invited presentations with ample time for discussion of points of interest between and among the participants assembled.

Solomons provided an introductory theme — 'Tropical urban nutrition: a new paradigm in international health', noting the small amount of research that had been devoted to urban populations, and speculating on the possible reasons for this neglect. Important among these is the fact that the poorest of the poor live in the countryside as rural peasants or in tribal groups and the fact that urban slum-dwellers are perceived as difficult to study by virtue of their reputation for aggressive behaviour (unlike the passive rural villagers) and have continuous movement within the cities, making longitudinal follow-up a major logistical concern. The demographic imperative, however, makes it necessary to study urban nutritional problems. It is doubtful if the lessons of the country-side can be extrapolated to the city.

Jay Schensul (Department of Anthropology, University of Connecticut) spoke on 'The central role of women in identifying and solving urban health problems' in which she built a model for the involvement of the mothers of the community in seeking and organizing the means for the

protection of their own health and that of their children. Migration and the participation in the workplace were factors identified that conditioned the nature and success of these strategies. The focus of the presentation by Maarten Immink, an economist from INCAP Guatemala City, was complementary. He spoke of the role of the rural worker and its relation to energy expenditure and the need for dietary energy. He detailed the assumptions and the methodologies employed in the study of this phenomenon. He extrapolated from this rural experience to speculate on what differences and similarities would exist when a serious effort to approach the topic of worker productivity and energy output would be conducted in the city environment.

C. Monteiro, a nutritional epidemiologist from the University of São Paulo, expounded on the topic 'rural urban comparisons in the nutritional status of Brazilians' presenting data that demonstrated essentially no differences in the nutritional status of the population of São Paulo and that of the rural sectors of that huge South American country. Of note was the greater monetary cost of food and services paid by the slum-dwellers as compared to rural individuals or even by the well-to-do. Despite greater 'incomes' the consuming power of the urban poor of Brazil is no better than that of the rural poor. Again focusing on Brazil, Roger Shrimpton of the UNICEF office in São Luiz, Maranhão, Brazil, spoke on the theme 'UNICEF's experience in urban projects'. He cited examples of considerable current investment of that United Nations agency in urban areas and described the form of the UNICEF endeavour in the new campaign for improving infant survival in urban contexts in the developing world.

S. Schensul, Center for International Community Health Studies, University of Connecticut, spoke on approaches to establishing contact and rapport with urban sectors to be involved in research. His topic was 'Methods of public health research in urban poor communities in the developing and developed countries.' He emphasized a strategy that he had used in a Latin community in the USA and in Peruvian and Sri Lankan experience, that of participation with and advocacy of the community under study. Urban residents, wealthy or poor, are more sophisticated and more suspicious than their country cousins. A solid and viable relationship derives from a mutual commitment of community and academy to each other as well as to the issues under study. The importance of a two-way flow of communication was emphasized in this model

Finally, the presentation by co-chairman Dr Gross was theoretical in its impact. He spoke on 'Urbanization and nutrition from a thermodynamic and cybernetic point of view'. His thesis represented the city as a thermodynamic and biological system, not simply as a chaotic deposit of inanimate streets and buildings and congregated people. As a system, it has a hierarchical organization of these elements, with periods of greater and lesser permeability, responding sooner or later to internal pressures and growing instability with reorganization and renewal. This is a continuous, but uneven, process, but at any point one sees the results of self-restructuring underway. This concept of cybernetic system sees the levels of regulation ordered from the level of the individual, through the family or household unit, to the neighbourhood, community and finally the metropolis itself. Thus, the usual reductionist approach of science in general, and nutrition in particular, may fail ultimately to understand nutrition in the city unless it takes into consideration the organic whole that is the metropolitan area.

Discussion throughout the morning was spirited, and led to a mutual appreciation of a deep interest in the field of nutrition in urban areas of tropical countries and to a flavour of diversity among different regions. There was also the sense that larger groups of interested individuals needed to be organized at future international meetings. The pursuit of new knowledge in nutrition in cities of the developing world cannot be achieved by the nutrition profession alone, but only with the assistance of other professionals including urban planners, and urban sociologists, with prior and ongoing experience in the study of cities and their populations. Mechanisms for continued communication among the participants and other interested parties were suggested and developed by a small working group which met with the organizers at the conclusion of the morning session. A small monograph of the proceedings of this Workshop is currently being prepared.