

Review on Formulation and Evaluation of Sunscreen

Harshada M. Sanap¹, Bhakti Y. Sabale¹, Chaitali R. Dhale², Saurabh S. Pol³, Ajay D. More⁴

Students, JBVP'S Vidya Niketan College of Pharmacy, Lakhewadi, Pune, Maharashtra, India^{1,3}

Assoc. Professor, JBVP'S Vidya Niketan College of Pharmacy, Lakhewadi, Pune, Maharashtra, India^{2,4}

Corresponding author: Bhakti Y Sable

bhaktisabale123@gmail.com

Abstract: Sunscreen plays a crucial role in protecting the skin from harmful ultraviolet (UV) radiation, which can lead to sunburn, skin damage, and an increased risk of skin cancer. This article explores the various factors influencing sunscreen efficacy, including the significance of SPF (Sun Protection Factor) and the active ingredients used in formulations. SPF calculation is detailed, emphasizing the importance of applying the recommended amount of sunscreen to achieve the desired level of protection. Additionally, the article examines the health risks associated with certain chemical filters, such as oxybenzone and avobenzone, which have raised concerns regarding their systemic absorption and potential hormonal effects. Conversely, the benefits of sunscreen in preventing skin cancer and premature aging are highlighted. It also includes key safety concerns, environmental effects & application of sunscreen. The article also addresses the need for ongoing research to evaluate the safety and efficacy of both chemical and physical sunscreen ingredients, ultimately advocating for informed sunscreen use to maximize skin protection while minimizing health risks.

Keywords: Sunscreen, SPF, UV, technology