

***Azadirachta indica* A.Juss.**

Family: Meliaceae

Bengali/tribal name: Neem

English name: Indian lilac, Margosa, Neem

Azadirachta indica, commonly known as Neem, is a versatile medicinal plant with a long history of use in traditional medicine systems, particularly in Ayurveda, Unani, and traditional African medicine. Almost every part of the neem tree, including the leaves, bark, seeds, and oil, has medicinal properties. Here are some of its well-documented medicinal uses:



1. **Antimicrobial Properties:** Neem possesses potent antimicrobial properties due to the presence of compounds like nimbin, nimbidin, and azadirachtin. It is effective against a wide range of bacteria, viruses, and fungi, making it valuable in the treatment of various infections, including skin infections, bacterial and viral diseases, and fungal infections like athlete's foot and ringworm.
2. **Anti-inflammatory Effects:** Neem exhibits significant anti-inflammatory properties, which can help reduce inflammation and alleviate symptoms associated with inflammatory conditions such as arthritis, rheumatism, and skin disorders like eczema and psoriasis. Neem extracts may be applied topically or consumed internally to mitigate inflammation.
3. **Antioxidant Activity:** Neem is rich in antioxidants, such as flavonoids, triterpenoids, and vitamin C, which help neutralize harmful free radicals in the body. Antioxidants play a crucial role in protecting cells from oxidative damage, preventing chronic diseases, and promoting overall health and longevity.
4. **Wound Healing:** Neem has been traditionally used to promote wound healing and tissue regeneration. Its antimicrobial and anti-inflammatory properties help prevent infection, reduce inflammation, and accelerate

the healing process when applied topically to wounds, cuts, burns, and abrasions.

5. **Dental Care:** *Neem is prized for its oral health benefits and is a common ingredient in oral care products like toothpaste and mouthwash. Its antimicrobial properties help combat oral bacteria, prevent cavities, gum disease, and bad breath, and promote overall dental hygiene.*
6. **Immune Support:** *Neem supports immune function and helps strengthen the body's natural defense mechanisms against infections and diseases. Regular consumption of neem or its extracts may boost immunity, enhance resistance to pathogens, and improve overall health and well-being.*
7. **Antidiabetic Effects:** *Some studies suggest that neem may help regulate blood sugar levels and improve insulin sensitivity in individuals with diabetes. Neem extracts may help lower elevated blood glucose levels and prevent diabetic complications by supporting pancreatic function and glucose metabolism.*
8. **Antiparasitic Properties:** *Neem extracts have been used traditionally to expel intestinal parasites and worms from the body. They may also be effective against other parasites, such as head lice and scabies mites, when applied topically.*
9. **Skin Care:** *Neem is a popular ingredient in skincare products due to its ability to cleanse, purify, and rejuvenate the skin. It helps treat various skin conditions, including acne, blackheads, blemishes, and signs of aging, by balancing oil production, unclogging pores, and promoting healthy skin renewal.*
10. **Hair Care:** *Neem oil is used in hair care products for its nourishing and conditioning properties. It helps strengthen hair, promote hair growth, and relieve scalp conditions like dandruff, itching, and inflammation.*

Despite its numerous health benefits, neem should be used cautiously, especially in pregnant or breastfeeding women and individuals with known allergies to neem or related plants. It's advisable to consult with a healthcare professional before using neem for medicinal purposes, particularly if you have any underlying health conditions or are taking medications. Additionally, neem oil should be diluted before topical application to avoid skin irritation or allergic reactions.