# ABSTRACT

To meet out the growing consumer demand for cosmetic preparations that incorporate biologically active and natural ingredients, the goal of this study was to create a new body wash formulation which combines the surfactant qualities provided by sodium lauryl sarcosinate with the therapeutic effects of anti-spasmodic essential oils. Sodium lauryl sarcosinate acts as a gentle washing surfactant that is commonly utilized in personal care products. Essential oils with antispasmodic properties, on the other hand, have the potential to relieve muscle spasms, alleviate tension, and induce relaxation. The study involved selection of a variety of anti-spasmodic essential oils based on their established therapeutic effects. Each of these essential oils were carefully mixed at varied quantities into the body wash formulation to identify the best blend for maximum anti-spasmodic activity. To ensure the quality of the product and shelf-life, physicochemical characterization was performed, including pH, foamability, and stability testing. Sensory assessments and customer preference surveys were conducted to evaluate the acceptance and overall user experience of the prepared body wash. These evaluations considered elements like as smell, appearance, and cleansing performance to design a product that not only gives physical advantages but also improves the bathing experience of the customers. Finally, the study aimed to create a body wash formulation that provides the dual benefits of effective cleansing via sodium lauryl sarcosinate and the relaxing, antispasmodic effects of essential oils, focusing on the growing demand for multifunctional and wellness-oriented personal care products.