

Hemp-seed oil has several positive effects on the skin: thanks to its poly-unsaturated fatty acid (PUFA) content it alleviates skin problems such as dryness and those related to the aging process. Hempseed oil has been shown to be useful in treating symptoms of atopic dermatitis. Published studies show that qualities of both skin dryness and itchiness improved. PUFAs have significant cardioprotective effects against ischemia. The oil has bacteriostatic activity. Other studies have shown prevention of polycystic kidney disease, prevention of colon tumour development, lower pregnancy losses, and prevention of human breast cancer growth and metastasis. Skin studies have shown that Hemp-seed oil alleviates symptoms of lupus erythematosus. Recent studies have shown prevention of UVB-induced skin injury. In children, flax oil and vitamin C improves the outcome of Attention Deficit Hyperactivity Disorder (ADHD). Ingestion and surface application of hemp-seed oils may result in positive chemical testing for cannabis.

Al-Khalifa A, Maddaford TG, Chahine MN, Austria JA, Edel AL, Richard MN, Ander BP, Gavel N, Kopilas M, Ganguly R, Ganguly PK, Pierce GN. Effect of dietary hempseed intake on cardiac ischemia-reperfusion injury. *Am J Physiol Regul Integr Comp Physiol.* 2007 Mar;292(3):R1198-203. Epub 2006 Nov 22.

Ambrose DJ, Kastelic JP, Corbett R, Pitney PA, Petit HV, Small JA, Zalkovic P Lower pregnancy losses in lactating dairy cows fed a diet enriched in alpha-linolenic acid.. *J Dairy Sci.* 2006 Aug;89(8):3066-74.

Bankovic-Calic N, Ogbori MR, Nicman E. Effect of a modified low protein and low fat diet on histologic changes and metabolism in kidneys in an experimental model of polycystic kidney disease. *Srp Arh Celok Lek.* 2002 Jul-Aug;130(7-8):251-7.

Bhathena SJ, Ali AA, Haudenschild C, Latham P, Ranich T, Mohamed AI, Hansen CT, Velasquez MT. Dietary flaxseed meal is more protective than soy protein concentrate against hypertriglyceridemia and steatosis of the liver in an animal model of obesity. *J Am Coll Nutr.* 2003 Apr;22(2):157-64.

Bommareddy A, Arasada BL, Mathees DP, Dwivedi C. Chemopreventive effects of dietary flaxseed on colon tumor development. *Nutr Cancer.* 2006;54(2):216-22.

Brown AC. Lupus erythematosus and nutrition: a review of the literature. *J Ren Nutr.* 2000 Oct;10(4):170-83.

Callaway J, Schwab U, Harvima I, Halonen P, Mykkanen O, Hyvonen P, Jarvinen T. Efficacy of dietary hempseed oil in patients with atopic dermatitis. *J Dermatolog Treat.* 2005 Apr;16(2):87-94.

Callaway JC, Weeks RA, Raymon LP, Walls HC, Hearn WL. A positive THC urinalysis from hemp (Cannabis) seed oil. *J Anal Toxicol.* 1997 Jul-Aug;21(4):319-20.

Campbell AP. Flax facts. A grain for good health. *Diabetes Self Manag.* 2003 Nov-Dec;20(6):18, 20-2.

Chen J, Hui E, Ip T, Thompson LU. Dietary flaxseed enhances the inhibitory effect of tamoxifen on the growth of estrogen-dependent human breast cancer (mcf-7) in nude mice. *Clin Cancer Res.* 2004 Nov 15;10(22):7703-11.

Chen J, Stavro PM, Thompson LU. Dietary flaxseed inhibits human breast cancer growth and metastasis and downregulates expression of insulin-like growth factor and epidermal growth factor receptor. *Nutr Cancer.* 2002;43(2):187-92.

Culikova V. Assortment of the plants in the Medieval diet in Czech countries (based on archaeobotanical finds). *Acta Univ Carol [Med] (Praha).* 2000;41(1-4):105-18.

Fournier G, Paris MR, Fourniat MC, Quero AM. Bacteriostatic activity of Cannabis sativa L. essential oil. *Ann Pharm Fr.* 1978;36(11-12):603-6.

Greenberg, L.A. and Lester, D. (1954) *Handbook of Cosmetic Materials.* New York. Interscience.

Humphrey, W.T. (1970) Flax seeds in ophthalmic folk medicine. *Amer. J. Ophthal.* 70: 287.

Joshi K, Lad S, Kale M, Patwardhan B, Mahadik SP, Patni B, Chaudhary A, Bhave S, Pandit A. Supplementation with flax oil and vitamin C improves the outcome of Attention Deficit Hyperactivity Disorder (ADHD). *Prostaglandins Leukot Essent Fatty Acids.* 2006 Jan;74(1):17-21. Epub 2005 Nov 28.

Lee GA, Crawford GW, Liu L, Chen. X Plants and people from the Early Neolithic to Shang periods in North China. *Proc Natl Acad Sci U S A.* 2007 Jan 16;104(3):1087-92. Epub 2007 Jan 9.

Lessard M, Gagnon N, Petit HV. Immune response of postpartum dairy cows fed flaxseed. *J Dairy Sci.* 2003 Aug;86(8):2647-57.

Malingre T, Hendriks H, Batterman S, Bos R, Visser J. The essential oil of Cannabis sativa. *Planta Med.* 1975 Aug;28(1):56-61.

Meneghini, C.L. and Gianotti, F. (1953) Contribution to the knowledge of cutaneous pathology in the working of linen and hemp. *Med. D. Lavoro* 44: 538.

Merzouki A, Ed-derfoufi F, Molero Mesa J (2000) Contribution to the knowledge of Rifian traditional medicine. II: Folk medicine in Ksar Lakbir district (NW Morocco). *Fitoterapia* 71(3): 278-307

Ogborn MR, Nitschmann E, Bankovic-Calic N, Weiler HA, Aukema H. Dietary flax oil reduces renal injury, oxidized LDL content, and tissue n-6/n-3 FA ratio in experimental polycystic kidney disease. *Lipids.* 2002 Nov;37(11):1059-65.

Sankaran D, Bankovic-Calic N, Peng CY, Ogborn MR, Aukema HM. Dietary flax oil during pregnancy and lactation retards disease progression in rat offspring with inherited kidney disease. *Pediatr Res.* 2006 Dec;60(6):729-33. Epub 2006 Oct 25.

Sapino S, Carlotti ME, Peira E, Gallarate M. Hemp-seed and olive oils: their stability against oxidation and use in O/W emulsions. *J Cosmet Sci.* 2005 Jul-Aug;56(4):227-51.

Shahidi F Antioxidant factors in plant foods and selected oilseeds.. *Biofactors.* 2000;13(1-4):179-85.

Sostaric R, Dizdar M, Kusan D, Hrsak V, Marekovic S. Comparative analysis of plant finds from Early Roman graves in Ilok (Cuccium) and Scitarjevo (Andautonia), Croatia--a contribution to understanding burial rites in southern Pannonia. *Coll Antropol.* 2006 Jun;30(2):429-36.

Struempfer RE, Nelson G, Urry FM A positive cannabinoids workplace drug test following the ingestion of commercially available hemp seed oil.. *J Anal Toxicol.* 1997 Jul-Aug;21(4):283-5.

Takemura N, Takahashi K, Tanaka H, Ihara Y, Ikemoto A, Fujii Y, Okuyama H Dietary, but not topical, alpha-linolenic acid suppresses UVB-induced skin injury in hairless mice when compared with linoleic acids. *Photochem Photobiol.* 2002 Dec;76(6):657-63.

Vieira JE, Abreu LC, Valle JR. On the pharmacology of the hemp seed oil. *Med Pharmacol Exp Int J Exp Med.* 1967;16(3):219-24.

Wang L, Chen J, Thompson LU. The inhibitory effect of flaxseed on the growth and metastasis of estrogen receptor negative human breast cancer xenografts attributed to both its lignan and oil components. *Int J Cancer.* 2005 Sep 20;116(5):793-8.

Wieczorek Z, Bengtsson B, Trojnar J, Siemion IZ. Immunosuppressive activity of cyclolinopeptide A. *Pept Res.* 1991 Sep-Oct;4(5):275-83.

Williams D, Verghese M, Walker LT, Boateng J, Shackelford L, Chawan CB. Flax seed oil and flax seed meal reduce the formation of aberrant crypt foci (ACF) in azoxymethane-induced colon cancer in Fisher 344 male rats.. *Food Chem Toxicol.* 2007 Jan;45(1):153-9. Epub 2006 Aug 30.

Wright S. Atopic dermatitis and essential fatty acids: a biochemical basis for atopy? *Acta Derm Venereol Suppl (Stockh).* 1985;114:143-5.

Young GS, Conquer JA, Thomas R. Effect of randomized supplementation with high dose olive, flax or fish oil on serum phospholipid fatty acid levels in adults with attention deficit hyperactivity disorder. *Reprod Nutr Dev.* 2005 Sep-Oct;45(5):549-58.

Honey has been used for over 2500 years as a wound dressing. Honey shows anti-bacterial properties that have only been recently researched. It has shown good anti-bacterial results in cases of MRSA-contaminated skin ulcers. The efficacy of honey in inhibiting strains of *Pseudomonas aeruginosa* from infected burns and controlling *Staphylococcus aureus* from infected wounds has been published. The use of honey-derived dressings to promote effective wound management has been published in the literature, and honey as a traditional dressing for chronic wounds in adults is supported. Honey has been shown to accelerate wound healing in skin tissue, and delicate eye tissues. Used in dilution, these effects are enhanced..

Ahmed AK, Hoekstra MJ, Hage JJ, Karim RB. Honey-medicated dressing: transformation of an ancient remedy into modern therapy. *Ann Plast Surg.* 2003 Feb;50(2):143-7; discussion 147-8.

Ali AT, Chowdhury MN, al Humayyd MS. Inhibitory effect of natural honey on *Helicobacter pylori*. *Trop Gastroenterol.* 1991 Jul-Sep;12(3):139-43.

Al-Waili NS. Investigating the antimicrobial activity of natural honey and its effects on the pathogenic bacterial infections of surgical wounds and conjunctiva. *J Med Food.* 2004 Summer;7(2):210-22.

Allen KL, Molan PC, Reid GM. A survey of the antibacterial activity of some New Zealand honeys. *J Pharm Pharmacol.* 1991 Dec;43(12):817-22.

Bang LM, Bunting C, Molan P. The effect of dilution on the rate of hydrogen peroxide production in honey and its implications for wound healing. *J Altern Complement Med.* 2003 Apr;9(2):267-73.

Benedum J. From the history of wound care. *Zentralbl Chir.* 2000;125 Suppl 1:84-6.

Bergman A, Yanai J, Weiss J, Bell D, David MP. Acceleration of wound healing by topical application of honey. An animal model. *Am J Surg.* 1983 Mar;145(3):374-6.

Biswal BM, Zakaria A, Ahmad NM. Topical application of honey in the management of radiation mucositis: a preliminary study. *Support Care Cancer.* 2003 Apr;11(4):242-8. Epub 2003 Feb 19.

Bowler PG. Wound pathophysiology, infection and therapeutic options. *Ann Med.* 2002;34(6):419-27.

Chambers J. Topical manuka honey for MRSA-contaminated skin ulcers. *Palliat Med.* 2006 Jul;20(5):557.

Cooper RA, Halas E, Molan PC. The efficacy of honey in inhibiting strains of *Pseudomonas aeruginosa* from infected burns. *J Burn Care Rehabil.* 2002 Nov-Dec;23(6):366-70.

Cooper RA, Molan PC, Harding KG. Antibacterial activity of honey against strains of *Staphylococcus aureus* from infected wounds. *J R Soc Med.* 1999 Jun;92(6):283-5.

Dart AJ, Dowling BA, Smith CL. Topical treatments in equine wound management. *Vet Clin North Am Equine Pract.* 2005 Apr;21(1):77-89, vi-vii.

Dixon B. Bacteria can't resist honey. *Lancet Infect Dis.* 2003 Feb;3(2):116.

Dunford C. The use of honey-derived dressings to promote effective wound management. *Prof Nurse.* 2005 Apr;20(8):35-8.

Dunford C, Cooper R, Molan P, White R. The use of honey in wound management. *Nurs Stand.* 2000 Nov 29-Dec 5;15(11):63-8.

Dunford CE, Hanano R. Acceptability to patients of a honey dressing for non-healing venous leg ulcers. *J Wound Care.* 2004 May;13(5):193-7.

Efem SE. Clinical observations on the wound healing properties of honey. *Br J Surg.* 1988 Jul;75(7):679-81.

Fox C. Honey as a dressing for chronic wounds in adults. *Br J Community Nurs.* 2002 Oct;7(10):530-4.

French VM, Cooper RA, Molan PC. The antibacterial activity of honey against coagulase-negative staphylococci. *J Antimicrob Chemother.* 2005 Jul;56(1):228-31. Epub 2005 Jun 7.

Golder W. Propolis. The bee glue as presented by the Graeco-Roman literature. *Wurzburg Medizinhist Mitt.* 2004;23:133-45.

Henriques A, Jackson S, Cooper R, Burton N. Free radical production and quenching in honeys with wound healing potential. *J Antimicrob Chemother.* 2006 Oct;58(4):773-7.

Ingle R, Levin J, Polinder K. Wound healing with honey--a randomised controlled trial. *S Afr Med J.* 2006 Sep;96(9):831-5.

Kingsley A. The use of honey in the treatment of infected wounds: case studies. *Br J Nurs.* 2001 Dec;10(22 Suppl):S13-6, S18, S20.

Leach MJ. A critical review of natural therapies in wound management. *Ostomy Wound Manage.* 2004 Feb;50(2):36-40, 42, 44-6.

Liptak JM. An overview of the topical management of wounds. *Aust Vet J.* 1997 Jun;75(6):408-13

Lusby PE, Coombes A, Wilkinson JM. Honey: a potent agent for wound healing? *J Wound Ostomy Continence Nurs.* 2002 Nov;29(6):295-300.

Lusby PE, Coombes AL, Wilkinson JM. Bactericidal activity of different honeys against pathogenic bacteria. *Arch Med Res.* 2005 Sep-Oct;36(5):464-7.

Lusby PE, Coombes AL, Wilkinson JM. A comparison of wound healing following treatment with *Lavandula x allardii* honey or essential oil. *Phytother Res.* 2006 Sep;20(9):755-7.

McIntosh CD, Thomson CE. Honey dressing versus paraffin tulle gras following toenail surgery. *J Wound Care.* 2006 Mar;15(3):133-6.

Misirliloglu A, Eroglu S, Karacaoglan N, Akan M, Akoz T, Yildirim S. Use of honey as an adjunct in the healing of split-thickness skin graft donor site. *Dermatol Surg.* 2003 Feb;29(2):168-72.

Molan PC, Allen KL. The effect of gamma-irradiation on the antibacterial activity of honey. *J Pharm Pharmacol.* 1996 Nov;48(11):1206-9.

Molan PC. The role of honey in the management of wounds. *J Wound Care.* 1999 Sep;8(8):415-8.

Molan PC. Potential of honey in the treatment of wounds and burns. *Am J Clin Dermatol.* 2001;2(1):13-9.

Molan PC. Re-introducing honey in the management of wounds and ulcers - theory and practice. *Ostomy Wound Manage.* 2002 Nov;48(11):28-40.

Molan PC. The evidence supporting the use of honey as a wound dressing. *Int J Low Extrem Wounds.* 2006 Mar;5(1):40-54.

Moore OA, Smith LA, Campbell F, Seers K, McQuay HJ, Moore RA. Systematic review of the use of honey as a wound dressing. *BMC Complement Altern Med.* 2001;1:2. Epub 2001 Jun 4.

Moore OA, Smith LA, Campbell F, Seers K, McQuay HJ, Moore RA. Systematic review of the use of honey as a wound dressing. *BMC Complement Altern Med.* 2001;1:2. Epub 2001 Jun 4.

Namias N. Honey in the management of infections. *Surg Infect (Larchmt).* 2003 Summer;4(2):219-26.

Natarajan S, Williamson D, Grey J, Harding KG, Cooper RA. Healing of an MRSA-colonized, hydroxyurea-induced leg ulcer with honey. *J Dermatolog Treat.* 2001 Mar;12(1):33-6.

Ndayisaba G, Bazira L, Habonimana E, Muteganya D. Clinical and bacteriological outcome of wounds treated with honey. An analysis of a series of 40 cases. *Rev Chir Orthop Reparatrice Appar Mot.* 1993;79(2):111-3.

Ojofeitimi EO, Ogunfowokan AA, Bello EO, Owolabi OO. The under utilization of honey in a deprived environment. *Nutr Health.* 2004;17(4):335-41.

Okeniyi JA, Olubanjo OO, Ogunlesi TA, Oyelami OA. Comparison of healing of incised abscess wounds with honey and EUSOL dressing. *J Altern Complement Med.* 2005 Jun;11(3):511-3.

Oladejo OW, Imosemi IO, Osuagwu FC, Oyedele OO, Oluwadara OO, Ekpo OE, Aiku A, Adewoyin O, Akang EE. A comparative study of the wound healing properties of honey and *Ageratum conyzoides*. *Afr J Med Med Sci.* 2003 Jun;32(2):193-6.

Osuagwu FC, Oladejo OW, Imosemi IO, Aiku A, Ekpos OE, Salami AA, Oyedele OO, Akang EU. Enhanced wound contraction in fresh wounds dressed with honey in Wistar rats (*Rattus Norvegicus*). *West Afr J Med.* 2004 Apr-Jun;23(2):114-8.

Pieper B. Honey: a potent agent for wound healing? *J Wound Ostomy Continence Nurs.* 2002 Nov;29(6):273-4.

Salcido R. Complementary and alternative medicine in wound healing. *Adv Wound Care.* 1999 Nov-Dec;12(9):438.

Simon A, Sofka K, Wiszniewsky G, Blaser G, Bode U, Fleischhack G. Wound care with antibacterial honey (Medihoney) in pediatric hematology-oncology. *Support Care Cancer.* 2006 Jan;14(1):91-7. Epub 2005 Aug 2.

Stephen-Haynes J. Evaluation of a honey-impregnated tulle dressing in primary care. *Br J Community Nurs.* 2004 Jun;Suppl:S21-7.

Subrahmanyam M. Topical application of honey in treatment of burns. *Br J Surg.* 1991 Apr;78(4):497-8.

Subrahmanyam M. A prospective randomised clinical and histological study of superficial burn wound healing with honey and silver sulfadiazine. *Burns.* 1998 Mar;24(2):157-61.

Subrahmanyam M. Honey dressing versus boiled potato peel in the treatment of burns: a prospective randomized study *Burns.* 1996 Sep;22(6):491-3.

Topham J. Why do some cavity wounds treated with honey or sugar paste heal without scarring? *J Wound Care.* 2002 Feb;11(2):53-5.

van der Weyden EA. The use of honey for the treatment of two patients with pressure ulcers. *Br J Community Nurs.* 2003 Dec;8(12):S14-20.

van der Weyden EA. Treatment of a venous leg ulcer with a honey alginate dressing. *Br J Community Nurs.* 2005 Jun;Suppl:S21, S24, S26-7.

Vardi A, Barzilay Z, Linder N, Cohen HA, Paret G, Barzilai A Local application of honey for treatment of neonatal postoperative wound infection. *Acta Paediatr.* 1998 Apr;87(4):429-32.

Vitetta L, Sali A. Treatments for damaged skin. *Aust Fam Physician.* 2006 Jul;35(7):501-2.

White R. The benefits of honey in wound management. *Nurs Stand.* 2005 Nov 16-22;20(10):57-64.

White RJ, Cutting K, Kingsley A. Topical antimicrobials in the control of wound bioburden. *Ostomy Wound Manage.* 2006 Aug;52(8):26-58.

Wilson V. Assessment and management of fungating wounds: a review. *Br J Community Nurs.* 2005 Mar;10(3):S28-34.

Zaghloul AA, el-Shattawy HH, Kassem AA, Ibrahim EA, Reddy IK, Khan MA. Honey, a prospective antibiotic: extraction, formulation, and stability. *Pharmazie.* 2001 Aug;56(8):643-7.

Lavender extracts have been used to reduce pain and enhance wound healing. These extracts show anti-microbial activity and have been used to treat parasitic infestations successfully. In addition, these extracts show antiinflammatory properties, suppress mutagenic potential, and have been used to manage wound infection and healing. Lavender extracts cross the dermal surface easily, and have been shown to allergic responses and neutrophil collection in tissue. The odour has a calming effect on the patient.

Alaoui-Ismaili O, Vernet-Maury E, Dittmar A, Delhomme G, Chanel J. Odor hedonics: connection with emotional response estimated by autonomic parameters. *Chem Senses*. 1997 Jun;22(3):237-48.

Basch E, Foppa I, Liebowitz R, Nelson J, Smith M, Sollars D, Ulbricht C. Lavender (*Lavandula angustifolia* Miller). *Herb Pharmacother*. 2004;4(2):63-78.

Benito M, Jorro G, Morales C, Pelaez A, Fernandez A. Labiatae allergy: systemic reactions due to ingestion of oregano and thyme. *Ann Allergy Asthma Immunol*. 1996 May;76(5):416-8.

Brand G, Millot JL, Henquell D. Olfaction and hemispheric asymmetry: unilateral stimulation and bilateral electrodermal recordings. *Neuropsychobiology*. 1999;39(3):160-4.

Cal K, Krzyzaniak M. Stratum corneum absorption and retention of linalool and terpinen-4-ol applied as gel or oily solution in humans. *J Dermatol Sci*. 2006 Jun;42(3):265-7. Epub 2006 Mar 27.

Campenni CE, Crawley EJ, Meier ME. Role of suggestion in odor-induced mood change. *Psychol Rep*. 2004 Jun;94(3 Pt 2):1127-36.

Canyon DV, Speare R. A comparison of botanical and synthetic substances commonly used to prevent head lice (*Pediculus humanus* var. *capitis*) infestation. *Int J Dermatol*. 2007 Apr;46(4):422-6.

Cava J . Biological activities of lavender essential oil. *Phytother Res*. 2002 Jun;16(4):301-8.

Cavanagh HM, Wilkinson JM. Biological activities of lavender essential oil. *Phytother Res*. 2002 Jun;16(4):301-8.

Darshan S, Doreswamy R. Patented antiinflammatory plant drug development from traditional medicine. *Phytother Res*. 2004 May;18(5):343-57

Evandri MG, Battinelli L, Daniele C, Mastrangelo S, Bolle P, Mazzanti G. The antimutagenic activity of *Lavandula angustifolia* (lavender) essential oil in the bacterial reverse mutation assay. *Food Chem Toxicol*. 2005 Sep;43(9):1381-7.

Francis MJ, Gulati N, Pashley RM. The dispersion of natural oils in de-gassed water. *J Colloid Interface Sci*. 2006 Jul 15;299(2):673-7. Epub 2006 Mar 3.

Hartman D, Coetzee JC. Two US practitioners' experience of using essential oils for wound care. *J Wound Care*. 2002 Sep;11(8):317-20

Heuberger E, Redhammer S, Buchbauer G. Transdermal absorption of (-)-linalool induces autonomic deactivation but has no impact on ratings of well-being in humans. *Neuropsychopharmacology*. 2004 Oct;29(10):1925-32.

Hsu S. Green tea and the skin. *J Am Acad Dermatol*. 2005 Jun;52(6):1049-59. Review.

Kane FM, Brodie EE, Coull A, Coyne L, Howd A, Milne A, Niven CC, Robbins R. The analgesic effect of odour and music upon dressing change. *Br J Nurs*. 2004 Oct 28-Nov 10;13(19):S4-12.

Kim HM, Cho SH. Lavender oil inhibits immediate-type allergic reaction in mice and rats. *J Pharm Pharmacol*. 1999 Feb;51(2):221-6.

Lis-Balchin M, Hart S. Studies on the mode of action of the essential oil of lavender (*Lavandula angustifolia* P. Miller). *Phytother Res*. 1999 Sep;13(6):540-2.

Lusby PE, Coombes AL, Wilkinson JM. A comparison of wound healing following treatment with *Lavandula x allardii* honey or essential oil. *Phytother Res*. 2006 Sep;20(9):755-7.

Maddocks-Jennings W. Critical incident: idiosyncratic allergic reactions to essential oils. *Complement Ther Nurs Midwifery*. 2004 Feb;10(1):58-60.

Maruyama N, Sekimoto Y, Ishibashi H, Inouye S, Oshima H, Yamaguchi H, Abe S. Suppression of neutrophil accumulation in mice by cutaneous application of geranium essential oil. *J Inflamm (Lond)*. 2005 Feb 10;2(1):1.

Matthieu L, Meuleman L, Van Hecke E, Blondeel A, Dezfoulian B, Constandt L, Goossens A. Contact and photocontact allergy to ketoprofen. The Belgian experience. *Contact Dermatitis*. 2004 Apr;50(4):238-41.

Meume S, Teot L, Lazareth I, Martini J, Bohbot S. The importance of pain reduction through dressing selection in routine wound management: the MAPP study. *J Wound Care*. 2004 Nov;13(10):409-13.

Prashar A, Locke IC, Evans CS. Cytotoxicity of lavender oil and its major components to human skin cells. *Cell Prolif*. 2004 Jun;37(3):221-9.

Vernet-Maury E, Alaoui-Ismaili O, Dittmar A, Delhomme G, Chanel J. Basic emotions induced by odorants: a new approach based on autonomic pattern results. *J Auton Nerv Syst*. 1999 Feb 15;75(2-3):176-83.

Myrrh has been used in the treatment of wounds and as an incense to promote a sense of well-being for over 3500 years. Myrrh extracts show anti-microbial and anti-inflammatory effects. It has been used in tinctures for infection control, such as periodontal disease, in dentistry for centenarians. New applications are being developed in wound dressings and plasters.

Darshan S, Doreswamy R. Patented antiinflammatory plant drug development from traditional medicine. *Phytother Res.* 2004 May;18(5):343-57.

Gallo R, Rivara G, Cattarini G, Cozzani E, Guarrera M. Allergic contact dermatitis from myrrh. *Contact Dermatitis.* 1999 Oct;41(4):230-1.

Li P, Li L, Zhuang Y, Guo HQ, Chen Q, An BC. The creation of laosun yutie plaster and safety experiment. *Zhongguo Zhong Yao Za Zhi.* 2005 May;30(9):697-9.

Ozone when incorporated as an ozonoid in a gel or cream, has important anti-microbial properties. The products are anti-bacterial, anti-fungal, and anti-viral. They impart additional oxygen to cellular structures, and increase the potential for cellular regeneration and repair. They are important in infection control and wound management.

Bocci V. Does ozone therapy normalize the cellular redox balance? Implications for therapy of human immunodeficiency virus infection and several other diseases. *Med Hypotheses* 1996; 46: 150-154.

Bocci V. Ozone as a bioregulator. Pharmacology and toxicology of ozone therapy today. *J Biol Regul Homeost Agents* 1996; 10: 31-53

Bocci V. Biological and clinical effects of ozone. Has ozone therapy a future in medicine? *Br J Biomed Sci* 1999; 56: 270-279.

Bocci V. Ozone as Janus: This controversial gas can be either toxic or medically useful. *Mediators of Inflammation*. 13(1): 3-11, 2004

Bocci V, Aldinucci C. Rational bases for using oxygen-ozonotherapy as a biological response modifier in sickle cell anemia and beta-thalassemia: a therapeutic perspective. *J Biol Regul Homeost Agents*. 2004, 18:38-44.

Bocci V, Luzzi E, Corradeschi F. Studies on the biological effects of ozone: 4. Cytokine production and glutathione levels in human erythrocytes. *J Biol Regul Homeost Agents* 1993; 7: 133-138.

Carpendale MT, Freeberg JK. Does ozone alleviate AIDS diarrhea? *J Clin Gastroenterol* 17(2):142-145, 1993.

Carpendale MT, Freeberg JK. Ozone inactivates extracellular human immunodeficiency virus at non-toxic concentrations. Fourth Intl Conf AIDS, Stockholm, abstract 3560, 1988.

Carpendale MT, Freeberg JK. Ozone inactivates HIV at noncytotoxic concentrations. *Antiviral Res*. 1991 Oct;16(3):281-92.

Castañeira ET, Cruz O, Menéndez S1. Dyschroma Treated With 'OLEOZON'. Abstract, 1995 International Ozone Conference, Havana, Cuba. Elpidio Berovides Educational Polyclinic Center, Cuba.1 Ozone Research Center, Cuba. Chang H, Fulton, Lynch E Antimicrobial Efficacy of Ozone on *Enterococcus faecalis*. IADR Abstract 2003

Chahverdiani B, Thadj-Bakhche A. Ozone treatment in root canal therapy. Introduction and general discussion *Acta Med Iran*. 1976;19(3):192-200.

de Gruijl FR. Skin cancer and solar UV radiation. *Eur J Cancer*. 1999 Dec;35(14):2003-9.

Domingo H, Abu-Naba L, Al Shorman H, Holmes J, Marashdeh M, Abu-Salem O, Smith C, Freeman R, and Lynch E. Reducing barriers to care in patients managed with ozone. *J. Dent. Res*, 2003. 82A: p. 0677

Ed McCabe, in <http://www.silvermedicine.org/ed-mccabe-ozone.html>

Fitzpatrick TB. The skin cancer cascade: from ozone depletion to melanoma--some definitions and some new interpretation, 1996. *J Dermatol*. 1996 Nov;23(11):816-20.

Freeman BA, Sharman MC, Mudd JB. Reaction of ozone with phospholipid vesicles and human erythrocyte ghosts. *Arch Biochem Biophys.* 1979 Oct 1;197(1):264-72.

Friedman LI, Stromberg RR. Viral inactivation and reduction in cellular blood products. *Rev Fr Transfus Hemobiol.* 1993 Jan;36(1):83-91. Review

Garber GE, Cameron DW, Hawley-Foss N, Greenway D, Shannon ME. The use of ozone-treated blood in the therapy of HIV infection and immune disease: a pilot study of safety and efficacy. *AIDS.* 1991 Aug;5(8):981-4.

Goldstein BD, Balchum OJ. Effect of ozone on lipid peroxidation in the red blood cell. *Proc Soc Exp Biol Med.* 1967 Nov;126(2):356-8.

Goldstein BD, Lodi C, Collinson C, Balchum OJ. Ozone and lipid peroxidation. *Arch Environ Health.* 1969 Apr;18(4):631-5.

Gutteridge JM, Halliwell B. Iron toxicity and oxygen radicals. *Baillieres Clin Haematol.* 1989 Apr;2(2):195-256.

Holmes J. New technologies in dental care. *Dentistry,* 2002. 16th May: p. 14. 3-part series

Holmes J and Daley T. Sensitivity and cracked teeth; treatment with ozone. *Dental Practice* 2003; June

Holmes J, Grootveld M, Smith C, Claxson A, and Lynch E. Bleaching of Components Responsible for Extrinsic Tooth Discoloration by Ozone. *J Dent Res* 82(Spec Iss A):0615, 2003

Hooker MH, Gazzard BG. Ozone-treated blood in the treatment of HIV infection. *AIDS.* 1992 Jan;6(1):131.

Lynch E, Grootveld M, Holmes J, Silwood CJ, Claxson AWD, Prinz J, Toms H. 1H NMR Analysis of Ozone-treated Grapeseed, Olive and Sunflower Oils. *AADR Abstract no. 182;* 2003

Jordan L, Beaver K, Foy S. Ozone treatment for radiotherapy skin reactions: is there an evidence base for practice? *Eur J Oncol Nurs.* 2002 Dec;6(4):220-7.

Lipatov KV, Sopromadze MA, Shekhter AB, Rudenko TG, Emel'ianov AIu. Ozone-ultrasonic therapy in the treatment of purulent wounds. *Khirurgiia (Mosk).* 2002;(1):36-9.

Moseley R, Waddington RJ, Embery G. Degradation of glycosaminoglycans by reactive oxygen species derived from stimulated polymorphonuclear leukocytes. *Biochim Biophys Acta.* 1997 Dec 31;1362(2-3):221-31.

Ovchinnikov IuM, Sin'kov EV. Use of gaseous ozone and ozonized solutions in the treatment of chronic suppurative otitis media. *Vestn Otorinolaringol.* 1998;(6):11-2.

Pogosov VS, Miroshnichenko NA, Tafintsev AN. Medical ozone in combination with low-frequency ultrasound therapy in the treatment of patients with chronic purulent otitis media. *Vestn Otorinolaringol.* 2001;(5):24-5.

Pryor WA, Stanley JP, Blair E. Autoxidation of polyunsaturated fatty acids: II. A suggested mechanism for the formation of TBA-reactive materials from prostaglandin-like endoperoxides. *Lipids.* 1976 May;11(5):370-9.

Sechi L.A, Lezcano I, Nunez N, Espim M, Duprè I, Pinna A, Molicotti P, Fadda G & Zanetti S. Antibacterial activity of ozonized sunflower oil (Oleozon). *Journal of Applied Microbiology*, Volume 90 Issue 2 Page 279 - February 2001

Slaper H, Velders GJ, Daniel JS, de Gruijl FR, van der Leun JC. Estimates of ozone depletion and skin cancer incidence to examine the Vienna Convention achievements. *Nature*. 1996 Nov 21;384(6606):256-8.

Thiele JJ, Schroeter C, Hsieh SN, Podda M, Packer L. The antioxidant network of the stratum corneum. *Curr Probl Dermatol*. 2001;29:26-42.

Urbach F. Ultraviolet radiation and skin cancer of humans. *J Photochem Photobiol B*. 1997 Aug;40(1):3-7.

Waddington RJ, Moseley R, Embery G. Reactive oxygen species: a potential role in the pathogenesis of periodontal diseases. *Oral Dis*. 2000 May;6(3):138-51.

Wells KH, Latino J, Gavalchin J, Poiesz BJ. Inactivation of human immunodeficiency virus type 1 by ozone in vitro. *Blood*. 1991 Oct 1;78(7):1882-90.

Passionflower was used in traditional remedies as a "calming" herb for anxiety, insomnia, seizures, and hysteria. During the early twentieth century, this herb was included in many over-the-counter sedatives and sleep aids. In Germany passionflower is available as an over-the-counter sedative (in combination with other calming herbs such as valerian and lemon balm). It is also used in German homeopathic medicine to treat pain, insomnia, and nervous restlessness. Today, professional herbalists use passionflower to help treat insomnia, tension, and other health problems related to anxiety and nervousness.

Supporting Research

Akhondzadeh S, Kashani L, Mobaseri M, Hosseini SH, Nikzad S, Khani M. Passionflower in the treatment of opiates withdrawal: a double-blind randomized controlled trial. *J Clin Pharm Ther.* 2001 Oct;26(5):369-73.

Akhondzadeh S, Naghavi HR, Vazirian M, Shayeganpour A, Rashidi H, Khani M. Passionflower in the treatment of generalized anxiety: a pilot double-blind randomized controlled trial with oxazepam. *J Clin Pharm Ther.* 2001 Oct;26(5):363-7.

Akhondzadeh S, Naghavi HR, Vazirian M, Shayeganpour A, Rashidi H, Khani M. Passionflower in the treatment of generalized anxiety: a pilot double-blind randomized controlled trial with oxazepam. *J Clin Pharm Ther.* 2001;26(5):369-373.

Akhondzadeh S. Passionflower in the treatment of opiates withdrawal: a double-blind randomized controlled trial. *J Clin Pharm Ther.* 2001;26(5):369-373.

Anseau M. Evaluation of activity parameters of passionflower dry extract capsules according to a "star" model. *J Pharm Belg.* 2004;59(4):97-9.

Argento A, Tiraferri E, Marzalani M. Oral anticoagulants and medicinal plants. An emerging interaction. *Ann Ital Med Int.* 2000 Apr-Jun;15(2):139-43. Review.

Baumgaertel A. Alternative and controversial treatments for attention-deficit/hyperactivity disorder. *Pediatr Clin of North Am.* 1999;46(5):977-992.

Bilia AR, Bergonzi MC, Mazzi G, Vincieri FF. Analysis and stability of the constituents of artichoke and St. John's wort tinctures by HPLC-DAD and HPLC-MS. *Drug Dev Ind Pharm.* 2002 May;28(5):609-19.

Bilia AR, Bergonzi MC, Gallori S, Mazzi G, Vincieri FF. Stability of the constituents of Calendula, milk-thistle and passionflower tinctures by LC-DAD and LC-MS. *J Pharm Biomed Anal.* 2002 Oct 15;30(3):613-24.

Block KI, Gyllenhaal C, Mead MN. Safety and efficacy of herbal sedatives in cancer care. *Integr Cancer Ther.* 2004 Jun;3(2):128-48. Review.

Blumenthal M, Busse WR, Goldberg A, et al. ed. *The Complete German Commission E Monographs.* Boston, Mass: Integrative Medicine Communications; 1998: 179-180.

Blumenthal M, Goldberg A, Brinckmann J. *Herbal Medicine: Expanded Commission E Monographs.* Newton, MA: Integrative Medicine Communications; 2000:293-296.

- Bourin M, Bougerol T, Guitton B, Broutin E.** A combination of plant extracts in the treatment of outpatients with adjustment disorder with anxious mood: controlled study versus placebo. *Fundam Clin Pharmacol.* 1997;11:127-132.
- Brinker F.** *Herb Contraindications and Drug Interactions.* 2nd ed. Sandy, Ore: Eclectic Medical; 1998:109-110.
- Capasso A, Pinto A.** Experimental investigations of the synergistic-sedative effect of passiflora and kava. *Acta Therapeutica.* 1995;21:127-140
- Cauffield JS, Forbes HJ.** Dietary supplements used in the treatment of depression, anxiety, and sleep disorders. *Lippincotts Prim Care Pract.* 1999 May-Jun;3(3):290-304. Review.
- Cuzzolin L, Zaffani S, Benoni G.** Safety implications regarding use of phytochemicals. *Eur J Clin Pharmacol.* 2006 Jan;62(1):37-42. Epub 2005 Dec 3.
- Dhawan K.** Drug/substance reversal effects of a novel tri-substituted benzoflavone moiety (BZF) isolated from *Passiflora incarnata* Linn.--a brief perspective. *Addict Biol.* 2003 Dec;8(4):379-86.
- Dhawan K, Dhawan S, Sharma A.** *Passiflora*: a review update. *J Ethnopharmacol.* 2004 Sep;94(1):1-23.
- Dhawan K, Kumar S, Sharma A.** Nicotine reversal effects of the benzoflavone moiety from *Passiflora incarnata* Linnaeus in mice. *Addict Biol.* 2002 Oct;7(4):435-41.
- Dhawan K, Kumar S, Sharma A.** Anxiolytic activity of aerial and underground parts of *Passiflora incarnata*. *Fitoterapia.* 2001 Dec;72(8):922-6.
- Dhawan K, Kumar S, Sharma A.** Antiasthmatic activity of the methanol extract of leaves of *Passiflora incarnata*. *Phytother Res.* 2003 Aug;17(7):821-2.
- Dhawan K, Sharma A.** Antitussive activity of the methanol extract of *Passiflora incarnata* leaves. *Fitoterapia.* 2002 Aug;73(5):397-9.
- De Souza KC, Petrovick PR, Bassani VL, Ortega GG.** The adjuvants aerosil 200 and Gelita-Sol-P influence on the technological characteristics of spray-dried powders from *Passiflora edulis* var. *flavicarpa*. *Drug Dev Ind Pharm.* 2000 Mar;26(3):331-6.
- Ernst E, ed.** *Passiflora.* *The Desktop Guide to Complementary and Alternative Medicine.* Edinburgh: Mosby; 2001:140-141.
- Ernst E.** Herbal remedies for anxiety - a systematic review of controlled clinical trials. *Phytomedicine.* 2006 Feb;13(3):205-8. Epub 2005 Aug 15.
- Fuchikami H, Satoh H, Tsujimoto M, Ohdo S, Ohtani H, Sawada Y.** Effects of herbal extracts on the function of human organic anion-transporting polypeptide OATP-B. *Drug Metab Dispos.* 2006 Apr;34(4):577-82. Epub 2006 Jan 13.
- Gomes CS, Campos AC, Torres OJ, Vasconcelos PR, Moreira AT, Tenorio SB, Tambara EM, Sakata K, Moraes Junior H, Ferrer AL.** *Passiflora edulis* extract and the healing of abdominal wall of rats: morphological and tensiometric study. *Acta Cir Bras.* 2006;21 Suppl 2:9-16.
- Gow PJ, Connelly NJ, Hill RL, Crowley P, Angus PW.** Fatal fulminant hepatic failure induced by a natural therapy containing kava. *Med J Aust.* 2003 May 5;178(9):442-3.

- Gruenwald J, Brendler T, Jaenicke C, ed.** PDR for Herbal Medicines. 2nd ed. Montvale, NJ: Medical Economics Company; 2000:573-575.
- Gyllenhaal C, Merritt SL, Peterson SD, Block KI, Gochenour T.** Efficacy and safety of herbal stimulants and sedatives in sleep disorders. *Sleep Med Rev.* 2000 Jun;4(3):229-251.
- Heck AM, DeWitt BA, Lukes AL.** Potential interactions between alternative therapies and warfarin. *Am J Health Syst Pharm.* 2000 Jul 1;57(13):1221-7; quiz 1228-30. Review.
- Kapadia GJ, Azuine MA, Tokuda H, Hang E, Mukainaka T, Nishino H, Sridhar R.** Inhibitory effect of herbal remedies on 12-O-tetradecanoylphorbol-13-acetate-promoted Epstein-Barr virus early antigen activation. *Pharmacol Res.* 2002 Mar;45(3):213-20.
- Krenn L.** Passion Flower (*Passiflora incarnata* L.)--a reliable herbal sedative. *Wien Med Wochenschr.* 2002;152(15-16):404-6. Review.
- Lans CA, Tambara EM, Tenorio SB, Torres OJ, Agulham MA, Araujo AC, Santis-Isolan PM, Oliveira RM, Arruda EC.** Ethnomedicines used in Trinidad and Tobago for urinary problems and diabetes mellitus. *J Ethnobiol Ethnomedicine.* 2006 Oct 13;2:45.
- Larzelere MM, Wiseman P.** Anxiety, depression, and insomnia. *Prim Care.* 2002 Jun;29(2):339-60, vii.
- Lutomski J, Segiet E, Szpunar K, Grisse K.** The importance of the passionflower in medicine. *Pharm Unserer Zeit.* 1981 Mar;10(2):45-9.
- Miyasaka LS, Atallah AN, Soares BG.** Passiflora for anxiety disorder. *Cochrane Database Syst Rev.* 2007 Jan 24;(1):CD00451
- Montanher AB, Zucolotto SM, Schenkel EP, Frode TS.** Evidence of anti-inflammatory effects of *Passiflora edulis* in an inflammation model. *J Ethnopharmacol.* 2007 Jan 19;109(2):281-8. Epub 2006 Jul 31.
- Mourvaki E, Gizzi S, Rossi R, Rufini S.** Passionflower fruit-a "new" source of lycopene? *J Med Food.* 2005 Spring;8(1):104-6.
- Newall C, Anderson L, Phillipson J.** *Herbal Medicines: A Guide for Health-care Professionals.* London, England: Pharmaceutical Press; 1996: 206-207.
- Rotblatt M, Ziment I.** *Evidence-Based Herbal Medicine.* Philadelphia, PA: Hanley & Belfus, Inc; 2002;294-297.
- Rowe CA, Nantz MP, Deniera C, Green K, Talcott ST, Percival SS.** Inhibition of neoplastic transformation of benzo[alpha]pyrene-treated BALB/c 3T3 murine cells by a phytochemical extract of passionfruit juice. *J Med Food.* 2004 Winter;7(4):402-7.
- Rudnicki M, Silveira MM, Pereira TV, Oliveira MR, Reginatto FH, Dal-Pizzol F, Moreira JC.** Protective effects of *Passiflora alata* extract pretreatment on carbon tetrachloride induced oxidative damage in rats. *Food Chem Toxicol.* 2007 Apr;45(4):656-61. Epub 2006 Nov 2.
- Solbakken AM, Rorbakken G, Gundersen T.** Nature medicine as intoxicant. *Tidsskr Nor Laegeforen.* 1997 Mar 20;117(8):1140-1.
- Soulimani R, Younos C, Jarmouni S, Bousta D, Misslin R, Mortier F.** Behavioural effects of *Passiflora incarnata* L. and its indole alkaloid and flavonoid derivatives and maltol in the mouse. *J Ethnopharmacol.* 1997;57(1):11-20.

Speroni E, Minghetti A. Neuropharmacological activity of extracts from *Passiflora incarnata*. *Planta Medica*. 1988;54:488-491.

Spinella M. Herbal Medicines and Epilepsy: The Potential for Benefit and Adverse Effects. *Epilepsy Behav*. 2001 Dec;2(6):524-532.

Vargas AJ, Geremias DS, Provensi G, Fornari PE, Reginatto FH, Gosmann G, Schenkel EP, Frode TS. *Passiflora alata* and *Passiflora edulis* spray-dried aqueous extracts inhibit inflammation in mouse model of pleurisy. *Fitoterapia*. 2007 Feb;78(2):112-9. Epub 2006 Nov 14.

Wheatley D. Medicinal plants for insomnia: a review of their pharmacology, efficacy and tolerability. *J Psychopharmacol*. 2005 Jul;19(4):414-21.

White L, Mavor S. *Kids, Herbs, Health*. Loveland, Colo: Interweave Press; 1998:22, 38.

Zal HM. Five herbs for depression, anxiety, and sleep disorders. Uses, benefits, and adverse effects. *Consultant*. 1999;3343-3349.

Potassium Sorbate References

Potassium Sorbate has shown antifungal and antimicrobial antifungal activity. It is used for its antimicrobial properties in infection control and wound management.

Venturini ME, Blanco D, Oria R. In vitro antifungal activity of several antimicrobial compounds against *Penicillium expansum*. J Food Prot. 2002 May;65(5):834-9

Sceletium is being used successfully by a number of psychiatrists, psychologists and doctors with excellent results for anxiety states and mild to moderate depression; and they can also be used by the lay public as supplements to elevate mood and for stress and tension. In addition to Sceletium's common use for the stress and mental fatigue of modern industrial living, Sceletium has been used as a natural supplement in:

1. Low mood, including grey weather syndrome
2. Anxiety states, including social phobia
3. Irritability in menopause
4. Improvement in libido, when lack of libido is from anxiety or low mood
5. Post-traumatic stress disorder, as part of a support program

Supporting Research.

Aiton, W.T. (1811) Hortus Kewensis or, A Catalogue of the Plants Cultivated in the Royal Botanic Garden at Kew. Vol. III. Longman, Hurst, Rees, Orme, and Brown, London.

Allison, M.J., Dawson, K.A., Cook, H.M. and Mayberry, W.R. (1985) Oxalobacter formigenes gen. nov., sp. nov: oxalate-degrading anaerobes that inhabit the gastrointestinal tract. Archives of Microbiology 141, 1-7.

Argenzio, R.A., Liacos, J.H. and Allison, M.J. (1988) Intestinal oxalate-degrading bacteria reduce oxalate absorption and toxicity in guinea pigs. Journal of Nutrition 118, 787-792.

Arridt, R.R. and Kruger, P.E.J. (1970) Alkaloids from Sceletium joubertii L. Bolus: the Structure of joubertiamine, dihydrojoubertiamine and dehydrojoubertiamine. Tetrahedron Letters 37, 3237-3240.

Barz, W. and Koster, J. (1981) Turnover and degradation of secondary (natural) products. In: P.K. Stumpf and E.E. Conn (Eds.), The Biochemistry of Plants: a Comprehensive Treatise. Vol. 7, Academic Press, New York, pp. 35-84.

Bastida, L, Viladomat, F., Llabres, J. M., Ramires, G., Codina, C. and Rubiralta, M. (1989) Narcissus alkaloids, VIII mesembrenone: an unexpected alkaloid from Narcissus pallidulus. Journal of Natural Products 52, 478-480.

Bittrich, V. (1986) Untersuchungen zu Mermalsbestand, Gliederung und Abgrenzung der Unterfamilie Mesembryanthemoideae (Mchembryanthemaceae Fend) Mitteilungen aus den Institut für Allgemeine Botanik (Hamburg) 21, 5-116.

Bolus, H.M.L. (1928) Notes of Mesembrianthemum and Some Allied Genera with Descriptions of a Hundred New Species. Part I. Bolus Herbarium, University of Cape Town. The Speciality Press, Cape Town.

Daniel, S.L., Hartmann, P.A. and Allison, M.J. (1987) Microbial degradation of oxalate in the gastrointestinal tracts of rats. Applied and Environmental Microbiology 53, 1793-1797.

Dobkin de Rios, M. (1990) Hallucinogens: Cross Cultural Perspectives. Prism-Unity, Dorset, U.K.

Elphick, R. (1977) Kraal and Castle: Khoikhoi and the Founding of White South Africa. Yale University Press, London.

Emboden, W. (1979) Narcotic Plants. MacMillan, New York.

Fourie, T.G., Swart, I. and Snyckers, F.O. (1992) Folk medicine: A viable starting point for pharmaceutical research. South African Journal of Science 88, 190-192.

- Guzinan, G.** (1983) The Genus *Psilocybe*. *Beiliefte Zur Nova Hedwigia* 74, 1-439. Kramer, Vaditz.
- Hanson, C.F., Frankos, V.H. and Thompson, W.O.** (1989) Bioavailability of oxalic acid from spinach, sugar beet fibre and a solution of sodium oxalate consumed by female volunteers. *Food Chemistry and Toxicology* 27, 181~184.
- Hartmann, M.E.K.** (1991) *Mesembryanthema*. *Contributions from the Bolus Herbarium* 13, 75-157.
- Haworth, A. H.** (1794) Observations on the Genus *Mesembryanthemum*, in Two Parts. J. Barker, B. and J. White, London.
- Herre, H.** (1971) *The Genera of the Mesembryanthemaceae*. Tafelberg Publishers, Cape Town.
- Jacobsen, H.** (1960) *A Handbook of Succulent Plants. Vol. III. Mesembryanthemums (Ficoideaceae)*. Blandford Press, London.
- Jeffs, P.W., Allmann, G., Campbell, H.F., Farrier, D.S., Ganguli, G. and Hawks, R. L.** (1970) Alkaloids of *Sceletium* species. 111. The structures of four new alkaloids from *Sceletium strictum*. *Journal of Organic Chemistry* 35, 3512-3518.
- Jeffs, P.W., Archie, W.C., Hawks, R.L. and Farrier, D.S.** (1971) Biosynthesis of mesembrine and related alkaloids: the amino acid precursors. *Journal of the American Chemical Society* 93, 3752~3758.
- Jeffs, P.W., Capps, T., Johnson, D.B., Karle, J.M., Martin, N.H. and Rauckman, B.** (1974) *Sceletium* alkaloids. VI. Minor alkaloids of *Sceletium namaquense* and *Sceletium strictum*. *Journal of Organic Chemistry* 39, 2703-2709.
- Jeffs, P.W., Karle, L.M. and Martin, N.H.** (1978) Cinnamic acid intermediates as precursors to mesembrine and some observations on the late stages in the biosynthesis of the mesembrine alkaloids. *Phytochemistry* 17, 719-728.
- Juritz, C.F.** (1906) Kaffir beers, their nature and composition. *Cape Agricultural Journal*, 28, 35-47.
- Kellerman, T.S., Coetzer, L.A.W. and Naude, T.W.** (1988) *Plant Poisonings and Mycotoxicoses of Livestock in Southern Africa*. Oxford University Press, Cape Town.
- Laidler, P.W.** (1928) The magic medicine of the Hottentots. *South African Journal of Science* 25, 433-447.
- Lewis, W.H. and Elvin-Lewis, P.F.** (1977) *Medicinal Botany: Plants Affecting Man's Health*. Wiley, New York.
- Libert, B. and Franceschi, V.R.** (1987) Oxalate in crop plants. *Journal of Agricultural and Food Chemistry* 35, 926~938.
- Marloth, R.** (1913) *The Flora of South Africa with Synoptical Tables of the Genera of Higher Plants. Vol. I*. William Wesley & Son, London.
- McKenna, D.J., Towers, G.H.N. and Abbott, F.** (1984) Monoamine oxidase inhibitors in South American hallucinogenic plants: tryptamines and -carboline constituents of ayahuasca. *Journal of Ethnopharmacology* 10, 195-223.
- Meiring, I.** (1898) Notes on some experiments with the active principle of *Mesembryanthemum tortuosum*. *Transactions of the South African Philosophical Society* 9, 48-50.

- Nienaber, G.S. and Raper, P.E.** (1977) *Toponymica Hottentolica*. (Volume H-Z). HSRC, Pretoria.
- Popelak, A. and Lettenbauer, G.** (1968) The mesembrine alkaloids. In: R.H.F. Manske (Ed.), *The Alkaloids*. Vol. 9. Academic Press, New York, pp. 467-482.
- Raper, P.E. and Boucher, M.** (Eds.) (1988) Robert Jacob Gordon. Cape Travels, 1777 to 1786. Vol. 1. The Brenthurst Press, Houghton, South Africa.
- Rimington, C. and Roets, G.C.S.** (1937) Notes upon the isolation of the alkaloidal constituent of the drug 'channa' or 'kougoed' (*Mesembryantheum anatomicum* and *Mesembryanthemum tortuosum*). *Onderstepoort Journal of Veterinary Science and Animal Industry* 9, 187-191.
- Rood, B.** (1994) *Uit die Veld-Aptek*. Tafelberg, Cape Town.
- Rowley, G.D.** (1978) Caryophyllidae. In: V.E. Heywood (Ed.), *Flowering Plants of the World*. Oxford University Press, UK, pp. 63-67.
- Schapera, I.** (1963) *The Khoisan Peoples of South Africa*. Routledge, London.
- Schultes, R.E.** (1970) The botanical and chemical distribution of hallucinogens. *Annual Review of Plant Physiology* 21, 571-598.
- Schultes, R.E.** (1976). Indole Alkaloids in Plant Hallucinogens. *Planta Medica* 29, 330~342.
- Schultes, R.E.** (1977) The botanical and chemical distribution of hallucinogens, In: B.B. Du Toit (Ed.), *Drugs, rituals and altered states of consciousness*, A.A. Balkema, Rotterdam, pp. 25-55.
- Schultes, R.E. and Farnsworth, N.** (1980) Ethnomedical, botanical and phytochemical aspects of natural hallucinogens. *Botanical Museum Leaflets of Harvard University* 28, 123-214.
- Schultes, R.E. and Hofmann, A.** (1979) *Plants of the Gods.. Origins of Hallucinogenic Use*. Hutchinson, London.
- Smith, T.A.** (1977) Tryptamine and related compounds in plants. *Phytochemistry* 16, 171-175.
- Snyckers, F.O., Strelow, F., and Weichers, A.** (1971) The structures of partial racemic Scelletium alkaloid A4 and tortuosamine, pyridine alkaloids from *Scelletium tortuosum* N.E.Br. *Chemical Communications (The Journal of the Chemical Society, Section D)*, 1467-1469.
- Stevens, R.V.** (1977) Alkaloid synthesis. In: J. ApSimon (Ed.), *The Total Synthesis of Natural Products*. Wiley, New York, pp. 439-554.
- Steyn, D.G.** (1934). *The Toxicology of Plants in South Africa (Together With a Consideration of Poisonous Foodstuffs and Fungi)*. Central News Agency Ltd., London.
- Watt, J. M. and Breyer-Brandwijk, M.G.** (1932) *The Medicinal and Poisonous Plants of Southern Africa*. Livingstone, Edinburgh.
- Watt, J.M. and Breyer-Brandwijk, M.G.** (1962) *The Medicinal and Poisonous Plants of Southern and Eastern Africa* 2nd ed. Livingstone, London.
- Weil, A.T. and Davis, W.** (1994) *Bufo alvarius*: a potent hallucinogen of animal origin. *Journal of Ethnopharmacology* 41, 1-8.
- Weniger, B., Italiano, L., Beck, J-R, Bastida, J., Bergonon, S., Codina, C., Lobstein, A. and Anton, R.** (1995) Cytotoxic activity of Amaryllidaceae alkaloids. *Planta Medica* 61, 77-79.

Sesame Seed Oil References

Sesame Seed Oil has been shown to reduce cellular oxidative stress, which is a key precursor to ageing of skin tissue. The oil has been shown to reduce periodontal disease, and the oil has anti-bacterial and fungal properties. Sesame seed oil contains a high percentage of Vitamin E, essential it maintaining healthy skin. Studies have shown anti-viral and nerve tissue growth stimulant.

Bhaskaran S, Santanam N, Penumetcha M, Parthasarathy S. Inhibition of atherosclerosis in low-density lipoprotein receptor-negative mice by sesame oil. *J Med Food.* 2006 Winter;9(4):487-90.

Chiang JP, Hsu DZ, Tsai JC, Sheu HM, Liu MY. Effects of topical sesame oil on oxidative stress in rats. *Altern Ther Health Med.* 2005 Nov-Dec;11(6):40-5.

Costa N, Fiore M, Aloe L. Healing action of nerve growth factor on lameness in adult goats. *Ann Ist Super Sanita.* 2002;38(2):187-94.

Cohen A, Goldberg M, Levy B, Leshno M, Katz Y. Sesame food allergy and sensitization in children: the natural history and long-term follow-up. *Pediatr Allergy Immunol.* 2007 May;18(3):217-23. Epub 2007 Mar 7.

Darmstadt GL, Mao-Qiang M, Chi E, Saha SK, Ziboh VA, Black RE, Santosham M, Elias PM. Impact of topical oils on the skin barrier: possible implications for neonatal health in developing countries. *Acta Paediatr.* 2002;91(5):546-54

Frank J. Beyond vitamin E supplementation: an alternative strategy to improve vitamin E status. *J Plant Physiol.* 2005 Jul;162(7):834-43.

Kapadia GJ, Azuine MA, Tokuda H, Takasaki M, Mukainaka T, Konoshima T, Nishino H. Chemopreventive effect of resveratrol, sesamol, sesame oil and sunflower oil in the Epstein-Barr virus early antigen activation assay and the mouse skin two-stage carcinogenesis. *Pharmacol Res.* 2002 Jun;45(6):499-505.

Hsu DZ, Chen KT, Chien SP, Li YH, Huang BM, Chuang YC, Liu MY. Sesame oil attenuates acute iron-induced lipid peroxidation-associated hepatic damage in mice. *Shock.* 2006 Dec;26(6):625-30.

Hsu DZ, Liu MY. Sesame oil protects against lipopolysaccharide-stimulated oxidative stress in rats. *Crit Care Med.* 2004 Jan;32(1):227-31.

Jansson H. Studies on periodontitis and analyses of individuals at risk for periodontal diseases. *Swed Dent J Suppl.* 2006;(180):5-49.

Mullany LC, Darmstadt GL, Khatry SK, Tielsch JM. Traditional massage of newborns in Nepal: implications for trials of improved practice. *J Trop Pediatr.* 2005 Apr;51(2):82-6. Epub 2005 Jan 26.

Moazzami AA, Andersson RE, Kamal-Eldin A. Quantitative NMR analysis of a sesamin catechol metabolite in human urine. *J Nutr.* 2007 Apr;137(4):940-4.

Contains:

Aloe Vera has been shown to have skin moisturising effects. Aloe Vera extracts have positive effects on cell structure and increase cellular healing potential. Antilipoxygenase activity and the trace elements content of Aloe Vera account for rapid skin healing in burn victims and radiation-affected patients. These extracts have been used in facial plastic surgery healing and wound management in chronic ulceration, and shown to have UV protective effects on exposed skin.

Cell Cultures

Bezakova L, Oblozinsky M, Sykorova M, Paulikova I, Kostalova D. Antilipoxygenase activity and the trace elements content of Aloe Vera in relation to the therapeutical effect. *Ceska Slov Farm.* 2005 Jan;54(1):43-6.

Dal'Belo SE, Gaspar LR, Maia Campos PM. Moisturizing effect of cosmetic formulations containing Aloe Vera extract in different concentrations assessed by skin bioengineering techniques. *Skin Res Technol.* 2006 Nov;12(4):241-6.

Human Studies

Abdullah KM, Abdullah A, Johnson ML, Bilski JJ, Petry K, Redmer DA, Reynolds LP, Grazul-Bilska AT. Effects of Aloe Vera on gap junctional intercellular communication and proliferation of human diabetic and nondiabetic skin fibroblasts. *J Altern Complement Med.* 2003 Oct;9(5):711-8.

Ardire L. Necrotizing fasciitis: case study of a nursing dilemma. *Ostomy Wound Manage.* 1997 Jun;43(5):30-4, 36, 38-40.

Avijgan M. Phytotherapy: an alternative treatment for non-healing ulcers. *J Wound Care.* 2004 Apr;13(4):157-8.

Bezakova L, Oblozinsky M, Sykorova M, Paulikova I, Kostalova D. Antilipoxygenase activity and the trace elements content of Aloe Vera in relation to the therapeutical effect. *Ceska Slov Farm.* 2005 Jan;54(1):43-6.

Bolderston A, Lloyd NS, Wong RK, Holden L, Robb-Blenderman L. The prevention and management of acute skin reactions related to radiation therapy: a systematic review and practice guideline. *Support Care Cancer.* 2006 Aug;14(8):802-17.

Choi SW, Son BW, Son YS, Park YI, Lee SK, Chung MH. The wound-healing effect of a glycoprotein fraction isolated from aloe Vera. *Br J Dermatol.* 2001 Oct;145(4):535-45.

Dal'Belo SE, Gaspar LR, Maia Campos PM. Moisturizing effect of cosmetic formulations containing Aloe Vera extract in different concentrations assessed by skin bioengineering techniques. *Skin Res Technol.* 2006 Nov;12(4):241-6.

Duansak D, Somboonwong J, Patumraj S. Effects of Aloe Vera on leukocyte adhesion and TNF-alpha and IL-6 levels in burn wounded rats. *Clin Hemorheol Microcirc.* 2003;29(3-4):239-46.

Fisher J, Scott C, Stevens R, Marconi B, Champion L, Freedman GM, Asrari F, Pilepich MV, Gagnon JD, Wong G. Randomized phase III study comparing Best Supportive Care to Biafine as a prophylactic agent for radiation-induced skin toxicity for women undergoing breast irradiation: Radiation Therapy Oncology Group (RTOG) 97-13. *Int J Radiat Oncol Biol Phys.* 2000 Dec 1;48(5):1307-10.

Gallagher J, Gray M. Is aloe Vera effective for healing chronic wounds? *J Wound Ostomy Continence Nurs.* 2003 Mar;30(2):68-71.

Gfeller RW, Crowe DT. The emergency care of traumatic wounds: current recommendations. *Vet Clin North Am Small Anim Pract.* 1994 Nov;24(6):1249-74.

Heggie S, Bryant GP, Tripcony L, Keller J, Rose P, Glendenning M, Heath J. A Phase III study on the efficacy of topical aloe Vera gel on irradiated breast tissue. *Cancer Nurs.* 2002 Dec;25(6):442-51.

Hodges PJ, Kam PC. The peri-operative implications of herbal medicines. *Anaesthesia.* 2002 Sep;57(9):889-99.

Hsu S. Green tea and the skin. *J Am Acad Dermatol.* 2005 Jun;52(6):1049-59.

Kostalova D, Bezakova L, Oblozinsky M, Kardosova A. Isolation and characterization of active compounds from Aloe Vera with a possible role in skin protection. *Ceska Slov Farm.* 2004 Sep;53(5):248-51.

Lee CK, Han SS, Mo YK, Kim RS, Chung MH, Park YI, Lee SK, Kim YS. Prevention of ultraviolet radiation-induced suppression of accessory cell function of Langerhans cells by Aloe Vera gel components. *Immunopharmacology.* 1997 Oct;37(2-3):153-62.

Lv RL, Wu BY, Chen XD, Jiang Q. The effects of aloe extract on nitric oxide and endothelin levels in deep-partial thickness burn wound tissue in rat. *Zhonghua Shao Shang Za Zhi.* 2006 Oct;22(5):362-5.

MacKay D, Miller AL. Nutritional support for wound healing. *Altern Med Rev.* 2003 Nov;8(4):359-77.

Maddocks-Jennings W, Wilkinson JM, Shillington D. Novel approaches to radiotherapy-induced skin reactions: a literature review. *Complement Ther Clin Pract.* 2005 Nov;11(4):224-31.

MacKay D, Miller AL. Nutritional support for wound healing. *Altern Med Rev.* 2003 Nov;8(4):359-77.

Mantle D, Gok MA, Lennard TW. Adverse and beneficial effects of plant extracts on skin and skin disorders. *Adverse Drug React Toxicol Rev.* 2001 Jun;20(2):89-103.

Moore ZE, Cowman S. Wound cleansing for pressure ulcers. *Cochrane Database Syst Rev.* 2005 Oct 19;(4):CD004983.

Olsen DL, Raub W Jr, Bradley C, Johnson M, Macias JL, Love V, Markoe A. The effect of aloe Vera gel/mild soap versus mild soap alone in preventing skin reactions in patients undergoing radiation therapy. *Oncol Nurs Forum.* 2001 Apr;28(3):543-7.

Pribitkin ED, Boger G. Herbal therapy: what every facial plastic surgeon must know. *Arch Facial Plast Surg.* 2001 Apr-Jun;3(2):127-32.

Pribitkin ED, Boger G, e P, Glendenning M, Heath J. Herbal therapy: what every facial plastic surgeon must know. *Arch Facial Plast Surg.* 2001 Apr-Jun;3(2):127-32.

Richardson J, Smith JE, McIntyre M, Thomas R, Pilkington K. Aloe Vera for preventing radiation-induced skin reactions: a systematic literature review. *Clin Oncol (R Coll Radiol).* 2005 Sep;17(6):478-84.

Strickland FM, Kuchel JM, Halliday GM. Natural products as aids for protecting the skin's immune system against UV damage. *Cutis.* 2004 Nov;74(5 Suppl):24-8.

Wickline MM. Prevention and treatment of acute radiation dermatitis: a literature review. *Oncol Nurs Forum.* 2004 Mar-Apr;31(2):237-47.

Williams MS, Burk M, Loprinzi CL, Hill M, Schomberg PJ, Nearhood K, O'Fallon JR, Laurie JA, Shanahan TG, Moore RL, Urias RE, Kuske RR, Engel RE, Eggleston WD. Phase III double-blind evaluation of an aloe Vera gel as a prophylactic agent for radiation-induced skin toxicity. *Int J Radiat Oncol Biol Phys.* 1996 Sep 1;36(2):345-9.

Visuthikosol V, Chowchuen B, Sukwanarat Y, Sriurairatana S, Boonpucknavig V. Effect of aloe Vera gel to healing of burn wound a clinical and histologic study. *J Med Assoc Thai.* 1995 Aug;78(8):403-9.

Animal Models

Badgwell DB, Walker CM, Baker WT, Strickland FM. Ethanol and aloe emodin alter the p53 mutational spectrum in ultraviolet radiation-induced murine skin tumors. *Mol Carcinog.* 2004 Mar;39(3):127-38.

Chithra P, Sajithlal GB, Chandrakasan G. Influence of aloe Vera on the healing of dermal wounds in diabetic rats. *J Ethnopharmacol.* 1998 Jan;59(3):195-201.

Chithra P, Sajithlal GB, Chandrakasan G. Influence of Aloe Vera on the glycosaminoglycans in the matrix of healing dermal wounds in rats. *J Ethnopharmacol.* 1998 Jan;59(3):179-86

Chithra P, Sajithlal GB, Chandrakasan G. Influence of Aloe Vera on collagen characteristics in healing dermal wounds in rats. *Mol Cell Biochem.* 1998 Apr;181(1-2):71-6.

Gfeller RW, Crowe DT. The emergency care of traumatic wounds: current recommendations. *Vet Clin North Am Small Anim Pract.* 1994 Nov;24(6):1249-74.

Heggors JP, Kucukcelebi A, Listengarten D, Stabenau J, Ko F, Broemeling LD, Robson MC, Winters WD. Beneficial effect of Aloe on wound healing in an excisional wound model. *J Altern Complement Med.* 1996 Summer;2(2):271-7.

Muller MJ, Hollyoak MA, Moaveni Z, Brown TL, Herndon DN, Heggors JP. Retardation of wound healing by silver sulfadiazine is reversed by Aloe Vera and nystatin. *Burns.* 2003 Dec;29(8):834-6.

Rodriguez-Bigas M, Cruz NI, Suarez A. Comparative evaluation of aloe Vera in the management of burn wounds in guinea pigs. *Plast Reconstr Surg.* 1988 Mar;81(3):386-9.

Somboonwong J, Thanamitramanee S, Jariyapongskul A, Patumraj S. Therapeutic effects of Aloe Vera on cutaneous microcirculation and wound healing in second degree burn model in rats. *J Med Assoc Thai.* 2000 Apr;83(4):417-25.

Spoerke DG, Ekins BR. Aloe Vera--fact or quackery. *Vet Hum Toxicol.* 1980 Dec;22(6):418-24.

Strickland FM, Pelley RP, Kripke ML. Prevention of ultraviolet radiation-induced suppression of contact and delayed hypersensitivity by Aloe barbadensis gel extract. *J Invest Dermatol.* 1994 Feb;102(2):197-204.

Watcher MA, Wheeland RG. The role of topical agents in the healing of full-thickness wounds. *J Dermatol Surg Oncol.* 1989 Nov;15(11):1188-95.

Cedar Wood References

Cedar Wood has been used for over 3000 years as a liner for caskets and store boxes for clothing. It was used in China as an extracted oil for medicinal purposes. The majority of papers deal with allergenic issues amongst forestry and wood workers.

Uses

Cedar Wood extracts have been shown to have anti-microbial effects. In combination with other essential oil extracts, it potentiates the healing ability of skin tissue, and is used in wound management.

Dolan MC, Dietrich G, Panella NA, Montenieri JA, Karchesy JJ. Biocidal activity of three wood essential oils against *Ixodes scapularis* (Acari: Ixodidae), *Xenopsylla cheopis* (Siphonaptera: Pulicidae), and *Aedes aegypti* (Diptera: Culicidae). *J Econ Entomol.* 2007 Apr;100(2):622-5.

Panella NA, Dolan MC, Karchesy JJ, Xiong Y, Peralta-Cruz J, Khasawneh M, Montenieri JA, Maupin GO. Use of novel compounds for pest control: insecticidal and acaricidal activity of essential oil components from heartwood of Alaska yellow cedar. *J Med Entomol.* 2005 May;42(3):352-8.

Allergy

Ashley MJ, Corey P, Chan-Yeung M, MacLean L, Maledy H, Grzybowski S. A respiratory survey of cedar mill workers. II. Influence of work-related and host factors on the prevalence of symptoms and pulmonary function abnormalities. *J Occup Med.* 1978 May;20(5):328-32.

Bleumink E, Mitchell JC, Nater JP. Allergic contact dermatitis from cedar wood (*Thuja plicata*). *Br J Dermatol.* 1973 May;88(5):499-504.

Calnan CD. Dermatitis from cedar wood pencils. *Trans St Johns Hosp Dermatol Soc.* 1972;58(1):43-7

Chan-Yeung M, Barton GM, McLean L, Grzybowski S. Bronchial reactions to western red cedar (*Thuja plicata*). *Can Med Assoc J.* 1971 Jul 10;105(1):56-8 passim.

Chan-Yeung M, Barton GM, MacLean L, Grzybowski S. Occupational asthma and rhinitis due to Western red cedar (*Thuja plicata*). *Am Rev Respir Dis.* 1973 Nov;108(5):1094-102.

Choubrac P. Occupational asthma: current and future perspectives. The point of view of an expert. *Bull Acad Natl Med.* 1991 May;175(5):703-12; discussion 712-5.

Estlander T, Jolanki R, Alanko K, Kanerva L. Occupational allergic contact dermatitis caused by wood dusts. *Contact Dermatitis.* 2001 Apr;44(4):213-7.

Frew AJ, Chan H, Chan-Yeung M. Lack of role for mononuclear cell-derived histamine releasing factors in occupational asthma due to western red cedar. *Clin Exp Allergy.* 1993 Oct;23(10):861-7.

Gandevia B, Milne J. Occupational asthma and rhinitis due to Western red cedar (*Thuja plicata*), with special reference to bronchial reactivity. *Br J Ind Med.* 1970 Jul;27(3):235-44.

Lin FJ, Dimich-Ward H, Chan-Yeung M. Longitudinal decline in lung function in patients with occupational asthma due to western red cedar. *Occup Environ Med.* 1996 Nov;53(11):753-6.

Mue S, Ise T, Ono Y, Akasaka K. A study of western red cedar-induced asthma. *Ann Allergy.* 1975 May;34(5):296-304.

Paggiaro PL, Chan Yeung M. Pattern of specific airway response in asthma due to western red cedar (*Thuja plicata*): relationship with length of exposure and lung function measurements. *Clin Allergy*. 1987 Jul;17(4):333-9.

Shida T, Mimaki K, Sasaki N, Nakagawa Y, Hattori O. Western red cedar asthma. 3. Occurrence in Oume City, Tokyo and results of inhalation tests using "nezucone", aromatic substances of the western red cedar *Arerugi*. 1971 Dec;20(12):915-21.

Siracusa A, Kennedy SM, DyBuncio A, Lin FJ, Marabini A, Chan-Yeung M. Prevalence and predictors of asthma in working groups in British Columbia. *Am J Ind Med*. 1995 Sep;28(3):411-23.

Vedal S, Enarson DA, Chan H, Ochnio J, Tse KS, Chan-Yeung M. A longitudinal study of the occurrence of bronchial hyperresponsiveness in western red cedar workers. *Am Rev Respir Dis*. 1988 Mar;137(3):651-5.

Williams PB. Critical analysis of studies concerning reports of respiratory sensitization to certain wood dusts. *Allergy Asthma Proc*. 2005 Jul-Aug;26(4):262-7. Review.

Wohrl S, Hemmer W, Focke M, Gotz M, Jarisch R. The significance of fragrance mix, balsam of Peru, colophony and propolis as screening tools in the detection of fragrance allergy. *Br J Dermatol*. 2001 Aug;145(2):268-73.

Toxicology

Craig AM, Karchesy JJ, Blythe LL, del Pilar Gonzalez-Hernandez M, Swan LR. Toxicity studies on western juniper oil (*Juniperus occidentalis*) and Port-Orford-cedar oil (*Chamaecyparis lawsoniana*) extracts utilizing local lymph node and acute dermal irritation assays. *Toxicol Lett*. 2004 Dec 30;154(3):217-24.

CoEnzyme Q10 (CoEQ10) has anti-inflammatory and antioxidant properties. It is an important nutritional supplement before and following surgery. It helps prevent skin damage and aging that may result in wrinkle formation. Studies have shown CoEQ10's importance in skin healing and rejuvenation.

Blatt T, Mundt C, Mummert C, Maksiuk T, Wolber R, Keyhani R, Schreiner V, Hoppe U, Schachtschabel DO, Stab F. Modulation of oxidative stresses in human aging skin. *Z Gerontol Geriatr.* 1999 Apr;32(2):83-8.

Baumann L. How to prevent photoaging? *J Invest Dermatol.* 2005 Oct;125(4):xii-xiii.

Fuller B, Smith D, Howerton A, Kern D. Anti-inflammatory effects of CoQ10 and colorless carotenoids. *J Cosmet Dermatol.* 2006 Mar;5(1):30-8.

Hojerova J. Coenzyme Q10--its importance, properties and use in nutrition and cosmetics. *Ceska Slov Farm.* 2000 May;49(3):119-23.

Hoppe U, Bergemann J, Diembeck W, Ennen J, Gohla S, Harris I, Jacob J, Kielholz J, Mei W, Pollet D, Schachtschabel D, Sauermann G, Schreiner V, Stab F, Steckel F. Coenzyme Q10, a cutaneous antioxidant and energizer. *Biofactors.* 1999;9(2-4):371-8

McDaniel D, Neudecker B, Dinardo J, Lewis J 2nd, Maibach H. Clinical efficacy assessment in photodamaged skin of 0.5% and 1.0% idebenone. *J Cosmet Dermatol.* 2005 Sep;4(3):167-73.

Okamoto T, Kubota N, Takahata K, Takahashi T, Goshima K, Kishi T. Protective effect of coenzyme Q10 on cultured skeletal muscle cell injury induced by continuous electric field stimulation. *Biochem Biophys Res Commun.* 1995 Nov 22;216(3):1006-12.

Passi S, De Pita O, Grandinetti M, Simotti C, Littarru GP. The combined use of oral and topical lipophilic antioxidants increases their levels both in sebum and stratum corneum. *Biofactors.* 2003;18(1-4):289-97.

Passi S, De Pita O, Puddu P, Littarru GP. Lipophilic antioxidants in human sebum and aging. *Free Radic Res.* 2002 Apr;36(4):471-7.

Rona C, Vailati F, Berardesca E. The cosmetic treatment of wrinkles. *J Cosmet Dermatol.* 2004 Jan;3(1):26-34.

Shimomura Y, Suzuki M, Sugiyama S, Hanaki Y, Ozawa T. Protective effect of coenzyme Q10 on exercise-induced muscular injury. *Biochem Biophys Res Commun.* 1991 Apr 15;176(1):349-55..

Siemieniuk E, Skrzydlewska E. Coenzyme Q10: its biosynthesis and biological significance in animal organisms and in humans. *Postepy Hig Med Dosw (Online).* 2005;59:150-9.

Smith AG, Din A, Denyer M, Crowther NJ, Eagland D, Vowden K, Vowden P, Britland ST. Microengineered surface topography facilitates cell grafting from a prototype hydrogel wound dressing with antibacterial capability. *Biotechnol Prog.* 2006 Sep-Oct;22(5):1407-15.

Winkler-Stuck K, Wiedemann FR, Wallesch CW, Kunz WS. Effect of coenzyme Q10 on the mitochondrial function of skin fibroblasts from Parkinson patients. *J Neurol Sci.* 2004 May 15;220(1-2):41-8.

Animal Studies

Ashida Y, Yamanishi H, Terada T, Oota N, Sekine K, Watabe K. CoQ10 supplementation elevates the epidermal CoQ10 level in adult hairless mice. *Biofactors*. 2005;25(1-4):175-8.

Giovannini L, Bertelli AA, Scalori V, Dell'Osso L, Alessandri MG, Mian M. Skin penetration of CoQ10 in the rat. *Int J Tissue React*. 1988;10(2):103-5.

Scalori V, Alessandri MG, Giovannini L, Bertelli A. Plasma and tissue concentrations of coenzyme Q10 in the rat after intravenous, oral and topical administrations. *Int J Tissue React*. 1990;12(3):149-54.

Colloidal Silver has been found to have antibacterial properties. Research and published studies have shown colloidal silver prevents damage by free radicals, especially the hydroxide free radicals. Colloidal silver has been used in management of burns, and is one constituent of an experimental wound dressing for infection control and tissue healing potential. It has been used to cleanse the body of heavy metals.

Brentano L, Margraf H, Monafó WW, Moyer CA. Antibacterial efficacy of a colloidal silver complex. *Surg Forum.* 1966;17:76-8

Huang SK, Martin FJ, Jay G, Vogel J, Papahadjopoulos D, Friend DS. Extravasation and transcytosis of liposomes in Kaposi's sarcoma-like dermal lesions of transgenic mice bearing the HIV tat gene. *Am J Pathol.* 1993 Jul;143(1):10-4.

Kim DW, Hong GH, Lee HH, Choi SH, Chun BG, Won CK, Hwang IK, Won MH. Effect of colloidal silver against the cytotoxicity of hydrogen peroxide and naphthazarin on primary cultured cortical astrocytes. *Int J Neurosci.* 2007 Mar;117(3):387-400.

Lansdown AB. Controversies over colloidal silver. *J Wound Care.* 2003 Mar;12(3):120.

Lansdown AB. Silver in health care: antimicrobial effects and safety in use. *Curr Probl Dermatol.* 2006;33:17-34.

Monafó WW. The management of burns. II. The silver nitrate method. *Curr Probl Surg.* 1969 Feb;:53-66.

Morris PJ, Bondoc CC, Burke JF. The control of burn wound sepsis with 0.5 per cent silver nitrate. *Aust N Z J Surg.* 1968 Nov;38(2):108-11.

Serra N, Torres OG, Romo MI, Llovera JM, Vigil-Escalera LJ, Soto MA, Gonzalez-Parra S. Hydro-colloidal dressings which release hydro-active silver. *Rev Enferm.* 2005 Feb;28(2):13-8.

Eucalyptus extracts show antibacterial, anti-viral and anti-fungal properties. They have been used in cases of multiple-resistance staphylococcus infections. A topical application or percutaneous treatment has been shown to be effective in chronic MRSA osteomyelitis. An anti-inflammatory effect through anti-oxidant pathway has been demonstrated, and eucalyptus extracts are used to de-stress patients and control post-operative pain. In addition, the eucalyptus extracts show antiplasmid activity. The antibacterial efficacies of eucalyptus tincture is used in obstetric-gynecologic and dental infections.

Bassole IH, Ouattara AS, Nebie R, Ouattara CA, Kabore ZI, Traore SA. Chemical composition and antibacterial activities of the essential oils of *Lippia chevalieri* and *Lippia multiflora* from Burkina Faso. *Phytochemistry*. 2003 Jan;62(2):209-12.

Cimanga K, Kambu K, Tona L, Apers S, De Bruyne T, Hermans N, Totte J, Pieters L, Vlietinck AJ. Correlation between chemical composition and antibacterial activity of essential oils of some aromatic medicinal plants growing in the Democratic Republic of Congo. *J Ethnopharmacol*. 2002 Feb;79(2):213-20.

Edwards-Jones V, Buck R, Shawcross SG, Dawson MM, Dunn K. The effect of essential oils on methicillin-resistant *Staphylococcus aureus* using a dressing model. *Burns*. 2004 Dec;30(8):772-7.

Essawi T, Srour M. Screening of some Palestinian medicinal plants for antibacterial activity. *J Ethnopharmacol*. 2000 Jun;70(3):343-9.

Fellows D, Barnes K, Wilkinson S. Aromatherapy and massage for symptom relief in patients with cancer. *Cochrane Database Syst Rev*. 2004;(2):CD002287.

Grassmann J, Hippeli S, Dornisch K, Rohnert U, Beuscher N, Elstner EF. Antioxidant properties of essential oils. Possible explanations for their anti-inflammatory effects. *Arzneimittelforschung*. 2000 Feb;50(2):135-9.

Halcon L, Milkus K. *Staphylococcus aureus* and wounds: a review of tea tree oil as a promising antimicrobial. *Am J Infect Control*. 2004 Nov;32(7):402-8.

Hsiao LK. Experimental and clinical preliminary observations on *folium eucalypti* in treating burns. *Zhonghua Wai Ke Za Zhi*. 1963;11:190-3.

Kim MJ, Nam ES, Paik SI. The effects of aromatherapy on pain, depression, and life satisfaction of arthritis patients. *Taehan Kanho Hakhoe Chi*. 2005 Feb;35(1):186-94.

Kim JT, Wajda M, Cuff G, Serota D, Schlame M, Axelrod DM, Guth AA, Bekker AY. Evaluation of aromatherapy in treating postoperative pain: pilot study. *Pain Pract*. 2006 Dec;6(4):273-7.

Louis M, Kowalski SD. Use of aromatherapy with hospice patients to decrease pain, anxiety, and depression and to promote an increased sense of well-being. *Am J Hosp Palliat Care*. 2002 Nov-Dec;19(6):381-6.

Lu XQ, Tang FD, Wang Y, Zhao T, Bian RL. Effect of *Eucalyptus globulus* oil on lipopolysaccharide-induced chronic bronchitis and mucin hypersecretion in rats. *Zhongguo Zhong Yao Za Zhi*. 2004 Feb;29(2):168-71.

Nielsen JB. Natural oils affect the human skin integrity and the percutaneous penetration of benzoic acid dose-dependently. *Basic Clin Pharmacol Toxicol*. 2006 Jun;98(6):575-81.

Pattnaik S, Subramanyam VR, Kole C. Antibacterial and antifungal activity of ten essential oils in vitro. *Microbios.* 1996;86(349):237-46.

Prabuseenivasan S, Jayakumar M, Ignacimuthu S. In vitro antibacterial activity of some plant essential oils. *BMC Complement Altern Med.* 2006 Nov 30;6:39.

Ramezani H, Singh HP, Batish DR, Kohli RK. Antifungal activity of the volatile oil of *Eucalyptus citriodora*. *Fitoterapia.* 2002 Jun;73(3):261-2.

Samy RP, Ignacimuthu S. Antibacterial activity of some folklore medicinal plants used by tribals in Western Ghats of India. *J Ethnopharmacol.* 2000 Jan;69(1):63-71.

Sartorelli P, Marquiere AD, Amaral-Baroli A, Lima ME, Moreno PR. Chemical composition and antimicrobial activity of the essential oils from two species of *Eucalyptus*. *Phytother Res.* 2007 Mar;21(3):231-3.

Schelz Z, Molnar J, Hohmann J. Antimicrobial and antiplasmid activities of essential oils. *Fitoterapia.* 2006 Jun;77(4):279-85. Epub 2006 May 11.

Schnitzler P, Schon K, Reichling J. Antiviral activity of Australian tea tree oil and eucalyptus oil against herpes simplex virus in cell culture. *Pharmazie.* 2001 Apr;56(4):343-7.

Senthil Nathan S. The use of *Eucalyptus tereticornis* Sm. (Myrtaceae) oil (leaf extract) as a natural larvicidal agent against the malaria vector *Anopheles stephensi* Liston (Diptera: Culicidae). *Bioresour Technol.* 2007 Jul;98(9):1856-60. Epub 2006 Sep 25.

Sherry E, Boeck H, Warnke PH. Percutaneous treatment of chronic MRSA osteomyelitis with a novel plant-derived antiseptic. *BMC Surg.* 2001;1:1. Epub 2001 May 16.

Silva J, Abebe W, Sousa SM, Duarte VG, Machado MI, Matos FJ. Analgesic and anti-inflammatory effects of essential oils of *Eucalyptus*. *J Ethnopharmacol.* 2003 Dec;89(2-3):277-83.

Takarada K, Kimizuka R, Takahashi N, Honma K, Okuda K, Kato T. A comparison of the antibacterial efficacies of essential oils against oral pathogens. *Oral Microbiol Immunol.* 2004 Feb;19(1):61-4.

Thorsell W, Mikiver A, Tunon H. Repelling properties of some plant materials on the tick *Ixodes ricinus*. *Phytomedicine.* 2006 Jan;13(1-2):132-4. Epub 2005 Jul 1.

Tunon H, Thorsell W, Mikiver A, Malander I. Arthropod repellency, especially tick (*Ixodes ricinus*), exerted by extract from *Artemisia abrotanum* and essential oil from flowers of *Dianthus caryophyllum*. *Fitoterapia.* 2006 Jun;77(4):257-61. Epub 2006 Apr 19.

Vigo E, Cepeda A, Gualillo O, Perez-Fernandez R. In-vitro anti-inflammatory effect of *Eucalyptus globulus* and *Thymus vulgaris*: nitric oxide inhibition in J774A.1 murine macrophages. *J Pharm Pharmacol.* 2004 Feb;56(2):257-63.

Willms RU, Funk P, Walther C. Local tolerability of two preparations with eucalyptus oil and pine-needle oil. *MMW Fortschr Med.* 2005 Oct 6;147 Suppl 3:109-12.

Yang YC, Lee HS, Clark JM, Ahn YJ. Insecticidal activity of plant essential oils against *Pediculus humanus capitis* (Anoplura: Pediculidae). *J Med Entomol.* 2004 Jul;41(4):699-704.

Zaianchkovskii IF. The use of eucalyptus tincture in obstetric-gynecologic practice. *Veterinariia.* 1966 Jul;43(7):82-3

Toxicity

Darben T, Cominos B, Lee CT. Topical eucalyptus oil poisoning. *Australas J Dermatol.* 1998 Nov;39(4):265-7.

De Vincenzi M, Silano M, DeVincenzi A, Maialetti F, Scazzocchio B. Constituents of aromatic plants: eucalyptol. *Fitoterapia.* 2002 Jun;73(3):269-75.

Webb NJ, Pitt WR. Eucalyptus oil poisoning in childhood: 41 cases in south-east Queensland. *J Paediatr Child Health.* 1993 Oct;29(5):368-71.

Animal Studies

Al-Saimary IE, Bakr SS, Jaffar T, Al-Saimary AE, Salim H, Al-Muosawi R. Effects of some plant extracts and antibiotics on *Pseudomonas aeruginosa* isolated from various burn cases. *Saudi Med J.* 2002 Jul;23(7):802-5.

Das MK, Bhattacharya A, Ghosal SK. Effect of different terpene-containing essential oils on percutaneous absorption of trazodone hydrochloride through mouse epidermis. *Drug Deliv.* 2006 Nov-Dec;13(6):425-31.

Husain MT, Karim QN, Tajuri S. Analysis of infection in a burn ward. *Burns.* 1989 Oct;15(5):299-302.

Lysenko LV. Anti-inflammatory effect of azulene of eucalyptus oil. *Farmakol Toksikol.* 1967 May-Jun;30(3):341-3.

Mazurik MF, Skomarovskii ATs, Ivankov SN, Nemchenko VV. Problems of treatment of suppurative wounds. *Klin Khir.* 1975 May;(3):52-3.

Santos FA, Rao VS. Mast cell involvement in the rat paw oedema response to 1,8-cineole, the main constituent of eucalyptus and rosemary oils. *Eur J Pharmacol.* 1997 Jul 23;331(2-3):253-8.

Frankincense extracts are used in China in wound dressings to control infection and manage tissue regeneration and repair. The extract has anti-microbial and anti-fungal activity, which are of dermatological relevance. Frankincense extracts are used in trans-dermal preparations to deliver pharmaceuticals into deep tissue and into the blood system.

Li P, Li L, Zhuang Y, Guo HQ, Chen Q, An BC. The creation of laosun yutie plaster and safety experiment. *Zhongguo Zhong Yao Za Zhi*. 2005 May;30(9):697-9.

Weckesser S, Engel K, Simon-Haarhaus B, Wittmer A, Pelz K, Schempp CM. Screening of plant extracts for antimicrobial activity against bacteria and yeasts with dermatological relevance. *Phytomedicine*. 2007 Feb 7.

Xu YA, Zhang X, Feng B, Gao H, Wang Y. Trends in the study on transdermal agents of Chinese medicinal herbs. *Zhong Yao Cai*. 2002 Feb;25(2):133-5.

Zhou SH, Xiao XH, Yuan HL, Zhao YL, Shan LM, Cai GM. Proceedings of new drug delivery systems and their applications in the traditional Chinese drugs. *Zhongguo Zhong Yao Za Zhi*. 2003 Jul;28(7):589-92.

African Griffonia Seed (contains 5-11% 5-HTP). 5-hydroxytryptophan, is the immediate precursor of serotonin. Low levels of serotonin are associated with sleep problems, depression, anxiety, compulsive disorders (including eating disorders), restless leg syndrome, migraines, fibromyalgia, and low pain threshold. Many people that are afflicted with one of those conditions often have others, which has led some researchers to label them collectively as "Low Serotonin Syndrome".

Supporting Research

Angst J, Woggon B, Schoepf J. The treatment of depression with L-5-hydroxytryptophan versus imipramine. Results of two open and one double-blind study. *Arch Psychiatr Nervenkr.* 1977;224:175–186.

Attele AS, Xie JT, Yuan CS. Treatment of insomnia: an alternative approach. *Altern Med Rev.* 2000;5(3):249-259.

Birdsall TC. 5-Hydroxytryptophan: a clinically-effective serotonin precursor. *Altern Med Rev.* 1998;3:271–280.

Bodner RA, Lynch T, Lewis L, Kahn D. Serotonin syndrome. *Neurol.* 1995;45(2):219-223.

Byerley WF, et al. 5-Hydroxytryptophan: a review of its antidepressant efficacy and adverse effects. *J Clin Psychopharmacol.* 1987;7:127–137.

Cangiano C, Ceci F, Cascino A, et al. Eating behavior and adherence to dietary prescriptions in obese adult subjects treated with 5-hydroxytryptophan. *J Clin Nutr.* 1992;56:863–867.

Caruso I, Sarzi Puttini P, Cazzola M, et al. Double-blind study of 5-hydroxytryptophan versus placebo in the treatment of primary fibromyalgia syndrome. *J Int Med Res.* 1990;18:201–209.

Cauffield JS, Forbes HJ. Dietary supplements used in the treatment of depression, anxiety, and sleep disorders. *Lippincotts Prim Care Pract.* 1999; 3(3):290-304.

Ceci F, Cangiano C, Cairella M, Cascino A, et al. The effects of oral 5-hydroxytryptophan administration on feeding behavior in obese adult female subjects. *J Neural Transm.* 1989;76:109–117.

DeBenedittis G, Massei R. Serotonin precursors in chronic primary headache. A double-blind cross-over study with L-5-hydroxytryptophan vs. placebo. *J Neurosurg Sci.* 1985; 29:239–248.

DeGiorgis G, et al. Headache in association with sleep disorders in children: a psychodiagnostic evaluation and controlled clinical study—L-5-HTP versus placebo. *Drugs Exp Clin Res.* 1987;13:425–433.

Dwuma-Badu D. Constituents of West African medicinal plants. XVI. Griffonin and Grriffonilide, novel constituents of *Griffonia simplicifolia*. *Lloydia.* 1976 Nov-Dec;39(6):385-90.

Elko CJ, Burgess JL, Robertson WO. Zolpidem-associated hallucinations and serotonin reuptake inhibition: a possible interaction. *J Toxicol Clin Toxicol.* 1998;36(3):195-203.

Hines Burnham T, et al, eds. *Drug Facts and Comparisons* 2000. 55th ed. St. Louis, MO: Facts and Comparisons; 2000.

Juhl JH. Primary fibromyalgia syndrome and 5-hydroxy-L-tryptophan: a 90-day open study. *Altern Med Rev.* 1998;3:367–375.

Lescar J, Loris R, Mitchell E, Gautier C, Chazalet V, Cox V, Wyns L, Perez S, Breton C, Imberty A. Isolectins I-A and I-B of *Griffonia (Bandeiraea) simplicifolia*. Crystal structure of metal-free GS I-B(4) and

molecular basis for metal binding and monosaccharide specificity. *J Biol Chem.* 2002 Feb 22;277(8):6608-14. Epub 2001 Nov 19.

Magnussen I, Nielson-Kudsk F. Bioavailability and related pharmacokinetics in man of orally administered L-5-hydroxytryptophan in steady state. *Acta Pharmacol et Toxicol.* 1980;46:257–262.

Mason BJ, Blackburn KH. Possible serotonin syndrome associated with tramadol and sertraline coadministration. *Ann Pharmacother.* 1997;31(2):175-177.

Meyers S. Use of neurotransmitter precursors for treatment of depression. *Altern Med Rev.* 2000;5(1):64-71.

Murray MT, Pizzorno JE. Bromelain. In: Pizzorno JE, Murray MT, eds. *Textbook of Natural Medicine.* Vol 1. 2nd ed. Edinburgh: Churchill Livingstone; 1999:783-794.

Nicolodi M, Sicuteri F. Fibromyalgia and migraine, two faces of the same mechanism. Serotonin as the common clue for pathogenesis and therapy. *Adv Exp Med Biol.* 1996;398:373–379.

Nisijima K, Shimizu M, Abe T, Ishijuro T. A case of serotonin syndrome induced by concomitant treatment with low-dose trazodone and amitriptyline and lithium. *Int Clin Psychopharmacol.* 1996;11(4):289-290.

Puttini PS, Caruso I. Primary fibromyalgia and 5-hydroxy-L-tryptophan: a 90-day open study. *J Int Med Res.* 1992;20:182–189.

Reibring L, Agren H, Hartvig P, et al. Uptake and utilization of [β - ^{11}C] 5-hydroxytryptophan (5-HTP) in human brain studied by positron emission tomography. *Psychiatry Research.* 1992;45:215–225.

Shils ME, Olson JA, Shike M, eds. *Modern Nutrition in Health and Disease.* 9th ed. Media, Pa: Williams & Wilkins; 1999.

Tempel W, Tschampel S, Woods RJ. The xenograft antigen bound to Griffonia simplicifolia lectin 1-B(4). X-ray crystal structure of the complex and molecular dynamics characterization of the binding site. *J Biol Chem.* 2002 Feb 22;277(8):6615-21. Epub 2001 Nov 19.

Van Hiele LJ. L-5-hydroxytryptophan in depression: the first substitution therapy in psychiatry? *Neuropsychobiology.* 1980; 6:230–240.

Van Praag HM. Management of depression with serotonin precursors. *Biol Psychiatry.* 1981;16:291–310.

Zmilacher K, et al. L-5-hydroxytryptophan alone and in combination with a peripheral decarboxylase inhibitor in the treatment of depression. *Neuropsychobiology.* 1988;20:28–33.

Helichrysum extracts show biologically active compounds. Research has shown helichrysum extracts to be antimicrobial, anti-inflammatory, anti-viral activity. Helichrysum extract interferes with the production of enterotoxins by *Staphylococcus aureus* and it inhibits herpes simplex virus type 1 activity.

Afolayan AJ, Meyer JJ. The antimicrobial activity of 3,5,7-trihydroxyflavone isolated from the shoots of *Helichrysum aureonitens*. *J Ethnopharmacol.* 1997 Aug;57(3):177-81.

Appendino G, Ottino M, Marquez N, Bianchi F, Giana A, Ballero M, Sterner O, Fiebich BL, Munoz E. Arzanol, an anti-inflammatory and anti-HIV-1 phloroglucinol alpha-Pyrone from *Helichrysum italicum* ssp. *microphyllum*. *J Nat Prod.* 2007 Apr;70(4):608-12. Epub 2007 Feb 22.

Dilika F, Bremner PD, Meyer JJ. Antibacterial activity of linoleic and oleic acids isolated from *Helichrysum pedunculatum*: a plant used during circumcision rites. *Fitoterapia.* 2000 Aug;71(4):450-2.

Guarino C, Sciarrillo R. Inhibition of herpes simplex virus type 1 by aqueous extracts from leaves of *Helichrysum litoreum* Guss. *Boll Chim Farm.* 2003 Jul-Aug;142(6):242-3.

Guida M, Casoria P, Guarino C, Melluso G. Preliminary report on antimicrobial activity of *Helichrysum litoreum* Guss. *Boll Chim Farm.* 1999 Jul-Aug;138(7):369-73.

Lall N, Hussein AA, Meyer JJ. Antiviral and antituberculous activity of *Helichrysum melanacme* constituents. *Fitoterapia.* 2006 Apr;77(3):230-2. Epub 2006 Mar 9.

Lourens AC, Reddy D, Baser KH, Viljoen AM, Van Vuuren SF. In vitro biological activity and essential oil composition of four indigenous South African *Helichrysum* species. *J Ethnopharmacol.* 2004 Dec;95(2-3):253-8.

Meyer JJ, Afolayan AJ. Antibacterial activity of *Helichrysum aureonitens* (Asteraceae). *J Ethnopharmacol.* 1995 Jul 7;47(2):109-11.

Meyer JJ, Afolayan AJ, Taylor MB, Engelbrecht L. Inhibition of herpes simplex virus type 1 by aqueous extracts from shoots of *Helichrysum aureonitens* (Asteraceae). *J Ethnopharmacol.* 1996 May;52(1):41-3.

Meyer JJ, Dilika F. Antibacterial activity of *Helichrysum pedunculatum* used in circumcision rites. *J Ethnopharmacol.* 1996 Jul 26;53(1):51-4.

Moench.Czinner E, Kery A, Hagymasi K, Blazovics A, Lugasi A, Szoke E, Lemberkovics E. Biologically active compounds of *Helichrysum arenarium* (L.)*Eur J Drug Metab Pharmacokinet.* 1999 Oct-Dec;24(4):309-13.

Nostro A, Cannatelli MA, Marino A, Picerno I, Pizzimenti FC, Scoglio ME, Spataro P. Evaluation of antiherpesvirus-1 and genotoxic activities of *Helichrysum italicum* extract. *New Microbiol.* 2003 Jan;26(1):125-8.

Nostro A, Cannatelli MA, Musolino AD, Procopio F, Alonzo V. *Helichrysum italicum* extract interferes with the production of enterotoxins by *Staphylococcus aureus*. *Lett Appl Microbiol.* 2002;35(3):181-4.

Rios JL, Recio MC, Villar A. Isolation and identification of the antibacterial compounds from *Helichrysum stoechas*. *J Ethnopharmacol.* 1991 May-Jun;33(1-2):51-5.

Salie F, Eagles PF, Leng HM. Preliminary antimicrobial screening of four South African Asteraceae species. *J Ethnopharmacol.* 1996 May;52(1):27-33.

Schinella GR, Tournier HA, Prieto JM, Mordujovich de Buschiazzo P, Rios JL. Antioxidant activity of anti-inflammatory plant extracts. *Life Sci.* 2002 Jan 18;70(9):1023-33.

Animal Models

Aslan M, Deliorman Orhan D, Orhan N, Sezik E, Yesilada E. In vivo antidiabetic and antioxidant potential of *Helichrysum plicatum* ssp. *plicatum capitulum* in streptozotocin-induced-diabetic rats. *J Ethnopharmacol.* 2007 Jan 3;109(1):54-9. Epub 2006 Jul 8.

Schinella GR, Tournier HA, Prieto JM, Mordujovich de Buschiazzo P, Rios JL. Antioxidant activity of anti-inflammatory plant extracts. *Life Sci.* 2002 Jan 18;70(9):1023-33.

References;

Al-Waili NS, Saloom KY. Effects of topical honey on post-operative wound infections due to gram positive and gram negative bacteria following caesarean sections and hysterectomies. *Eur J Med Res* 1999; **4**(3): 126-30.

Bauer L, Kohlich A, Hirschwehr R, Siemann U, Ebner H, Scheiner O, Kraft D, Ebner C. Food allergy to honey: pollen or bee products? Characterization of allergenic proteins in honey by means of immunoblotting. *J Allergy Clin Immunol* 1996; **97**(1 Pt 1): 65-73.

Bergman A, Yanai J, Weiss J, Bell D, David MP. Acceleration of wound healing by topical application of honey. An animal model. *Am J Surg* 1983; **145**(3): 374-6.

Betts JA, Molan PC. A pilot trial of honey as a wound dressing has shown the importance of the way honey is applied to wounds. 11th Conference of the European Wound Management Association, 2001; Dublin, Ireland.

Biebl KA, Warshaw EM. Allergic contact dermatitis to cosmetics. *Dermatol Clin.* 2006 Apr; **24**(2):215-32, vii

Bose B. Honey or sugar in treatment of infected wounds? *Lancet* 1982; **1**(8278): 963.

Brady NF, Molan PC, Harfoot CG. The sensitivity of dermatophytes to the antimicrobial activity of manuka honey and other honey. *Pharm Sci* 1997; **2**: 1-3.

Bruze M, Gruvberger B, Goossens A, Hindsen M, Ponten A. Allergic contact dermatitis from methyldibromoglutaronitrile. *Dermatitis.* 2005 Jun; **16**(2):80-6, quiz 55-6.

Bulman MW. Honey as a surgical dressing. *Middlesex Hospital Journal* 1955; **55**: 188-9.

Cavanagh D, Beazley J, Ostapowicz F. Radical operation for carcinoma of the vulva. A new approach to wound healing. *J Obstet Gynaecol Br Commonw* 1970; **77**(11): 1037-40.

De la Torre F, Garcia JC, Martinez A, Martinez J, Palacios R. IgE binding proteins in honey: discussion on their origin. *J Investig Allergol Clin Immunol.* 1997 Mar-Apr; **7**(2):83-9

Dold H, Du DH, Dziao ST. Nachweis antibakterieller, hitze- und lichtempfindlicher Hemmungsstoffe Inhibine im Naturhonig Blütenhonig [Detection of the antibacterial heat and light-sensitive substance in natural honey]. *Z Hyg Infektionskr* 1937; **120**: 155-67.

Dold H, Witzhausen R. Ein Verfahren zur Beurteilung der örtlichen inhibitorischen (keimvermehrungshemmenden) Wirkung von Honigsorten verschiedener Herkunft [Method of evaluation of the local inhibitory (antibacterial) substances of honeys from various origins]. *Z Hyg Infektionskr* 1955; **141**: 333-7.

Dunford C, Cooper R, Molan P. Using honey as a dressing for infected skin lesions. *Nurs Times* 2000; **96**(14 Suppl): 7-9.

Dunford C, Cooper R, White RJ, Molan P. The use of honey in wound management. *Nurs Standard* 2000; **15**(11): 63-8.

Efem SE. Clinical observations on the wound healing properties of honey. *Br J Surg* 1988; **75**(7): 679-81.

Efem SE. Recent advances in the management of Fournier's gangrene: preliminary observations. *Surgery* 1993; **2**(4): 18-23.

Efem SE. Recent advances in the management of Fournier's gangrene: preliminary observations. *Surgery* 1993; **113**(2): 200-4.

Emarah MH. A clinical study of the topical use of bee honey in the treatment of some ocular diseases. *Bull Islamic Med* 1996; **2**(5): 422-5

El-Banby M, Kandil A, Abou-Sehley G, El-Sherif ME, Abdel-Wahed K. Healing effect of floral honey and honey from sugar-fed bees on surgical wounds (animal model). Fourth International Conference on Apiculture in Tropical Climates, 1989; Cairo.

Garrido Fernandez S, Lasa Luaces E, Echechipia Modaz S, Arroabarren Aleman E, Anda Apinaniz M, Tabar Purroy AI. Allergic contact stomatitis due to therapeutic propolis. *Contact Dermatitis*. 2004 May;50(5):321.

Giusti F, Miglietta R, Pepe P, Seidenari S. Sensitization to propolis in 1255 children undergoing patch testing. *Contact Dermatitis*. 2004 Nov-Dec;51(5-6):255-8

Gunther RT. *The Greek Herbal of Dioscorides*. New York: Hafner, 1934 (reprinted 1959).

Gupta SK, Singh H, Varshney AC, Prakash P. Therapeutic efficacy of honey in infected wounds in buffaloes. *Indian J Anim Sci* 1992; **62**(6): 521-3.

Hasan T, Rantanen T, Alanko K, Harvima RJ, Jolanki R, Kalimo K, Lahti A, Lammintausta K, Lauerma AI, Laukkanen A, Luukkaala T, Riekkö R, Turjanmaa K, Varjonen E, Vuorela AM. Patch test reactions to cosmetic allergens in 1995-1997 and 2000-2002 in Finland--a multicentre study. *Contact Dermatitis*. 2005 Jul;53(1):40-5

Hausen BM. Evaluation of the main contact allergens in propolis (1995 to 2005). *Dermatitis*. 2005 Sep;16(3):127-9

Helbling A, Peter C, Berchtold E, Bogdanov S, Müller U. Allergy to honey: relation to pollen and honey bee allergy. *Allergy* 1992; **47**(1): 41-9.

Hutton DJ. Treatment of pressure sores. *Nurs Times* 1966; **62**(46): 1533-4.

Kalyoncu, A. F. Honey allergy and rhinitis in Ankara, Turkey. *Allergy*. 52(8):876-877, August 1997.

Kiistala R, Hannuksela M, Mäkinen-Kiljunen S, Niinimäki A, Haahtela T. Honey allergy is rare in patients sensitive to pollens. *Allergy* 1995; **50**(10): 844-7.

Lee SY, Lee DR, You CE, Park MY, Son SJ. Autosensitization dermatitis associated with propolis-induced allergic contact dermatitis. *J Drugs Dermatol*. 2006 May;5(5):458-60.

Lieberman HD, Fogelman JP, Ramsay DL, Cohen DE. Allergic contact dermatitis to propolis in a violin maker. *J Am Acad Dermatol*. 2002 Feb;46(2 Suppl Case Reports):S30-1

McInerney RJ. Honey - a remedy rediscovered. *J R Soc Med* 1990; **83**(2): 127.

Molan PC. The antibacterial activity of honey. 1. The nature of the antibacterial activity. *Bee World* 1992; **73**(1): 5-28.

Molan PC, Allen KL. The effect of gamma-irradiation on the antibacterial activity of honey. *J Pharm Pharmacol* 1996; **48**(11): 1206-9.

Natarajan S, Williamson D, Grey JA, Harding KG, Cooper RA. Healing of an MRAS-colonised, hydroxyurea-induced leg ulcer with honey. *J Dermat Treat* 2001; **12**: 33-6.

Ndayisaba G, Bazira L, Habonimana E, Muteganya D. Clinical and bacteriological outcome of wounds treated with honey. *J Orthop Surg* 1993; **7**(2): 202-4.

Postmes TJ, Bosch MMC, Dutrieux R, van Baare J, Hoekstra MJ. Speeding up the healing of burns with honey. An experimental study with histological assessment of wound biopsies. In: Mizrahi A, Lensky Y, editors. *Bee Products: Properties, Applications and Apitherapy*. New York: Plenum Press, 1997; 27-37.

Postmes T, van den Bogaard AE, Hazen M. The sterilization of honey with cobalt 60 gamma radiation: a study of honey spiked with spores of *Clostridium botulinum* and *Bacillus subtilis*. *Experientia* 1995; **51**(9-10): 986-9.

Robson V, Ward RG, Molan PC. The use of honey in split-skin grafting. 10th Conference of the European Wound Management Association, 2000; Harrogate, UK.

Sackett WG. Honey as a carrier of intestinal diseases. *Bull Colorado State Univ Agric Exp Stn* 1919; **252**: 1-18.

Select Committee on Science and Technology. Report no. 7: Resistance to antibiotics and other antimicrobial agents. London: House of Lords, 1998.

Strauss RM, Orton DI. Allergic contact cheilitis in the United Kingdom: a retrospective study. *Am J Contact Dermat*. 2003 Jun; **14**(2):75-7.

Subrahmanyam M. Topical application of honey in treatment of burns. *Br J Surg* 1991; **78**(4): 497-8.

Subrahmanyam M. Honey impregnated gauze versus polyurethane film (OpSite) in the treatment of burns - a prospective randomised study. *Br J Plast Surg* 1993; **46**(4): 322-3.

Subrahmanyam M. Honey dressing versus boiled potato peel in the treatment of burns: a prospective randomized study. *Burns* 1996; **22**(6): 491-3.

Subrahmanyam M. A prospective randomised clinical and histological study of superficial burn wound healing with honey and silver sulfadiazine. *Burns* 1998; **24**(2): 157-61.

Subrahmanyam M. Early tangential excision and skin grafting of moderate burns is superior to honey dressing: a prospective randomised trial. *Burns* 1999; **25**(8): 729-31.

Ting PT, Silver S. Allergic contact dermatitis to propolis. *J Drugs Dermatol.* 2004 Nov-Dec;3(6):685-6.

Tumova L, Pasavova D. [Allergic contact dermatitis caused by propolis] *Ceska Slov Farm.* 2000 Nov;49(6):285-7

Vardi A, Barzilay Z, Linder N, Cohen HA, Paret G, Barzilai A. Local application of honey for treatment of neonatal postoperative wound infection. *Acta Paediatr* 1998; **87**(4): 429-32.

Wadi M, Al-Amin H, Farouq A, Kashef H, Khaled SA. Sudanese bee honey in the treatment of suppurating wounds. *Arab Medico* 1987; **3**: 16-8.

Walgrave SE, Warshaw EM, Glesne LA. Allergic contact dermatitis from propolis. *Dermatitis.* 2005 Dec;16(4):209-15

White JW, Subers MH, Schepartz AI. The identification of inhibine, the antibacterial factor in honey, as hydrogen peroxide and its origin in a honey glucose-oxidase system. *Biochim Biophys Acta* 1963; **73**: 57-70.

Wood B, Rademaker M, Molan P. Manuka honey, a low cost leg ulcer dressing. *N Z Med J* 1997; **110**(1040): 107.