

Ecological Niche Theory: Non-traditional Urban and Rural Human Populations

Ana Paula Branco do Nascimento^{1,2}, Maurício Lamano Ferreira^{1,3} and
Silvia Maria Guerra Molina²

¹*Universidade Nove de Julho, São Paulo, SP, Brasil, Av. Adolfo Pinto, 109, Barra Funda,
01156-050, E-mail: apbnasci@yahoo.com.br*

²*Escola Superior de Agricultura Luiz de Queiroz (ESALQ-USP), Piracicaba, SP, Brasil,
Av. Pádua Dias, 11, CP 9, 13418-900.*

³*Centro de Energia Nuclear na Agricultura (CENA-USP), Piracicaba, SP, Brasil,
Av. Centenário, 303, CP 96, 13416-000.*

KEYWORDS Food Ecological Niche. Economical Class. Human Fitness. Human Ecology.

ABSTRACT Statistical samples from urban and rural non-traditional populations at Piracicaba, SP, Brazil, are studied in terms of human ecological fitness to his own environment. Ecological fitness was measured by Body Mass Index (BMI) with a demographic approach. Niche amplitude was estimated by Levins index. An economic classification was also elaborated. The highest level income families include rare food items and relative narrowing of food niche. Both populations use the same five food items more frequently: rice, beans, meat, bread, and coffee. According to BMI, these foods are not adequate: overweight and obesity mean that both populations are not ecologically fitted to their environment. The three joint approaches (ecological, economical and population nutritional status) have shown to be adequate for human ecological studies on modern ways of life. They also made it clear that economical factors are inconclusive for food choices.