

Development of a cinnamon flavoured butter

R.M.C.P. Rathnayaka, P.M.H.D. Pathiraje and O.D.A.N. Perera*

Department of Food Science and Technology, Faculty of Livestock Fisheries and Nutrition, Wayamba University of Sri Lanka, Makandura, Gonawila (NWP), Sri Lanka

Novel food products made from functionally valuable commodities have gained an increasing consumer demand recently. Cinnamon (*Cinnamomum verum*) has gained recognition as a health promoting agent with the proven properties of reducing cardiovascular diseases, blood glucose control, reducing body fat and reducing risk of colonic cancer. The health beneficial effects of cinnamon derive primarily from bioactive ingredients such as antioxidants, polyphenols and flavonoids. With the existence of those properties, the aim of the present study was to develop butter sample made from cream with addition of Cinnamon bark powder. Cream at 36% fat content was churned at 8, 10, 15 °C temperatures to select the suitable churning temperature. Sensory evaluation was done using a ranking test for overall quality of butter which was churned at different temperatures by panel of 20 tasters. The butter which was churned at 10 °C showed the highest acceptance. The fat, pH, acidity, moisture, total solids, solid-non-fat and free fatty acid value were analyzed after production of butter. The high fat content ($85.30 \pm 0.16\%$) with high total solid content ($87.03 \pm 0.15\%$) was yielded at 10 °C temperature. The four levels 1, 3, 5, and 7% (w/w) of cinnamon powder were added to the butter prepared at 10 °C. Sensory evaluation was done using a ranking test for overall quality of cinnamon added butter to a panel of 20 tasters. It was found that up to 5% (w/w) cinnamon powder can be incorporated in the formulation of butter without comprising the sensory attributes. Significantly ($p < 0.05$) high solid-non-fat content ($3.25 \pm 0.45\%$) and fat content ($82.37 \pm 0.29\%$) were present in cinnamon powder added butter. The cinnamon powder added butter showed a low level of peroxide value than normal butter. The cinnamon powder added butter sample showed high total antioxidant value (35.9%). Cinnamon powder added butter will be a new trend in world because it can be placed as a functional food.

Key words: Butter, cinnamon, churning temperature, storage stability

*aannpp2003@yahoo.co.uk