ELCSA: The Latin American & Caribbean Household Food Security Measurement Scale

Rafael Pérez-Escamilla, PhD
Professor of Epidemiology & Public Health
Yale University, School of Public Health, USA

McGill Conference on Global Food Security

October 20, 2010

Food Security exists when...

"...people, at all times, have physical, social and economic access to sufficient, safe and nutritious food which meets their dietary needs and food preferences for an active and healthy life"

1996 World Food Summit, Rome

Experience-Based Scales Theoretical Framework

Food Security **Worried about Food Access Dietary Quality Coping Strategies Adults Cut Food Consumption** Children Cut Food Consumption

Radimer et al

The Brazilian household food security measurement project



Desenvolvimento Social Ministério do Desenvolvimento Social e Combate à Fome













Eixos, programas e ações da estratégia Fome Zero

Fortalecimento da Agricultura Familiar

Programa Nacional Agricultura Familiar Seguro da Agricultura Familiar Garantia Safra Programa Aquisição de alimentos (PAA)

Acesso ao alimento

BOLSA FAMILIA

Alimentação escolar (PNAE)

Alimentação do trabalhador (PAT)

Desoneração de impostos da Cesta Básica

Construção de cisternas no semi-árido

Restaurantes Populares / Bancos de Alimentos

Agricultura Urbana / Hortas Comunitárias

Cestas de Alimentos para grupos específicos

Alimentação Saudável / Promoção de hábitos saudáveis

Distribuição de Vitamina A e de Ferro

Alimentação e nutrição dos povos indígenas

Educação alimentar e nutricional / SISVAN

FOME ZERO

Geração de renda

Qualificação social e profissional Economia Solidária e inclusão produtiva Consórcios SAN (CONSADs) Organização produtiva - PRODUZIR Desenvolvimento de cooperativas de catadores Micro-crédito produtivo orientado

Articulação, mobilização controle social

Casa das Famílias (CRAS/PAIF)

Educação cidadã e mobilização social

Capacitação de agentes públicos

Mutirões e doações

Parcerias com empresas e entidades

Conselhos de controle social



Table 1. Food insecurity questionnaire items. English back-translation from Portuguese				
item	During the last 3 months			
1	were you worried that you would run out of food before being able to buy or receive more food?			
2	did you run out of food before having money to buy more?			
3	did you run out of money to have a healthy and varied diet?			
4	did you have to consume just a few foods because you ran out of money?			
5 ²	were you unable to offer your children/adolescents a healthy and varied diet because you didn't have enough money?			
6 ²	did any of the children/adolescents didn't eat enough because there wasn't enough money to buy food?			
7	did you or any adult in your household ever reduced the size of meals or skipped meals because there wasn't enough money to buy food?			

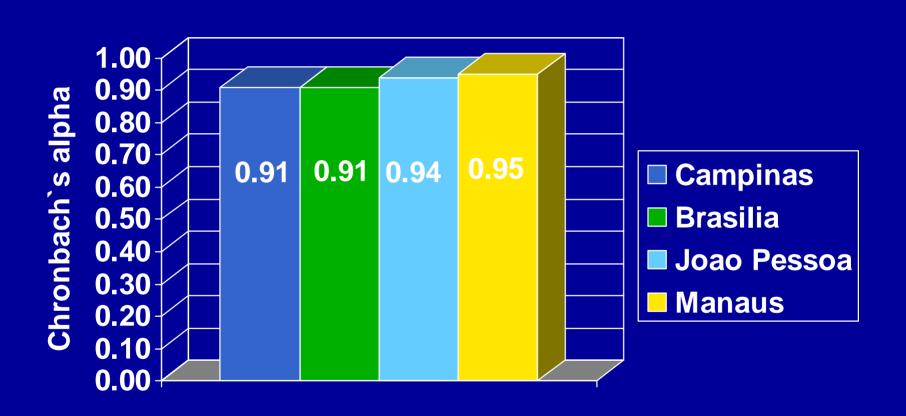
8	did you ever eat less than what you thought you should because there wasn't enough money to buy food?
9	did you ever feel hungry but didn't eat because there wasn't enough money to buy food?
10	did you lose weight because you didn't have enough money to buy food?
11	did you or any other adult in your household ever went without eating for a whole day or just had one meal in a whole day because there wasn't enough money to buy food?
12	did you ever reduced the size of meals of your children/ adolescents because there wasn't enough money to buy food?
13	did your children/adolescents ever had to skip a meal because there wasn't enough money to buy food?
14	were your children/adolescents ever hungry but you just couldn't buy more food?
15	did your children remained without food for a whole day because there wasn't enough money to buy food?

Perez-Escamilla R, Segall-Correa AM, Kurdian Maranha L, Sampaio MF, Marin-Leon L, Panigassi G. An adapted version of the U.S. Department of Agriculture Food Insecurity module is a valid tool for assessing household food insecurity in Campinas, Brazil. *J Nutr*. 2004:134:1923-8.

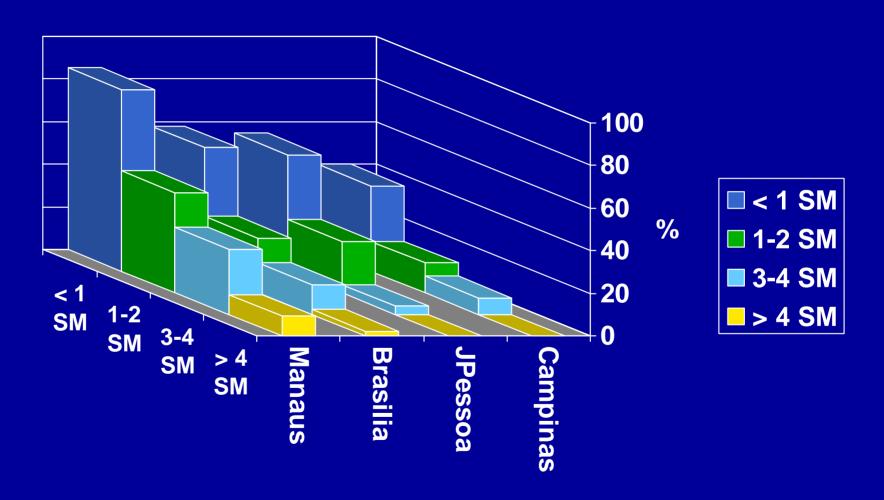
BRASIL



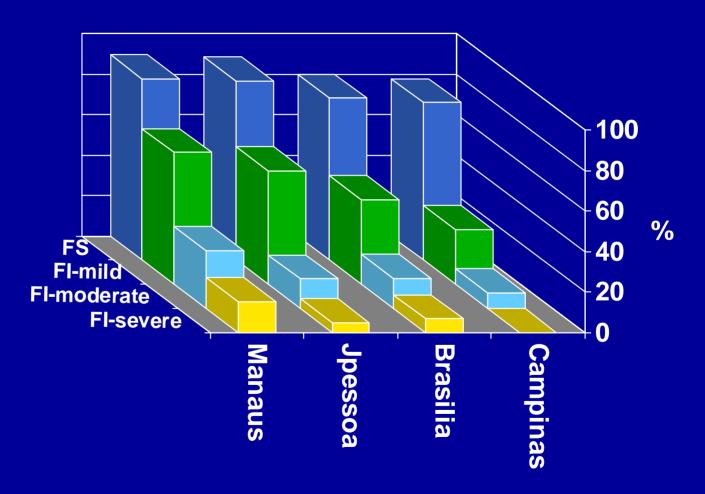
Internal Consistency



Severe Food Insecurity by Household Income



Daily Fruit Consumption by Food (In)security Level



Sensitivity to Food Insecurity

	Campinas	Brasilia	JPessoa	Manaus
Fruits	•	•	•	•
Veggies	•	•	•	•
Meat	•	•	•	•
Milk	•	•	•	•
Cereals	0	0	•	0
Beans	O	0	•	0
Eggs	O	O	•	0

Validation of the USDA food insecurity module for rural areas in the state of São Paulo, Brazil: Findings from the qualitative phase

Maria de Fátima Archanjo Sampaio, 1,2 Anne W. Kepple, 1 Julieta T. A. Oliveira, 2 Ana Maria Segall Corrêa, 1 Sonia

M.P.P. Bergamasco² and Rafael Pérez-Escamilla³

- 1. Departamento de Medicina Preventiva e Social Faculdade de Ciências Médicas UNICAMP
- 2. Departamento de Planejamento e Desenvolvimento Rural Sustentável Faculdade de Engenharia Agrícola UNICAMP
- 3. University of Connecticut UCONN

Conclusions

- Results replicated in rural areas in Amazonia, Sao Paulo, Goias, Mato Grosso and Joao Pessoa with similar results.
- Strong scientific and political support for incorporation of module into Brazilian national surveys
 - Health and nutrition
 - Socio-economic

EBIA Applications

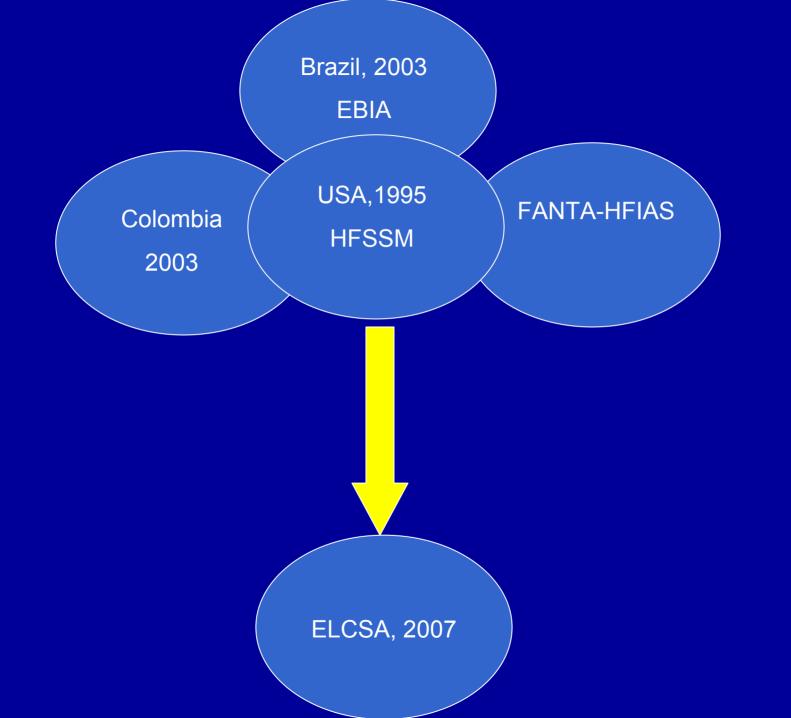
- PNAD- 2004
- PNDS- 2006
- PNAD- 2009
- Explosion of FI research in Brazil
 - Nutrition indicators
 - Health outcomes
 - Mental Health
 - Domestic violence



Why and how ELCSA came to be?

Why?

- Excellent psychometric behavior and high predictive and convergence validity of experiential FI scales
- Need to standardize measurement in LAC Region
 - Monitoring and evaluation
 - Academic research
 - Decision making
- Enthusiasm from academicians, FAO, PAHO, and governments

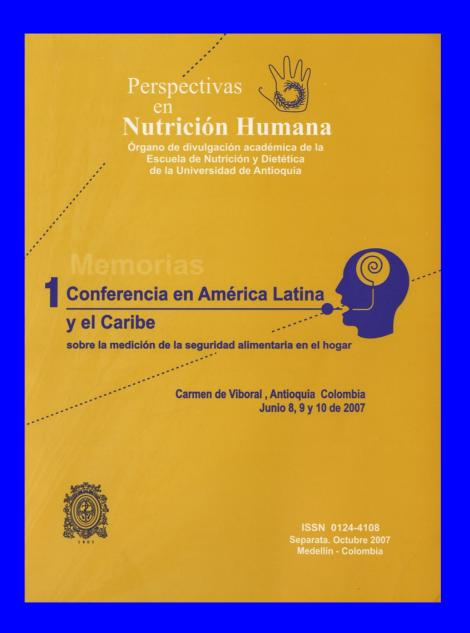


ELCSA Scientific Steering Committee

- Ana Maria Segall-Correa, University of Campinas, Brazil
- Martha Cecilia Alvarez Uribe, University of Antioquia, Colombia
- Hugo Melgar-Quiñonez, Ohio State
- Rafael Pérez-Escamilla, Yale University

SLAN Florianopolis-November 2006



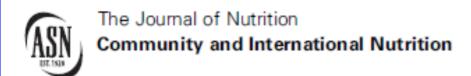


http://revinut.udea.edu.co/separata/pdf/separata1.pdf

ELCSA

Reference: Pérez-Escamilla R, Melgar-Quiñonez H, Nord M, Alvarez Uribe MC, Segall-Correa AM. Escala Latinoamericana y Caribeña de Seguridad Alimentaria (ELCSA) [Latinamerican and Caribbean Food Security Scale]. Perspectivas en Nutrición Humana (Colombia) 2007 (supplement):117-134

http://revinut.udea.edu.co/separata/pdf/separata1.pdf



Household Food Insecurity Is Associated with Childhood Malaria in Rural Haiti^{1,2}

Rafael Pérez-Escamilla, 3,6 * Michael Dessalines, Mousson Finnigan, Helena Pachón, Amber Hromi-Fiedler, and Nishang Gupta

³University of Connecticut, Storrs, CT 06269; ⁴Organization for the Rehabilitation of the Environment, Camp Perrin, Haiti; ⁵Centro Internacional de Agricultura Tropical, Cali, Colombia; and ⁶Office of Community Health, Yale School of Public Health, New Haven, CT 06510

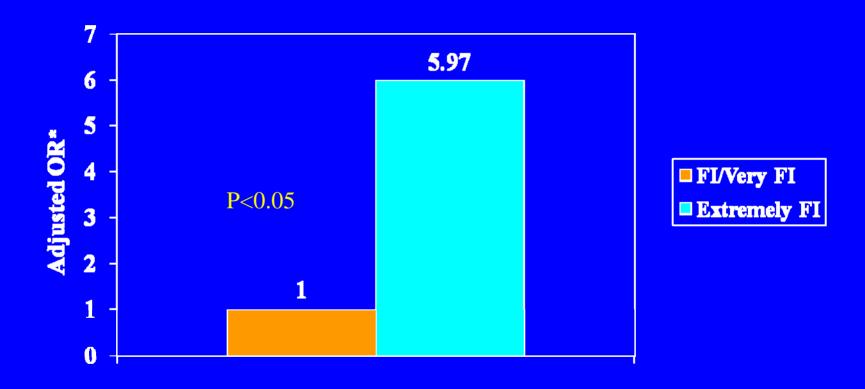


TABLE 1 ELCSA (n = 153)

Item	% Yes
Questions referring to respondent and/or other adults in the household: During the last 3 mo	
Were you worried about running out of food?	72.5
Did your home run out of food at any time?	88.9
Was your home unable to eat at any time the kind of foods that make you healthy?	71.9
Did you or anybody in your home usually have to eat the same foods almost every day?	64.7
Was there any day that you or any other adult in your home skipped a meal because of lack of food?	60.1
Did any adult in your home eat less food than what they needed because there wasn't enough food?	70.6
Was there any day when you or any other adult in your home felt hungry but did not eat because there wasn't enough food?	58.8
Was there any day when you or any other adult in your home didn't eat for a whole day or just ate once during the day because there wasn't enough food?	63.4
Did you do things that you would have preferred not to do, such as begging or sending children to work, to get food?	13.1
Questions referring to children in the household: During the last 3 mo	
Were you unable to provide the children in your home with the kinds of foods they need to be healthy?	56.2
Did any children in your home usually have to eat the same foods almost every day?	61.4
Did any child in your home eat less food than what s/he needed because there wasn't enough food?	77.8
Did you have to serve less food to any child because there wasn't enough food?	77.8
Was there any day when any child in your home felt hungry but could not be fed because there wasn't enough food?	56.2
Did any child in your home go to bed hungry on any day because of lack of food?	49.0
Was there any day when any child in your home didn't eat for a whole day or just ate once during the day because there wasn't enough food?	54.9

Husehold FI & Childhood Malaria: Haiti*

Pérez-Escamilla et al. J Nutr. (2009)



^{*}Logistic regression adjusting for poverty indicators and anthropometry

ELCSA data collection completed

Haití-2007

Guanajuato-2007

Colombia-2008

México-2008

México-2008

Mexico 2010

Nicaragua-2008

Pérez-Escamilla

Parás/Pérez-Escamilla

Alvarez-Uribe/Melgar-Quiñonez

Parás/Pérez-Escamilla

CONEVAL-MCS/ENIGH

CONEVAL-MCS/ENIGH

Caldera/Pachón

ELCSA data collection completed

- Uruguay
- Ecuador
- Bolivia
- Central America

El Salvador

Guatemala

Honduras

Nicaragua

Perez-Escamilla, Paras/LAPOP

Melgar-Quiñonez/FAO

PRESANCA

ELCSA Applications planning stage

Brazil? Segall-Correa

Paraguay FAO

Albania FAO



Taller Regional: Armonización de la Escala Latinoamericana y Caribeña de Seguridad Alimentaria — ELCSA

Para la Seguridad Alimentaria



FAO-ELCSA Harmonization workshop

INSP, Cuernavaca 7-10 Sept, 2010



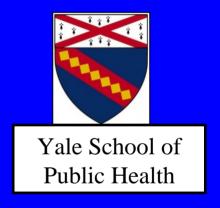
COLLABORATING INSTITUTIONS













Questions?

