

## SHORT COMMUNICATION

# Nutrition and probiotics in the care of older adults in Latin America

## Nutrición y probióticos en el cuidado del adulto mayor en Latinoamericana

Josiany Maria Barboza<sup>1</sup>, Karina Bustamente Galarza<sup>1</sup>

<sup>1</sup>Universidad Abierta Interamericana, Facultad de Medicina y Ciencias de la Salud, Carrera de Medicina. Buenos Aires, Argentina.

Cite as: Barboza JM, Bustamente Galarza K. Nutrition and probiotics in the care of older adults in Latin America. South Health and Policy. 2024; 3:143. <https://doi.org/10.56294/shp2024143>

Submitted: 07-08-2023

Revised: 17-10-2023

Accepted: 05-04-2024

Published: 06-04-2024

Editor: Dr. Telmo Raúl Aveiro-Róbalo 

### ABSTRACT

Population ageing has posed a growing challenge for healthcare systems, especially in Latin America and Argentina. In this context, there has been an increase in the prevalence of chronic diseases and gastrointestinal disorders in older adults. Dietary interventions and the use of probiotics have gained relevance as strategies to improve intestinal health and quality of life in this group. Age-related physiological changes affecting gastrointestinal function were identified, and the role of a diet rich in fibre and certain probiotic strains in improving symptoms such as constipation and irritable bowel syndrome was highlighted. Health policies in Argentina began to incorporate these strategies, although challenges related to professional training and the need for more local scientific evidence persisted.

**Keywords:** Ageing; Gut Health; Probiotics; Nutrition; Public Policy.

### RESUMEN

El envejecimiento poblacional representó un desafío creciente para los sistemas de salud, especialmente en América Latina y en Argentina. En este contexto, se observó un incremento en la prevalencia de enfermedades crónicas y trastornos gastrointestinales en adultos mayores. Las intervenciones dietéticas y el uso de probióticos cobraron relevancia como estrategias para mejorar la salud intestinal y la calidad de vida de este grupo. Se identificaron cambios fisiológicos relacionados con la edad que afectaron la función gastrointestinal, y se destacó el papel de una dieta rica en fibra y de ciertas cepas probióticas en la mejora de síntomas como el estreñimiento y el síndrome del intestino irritable. Las políticas sanitarias en Argentina comenzaron a incorporar estas estrategias, aunque persistieron desafíos relacionados con la capacitación profesional y la necesidad de mayor evidencia científica local.

**Palabras clave:** Envejecimiento; Salud Intestinal; Probióticos; Nutrición; Políticas Públicas.

### BACKGROUND

The aging of the population is a global phenomenon that poses significant challenges for health systems.<sup>(1)</sup> In Latin America, and particularly in Argentina, there has been an increase in the proportion of older adults, requiring special attention to chronic diseases and gastrointestinal disorders that affect this age group.<sup>(2)</sup> Among the strategies to improve gastrointestinal health in older adults, dietary interventions and probiotics have gained relevance due to their potential to improve quality of life and reduce the burden on health systems.<sup>(3)</sup>

With aging, physiological changes affect gastrointestinal function, including a decrease in intestinal motility, alterations in digestive enzyme secretion, and changes in the gut microbiota composition.<sup>(4)</sup> These factors contribute to a higher prevalence of disorders such as constipation, dyspepsia, and irritable bowel syndrome in older adults. Dietary modification and probiotic supplementation have been proposed to mitigate these effects

and promote a healthy gut microbiota.<sup>(1,5)</sup>

Evidence suggests that increasing dietary fiber intake can improve intestinal motility and relieve constipation in older adults. Studies have shown that diets rich in soluble fiber, such as psyllium, can increase bowel movement frequency and improve stool consistency.<sup>(7,8,9)</sup> In addition, a balanced diet that includes fruits, vegetables, and whole grains contributes to a diverse and healthy gut microbiota.<sup>(1)</sup>

Probiotics, defined as live microorganisms that confer health benefits when administered in adequate amounts, have been shown to improve certain gastrointestinal disorders.<sup>(10)</sup> Strains such as *Lactobacillus rhamnosus* GG and *Bifidobacterium* have been studied for their ability to reduce intestinal inflammation and improve symptoms of irritable bowel syndrome and ulcerative colitis. However, the effectiveness of probiotics may vary depending on the strain used and the patient's individual characteristics.<sup>(11)</sup>

In Argentina, health policies have begun to recognize the importance of nutrition and the use of probiotics in the care of older adults. Programs such as the National Nutrition Plan and the Comprehensive Care Program for Older Adults include components related to promoting healthy diets and research on effective nutritional interventions.<sup>(12)</sup> However, challenges remain in implementing these policies, including the need for greater professional training and the integration of evidence-based strategies into primary health care.

In the Latin American context, countries such as Mexico and Brazil have developed guidelines and consensus statements on using probiotics in gastroenterology, highlighting the need for solid evidence to support their use in clinical practice.<sup>(13,14)</sup> These initiatives reflect a growing recognition of the importance of nutrition and the gut microbiota in the health of older adults.<sup>(15)</sup>

### **Recommendations for the implementation of effective strategies**

- Development of evidence-based clinical guidelines: It is essential to develop clinical guidelines that integrate scientific evidence on dietary interventions and probiotics, adapted to the local context and the needs of the older adult population.
- Training of health professionals: Continuing education for physicians, nutritionists, and other health professionals in managing gastrointestinal disorders in older adults is essential for effectively implementing nutritional strategies.
- Promotion of local research: Encouraging clinical and epidemiological studies in the local population will generate specific evidence to support nutritional interventions and the use of probiotics in older adults.
- Integration into primary health care: Incorporating nutritional strategies and probiotics into primary care will facilitate a preventive and holistic approach to gastrointestinal health management in older adults.

Dietary intervention and the use of probiotics represent promising approaches for managing gastrointestinal disorders in older adults. Scientific evidence supports their effectiveness in improving gut health and quality of life in this age group. However, health policies, professional training, and local research need to be strengthened to ensure the effective implementation of these strategies in Argentina and Latin America. A comprehensive approach that combines the promotion of healthy diets, probiotic supplementation, and patient-centered care will contribute significantly to the well-being of older adults in the region.

### **BIBLIOGRAPHICAL REFERENCES**

1. Organización Mundial de la Salud. Envejecimiento y salud [Internet]. Ginebra: OMS; 2022 [citado 2024 Jul 13]. Disponible en: <http://www.who.int/es/news-room/fact-sheets/detail/envejecimiento-y-salud>
2. Anand R, Song Y, Garg S, Girotra M, Sinha A, Sivaraman A, et al. Effect of aging on the composition of fecal microbiota in donors for FMT and its impact on clinical outcomes. *Dig Dis Sci.* 2017;62(4):1027-36. doi:10.1007/s10620-017-4449-6
3. Ford AC, Moayyedi P, Lacy BE, Lembo AJ, Saito YA, Schiller L, et al. American College of Gastroenterology monograph on the management of irritable bowel syndrome and chronic idiopathic constipation. *Am J Gastroenterol.* 2014;109(S1). doi:10.1038/ajg.2014.187
4. Ford AC, Talley NJ, Spiegel BM, Foxx-Orenstein AE, Schiller L, Quigley EM, et al. Effect of fibre, antispasmodics, and peppermint oil in the treatment of irritable bowel syndrome: systematic review and meta-analysis. *BMJ.* 2008;337
5. Kaminski M, Skonieczna-Zydecka K, Loniewski I, Koulaouzidis A, Marlicz W. Are probiotics useful in the treatment of chronic idiopathic constipation in adults? A review of existing systematic reviews, meta-analyses,

and recommendations. Prz Gastroenterol. 2020;15(2):103-18

6. Goetze O, Fruehauf H, Pohl D, Giarrè M, Rochat F, Ornstein K, et al. Effect of a prebiotic mixture on intestinal comfort and general wellbeing in health. Br J Nutr. 2008;100(5):1077-85
7. Wen Y, Li J, Long Q, Yue CC, He B, Tang XG. The efficacy and safety of probiotics for patients with constipation-predominant irritable bowel syndrome: a systematic review and meta-analysis based on seventeen randomized controlled trials. Int J Surg. 2020;79:111-9. doi:10.1016/j.ijsu.2020.04.063
8. Sánchez-Rodríguez JR, Escare-Oviedo CA, Castro-Olivares VE, Robles-Molina CR, Vergara-Martínez MI, Jara-Castillo CT. Polifarmacia en adulto mayor, impacto en su calidad de vida. Revisión de literatura. Rev Salud Pública. 2019;21(2):271-7. Disponible en: <https://doi.org/10.15446/rsap.V21n2.76678>
9. Aragon G, Graham DB, Borum ML, Doman DB. Probiotic therapy for irritable bowel syndrome. Gastroenterol Hepatol (N Y). 2010;6(1):39-44
10. Silk DB, Davis A, Vulevic J, Tzortzis G, Gibson GR. Clinical trial: the effects of a trans-galactooligosaccharide prebiotic on faecal microbiota and symptoms in irritable bowel syndrome. Aliment Pharmacol Ther. 2009;29(5):508-18
11. Chang L. Current and emerging therapies in irritable bowel syndrome: from pathophysiology to treatment. Expert Rev Gastroenterol Hepatol. 2010;4(1):87-98
12. Quigley EM. Gut microbiota and the role of probiotics in therapy. Curr Opin Pharmacol. 2011;11(6):593-603
13. Sinn DH, Song JH, Kim HJ, Lee JH, Son HJ, Chang DK, et al. Therapeutic effect of *Lactobacillus acidophilus*-SDC 2012, 2013 in patients with irritable bowel syndrome. Dig Dis Sci. 2008;53(10):2714-8
14. Spiegel BM. Questioning the bacterial overgrowth hypothesis of irritable bowel syndrome: an epidemiologic and evolutionary perspective. Clin Gastroenterol Hepatol. 2011;9(6):461-9
15. Min YW, Park SU, Jang YS, Kim YH, Rhee PL, Ko SH, et al. Effect of composite yogurt enriched with acacia fiber and *Bifidobacterium lactis* on irritable bowel syndrome: a randomized controlled trial. World J Gastroenterol. 2012;18(33):4563-9.

## FUNDING

None.

## CONFLICT OF INTEREST

None.

## AUTHOR CONTRIBUTION

*Conceptualization:* Josiany Maria Barboza, Karina Bustamente Galarza.

*Data curation:* Josiany Maria Barboza, Karina Bustamente Galarza.

*Formal analysis:* Josiany Maria Barboza, Karina Bustamente Galarza.

*Research:* Josiany Maria Barboza, Karina Bustamente Galarza.

*Methodology:* Josiany Maria Barboza, Karina Bustamente Galarza.

*Project management:* Josiany Maria Barboza, Karina Bustamente Galarza.

*Resources:* Josiany Maria Barboza, Karina Bustamente Galarza.

*Software:* Josiany Maria Barboza, Karina Bustamente Galarza.

*Supervision:* Josiany Maria Barboza, Karina Bustamente Galarza.

*Validation:* Josiany Maria Barboza, Karina Bustamente Galarza.

*Visualization:* Josiany Maria Barboza, Karina Bustamente Galarza.

*Writing - original draft:* Josiany Maria Barboza, Karina Bustamente Galarza.

*Writing - review and editing:* Josiany Maria Barboza, Karina Bustamente Galarza.