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## Formulation and Evaluation of Turmeric Cream

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Abstract: The present study aims to formulate and evaluate a topical cream containing turmeric (Curcuma longa) extract, renowned for its natural anti-inflammatory, antimicrobial, and antioxidant properties. The cream was developed using an oil-in-water emulsion system, incorporating turmeric extract as the active ingredient along with suitable excipients such as emulsifying wax, stearic acid, cetostearyl alcohol, glycerin, and preservatives. The formulation process involved melting and mixing of oil and aqueous phases at controlled temperatures, followed by homogenization and gradual cooling to obtain a stable emulsion. The prepared turmeric cream was evaluated for its physicochemical properties including appearance, pH, viscosity, spreadability, and washability. Stability studies were conducted under various storage conditions to assess the formulation's resistance to physical changes. Additionally, biological evaluation involved antimicrobial testing against common skin pathogens and a patch test to assess dermal irritation potential. The results indicated that the formulated cream exhibited satisfactory physicochemical characteristics, good stability, significant antimicrobial activity, and was non-irritant to the skin. These findings suggest that turmeric-based cream can serve as an effective herbal topical preparation for skin care applications.

Keywords: Turmeric cream, Curcuma longa, Herbal formulation, Topical preparation, Antiinflammatory, Antimicrobial activity, Antioxidant



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