

## **Abstract**

Shampoo is an industry product made of soaps or detergents, used for hair care, in some cases with additional beneficial properties. On the other hand, goat milk yogurt contains interesting technological properties which, once added to a basic shampoo formulation might present favorable results. The aim of this research is to assess the physico-chemical characteristics, packaging and effectiveness of shampoo made with different concentrations of goat's milk yogurt. When four shampoo samples containing 0 (control), 10, 20 and 30% goat yogurt respectively were manufactured and assessed on days 0, 30 and 60. The physico-chemical tests performed are: surface tension, percentage of solids, pH, formation and stability of the foam, dispersion of dirt, wetting time, colour, viscosity and conditioning test. When comparing the results, it was found that the addition of goat milk yogurt in the formulation does not affect the conditioning performance of the shampoo, all samples have a pH of 5-7 until day 30, have low viscosity and percentage of solids, but the fluid is pseudoplastic in nature, have good cleaning characteristics, wetting time and surface tension, and the foam formation is adequate but unstable when compared with other brands of shampoo. It is concluded that the best formulation of the 4 treatments evaluated is the sample containing 10% goat milk yogurt because it maintains most of the quality characteristics up to day 60 of evaluation.

**Keywords:** shampoo, goat milk yogurt, physicochemical characteristics, conditioning.

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