

# Healing with Frangipani: An Integrative Review of Phytochemicals and Therapeutic Benefits of *Plumeria alba*

Saumya Singh and Dr. Mala Trivedi

Amity Institute of Biotechnology, Amity University, Lucknow Campus, Lucknow

Corresponding author Email: - [mtrivedi@lko.amity.edu](mailto:mtrivedi@lko.amity.edu)

**Abstract:** *Plumeria alba*, commonly known as white frangipani, has captivated cultures for centuries with its enchanting fragrance and remarkable healing properties. This integrative review embarks on a journey through the botanical wonderland of plants, exploring its rich phytochemical composition and unveiling the myriad therapeutic benefits it offers. Drawing from a tapestry of traditional wisdom and modern scientific inquiry, this review reveals the multifaceted nature of *Plumeria alba*'s healing potential. Traditional healers across diverse cultures have revered white frangipani for its versatile applications in treating wounds, soothing skin maladies, alleviating respiratory discomfort, and easing the burden of pain. Their insights, passed down through generations, provide a timeless foundation for understanding the plant's medicinal prowess. In tandem with traditional knowledge, contemporary research endeavors have illuminated the intricate web of phytochemicals woven within *Plumeria alba*'s petals and leaves. Alkaloids, flavonoids, terpenoids, and phenolic compounds dance harmoniously, bestowing upon the plant a treasure trove of pharmacological activities. From antioxidant fortification to anti-inflammatory resilience, from antimicrobial vigilance to analgesic relief, it emerges as a botanical powerhouse of healing. As we navigate through this verdant landscape of discovery, it becomes evident that white frangipani holds promise as a beacon of holistic health and wellness. Its phytochemical symphony orchestrates a chorus of therapeutic benefits, beckoning us to explore its potential applications in modern healthcare. By marrying ancient wisdom with contemporary science, we unlock the secrets of plant's healing alchemy and pave the way for its integration into evidence-based treatments. This stands as a testament to the enduring allure of *Plumeria alba* and as a guidepost for researchers, healthcare professionals, and nature enthusiasts alike. Together, let us embark on a voyage of healing with frangipani, embracing the beauty and bounty of nature's pharmacy.

**Keywords:** *Plumeria alba*, phytochemicals, traditional medicine, antioxidant, anti-inflammatory, antimicrobial, holistic health

