

Habitat, Food and Health. Three Components that Need to Meet again to Contribute to a Sustainable Quality of Life

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Luis L Vázquez*

Research Associate, Latin American Center for Agroecological Research (CELIA), Cuba

***Corresponding Author:** Luis L Vázquez, Research associate, Latin American Center for Agroecological Research (CELIA), Cuba.

The original human populations lived in communities, where they coexisted in a feeding system integrated into the natural habitat. With social development, they were regrouped into urban (towns and cities), periurban and rural socioecosystems. These characteristics have contributed to the fact that today's society is made up of population conglomerates in anthropized habitats, where the quality of food and the state of health, which are still valued separately, have become important social problems, including in rural areas, where the influences of modernity have eroded traditional food culture and medication.

In fact, the feeding of human populations has gone from the collection of fresh vegetables in nature, to specialized production in large monoculture extensions, with high mechanization and use of agrochemicals; that is, from natural foods to those manipulated through different technological processes. The latter have become a few basic products, whose negative effects are well known, due to prolonged exposure over many generations to a low diversity of foods and their associated microbiota, which is why nutrition and immunity functions have been reduced naturally in the human microbiota (Vázquez 2022).

Paradoxically, families from periurban communities, sometimes socially marginalized, are more likely to obtain food in small spaces, which provide them with a diversity of seminatural fresh products, because they are obtained with minimal physical interventions, not chemicals and very little manipulation, whose biotic direct interactions contacts with family members influence nutrition and health, facilitating a sustainable quality of life despite living with low income. In fact, these periurban communities constitute coinovation niches that can serve as a reference for designing the food systems of the future.

Habitat and feeding

An estimated 800 million city dwellers worldwide are involved in agriculture-related activities in cities and towns, where they produce food and generate income. A combination of data from national censuses, household surveys and research projects from various agencies indicate that up to two thirds of urban and periurban households are involved in agriculture, through local government, institutional, community and family programs (FAO 2010).

It is interesting to observe that in the members of these families there are contrasts of origin, training and ages, which converge with a permacultural, organic or agroecological perception regarding

family farming, mainly when elderly people of peasant or rural origin live together, who transmit their cultural traditions; also, people who have received training that allows them to understand the differences regarding feeding with products from conventional agriculture.

Carrying out biodiversity management practices in small scale agricultural production systems, with social and environmental advantages in historical, socioeconomic, and geographical contexts in Latin America, has helped to maintain more sustainable agricultural systems than the technified ones (Mougeot 2006). These urban green spaces can provide vegetation structures and biodiversity for ecosystem functions and services, across fragmented habitats and spatial scales (Lin and Fuller 2013).

Although urban agriculture alone will not solve the complex ecological and social problems of cities, given the multiplicity of factors that intervene in it. Agrocultural development in the city constitutes an effective strategy for the management, protection, and recovery of the urban environment from various spheres of action (Moreno 2007). In fact, small scale agricultures are those that produce around 70% of the food worldwide, using only 30% of the productive resources, while industrial agriculture produces 30% of the food in 70% of the surface (ETC 2017).

Small scale food production in urban and periurban areas has become an important component in the design of feeding strategies in large cities of the developing world and is an agricultural production alternative with almost nonexistent negative environmental impacts (Morello 2000), experiences that justify the importance of integrating the habitat with the self management of food that can be considered as seminatural.

In fact, human health is closely related to the environmental factors (Mejías 2013). The different existing models on health determinants contemplate the environment as an important factor to take into account (Evans et al 1996). Considering that the city is the main environment in which life takes place for a large part of the population and that, as has already been seen, it is possible that it will increasingly accommodate a greater number of people, it seems advisable to study how to make these ecosystems healthy spaces (Mejías 2013).

Several studies indicate that contact with nature and the inclusion of green spaces in urban environments promote psychological wellbeing, stress reduction and improve the perception of health of its residents (Largo-Wight 2011).

Given this need, agroecology emerges as a discipline that provides the basic ecological principles on how to study, design, and manage agroecosystems that are both productive and conserving natural resources, and that are also culturally sensitive and socio-economically viable (Altieri 2010).

Food and health

The modern diet is vastly different from that of our Paleolithic ancestors, who had an annual base of some 500 different plants, whereas ours has fewer than 50; they ate their food raw and often fermented, while we preserve, dry and cook our food, processes known to destroy many sensitive nutrients and antioxidants. This may be the reason why we are now seeing an increase in various atopic diseases, infections and so-called Western diseases (Bengmark 2001).

Several leading authoritative reviews have shown that dietary diversity is associated with better health outcomes, and that a monotonous diet, even biofortified, is associated with nutritional deficiencies and high rates of chronic disease (Bélanger and Johns 2008). Another potential positive effect of participation in urban gardens is an improvement in nutritional habits there are studies that indicate that the consumption of fresh fruits and vegetables is higher among horticulturists than among those who are not (Alaimo et al. 2008).

On the other hand, the postharvest rehandling of fresh agricultural products is a factor that can generate risks for healthy eating, mainly when good packaging, transportation and temporary storage practices are not guaranteed and the marketing circuits are long. This situation does not occur in family and community agriculture, where freshly harvested food is used or consumed in a short time, either by the family or community members.

Through social practice, societies have developed experiences and systematized special ways of “know and to know” about health and disease, which have gradually shaped a set of notions and knowledge formed in people’s daily and spontaneous common practice, until arriving at the empirical practice that concentrates and systematizes the experience of the community in a long time. This informal knowledge, of unquestionable cultural value, is considered by some health professionals as something that must be preserved or recovered due to its secular value (Silva 1997).

Sustainable quality of life

The sustainable quality of life, although it is a highly complex socioeconomic challenge for health systems, can be considered as one of the priorities for the survival of human populations. It is a holistic approach to health conservation, which is particularly different in urban, periurban and rural systems, where factors that determine habitat quality, healthy eating and natural medication converge.

People who have a working life in different occupations in society, find a moment to take care of plants and animals, which means a change of work that they do with pleasure, because it has the double function of contributing to the wellbeing of the family and their health, for being doing physical work. This is the integral health of the family, because they coexist in harmony with plants and animals that provide them with different benefits, be they food, nutrition, medicine and pleasure.

Another problem is the social isolation suffered by a significant number of older people, which is an important risk factor for developing other disorders or pathologies (Kharicha et al 2007). It is mentioned that, for example, in Sri Lanka the shade, freshness and diversity of these orchards are considered essential for people’s physical and mental wellbeing (Lok 1998).

Although the current needs of human populations are diverse and of a high magnitude, integrating orchards into urban, periurban, and rural family homes has an invaluable contribution to sustainable quality of life, because it contributes to rediscovering habitat, food, and health.

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