Optimization of Indigenous Fermented Milk Drink by Industrial Method Using Maximum Amount of Fresh Whey

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Addition of 8%, 12% and 16% skim milk to fresh whey was studied to prepare indigenous fermented milk by industrial method. G_3 mix mesophil starter culture and Y_{709} , V_2 thermo Phil starter cultures were used and fermentation was performed with 2% starter cultures. The effect of the essence, the amount of skim milk added to whey, the percentage of salt added to fermented milk beverage and the presence or absence of gas was studied in the samples.

Results show that carbonated samples containing spearmint or pennyroyal essence with 1% salt and 16% skim milk is the best desirable among others. The desirability of the samples containing Y_{709} starter culture at the above levels is comparable to the extent of the market samples and samples containing V_2 and V_3 mix starter cultures were lower desirability respectively. The amount of total solid content of samples containing V_3 and V_4 and V_{709} starter cultures are 6.98%, 6.37%, 6.06% respectively as compare with the market sample of 5.02% is obviously higher. The fermented milk beverage produced form whey being cheep, desirable quality, easily competitive with market samples and can be produced industrial.

Key words: Fermented milk beverage, Starter, Whey, Skim milk, Indigenous

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