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Corresponding Author:

Jitijiroj Ittichaicharoen, Department of Oral Biology and Oral Diagnostic Sciences, Faculty of Dentistry, Chiang Mai University, Chiang Mai, 50200, Thailand
E-mail: jitijiroj.itti@cmu.ac.th

Effect of *Lactobacillus-Bifidobacterium* Probiotic Yogurt on Oral *Candida* Levels in Older Adults

Pinyo Kerdpolwattana^{1,2}, Thararat Chitov^{3,4} , Chatsri Kuansuwan⁵, Surawut Pongsiriwet⁵ , Kanyarat Korwanich⁶ , Jitijiroj Ittichaicharoen⁵ 

¹Division of Geriatric Dentistry, Faculty of Dentistry, Chiang Mai University, Thailand

²Doi Saket Hospital, Thailand

³Department of Biology, Faculty of Science, Chiang Mai University, Thailand

⁴Natural Extracts and Innovative Products for Alternative Healthcare Research Group, Chiang Mai University, Thailand

⁵Department of Oral Biology and Oral Diagnostic Sciences, Faculty of Dentistry, Chiang Mai University, Thailand

⁶Department of Community Dentistry, Faculty of Dentistry, Chiang Mai University, Thailand

Abstract

Objectives: *Lactobacillus* and *Bifidobacterium* are increasingly incorporated in yogurt starters to enhance yogurts' probiotic properties. Since many *Lactobacillus-Bifidobacterium* probiotic strains are recognized for their antifungal activities against oral *Candida* species. The aim of this study was to investigate the effects of daily administering of yogurt containing *Lactobacillus acidophilus*, *Lactobacillus paracasei*, and *Bifidobacterium lactis* on the levels of oral *Candida* and other factors relating to oral candidiasis.

Methods: The experiment was conducted using a double-blind randomized placebo-controlled study in which 60 older adults were allocated into two groups. After baseline examination and randomization, the control group was given the plain yogurt, while the experimental group was given the probiotic yogurt, twice daily. Saliva samples were collected at baseline and after the administration period of two weeks.

Results: The experimental group demonstrated a significant reduction in oral *Candida* counts ($p < 0.05$), accompanied by significant increases in unstimulated salivary flow rate and salivary pH ($p < 0.05$).

Conclusions: The short-term consumption of yogurt containing *Lactobacillus acidophilus*, *Lactobacillus paracasei*, and *Bifidobacterium lactis* may provide an alternative method for the prevention of oral candidiasis and xerostomia.

Keywords: *Candida*, older adults, oral candidiasis, probiotics, yogurt