

Frequency of *Lactobacillus* Strains in Foods of East Azerbaijan Cities, Iran

Bonyadi M (PhD)

Immunology research center of Medicine
Faculty, Drug applied research center,
Tabriz University of Medical Sciences,
Iran

Ostad Rahimi M (PhD)

Professor of Nutrition Sciences, Tabriz
University of Medical Sciences

Nahai M (PhD)

Professor of Microbiology, Faculty
Medicine, Tabriz University of Medical
Iran ,Sciences

Akbari Dibavar M (Msc)

Microbiology, Faculty of Medicine, Tabriz
University of Medical Sciences

Mirzaee F (Msc)

Physiology, Faculty of Medicine, Tabriz
University of Medical Sciences

Corresponding Author: Bonyadi M

E-mail: Bonyadir@tbzmed.ac.ir

Abstract

Background and objectives: Probiotics are nonpathogenic and beneficial micro-organisms, usually made from strains of the genera *Lactobacillus* and *Bifidobacterium*. The probiotics are known as dietary supplements with beneficial effects on consumer health. In some countries, sufficient quantities and specific compound of *Lactobacillus* and *Bifidobacterium* are used for therapeutic purposes and food industry. The aim of this study was to evaluate the frequency of *Lactobacillus* and *Lactococcus* strains in food stuffs cities in Eastern Azerbaijan, Iran.

Material and Methods: In this cross-sectional study 100 Samples were obtained from dairy products, yogurt, grains, cheese, saffron flower, fresh pinto beans, red beans, and fresh green beans. All samples were incubated in MRS Agar cultures at 42, 37, and 25°C for two days, and then bacteria were isolated, concentrated, and lyophilized. Finally the differential recognition was performed in deferential cultures.

Results: Of 100 food samples, the following *Lactobacillus* and *Lactococcus* are isolated. *Lactobacillus delbrueki*, *L.bulgaris*, *L.salivarius*, *L .casei* are 10, 10, 8, 5 and 3 cases respectively. *Lactococcus thermophilus* the most frequent *Lactococcus* where isolated in this study.

Conclusion: Based on the results of this study, many kinds of probiotics especially *Lactobacillus* strains are presented in foods. It is recommended that these probiotics be isolated and proliferated and used in industry and also for therapeutic purposes.

Key words: probiotics, *Lactobacillus*, food.