



O88 DEVELOPMENT AND CROSS-CULTURAL ADAPTATION OF PERSUASIVE MULTIMEDIA MESSAGES TO PROMOTE EATING BEHAVIOR CHANGE IN AMAZONIAN SCHOOLCHILDREN

Mrs. Ana Carolina Hovadick¹, Ms Valéria Oliveira¹, MSc Caroline Zani¹, Professor Marly Cardoso¹

¹Department of Nutrition, School of Public Health, University of Sao Paulo, Sao Paulo, Brazil, Sao Paulo, Brazil.

Introduction: In addition to historical rates of stunting and micronutrient deficiencies, children in the Brazilian Amazon are also facing a high prevalence of overweight triggered by a significant increase in food insecurity, which has affected local dietary patterns. **Objectives:** To develop and culturally adapt persuasive multimedia messages to be sent to parents of Amazonian schoolchildren in a Randomized Controlled Trial to promote changes in eating behavior. **Methods:** To better understand the study population dietary practices, we conducted a phone-based interview with guardians and analyzed results from Food Frequency Questionnaires previously applied to target children. Also, to write the messages, six behavior change techniques and five persuasive writing strategies were applied. The messages were planned following the guidelines of the Food Guide for the Brazilian Population. For cultural adaptation, 11 health care professionals with experience in the Amazon region were invited to answer a 5-point Likert Scale formulary evaluating messages' three domains: cultural accordance, understanding and relevance. A text box for comments was also provided. To assess the probability of chance of agreement occurring by experts, Modified Cohen Kappa (k^*) was calculated for each domain of each message. Messages with k^* lower than 0.74 were reformulated and resubmitted for a new evaluation. Also, Scale-Content Validity Index Average (S-CVI-Ave) was calculated to assess the mean content validity of the message set domains. Excellent content validity should have a S-CVI-Ave >0.90. **Results:** Overall, 55 text messages were drafted. On the first round of expert's evaluation, eight messages reach a $k^*=0.72$. They were reformulated according to experts' suggestions and resubmitted for a new evaluation. Then, all messages obtained $k^*>0.74$. The S-CVI-Ave for each domain was: cultural accordance =0.97, understanding = 0.96 and relevance =0.97. **Conclusion:** The message set has excellent agreement on cultural accordance, understanding and relevance for the target population according to the experts' evaluation. We expect that this study contributes with the provision of reliable and attractive nutritional content to improve Amazon children's eating habits.

Keywords: childhood obesity, mhealth, eating behavior.

O89 IMPACTO DE UN ALIMENTO FUNCIONAL COMPLEMENTARIO CON PROBIÓTICOS (*Lactiplantibacillus plantarum* CECT9435) OBTENIDOS DE ALIMENTOS AUTÓCTONOS LATINOAMERICANOS, EN LA PREVENCIÓN DE LA DIARREA INFANTIL EN GUATEMALA

Dr. Manolo Mazariegos Fernández¹

¹INCAP, Guatemala City, Guatemala.

Antecedentes: La diarrea infantil es problema de salud pública en países en desarrollo, con impacto en desnutrición crónica infantil. Dentro del abordaje de la diarrea aguda, se ha propuesto el uso de probióticos. El Programa Iberoamericano de Ciencia y Tecnología para el Desarrollo (CYTED), a través del Proyecto Pro-Infant liderado desde Instituto de Productos Lácteos de Asturias del Consejo Superior de Investigaciones Científicas (IPLA-CSIC), España, seleccionaron el probiótico *Lactiplantibacillus plantarum* CECT9435, aislado de alimentos fermentados autóctonos latinoamericanos. **Objetivo:** Evaluación de la eficacia del probiótico *Lactiplantibacillus plantarum* CECT9435 en reducir prevalencia de diarrea (PD) en niños de 24-48 meses. **Método:** Población: 124 niños, ambulatorios aparentemente sanos, rurales de Chimaltenango (Varituc y Choatalun, San Martín Jilotepeque), altiplano central de Guatemala. Estudio aleatorizado por conglomerados, controlado, doble ciego, con dos tratamientos, probiótico/placebo, de 26 semanas en tres fases: basal (0-4), intervención (5-22) y residual (23-26). **Intervención:** entrega domiciliar diaria de alimento (Incaparina® con leche, lista para consumir), con probiótico o placebo. **Protocolo** aprobado por Comité Nacional de Ética/MSPAS. **Evaluaciones:** Encuesta demográfica, salud/nutrición en cada fase; monitoreo diario de morbilidad por diarrea y adherencia. **Resultados:** Fase de intervención: el conglomerado con probiótico mostró reducción significativa de PD, respecto a la basal, de 9.6% a 1.6% ($p<0.05$); conglomerado control, sin cambio. Además, la PD final fue significativamente menor en conglomerado con probiótico en comparación al control (20.9% vs 1.6%, $p<0.001$). **Conclusión:** El primer estudio en población infantil ambulatoria rural en Latinoamérica con *Lactiplantibacillus plantarum* CECT9435, mostró su potencial en reducir PD. El estudio evidencia el rol importante de la ciencia y la tecnología en la búsqueda de soluciones a los problemas de salud pública.

Palabras clave: Alimento funcional, *Lactiplantibacillus plantarum* CECT9435, diarrea, población infantil.

