

# Effect of Culture Time on Cell Concentration in Home-made Fermented Milk Inoculated with Commercial AB Lactic Acid Bacteria

吳柔幸、張耀南

E-mail: 9417960@mail.dyu.edu.tw

## ABSTRACT

In this study, the cell growth concentration of the fermented milk inoculated with the strain of AB lactic acid bacteria from various (A, B, C) brands of commercial drinking yoghurts in a home-made (DIY) fermentor was investigated. It was found that AB lactic acid bacteria in the fermented milk with initial 8% NFNS (non-fat milk solid) was recovered at a level of over 7 log CFU/mL, where the cell counts was 7.42, 8.28 and 8.53 log CFU/mL for A, B and C brand, respectively, after 8 h of cultivation in a home-made fermentor. The pH of the fermented milk declined and the titratable acidity rose during the cultivation period. After 12 h of cultivation the fermented milks were then held at 4 °C cold room for a period of 14 days. Population of the AB lactic acid bacteria reduced at the 4th, 8th, 2nd day of storage time for A, B and C brand, respectively, while the pH of the fermented milks little decreased during the storage period and the titratable acidity reached a maximum after 10 day. The growth test of coliform and E. coli for the fermented milk in the home-made fermentor was not detectable. It will be good and safe for consumers to drink the fermented milk made in the DIY drinking-yoghurt fermentor at home.

Keywords : AB lactic acid yoghurt ; culture (storage) time ; total cell ; concentration ; acidity

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