

**“THE I.U.N.S. GAINS FROM PARTICIPATION WITH BRAZILIAN COLLEAGUES’
DEEPENING INTEREST IN URBAN NUTRITION”**

It has been a privilege and an honor for the Committee II/3 of the International Union of Nutritional Sciences on Urbanization and Nutrition to have been a co-sponsor of the Workshop on Micronutrient Status and Urban Life Style in Brazil. It was from professionals who now constitute this Committee that the first strong signals of just how abandoned had been the focus on urban nutrition in developing countries. They also signaled how very complex and dynamic would be the interactions among the various social strata (upper, middle, and lower) and levels of organization (metropolitan area, city, district, neighborhood, household, individual). Subsequently, other seminal thoughts have been mobilized on urban nutrition. Dr. Barry Popkin (also a member of the Committee), in his formulation of the thesis of “nutrition transition,” draws our attention to situations in which both diseases of deficiency and of excess are simultaneously important in the public health scenario. Being sedentary may make one gain excess weight, putting the individual at risk for obesity, hypertension, and diabetes.

One must look at the directions in which micronutrient intakes might go as a consequence of low-income people’s adopting a more sedentary lifestyle. They will eat less food and thus consume fewer micronutrients. The title of a book edited by Klaus Pietrzik, *Modern Lifestyles, Lower Energy Intakes and Micronutrient Status*, makes an important point in its title, itself. If diets maintain the same nutrient density, lower energy requirements will oblige persons to consume lower total amounts of the micronutrients. The final step is to recognize the potential for synergism between a relatively deficient micronutrient intake and exposure to initiating and promoting factors for chronic diseases; being sedentary may make one eat less food and consume fewer nutrients, and - despite that - gain excess weight. The obese individual’s added risks for hypertension, diabetes and osteoarthritis are perhaps exacerbated by relatively lower micronutrient status, thus closing the vicious cycle.

The history of Brazil has been one of notable prevalences of undernutrition. In recent decades, a massive shift in the concentrations of population has occurred, with 73% of its citizens now living in cities. With the possible exception of the slums of Calcutta, the *favelas* of Brazil have become emblematic of urban poverty. Clearly the situations in the North and Northeast cities such as Fortaleza, Belem, Recife, and Salvador might be more precarious, allowing for persistence of both nutritional anemia and other deficiency states of other trace elements and vitamins. The consensus from the data presented at the Workshop was that only iron deficiency, among the various micronutrients, is widely endemic to the point of causing deficiency syndromes within the large cities of the south of Brazil (Sao Paulo; Rio de Janeiro; Brasilia). However, when considerations of other outcomes - such as neural tube defects or elevated circulating

homocysteine - are raised, the cut-off for a desirable folate status may be much higher than when traditional nutritional criteria are applied. Brazil’s diet may make all urban populations vulnerable for these adversities.

Both of us have collaborated with Brazilian institutions and have published papers based on urban populations in Brazil. We see now that a critical mass of investigators have been doing population research in the metropolises of Brazil, and are now beginning to focus on the paradigm of chronic disease. Confronting diet and health relationships prompted many of those in attendance to call for an immediate effort to train Brazilian professionals in the modern nutritional epidemiological methods. In the end, this meeting in Rio may have done more than bring a group of scientists and students together or to bring a collection of manuscripts together; indeed, it may have brought the stimulus to bring a constituency together to carry public health and community nutrition research to the most relevant next level. If this will have been the outcome of this Workshop, then the IUNS Committee II/3 can really be proud of any role it has played in catalyzing this new departure.

Noel W. Solomons, MD

Chair, IUNS Committee II/3

Rainer Gross, PhD

Past Chair, IUNS Committee II/3