

## **Evaluation of Ground Flaxseed Supplementation to Lactating Buffaloes Ration versus Control Milk Samples for milk and Stirred Yoghurt Production**

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**KEYWORDS** Buffalo Milk. Flaxseed. Fatty Acid Profile. Stirred Yoghurt. Microbiology Analysis. Sensory Evaluation

**ABSTRACT** Flaxseed contains high level of  $\alpha$ -linolenic acid (omega- 3 fatty acid) which essential for humans and necessary to add to milk products to increase their health effects. To evaluate the acceptability of supplementing flaxseed to dairy products, fourteen lactating buffaloes were divided into two experimental groups. The first group used as control animals was fed ration without flaxseed (C) and the treated animals was fed rations supplemented with 433 g flaxseed/head/day (T<sub>1</sub>). Flaxseed directly added to part of the control milk to design the third milk sample (T<sub>2</sub>). All samples were used for stirred yoghurt production and their chemical composition, fatty acid profile, sensory evaluation and microbiological contents were evaluated. Flaxseed supplementation to ration increased fat content of donated milk. The results showed that supplementing control milk (T<sub>2</sub>) with ground flaxseed significantly increased the total concentrations of CLA and omega-3 fatty acids.