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Traditional Foods Contribute to the Minimum Dietary Diversity Score of Indigenous Woman in Guasaganda, Ecuador

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Abstract

The objective of this study was to document the intake of traditional foods by indigenous women in Guasaganda, central Ecuador, and evaluate the nutrient adequacy of the diet and the nutrient contribution of the consumed traditional foods.

Therefore a two-step cluster design was used. Initially, 18 villages were selected from a list retrieved by the Ecuadorian Institute of National Surveys (INEC) using probability proportionate to size. Then households were selected at random using a list of household identified by GPS points. The intake of traditional foods was recorded during 2 visits using a 24 hour recall (n=260).

The intake of energy, protein, total fat, carbohydrates total, carbohydrates available, dietetic fibre, calcium, iron, zinc, vitamin A and vitamin C was documented. Also, the intake of the 15 most consumed foods was listed. To evaluate the adequacy of the diet the Mean Adequacy Ratio and the Women Dietary Diversity Score were reported.

Summary statistics were used to report the nutrient intake of studied women. To report the Mean Adequacy Ratio, Nutrient Adequacy Ratios of 10 nutrients were calculated. Additionally, the Multiple Source Method was used to reduce interpersonal variability using the two visits .

The results show that the studied diet is adequate for most of the macro- and micronutrients, with a Women Dietary Diversity Score higher than 5 (7) and a Mean Adequacy Ratio close to 1 (0.79). The consumption of traditional foods contributes to 80% of the Recommended Nutrient Intake for protein, 52% for fat and 40% for carbohydrates. The Recommended Nutrient Intake for Vitamin C is fully reached by the consumption of local foods. Plantains, milk, banana, papaya and oranges are the most consumed local foods.

Traditional foods are important contributors of nutrients to indigenous peoples' diets. Promoting the consumption of the former is key of future food-sovereignty interventions.

Keywords: Diet, Ecuador, indigenous people, women

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