

# Bacterial Counts and Species Identification of Lactobacilli in Some Fermented Milk in Taiwan

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## ABSTRACT

The identification and enumeration of Lactobacilli in probiotic fermented milk in Taiwan was performed by PCR-based method. The numbers and types of Lactobacillus species in fermented milk were also compared with the information stated on the product labels. We collected 8 brands of fermented milk, they are recognized as health food by the Department of Health, cultured in both of the selective medium. One medium used was AMRSA (HCl-Acidified de Man Rogosa & Sharpe Agar) and the other was LAMVAB (Lactobacillus anaerobic MRS agar with vancomycin and bromocresol green). Monocolony was selected as sample of PCR preparation for probiotic Lactobacillus species identification after cultivation from mediums. Lactobacillus casei, Lactobacillus rhamnosus and Lactobacillus delbrueckii subsp. lactis were identified from fermented milk. However, none of stated probiotics were isolated from three brands of fermented milk. No colony was observed in both selective mediums in one brand of fermented milk. As to numbers of colonies cultured from both mediums, only 2 of 24 samples from 8 brands were higher than the stated probiotic numbers. The rest of samples were lower than stated probiotic numbers. This is the first survey in Taiwan since the Health Food Control Act published in 1999.

Keywords : Lactobacilli ; Probiotics ; Fermented milk

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