

FRANKINCENSE

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Dr. Suhail earned his medical degree from Al Anbar University and is considered an expert on alternative medical therapies. Dr. Suhail is working with Young Living on proper identification of frankincense species and innovative extraction methods to further increase the purity and potency of the essential oils provided by this miraculous essential oil.

1. Studies on Terpenoids: Boswellic acids; gum resin, water soluble
 - a. Antiseptic & Anti-inflammatory, Johns Hopkins
 - b. Reduce symptoms of asthma, bronchitis, laryngeal cough and cold, India
 - c. Neuro-protective, Hebrew University
 - d. Rheumatoid Arthritis, India
 - e. Selectively kills bladder cancer, Oklahoma, MSU
 - f. Ulcerative colitis and Chrohn's, India (3 states)
 - g. Endometriosis and fibroids, dysmenorrhea, China
2. Cosmetics: treat dry, chapped, wrinkles, carbuncles
3. Anti-microbial: prevent growth of mold, inhibit bacteria and fungi, inhibit Hep C virus
4. **Respiratory**: bronchodilator, for constrictions, inflammations
 - a. In Oman, 5-7 grams in water; drink water next day
 - b. 300-400 mg. for lungs
5. **Asthmas**: Austria and Germany used therapeutically
 - a. 80 patients: 300 mg. 3X daily for 6 weeks (8-10 drops)
 - b. 70% significant remission
6. **Osteoarthritis & Rheumatoid Arthritis**
 - a. 42 patients, (arthritis, bursitis, tendonitis) had decrease markers in blood test, decreased pain, but no changes on X-rays, then injected into joints; resets nucleus of cell so it regenerates itself. Then X-rays showed significant improvement.
 - b. Decreased inhibition of leukotrienes – acts like non-steroidal drugs!
 - c. Prevention of glycosamenoglycation degradation (all NSAIDS cause this!)
7. Protects against ulcers; selective inhibition of lipOxygenase5 (drugs are non selective thereby causing serious side effects like central nervous system and cardiovascular disorders)
8. Enhances polymorph neutrophils (WBC)
9. Inhibit graft refection in renal (kidney) transplants
10. Irritable Bowel Syndrome: 350 mg. 3 times daily, for 6 weeks
 - a. Frankincense is first choice of therapy for IBS
 - b. 1995, 82% remission with frankincense resin
 - c. Only 72% with drug of choice, Sulfasalazine
 - d. Repeated test in 2005 with same results
 - e. Frankincense Boswellic acids – NO SIDE EFFECTS
 - f. Serious side effects with corticosteroids: immune suppression, osteoporosis, renal failure, diabetes
11. **Cancer & Frankincense**; studies for significant effects on:
 - a. Cancers: Meningioma, leukemia, hepatoma, melanoma, fibrosarcoma, colon, pancreatic, prostate
 - b. Palliative treatment of relapsing brain tumors – have anti-edematous effect (reduces swelling in brain)
 - c. Route of Administration:

- i. Gastrointestinal: by mouth, rectal, sublingual
 - ii. Epicutaneous: sublabia (behind lips), Transdermal-locked onto skin to go deeper, Topical, local tissue of skin
 - iii. Respiratory inhalation
- 12. Bio-availability
 - a. How much goes unchanged directly into cardiovascular system?
 - b. Oral: undergoes degradation with enzymes, liver, etc. Only 2%; 98% lost to metabolism. Called “first pass” as travels through digestive tract and through liver.
 - c. Transdermal avoids “first pass”, 6X better on forehead than arm, 12X more effective on genitals than forearm.
- 13. BEST TO LEAST FOR APPLICATION
 - a. Genitals 100% absorption
 - b. Head and neck (forehead is best after washed and warmed)
 - c. Trunk
 - d. Arms, forearm 8.56% absorption
 - e. Legs
- 14. Factors for Topical Application – potential barriers
 - a. Lipid film, sebum...natural oils; wash before application
 - b. Skin hydration; increase hydration to increase penetration
 - c. Skin temperature; increase temperature for vasodilation and increased absorption
 - d. Regional variations (as mentioned above for location of application)
- 15. Occlusive Topical Transdermal Application; future of application being developed
 - a. Impermeable backing
 - b. Reservoir holding ingredient
 - c. Adhesive to hold in place
- 16. Precautions and Contraindications
 - a. Potential reactions: 2-3 drops on forearm, wait 15 minutes
 - b. Pregnant/nursing, do not take internally
 - c. Avoid when on blood thinners
 - d. Restrict when hepatic insufficiency (liver)
 - e. 65% is equal to 5.6 ml 2X daily
- 17. Low doses are okay and are actually hepato-protective, 1 ml okay!
 - a. 1 ml=18-20 drops=1/5th teaspoon
 - b. 10-15 mcg/ml Boswellic acid
 - c. < 10mcg/ml may induce inflammation instead of suppression
 - d. 10 drops enough for 9% of body
- 18. 9% rule: head = 9%
 - a. Each Arm = 9%
 - b. Abdomen & chest = 18%
 - c. Pelvic region = 1%
 - d. Each leg = 18%
- 19. Child:
- 20. Head = 18%
- 21. Each arm = 9%
- 22. Each leg = 14%
- 23. Trunk = 18%

Frankincense: promising medicines and safe alternatives