

Frankincense – *Boswellia serrata*

Also known as Indian Frankincense, Olibanum or Salai Guggul. Other medicinal Frankincense species include Boswellia sacra and Boswellia carterii.

Traditional Herb Actions

- Potent anti-inflammatory
- Antirheumatic
- Analgesic
- Antioxidant
- Antimicrobial
- Astringent
- Expectorant
- Wound-healing
- Immune-modulating
- Nervine and grounding aromatic

Traditional Herbal Indications

- Arthritis, osteoarthritis and rheumatic pain
- Muscular stiffness and inflammatory joint conditions
- Inflammatory conditions of the gastrointestinal tract
- Respiratory inflammation, asthma, bronchitis and catarrh
- Minor wounds, ulcers and inflammatory skin conditions
- Supporting oral and gum health
- Menstrual discomfort
- Supporting healthy ageing
- Emotional stress, meditation and spiritual wellbeing

Traditional Use

Frankincense is the aromatic oleo-gum-resin obtained by tapping the bark of trees belonging to the *Boswellia* genus. It has been used for thousands of years in Ayurvedic, Middle Eastern, African and traditional Chinese medicine.

In Ayurveda, *Boswellia serrata* is known as **Salai Guggul** and has traditionally been used for inflammatory and painful conditions, particularly arthritis, respiratory complaints and gastrointestinal inflammation. The resin was also applied externally to wounds, ulcers and painful joints.

Frankincense contains **boswellic acids**, including AKBA—acetyl-11-keto-beta-boswellic acid—which have been studied for their ability to influence inflammatory pathways, particularly the production of leukotrienes. This may help explain Frankincense's traditional use for joint, respiratory and inflammatory conditions.

Historical Uses

Frankincense has been valued as a sacred medicine, incense and ceremonial substance for more than 3,000 years. Ancient trade routes carried the resin from Arabia, India and north-eastern Africa into Egypt, Greece, Rome and the Mediterranean.

The ancient Egyptians burned Frankincense in temples, incorporated it into perfumes and cosmetics, and used it in preparations for the skin, wounds and ceremonial embalming. In Middle Eastern and African traditions, the resin was burned to cleanse homes and sacred spaces, freshen the air and support spiritual practices.

Frankincense also holds an important place in Biblical history and Christian tradition, where it represented holiness, reverence and the divine. It has continued to be used in religious ceremonies, prayer and meditation because its warm, resinous aroma is traditionally believed to quieten the mind, deepen breathing and encourage contemplation.

Historically, Frankincense resin was chewed or prepared medicinally for digestive complaints, respiratory congestion, oral health, inflammatory pain and women's reproductive concerns. Its smoke, resin, powdered herb and infused preparations were used in different ways across cultures.

Constituents

Pentacyclic triterpenes and boswellic acids, including:

- Beta-boswellic acid
- Acetyl-beta-boswellic acid
- 11-keto-beta-boswellic acid
- Acetyl-11-keto-beta-boswellic acid—AKBA
- Lupeolic acids
- Tirucallic acids
- Essential oils and monoterpenes, including alpha-pinene, limonene and myrcene
- Diterpenes
- Polysaccharides
- Resin acids and aromatic compounds

Frankincense and Cancer Research Today

Frankincense is currently being investigated as a **complementary botanical medicine in cancer research**, particularly through standardised *Boswellia* extracts and isolated boswellic acids. Laboratory research suggests these compounds may affect inflammatory signalling, cancer-cell proliferation, apoptosis—programmed cell death—angiogenesis and pathways involved in tumour invasion. However, laboratory findings cannot automatically be assumed to produce the same effects in the human body.

A small Phase Ia clinical study involving women awaiting surgery for breast cancer found that oral *Boswellia serrata* extract was well tolerated and was associated with a statistically significant reduction in a marker of tumour-cell proliferation. This was an encouraging early finding, but the study involved only a small number of patients and was not designed to determine whether *Boswellia* improves survival or prevents recurrence. [Published clinical study](#)

Boswellia has also been studied for **peritumoural cerebral oedema**—swelling surrounding brain tumours—particularly in people undergoing radiotherapy. Some clinical evidence suggests that oral *Boswellia* extract may help reduce this inflammatory swelling, although it has not been demonstrated to shrink the brain tumour itself. The European Medicines Agency previously granted an orphan designation to a *Boswellia serrata* resin extract for investigation in this area. [European Medicines Agency](#)

Topical *Boswellia* preparations have also been studied for helping to reduce skin inflammation and dermatitis associated with breast radiotherapy.

Frankincense essential oils and boswellic acids have demonstrated activity against several cancer-cell lines in laboratory studies, including breast, bladder, pancreatic, prostate, colon and brain cancer cells.