Physicochemical, microbial and sensory properties of milk, butter and garlic butter

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Abstract

A study on the physicochemical, microbial load and sensory properties of milk, butter with or without garlic was carried out using fresh milk from white Fulani cow for eight weeks of the lactation. The milk used was milked manually by the Fulanis early in the morning. Fat content was highest in milk (4.13±0.16) and least in garlic butter (2.50±0.46). There was no observed significant (P>0.05) difference in the protein, lactose, total solid, ash and pH of the milk, butter and garlic butter. Lactose content of the products differs with milk having highest (2.82%) while butter had the least (1.26%). Fat content in milk, butter and garlic butter varies in value from 4.13%, 3.25% and 2.50% respectively. Total solid obtained in this study was 9.22% for milk, butter 8.21% and garlic butter 7.69%. Ash content of milk and butter were 0.72% and 0.64% respectively. Garlic had a significant effect on all the microorganisms present in the butter. The taste panel ratings for butter and garlic butter shows that the taste, aroma, flavour and acceptability of ordinary butter were more preferred by the panelist.

Keywords: Physicochemical, Microbial, Sensory, Milk, Butter, Garlic butter