

## Medicinal Herbs in Modern Medicine: Efficacy and Applications of Turmeric, Ginger, Garlic and Aloe Vera

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## DESCRIPTION

For millennia, people have utilized medicinal herbs as a natural way to promote health and healing. Both traditional and modern medicine benefit greatly from their medicinal qualities, which include lowering inflammation and preventing infections. Interest in these plants is increasing as scientific studies confirm their efficacy, and many are being used in modern therapies for a range of illnesses. The therapeutic properties of some of the most widely used medicinal plants, such as aloe vera, ginger, garlic, and turmeric, have long been known [1,2].

One of the most well-known and frequently used medicinal plants is turmeric. Curcumin, its main ingredient, is well-known for its strong anti-inflammatory and antioxidant qualities. According to studies, curcumin can lessen joint pain and inflammation, which helps ease the symptoms of arthritis. Additionally, by enhancing bile synthesis and encouraging the liver's removal of toxins, turmeric has been shown to enhance digestive health. Because curcumin has been demonstrated to stop the growth of cancer cells and slow the spread of tumors, it also shows promise in the prevention of cancer. Beyond its culinary use, turmeric's adaptability makes it a common ingredient in herbal medicine worldwide [3,4].

Another potent medicinal herb, ginger, is widely used to cure a number of ailments, especially those pertaining to the digestive system. Gingerol, its main ingredient, is well-known for its capacity to reduce nausea and vomiting, making it a useful treatment for motion sickness, morning sickness during pregnancy, and chemotherapy-induced nausea. In diseases like rheumatoid arthritis and osteoarthritis, ginger is also used to lessen discomfort and inflammation. Ginger has also been demonstrated to strengthen the immune system, increase circulation, and alleviate respiratory conditions including colds and asthma [5,6].

Another amazing plant with a long history of culinary and therapeutic applications is garlic. Allicin, a sulfur molecule with antibacterial, antifungal, and antiviral activities, is responsible for its medicinal qualities. Because it has been demonstrated to

lower blood pressure, cholesterol, and enhance circulation, garlic is most frequently utilized for its cardiovascular effects. Because it helps strengthen the immune system and aid in the body's defense against infections, it is also regarded as a natural treatment for colds and the flu. Garlic is also thought to have anti-cancer qualities; some research suggests that it may lower the risk of developing stomach, colon, and prostate cancers, among other malignancies [7,8].

Another renowned medical plant is aloe vera, which is especially well-liked for its skincare applications. Polysaccharides and anthraquinones, two substances included in its gel, provide calming and restorative properties for burns, wounds, and skin irritations. Aloe vera is often taken internally to promote digestive health and as a natural laxative. It can ease bowel movements, lessen intestinal inflammation, and treat ailments like Irritable Bowel Syndrome (IBS) and acid reflux. Aloe vera has also been demonstrated to help general skin health, encourage hydration, and strengthen the immune system. Native to North America, echinacea is a flowering plant that is frequently used to treat and prevent respiratory illnesses, including the common cold [9,10].

## CONCLUSION

Alkylamides and glycoproteins, two of the active ingredients in echinacea, are thought to boost immunity and aid the body in fending off viral infections. To lessen the intensity and length of cold symptoms, echinacea is frequently used as tinctures, teas, or capsules. Additionally, it is believed to have anti-inflammatory qualities, which could help reduce the pain and swelling brought on by diseases like arthritis. Another herb with several medicinal uses is peppermint. Because menthol gives it a cooling sensation, it works well for headaches, muscle aches, and digestive problems. When applied topically to the forehead and temples, peppermint oil is frequently used to treat tension headaches. Additionally, by relaxing the gastrointestinal tract's muscles and encouraging the flow of bile, peppermint is well known for its capacity to reduce digestive discomfort. It can lessen bloating, indigestion, and the symptoms of Irritable Bowel Syndrome

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(IBS). Tea with peppermint is frequently drunk to calm nausea or upset stomachs.

## REFERENCES

- 1. Naghizadeh A, Hamzeheian D, Akbari S, Mohammadi F, Otoufat T, Asgari S, et al. UNaProd: A universal natural product database for materia medica of Iranian traditional medicine. Evid Based Complementary Altern Med. 2020;2020(1):3690781.
- 2. Bultum LE, Woyessa AM, Lee D. ETM-DB: integrated Ethiopian traditional herbal medicine and phytochemicals database. BMC Complement Altern Med. 2019;19:1-1.
- Chen CY. TCM Database@ Taiwan: the world's largest traditional Chinese medicine database for drug screening in silico. PloS one. 2011;6(1):e15939.
- Mohanraj K, Karthikeyan BS, Vivek-Ananth RP, Chand RB, Aparna SR, Mangalapandi P, Samal A. IMPPAT: A curated database of I ndian M edicinal P lants, P hytochemistry A nd T herapeutics. Sci Rep. 2018;8(1):4329.

- Agyei-Baffour P, Kudolo A, Quansah DY, Boateng D. Integrating herbal medicine into mainstream healthcare in Ghana: clients' acceptability, perceptions and disclosure of use. BMC Complement Altern Med. 2017;17:1-9.
- 6. Kumar Y, Prakash O, Tripathi H, Tandon S, Gupta MM, Rahman LU, et al. AromaDb: a database of medicinal and aromatic plant's aroma molecules with phytochemistry and therapeutic potentials. Front Plant Sci. 2018;9:1081.
- 7. Dankar FK, Ptitsyn A, Dankar SK. The development of large-scale de-identified biomedical databases in the age of genomics-principles and challenges. Hum Genomics. 2018;12:1-5.
- 8. Sorokina M, Steinbeck C. Review on natural products databases: Where to find data in 2020. J Cheminform. 2020;12(1):20.
- Adotey JP, Adukpo GE, Opoku Boahen Y, Armah FA. A review of the ethnobotany and pharmacological importance of Alstonia boonei De Wild (Apocynaceae). Int Sch Res Notices. 2012;2012(1):587160.
- Liu Z, Li M, Shi H, Wang M. Development and evaluation of an enzyme-linked immunosorbent assay for the determination of thiacloprid in agricultural samples. Food Anal Methods. 2013;6:691-697.