

## THE COMPARISON OF COMPOSITION, PHYSICO-CHEMICAL PROPERTIES OF COW AND CAPRINE MILK

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### ABSTRACT

India's livestock sector is one of the largest in the world. India's milk production is estimated to have 176.35 million tonnes (provisional) during in 2017-18. The goat is one of the main contributor of dairy and it produces about more than 2 per cent of the world's total annual milk supply. India has witnessed an increasing trend of goat milk production with a growth rate of 3.82 percent during 2015 – 16.

The composition of goat milk differ slightly to cow milk with fat, protein, lactose and mineral content but their physico-chemical properties are various. The caprine milk has lesser ( $p > 0.05$ ) specific gravity, viscosity, freezing point & pH but higher ( $p < 0.05$ ) surface tension, refractive index, electrical conductivity & acidity which was found to be statistically insignificant compared to cow milk. The certain processing parameters of caprine milk of HCT and RCT were statistically lower ( $p > 0.05$ ) compared to cow milk.

Goat milk is highly nutritious, health benefits and widely consumed in many parts of the world. Therefore, awareness about the advantage of consumption of goat milk should be popularized in India so that production and utilization of goat milk could be enhanced.

**KEYWORDS:** Composition, Physico-Chemical Properties, HCT & RCT, Caprine & Cow Milk

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