

Barriers to Eating Traditional Foods Vary by Age Group in Ecuador With Biodiversity Loss as a Key Issue

Daniela Penafiel, MSc^{1,2,3}; Celine Termote, PhD⁴; Carl Lachat, PhD^{2,5}; Ramon Espinel, PhD¹; Patrick Kolsteren, MD, PhD^{2,5}; Patrick Van Damme, PhD^{3,6}

ABSTRACT

Objective: To document the perceptions of indigenous peoples for the sustainable management of natural resources against malnutrition.

Design: Initially 4 and then 12 interviews were conducted with 4 different age groups.

Setting: Eight rural villages in Guasaganda, central Ecuador, were studied in 2011–2012.

Participants: A total of 75 people (22 children, 18 adolescents, 20 adults, and 15 elders).

Main Outcome Measures: Benefits, severity, susceptibility, barriers, cues to action, and self-efficacy of eating traditional foods.

Analysis: Qualitative content analysis was completed using NVivo software. Initial analysis was inductive, followed by a content analysis directed by the Health Belief Model. Coding was completed independently by 2 researchers and kappa statistics ($\kappa \geq 0.65$) were used to evaluate agreement.

Results: Healthy perceptions toward traditional foods existed and differed by age. Local young people ate traditional foods for their health benefits and good taste; adults cultivated traditional foods that had an economic benefit. Traditional knowledge used for consumption and cultivation of traditional foods was present but needs to be disseminated.

Conclusions and Implications: Nutrition education in schools is needed that supports traditional knowledge in younger groups and prevents dietary changes toward unhealthy eating. Increased production of traditional food is needed to address current economic realities.

Key Words: biodiversity, behavior, eating, Ecuador (*J Nutr Educ Behav.* 2016; ■:1-11.)

Accepted December 2, 2015.

INTRODUCTION

Traditional foods (TFs) are essential to ensure the food security and health of indigenous populations.¹⁻⁴ Changes

in the environment, however, have turned the sustainable provision and use of these TFs into a challenge.⁵ In Ecuador, between 2004 and 2012, there was a national decline of stunt-

ing by 8%; however, the proportion of indigenous stunted children remains high (36%).⁶ At the same time, excess weight increased by 2%, with a prevalence of 25% in indigenous children, 3 times higher than in children of other ethnicities.⁶ The simultaneous burden of stunting and being overweight is also present in indigenous preschool children, adolescents, and adults, as reported in the last national health survey.⁷ Integrating the concerns of indigenous peoples into context-specific interventions against malnutrition is therefore critical for the sustainable management of natural food resources.⁸

Eating behavior studies, principally those using a behavior theory,⁹ can offer valuable information to guide the development of healthy-eating interventions.¹⁰ Theoretical models used to explore and predict eating behaviors are the Health Belief Model (HBM),^{11,12} the Theory of Planned Behavior,¹³ and the Stages of Change Model.¹⁴⁻¹⁶ Factors that contribute to healthy eating in young people include

¹Escuela Superior Politécnica del Litoral, Rural Research Center, Faculty of Mechanical Engineering and Production Sciences, Guayaquil, Ecuador

²Department of Food Safety and Food Quality, Faculty of Bioscience Engineering, Ghent University, Ghent, Belgium

³Department of Plant Production, Faculty of Bioscience Engineering, Ghent University, Ghent, Belgium

⁴Nutrition and Marketing Diversity Programme, Bioversity International, Sub-Saharan Africa Office, Nairobi, Kenya

⁵Nutrition and Child Health Unit, Institute of Tropical Medicine, Antwerp, Belgium

⁶Faculty of Tropical AgriSciences, Czech University of Life Sciences, Prague, Czech Republic

Conflict of Interest Disclosure: The authors' conflict of interest disclosures can be found online with this article on www.jneb.org.

Address for correspondence: Daniela Penafiel, MSc, Department of Plant Production, Faculty of Bioscience Engineering, Ghent University, Coupure Links 653, Ghent 9000, Belgium; Phone: 0032 9 264 60 89; Fax: 0032 264 6241; E-mail: doloresdaniela.penafielanchundia@ugent.be

©2016 Society for Nutrition Education and Behavior. Published by Elsevier, Inc. All rights reserved.

<http://dx.doi.org/10.1016/j.jneb.2015.12.003>

positive attitudes, education linked to action/maintenance behavior, and perceived control behavior, yet there are many barriers that still inhibit fruit and vegetable consumption.^{17,18} In adults, intentions to eat healthfully as well as descriptive norms are predictors of healthy eating behavior.^{19,20} These determinants could be psychosocial (ie, intrinsic to the individual) or environmental factors (ie, those surrounding the individual). However, knowledge about the determinants of eating behavior has emerged primarily from high-income countries, and therefore it cannot be extrapolated to the unique eating culture of indigenous peoples.

Traditional diets are based on about 200 foods and contribute to approximately 50% of the total energy intake.²¹ The choice of TFs is influenced by factors that are specific to the population under observation.^{2,21} Promoting the consumption of TFs has been used in participatory approaches that aim to promote sustainable and healthy eating habits and increase food security.^{22,23} These studies found that cooking classes, planting material, agricultural incentives,²³ affordable indigenous crops, and school meals based on indigenous crops²² motivated indigenous people of different ages to cultivate, prepare, and eat TFs.

Currently, the food habits of indigenous communities are changing.²⁴ The specific causes for increasing weight status have not yet been identified and therefore are difficult to target.⁶ To guide interventions that promote the sustainable consumption of TFs, the authors conducted a comprehensive behavioral study to identify key determinants of eating behavior. This study evaluated what indigenous people in Guasaganda (Ecuador) perceived to be the barriers to eating a variety of TFs, how changes in the local natural environment were affecting the latter, and why knowledge about TF consumption was not broadly transferred.

METHODOLOGY

Participants

Respondents were indigenous people of the rural parish of Guasaganda, which is situated in the highlands of Cotopaxi (between 250 and 1000 m

above sea level), central Ecuador, and has about 3,900 inhabitants. This location was selected owing to its high food biodiversity, which includes about 85 plant²⁵ and 20 animal²⁶ food species. In addition, people living in rural areas, such as the highlands, are the most affected by both stunting and excess weight gain, and remain poorly served by nutritional programs.⁶

Study Design

This study used group interviews to document opinions and perceived needs about eating TFs in indigenous children (6–9 years), adolescents (11–18 years), adults (19–56 years), and elders (56–91 years). **Table 1** shows the age ranges of each interviewed group. The interview process was conducted by the main researcher (DP), who followed general guidelines for interviews targeting indigenous and young participants.^{27–30} Interviews were done in a roundtable format, using a digital voice recorder (Model LFH 0667 DNS; Philips, Nederland, Eindhoven, 2010) and a microphone. Rather than a simple deductive phase, group discussions were conducted in 2 consecutive parts; the first inductive phase guided the selection of the theory to be used in the second.³¹

First phase (November, 2011). This phase aimed to identify the best theo-

retical model to be used throughout the study⁹ to describe and explain methodically why indigenous people eat a variety of TF. One group discussion per age group was conducted using open-ended questions (eg, Why do you eat local foods?) to maximize unbiased comments regarding eating behavior.

Second phase (December, 2011 and January, 2012). Interviews were conducted until saturation was attained (3 interviews/age group), and used semi-structured questions (**Table 2**) that were framed after the HBM.¹² The latter conceptualizes that a behavior is influenced by a combination of the perceived susceptibility to and severity of an illness (in this case, malnutrition), the desire to avoid that specific illness, and the belief that an action (which has perceived benefits and fewer barriers) would help to avoid or relieve the illness. According to this theory, perceptions are subjective ideas linked to behavior and are the force that guides the action. Also, stimuli (cues to action) and demographic variables such as age and ethnicity exist that influence the decision to engage in that action.¹²

Recruitment

Because the determinants of eating behavior are different across age

Table 1. Age Ranges of Participants (n = 75) for Each Interview Phase

Group	Age Range (Min-Max)	No. Participants per Interview	
		Phase 1	Phase 2
Children	7–8	5	
	7–9		5
	6–9		6
	7–8		6
Adolescents	15–16	5	
	11–17		4
	18–19		4
	11–12		5
Adults	21–43	6	
	27–53		5
	30–56		4
	19–35		5
Elders	56–62	4	
	60–91		5
	58–67		3
	60–86		3

Note: Participants' age ranges differ from group and therefore these overlap.

Download English Version:

<https://daneshyari.com/en/article/10314694>

Download Persian Version:

<https://daneshyari.com/article/10314694>

[Daneshyari.com](https://daneshyari.com)