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Formulation and Evaluation of Herbal Dental Gel by using Moringa Leaves

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Abstract: This study aimed to formulate and Evaluate a dental gel utilizing the anti- Inflammatory properties of Moringa Oleifera leaves extract. The gel was Prepared using a simple method, Incorporating various concentrations of Moringa extract to determine the Optimal formulation. Evaluation Parameters included pH, viscosity, Spreadability, and in vitro release Kinetics, Additionally, the anti- Inflammatory activity of the formulated Gel was assessed using an in vitro Model. Results demonstrated that the Formulated dental gel exhibited Desirable physical properties, with Optimal antiir-mmatory activity Observed at specific concentrations of Moringa extract. This study highlights the potential of Moringa oleifera as a natural source for developing effective dental care products with antiinflammatory roperties Phytomedicine refers to the use of naturaly Derived products to cure and mitigate Human conditions. Natural products have The advantages of causing minimum side Effects, being biocompatible, available, and Economical, with a wide array of biological Activities. Reports have described the use of Natural products with antimicrobial and Anti-inflammatory properties to treat oral Conditions and promote wound healing. Moringa oleifera, known as the "drumstick" or "horseradish" tree, is Believed to have medicinal properties Regarding a range of medical conditions. Focuses on the use of Moringa extracts in The management of oral conditions, Including oral infections, inflammatory Conditions, the remineraliz action of hard Tissues, oral wound healing, and tissue Regeneration, drawing from both in vitro And in vivo studies which indicate that the Potential of Moringa extracts in supporting Dentin- pulp regeneration after caries or Trauma is worthy of more careful Consideration.

Keywords: Tooth care, Plant-based therapeutics, Bioactive compounds, Oral healthcare, Dental care



