Physicochemical characteristics and sensory evaluation of fermented sausage supplemented: with Jerusalem artichoke and milk permeate powder.

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Abstract:

Fermented sausage was manufactured with adding Jerusalem artichoke (JAP), as a prebiotic, and milk permeate powder, as a milk sugar, and fermented with 5% of probiotic lactic acid bacteria. Sausage samples were produced in six treatments, A10, P10, B10, A40, P40 and B40, fermented by Lb. acidophilus (A), Lb. paracasei (P) or Bifido. Bifidum (B) both of them was mixed with Str. thermophilus in 1:1 and 10% or 40% of JAP. . Control (C) was represented by mixing sausage with Str. thermophilus (5%) without adding JAP. Titratable acidity%, pH, TVB-N, and TBA were determined at intervals of (fresh, 7, 14, 21, and 28 days). Moisture, protein, fat and ash were analyzed at intervals of (fresh, 14, and 28 days). Sensory evaluation was performed at the end of ripening period. Results showed that acidity, fat, protein, ash, TVB-N, and TBA increased during ripening period. However, pH values and moisture content decreased throughout ripening, but the pH values started to increase at the end of ripening period. Moreover, TBA and TVB-N contents were higher in C sample than the other samples. No significant differences were found in sensory evaluation among all treatments, except P10, which had a higher total sensory score.