Dietary Differences of Ngöbe Living within the Territorio Indigena Guaymi de Coto Brus, Costa Rica: an Indicator for the Development of Chronic Disease

April 16, 2012 · Original Research
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Abstract

This study was developed to evaluate the diet and lifestyle of a Latin American indigenous population, the Ngöbe of southern Costa Rica, and provides a baseline to assess whether diet and nutrition-related diseases are emerging within the Ngöbe population. Anthropometric and lifestyle characteristics of 204 male and female Ngöbes over the age of 18 were assessed through interviews, a recollection of dietary intake, and direct body measurements from October 2010 to April 2011. A subset of respondents was administered glucose intolerance (IGT) tests to assess risk factors for type 2 diabetes. These data indicated that there are differences between the general health status of males and females and between young and old adults. Daily diets show discrepancies in nutritional intake that point to both macro and micronutrient deficiencies. Differences in diet diversity for older and younger respondents and negative correlations of these values with Body Mass Index and blood glucose point toward causes of poor nutrition. More specifically, these data suggest a link between the shift in food behaviors away from the diverse and nutritious traditional diet and the increasing rates of diseases such as type 2 diabetes. Proper surveillance, diagnosis, treatment of nutrition-related diseases, implementation of comprehensive programs that work to improve food access, and providing incentives to practice a more active lifestyle, are of the utmost importance to battle the onset of this disease and reduce future health costs.