Determination the number of Lactic Acid Bacteria and Yeasts in the combination of traditional yoghurts of villages of East-Azerbaijan- province

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Abstract

Background and objectives: Yoghurt is a milky, fermented and semi-solid production that is produced by Microorganism starters. These microorganisms are known as lactic acid bacteria, which are responsible for the formation of the tissue, scent and flavor of yoghurt. Their presence in digestive system makes people healthy. The aim of this study was determination of the number of Lactic Acid Bacteria and Yeasts in the combination of traditional yoghurts of villages of East-Azerbaijan- province.

Material and Methods: In this study, we gathered 90 samples of traditional yoghurt from the villages of East- Azerbaijan province and transferred, in a standard condition, to the laboratory of pharmaceutical-applied research center of Tabriz medical science university. We used 10^{-6}dilution to measure the number of lactobacilli in MRS Agar medium and 10^{-3} dilution to count the Yeasts in Saborodextros Agar medium. Then, the grown colony has been enumerated and the kind of bacteria was specified via biochemistry tests.

Results: The mean number of lactobacilli in 1 ml of traditional yoghurts is about 62×10^6 CFU/mL and the number of Yeasts 41×10^4 CFU/mL. Delbrueckii and plantarum are the most common Lactobacilli, and Saccharomyces is with the highest frequency.

Conclusion: According to findings of this research, there is considerable amount of microorganisms such as useful bacteria, in the traditional yoghurts of villages of East- Azerbaijan province. They have been used as a starter and probiotic in Dairy and milk factories to produce good production in the future.

Key words: Lactic acid bacteria, East-Azerbaijan, Yoghurt, Yeasts