HEALING ARTS APOTHECARY

OUR HERBAL TEAS

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Teas were no doubt one of the first herbal medicines available to people, and since ancient times, people have learned to brew up herbs for medicine, pleasure, and to ferment decoctions into alcohols or intoxicants in the case of wines to ayahuasca mixtures. In Asia, tea making has been raised to a high art involving beautiful tea houses, elaborate social rituals around the sharing of tea, and artistic pots and small cups crafted for imbibing tea. When I was traveling in Asia, while shopping in a variety of different silk, or gem, or art shops, whenever it seemed certain to the shopkeeper that I was about to purchase something, all business would suddenly cease. and the tea pot would be brought out. We would pause briefly, sit and sip tea together, and only when this social nicety was accomplished, would our business dealing proceed. England has its tea time, as did much of Europe. My German grandparents took a break from their farm chores every afternoon around 2 or 3 pm to have tea and a snack. The Peruvians have their coca tea, the Paraguayans their Mate drunk from gourds with a bombilla, a bamboo or silver straw. Teas are also the basis of compresses, skin washes and herbal douches, and spiritual baths. One of the most basic measures undertaken by ancient people was probably the boiling of water to make an anodyne hot compress. The addition of herbs to a heating compress can only enhance its action.

With the ubiquitous and seemingly essential status of herbal teas as basic medicines, it is surprising how many physicians, even naturopathic physicians do not use herbal teas, preferring tinctures, or for some, even preferring herbal pills only. This is a shame because teas can often complement other therapeutic protocols helping to make the treatment as fast acting and powerful as possible. Teas, in fact can be superior to tinctures and pills in treating some conditions such as bladder infections where teas have a better surface contact with the urinary mucosa, and will deliver superior antimicrobial action than pills or tinctures in the case of UTIs. Teas may also provide a superior demulcent and anti-inflammatory effect on the bowels in cases of ulcer, colitis, or IBS. Teas are also relatively inexpensive compared to other forms of medicine.

Offering teas to patients may also have hidden benefits, in addition to the intended medicinal effect. Teas can be very comforting and relaxing, and just the act of stopping your activities to brew the tea, and then sit down to enjoy it has the fringe benefit of offering welcome stress relief and a respite from the pace our busy days. Furthermore, encouraging patients to drink 3 or more cups of herbal tea per day can increase their fluid intake, as well as end up replacing and crowding out less desirable beverages. For children who won't drink any significant quantity of tea, the brews may be frozen in ice

cube trays. These herbal ice cubes can be placed inside a dish towel and smashed with a hammer, and then placed in cup and offered to toddlers and children with a spoon. Many children will eat the entire cupful and ask for more. Adding a bit of fruit juice, sparkling mineral water, or the juice of an orange after brewing may also improve intake.

I stock some 100 dry herbs in my office, keeping them in glass jars in a large closed cupboard away from the damaging effects of ambient light. I also keep 10 different tea blends prepared and available for immediate use for common medical conditions. Many of these blends are mixed up by the poundage and then packaged in smaller amounts. Following are some of the blends I stock with a list of ingredients and indications for each.

Stomach Tea

Matricaria
Mentha
Glycyrrhiza
Foeniculum

My "stomach tea" is excellent for gassiness and flatulence, for intestinal cramps and IBS, for food poisoning and to help mitigate nausea and loss of appetite in for those on chemotherapy. The formula is tasty enough for even toddlers with tummy aches to tolerate. The ingredients have antispasmodic, anti-inflammatory, and carminative effects. All the ingredients have some degree of antimicrobial action for cases of food poisoning or general dysbiosis, yet do not impair beneficial probiotic species, even with long term use. The tea can be consumed at a minimum of 3 cups per day for cases of colitis, ulcers and other chronic conditions. For acute symptoms such as acute nausea, acute stomach cramps or uncomfortable gas and bloating, a large pot containing 6 to 10 cups should be prepared and then consumed throughout the day as frequently and as much as possible. Having the liquid run through the gastrointestinal tract constantly by sipping continuously can be a fast acting comfort in such acute situations. For acute and chronic nausea, mixing the prepared tea with a small amount of carbonated water or even ginger ale is sometimes better tolerated than plain tea. For those with severe vomiting where even tea is not tolerated, freezing the tea in ice cube trays and crushing the cubes into small slivers when frozen to take by the teaspoonful may offer relief.

Glycyrrhiza is well respected for its anti-ulcer effects and recent research upholds this age-old usage and confirms that the tasty tea herb reduces the ability of Helicobacter pylori to adhere to digestive mucosal cells. The H. pylori is associated with GI ulcers, GERD and other digestive symptoms.[1] *Glycyrrhiza* has been shown to be active against antibiotic resistant strains of H. pylori.[2] For these reasons, *Glycyrrhiza* may also act as a chemopreventative for individuals at risk for gastric cancer. Low gastric mucosal levels of glucuronidase are associated with gastric ulceration and levels are shown to increase as ulcers heal. *Glycyrrhiza* improve the production and release of glucuronic acid from gastric mucosal cells.[3] *Mentha , Foeniculum* and *Matricaria* have all also shown activity against Helicobacter strains.[4],[5] *Mentha* is also a noted antifungal that can help with intestinal dysbiosis.[6]

The alpha-Bisabolol in *Matricaria* is anti-microbial, anti-inflammatory and has demonstrated an ability to protect the gastric mucosa from ethanol and indomethacin-induced ulcers. Research has suggested that an increase in gastric sulfydryl groups is accomplished by *Matricaria* which help the gastric mucosa protect itself from oxidative injury. [7] *Matricaria* also antagonizes tachykinin NK1 receptors which are involved in .[8] The essential oil plentiful in *Mentha piperita* reduces bloating, gas, and cramping, and can reduce pain and symptoms of Irritable Bowel Syndrome.[9]

Alterative Tea

Taraxicum
Rumex
Arctium
Berberis
Cinnamomum
Zingiber
Citrus Peel
Foeniculum

My alterative tea is designed to be just that, an alterative, though despite containing a number of the bitter alterative herbs, this tea is tasty and does not require sweeteners. The alterative herbs improve liver function, enhance bile flow, improve digestion, assimilation of nutrients, and enhance the elimination of wastes. Liver support would obviously benefit liver diseases such as chronic hepatitis, be a tool to slow cirrhosis, helps normalize liver enzymes in cases of alcoholism or exposure to hepatotoxins. Biliary diseases such as gallstones and biliary colic would also be improved by this alterative tea. Supporting liver function also tends to help the liver process hormones and thereby be the improve PMS and all manner of estrogen dominance symptoms such as uterine fibroids and breast cysts.

This tea would also be appropriate for high cholesterol, high triglycerides, high blood sugar and diabetes. Because the liver helps the body process fats and sugars, this alterative tea can improve lipids and glucose, support weight loss and be an important part of a broader protocol for diabetes. The alterative tea is also appropriate for detoxification and cleansing programs. Patients with acne or skin diseases may also see a clearing of skin lesions by using this formula for several months. Some patients with joint pain and chronic headaches may also improve from the use of alteratives when inflammatory substances are better removed from the tissues and blood.

Because this tea contains hard roots and barks, it is best decocted using a tsp per cup of hot water. Simmer gently for 10 minutes, strain and drink 3 or more cups per day.

Heart Chakra Tea

Crataegus leaf and flower
Crataegus berry powder
Rosa Hips
Pink and red rose petals
Mentha spicata
Glycyrrhiza

So named because of the plant spirit indication of Hawthorne (*Crataegus*) to open the heart, this tea blend is used not only for spiritual purposes, but for physical complaints of the heart as well. *Crataegus* and Rose hips*(Rosa canina)* both contain heart and blood vessel protecting flavonoids known as procyanidins. This tea is appropriate for those with high blood pressure or those with cardiovascular disease or risk factors. These herbs can help protect the heart and blood vessels from the damaging effects of high cholesterol, smoking, and other irritants and oxidants.

This tea is also excellent in flavor, looks and smells wonderful and may help to open the heart to joy. For those suffering from “broken hearts”, those who are closed emotionally, and those who have trouble connecting to others, this formula might be a good accompaniment to cognitive therapies, counseling, journaling and any other behavioral therapies. This is the perfect tea to brew up for heart to heart chats. Steep 1 Tbl per cup of hot water and drink 3 or more cups per day.

Crataegus and its flavinoids may also affect mitochondria in positive ways that improve cellular respiration within the heart.[10] The flavonoids, commonly referred to as OPCs –oligomeric procyanidins, have also been shown to have a natural ACE inhibiting activity[11], calcium channel blocking activity,[12] and an ability to promote aortic vasorelaxation via a nitric oxide mediated mechanism. [13] *Crataegus* also affects potassium currents and contributes to a positive ionotropic effect and anti-arrhythmic effect.[14] *Rosa canina* flavinoids are also noted to have potent antioxidant potential, even greater than that of *Crataegus* species and that the antioxidant action include metal-chelating activity.[15] The flavinoids in *Rosa canina* include carotenoids[16] and other polyphenolics, and the ripe fruits (rose hips) are also notably high in calcium.[17]

Nutritive Tea

Medicago
Urtica
Rubus
Althea
Matricaria
Mentha
Rosa

My nutritive tea contains nourishing herbs of course! These herbs are rich in vitamins, minerals, trace minerals, and flavones, anti-oxidants and other all purpose nutrients. This tea is useful to support patients on chemo or radiation to mitigate nausea and provide easy to assimilate nutrients. This tea is also useful for patients with chronic disease, recovering from surgery, mending a broken bone or other convalescing situations. Pregnant women can also enjoy this tea to supplement their nutrition. This tea may be tolerated by those with morning sickness when vitamin pills are not and only worsen the nausea.

Steep 1 Tbl per cup water and drink freely. Minerals might be best extracted by covering the dry herbs with a small amount water, adding several Tbl of lemon juice or vinegar (basalmic, wine or cider vinegar) and allowing the herbs to soak overnight. The acidic natures of lemon juice and vinegar increase the release of minerals into the water, and even those who do not care for vinegar are often surprised how refreshing the flavor of vinegar can be once diluted with the water. Pour more hot water over the herbs in the morning and allow them to steep anew.

Mama's Tea

Foeniculum
Trigonella
Rosa canina
Melissa
Urtica
Cnicus benedictus

This tea is for nursing mothers to support lactation as well as is nourishing and hormonally supportive for the post partum period. Nursing women with an insufficient milk supply will be pleased that this simple measure is usually sufficient to increase the quantity of breast milk. Some of the aromatic compounds from these may also pass into the breast milk and help calm intestinal discomfort for babies with colic. Treating nursing infants directly with these herbs has also been found to be beneficial for babies with colic.[18] Nursing women should be encouraged to drink a cup of this tea every time they nurse.

Respiratory Tea

Thymus
Lobelia
Symphytum
Foeniculum
Verbascum
Zingiber
Glycyrrhiza
Urtica
Mentha

The respiratory blend is a formula for lung inflammation and cough. From simple colds to spastic bronchitis and pneumonia, this formula helps dry excessive mucous, expectorate, quiet coughing and soothe the throat and lungs. Many of the ingredients are also anti-microbial and would complement other herbal capsules or tinctures in the management of serious respiratory bacteria and viruses. For best results it should be consumed hot and sipped constantly throughout the day for those ill with bronchitis. Drinking 3 cups of hot tea while soaking in hot steamy bath can do wonders. Aim to take 2 "fever baths" twice each day at the onset of any lung infections.

Although *Lobelia* is a rather strong ingredient, it is a small quantity in the overall formula, well tolerated, and effective in reducing problematic coughs. Besides being one of our strongest antitussives, Lobeline, the most studied alkaloid in *Lobelia* has also been shown to reverse drug resistance in some tumor cells lines as well as multi-drug resistant infections.[19] The *Thymus* is not only antimicrobial but offers a drying effect when significant mucous is present. The *Mentha* offers a nice flavor to the tea, but like all highly aromatic herbs is antimicrobial, anti-viral and anti-inflammatory.[20] *Verbascum* lends a soothing and expectorating action to the tea blend but this wonderful herb is often underappreciated as an antimicrobial. *Verbascum* has been shown to have anti-viral activity[21], [22],[23]and activity against Klebsiella pneumonia.[24] The *Glycyrrhiza* not only sweetens up the tea blend but offers anti-inflammatory and anti-viral activity to the brew. *Glycyrrhiza* has been shown to inhibit the uptake of influenza A virus into cells.[25] *Glycyrrhiza* triterpenoid glycyrrhizin is anti-inflammatory by a number of mechanisms, and one that benefits the lungs is the ability to reduce allergic phenomena by reducing eotaxin release, and thereby excessive and inappropriate eosinophil activity.[26] *Glycyrrhiza* flavinoids have also been credited with an anti-inflammatory action on the lungs via positive influences on the lipopolysaccarhides,[27] long noted to play a role in pulmonary diseases. *Glycyrrhiza* flavinoids may also suppress pulmonary metastasis, [28]and inhibit mycobacteria, including Legionella and Tuberculosis.[29]

Lobeline, the major alkaloid in *Lobelia* acts variably as both a nicotinic receptor agonist and antagonist in various tissues, but particularly antagonising beta nicotinic receptors. Lobeline is also noted inhibit nicotine-evoked and amphetamine-invoked dopamine release by inhibiting dopamine uptake in neurons and promoting dopamine release from presynaptic vesicles all serving to disrupt dopamine storage and controlled release processes. [30] *Lobelia* has a history of use for smoking cessation, and because addictive processes alter dopamine transmission, Lobelia may indeed be helpful for addictions. Lobelane, another alkaloid in *Lobelia* also affect dopamine transport and in reduces amphetamine-induced dopaminergic transmission.[31] Lobeline also inhibits catecholamine release from the adrenal gland by blocking calcium influx in adrenal medulla chormaffin cells, but not affecting the release of calcium from the cytoplasmic storage.[32]

Thymus vulgaris in this tea is antibiotic and anti-inflammatory to the lungs as well as being capable of reducing excessive mucous and enhancing excretion of mucous. Thymus is also a powerful antispasmodic to the lungs and research has shown that the plant acts as a beta adrenergic receptor antagonists [33]on bronchial smooth muscle serving to calm spastic coughing and improve mucociliary

clearance.[34] *Thymus,* and its isolated essential oils thymol and carvacrol have antioxidant activity at fairly low dosage.[35] Clinical trials on *Thymus* combinations have shown that Thyme may improve coughing fits in patients with acute bronchitis.[36]

Nervine Tea

Scutellaria ***1***
Passiflora ***1***
Matricaria ***1***
Melissa ***1***
Hibiscus ***1/2***
Stevia ***1/2***
Lavendula ***¼***

The nervine tea is very calming to nervous tension and soothing, with subtle but immediate effects for those with acute stress as a healthy way of unwinding. Or the nervine tea can be used regularly and long term for those with chronic anxiety disorders, muscle tension, or panic attacks. The nervine tea can be consumed before bed for those with insomnia. This tea might also be a complement to therapies for hypertension when stress is contributory. Those weaning from pharmaceutical anxiolytics can drink this tea to help tone and restore the nervous system. Aim to combine tea drinking with other self-nurturing practices. Light a candle, put one some soft music, put your feet up, and pick up some fun reading or write in your journal and take a load off.

UTI Tea

Althea
Chimaphila
Arctostaphylos
Galium
Calendula

Equal parts of these herbs are combined to make a tea blend for treating urinary tract infections. Those prone to urinary tract infections should begin this tea blend at the first sign of urinary discomfort. Drink as much of the tea as possible, and aim to achieve surface contact of these herbs against the bladder mucosa. *Arctostaphylos,* or Uva ursi contains arbutin, known to be excreted via the urine and to deter the adherence of E.coli to the urinary mucosa[37]. For many the tea alone may be sufficient, for others the UTI might be combined with other therapies such as mannose powder or an herbal tincture.

Steep 1 TBL per cup of water. For dysuria and troubling pain, soak additional *Althea* overnight, or at least for 3 or 4 hours. Add more water and the UTI blend and bring to a brief and gentle simmer. Soaking in water can make a viscous resulting liquid, rich in mucilage and polysaccarhides having an anti-inflammatory and pain relieving effect on the urinary mucosa.

Allergy Tea

Euphrasia
Urtica
Crataegus leaf and flower
Hibiscus
Cymbopogon
Glycyrrhiza

This tea blend is a useful adjuvant therapy for hayfever, asthma, chronic sinus infection, and dermatitis. Use on a daily basis with antioxidant support and essential fatty acids to prepare for allergy season or as

part of a larger protocol to treat allergic conditions such as chronic asthma and excema. Drink as much as possible throughout the day for acute allergies such as hives or excema outbreaks.
Glycyrrhiza is commonly used in asthma, psoriasis, dermatitis and allergy formulations in China. Research has shown a licorice combination to reduce inflammation and epidermal proliferation is skin diseases. [38] The steroid-like beta-glycyrrhetinic acid is noted in inhibit the alternative complement pathway [39] and reduce the excessive release of inflammatory immunoglobulins[40] contributing to anti-allergy effects. Another constituent in Licorice, Glycyrrhizin has also demonstrated anti-allergy effect via immunoglobulin normalization.[41]

The Nettles is this tea, *Urtica dioica* have been shown to reduce histamine synthesis as well as reduce its release from mast cells.[42] Additionally, virtually all of the major inflammatory cytokines [43]or their enzyme systems including cyclooxygenase and prostaglandin synthase[44] are noted to be reduced by *Urtica.*

Euphrasia or Eyebright is a folkloric standard for upper respiratory allergies and the itchy watery eyes that commonly accompany hayfever. Research has revealed flavonoid glycosides with anti-inflammatory and anti-oxidant activity.[45]

Although most well known for its vascular effects, *Crataegus's* stabilizing affect on platelets may also lend it anti-allergy ability,[46] as well as positively reduce a variety of inflammatory mediators.[47],[48]

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[1] **J Ethnopharmacol.** 2009 Sep 7;125(2):218-23. *Aqueous extracts and polysaccharides from Liquorice roots (Glycyrrhiza glabra L.) inhibit adhesion of Helicobacter pylori to human gastric mucosa.* Wittschier N, Faller G, Hensel A.

[2] **Life Sci.** 2002 Aug 9;71(12):1449-63. *Anti-Helicobacter pylori flavonoids from licorice extract.* Fukai T, Marumo A, Kaitou K, Kanda T, Terada S, Nomura T.

[3] **Indian J Exp Biol.** 1989 Nov;27(11):959-62. *Effect of ayurvedic medicines on beta-glucuronidase activity of Brunner's glands during recovery from cysteamine induced duodenal ulcers in rats.* Nadar TS, Pillai MM.

[4] **Phytother Res.** 2005 Nov;19(11):988-91.*In vitro susceptibility of Helicobacter pylori to botanical extracts used traditionally for the treatment of gastrointestinal disorders.* Mahady GB, Pendland SL, Stoia A, Hamill FA, Fabricant D, Dietz BM, Chadwick LR.

[5] **Phytother Res.** 2009 Aug 3. Investigations into the antibacterial activities of phytotherapeutics against Helicobacter pylori and Campylobacter jejuni. Cwikla C, Schmidt K, Matthias A, Bone KM, Lehmann R, Tiralongo E.

[6] **Molecules.** 2009 Jan 7;14(1):238-49. Chemical composition of essential oils of Thymus and Mentha species and their antifungal activities. Soković MD, Vukojević J, Marin PD, Brkić DD, Vajs V, van Griensven LJ

[7] **Fundam Clin Pharmacol**. 2009 Aug 3. *Gastroprotection of (-)-alpha-bisabolol on acute gastric mucosal lesions in mice: the possible involved pharmacological mechanisms.* Moura Rocha NF, Venâncio ET, Moura BA, Gomes Silva MI, Aquino Neto MR, Vasconcelos Rios ER, de Sousa DP, Mendes Vasconcelos SM, de França Fonteles MM, de Sousa FC.

[8] **Chem Pharm Bull** (Tokyo). 2002 Jan;50(1):47-52. *A new nonpeptide tachykinin NK1 receptor antagonist isolated from the plants of Compositae.* Yamamoto A, Nakamura K, Furukawa K, Konishi Y, Ogino T, Higashiura K, Yago H, Okamoto K, Otsuka M

[9] **Phytomedicine.** 2005 Aug;12(8):601-6. *Peppermint oil in irritable bowel syndrome.* Grigoleit HG, Grigoleit P.

[10] **Phytother Res.** 2009 May 13. *The effect of crataegus fruit extract and some of its flavonoids on mitochondrial oxidative phosphorylation in the heart.* Bernatoniene J, Trumbeckaite S, Majiene D, Baniene R, Baliutyte G, Savickas A, Toleikis A.
[11] **Phytomedicine.** 2001 Jan;8(1):47-52. *Search for potential angiotensin converting enzyme (ACE)-inhibitors from plants.* Lacaille-Dubois, Franck U, Wagner H.
[12] **J Med Food.** 2008 Dec;11(4):680-6. *A comparison of the effects of commercially available hawthorn preparations on calcium transients of isolated cardiomyocytes.* Rodriguez ME, Poindexter BJ, Bick RJ, Dasgupta A.
[13] **Life Sci.** 2000;67(2):121-31. *Procyanidins in crataegus extract evoke endothelium-dependent vasorelaxation in rat aorta.* Kim SH, Kang KW, Kim KW, Kim ND.
[14] **Planta Med.** 1999 May;65(4):335-9.*Crataegus extract blocks potassium currents in guinea pig ventricular cardiac myocytes.* Müller A, Linke W, Klaus W.
[15] **Int J Food Sci Nutr.** 2008 Mar 12:1-9. *Determination of antioxidant effects of some plant species wild growing in Turkey.* Serteser A, Kargioğlu M, Gok V, Bağci Y, Ozcan MM, Arslan D.
[16] **AAPS PharmSciTech.** 2008;9(2):693-700. *Supercritical extraction of carotenoids from Rosa canina L. hips and their formulation with beta-cyclodextrin.* Tozzi R, Mulinacci N, Storlikken K, Pasquali I, Vincieri FF, Bettini R.
[17] **Biol Trace Elem Res**. 2008 Oct;125(1):72-80 *Fruit mineral contents of six wild species of the North Andean Patagonia, Argentina.* Damascos MA, Arribere M, Svriz M, Bran D.
[18] **Phytother Res**. 2005 Apr;19(4):335-40.*A randomized double-blind placebo-controlled trial of a standardized extract of Matricariae recutita, Foeniculum vulgare and Melissa officinalis (ColiMil) in the treatment of breastfed colicky infants.* Savino F, Cresi F, Castagno E, Silvestro L, Oggero R.
[19] **Phytomedicine**. 2008 Sep;15(9):754-8. *Lobeline, a piperidine alkaloid from Lobelia can reverse P-gp dependent multidrug resistance in tumor cells.* Ma Y, Wink M.
[20] **Harefuah.** 2008 Oct;147(10):783-8, 838*. The treatment of respiratory ailments with essential oils of some aromatic medicinal plants.* Rakover Y, Ben-Arye E, Goldstein LH.
[21] **Evid Based Complement Alternat Med.** 2007 Oct 25. Antiviral Activity of Some Plants Used in Nepalese Traditional Medicine. (No authors listed)
[22] **J Ethnopharmacol.** 1995 Dec 1;49(2):101-10. *Antiviral screening of British Columbian medicinal plants.*
McCutcheon AR, Roberts TE, Gibbons E, Ellis SM, Babiuk LA, Hancock RE, Towers GH.
[23] **Rev Latinoam Microbiol**. 1999 Apr-Jun;41(2):59-62. *Search for antiviral activity of certain medicinal plants from Córdoba, Argentina.* Zanon SM, Ceriatti FS, Rovera M, Sabini LJ, Ramos BA.
[24] **J Ethnopharmacol.** 2002 Oct;82(2-3):117-25. *Biological activity of common mullein, a medicinal plant.* Turker AU, Camper ND.
[25] **Antiviral Res.** 2009 Aug;83(2):171-8. *Glycyrrhizin inhibits influenza A virus uptake into the cell.* Wolkerstorfer A, Kurz H, Bachhofner N, Szolar OH.
[26] **J Agric Food Chem.** 2009 Feb 11;57(3):820-5. *Licorice flavonoids inhibit eotaxin-1 secretion by human fetal lung fibroblasts in vitro.* Jayaprakasam B, Doddaga S, Wang R, Holmes D, Goldfarb J, Li XM.
[27] **Int Immunopharmacol.** 2009 Feb;9(2):194-2008 *Inhibitory effects of flavonoids extracted from licorice on lipopolysaccharide-induced acute pulmonary inflammation in mice*. Xie YC, Dong XW, Wu XM, Yan XF, Xie QM.
[28] **Cancer Lett.** 2002 Sep 8;183(1):23-30. *Isoliquiritigenin suppresses pulmonary metastasis of mouse renal cell carcinoma.* Yamazaki S, Morita T, Endo H, Hamamoto T, Baba M, Joichi Y, Kaneko S, Okada Y, Okuyama T, Nishino H, Tokue A.
[29] **Planta Med.** 2002 May;68(5):416-9. *In vitro antimycobacterial and antilegionella activity of licochalcone A from Chinese licorice roots.* Friis-Møller A, Chen M, Fuursted K, Christensen SB, et al

[30] **Biochem Pharmacol.** 2002 Jan 15;63(2):89-98. *A novel mechanism of action and potential use for lobeline as a treatment for psychostimulant abuse.* Dwoskin LP, Crooks PA.
[31] **Eur J Pharmacol.** 2007 Sep 24;571(1):33-8. *Lobelane decreases methamphetamine self-administration in rats.* Neugebauer NM, Harrod SB, Stairs DJ, Crooks PA, Dwoskin LP, Bardo MT.
[32] **Auton Neurosci.** 2004 Jan 30;110(1):27-35.*Influence of lobeline on catecholamine release from the isolated perfused rat adrenal gland.* Lim DY, Kim YS, Miwa S.
[33] **Farmaco.** 2003 Aug;58(8):557-62. *Synthesis, beta-adrenergic blocking activity and beta-receptor binding affinities of 1-substituted-3-(2-isopropyl-5-methyl-phenoxy)-propan-2-ol oxalates*. Jindal DP, Coumar MS, Nandakumar K, Bodhankar SL, Purohit PG, Mahadik KR, Bruni G, Collavoli E, Massarelli P.
[34] **Planta Med.** 2007 Jun;73(7):629-35. *The effect of thyme extract on beta2-receptors and mucociliary clearance.* Wienkötter N, Begrow F, Kinzinger U, Schierstedt D, Verspohl EJ.
[35] **Food Chem Toxicol.** 2009 Aug;47(8):2037-43. *Antioxidant activities of major thyme ingredients and lack of (oxidative) DNA damage in V79 Chinese hamster lung fibroblast cells at low levels of carvacrol and thymol.* Undeğer U, Başaran A, Degen GH, Başaran N.
[36] **Arzneimittelforschung.** 2007;57(9):607-15. *Evaluation of efficacy and tolerability of a fixed combination of dry extracts of thyme herb and primrose root in adults suffering from acute bronchitis with productive cough. A prospective, double-blind, placebo-controlled multicentre clinical trial.* Kemmerich B.

[37] **Planta Med**. 2005 Feb;71(2):147-52 *Urinary excretion of arbutin metabolites after oral administration of bearberry leaf extracts*. Quintus J, Kovar KA, Link P, Hamacher H.
[38] **Exp Dermatol.** 2008 Aug;17(8):681-7. *Chinese herbal medicine (Tuhuai extract) exhibits topical anti-proliferative and anti-inflammatory activity in murine disease models.* Man MQ, Shi Y, Man M, Lee SH, Demerjian M, Chang S, Feingold KR, Elias PM.
[39] **Immunology.** 1997 Jan;90(1):115-20. *Inhibition of human complement by beta-glycyrrhetinic acid.* Kroes BH, Beukelman CJ, van den Berg AJ, Wolbink GJ, van Dijk H, Labadie RP.
[40] **Planta Med.** 2007 Mar;73(3):257-61. *In vitro and in vivo antiallergic effects of Glycyrrhiza glabra and its components.* Shin YW, Bae EA, Lee B, Lee SH, Kim JA, Kim YS, Kim DH.
[41] **Int Immunopharmacol.** 2006 Sep;6(9):1468-77. *Glycyrrhizin alleviates experimental allergic asthma in mice.* Ram A, Mabalirajan U, Das M, Bhattacharya I, Dinda AK, Gangal SV, Ghosh B.
[42] **Phytother Res.** 2009 Jul;23(7):920-6. *Nettle extract (Urtica dioica) affects key receptors and enzymes associated with allergic rhinitis.* Roschek B Jr, Fink RC, McMichael M, Alberte RS.
[43] **Arzneimittelforschung.** 1996 Sep;46(9):906-10.*Cytokine secretion in whole blood of healthy subjects following oral administration of Urtica dioica L. plant extract*. Teucher T, Obertreis B, Ruttkowski T, Schmitz H.
[44] **Phytother Res.** 2009 Jul;23(7):920-6. *Nettle extract (Urtica dioica) affects key receptors and enzymes associated with allergic rhinitis.* Roschek B Jr, Fink RC, McMichael M, Alberte RS
[45] **Acta Pharm Hung.** 2009;79(1):11-6. *Antioxidant activity of different phenolic fractions separated from Euphrasia rostkoviana Hayne.* Blazics B, Alberti A, Kéry A.
[46] **Eur J Pharm Sci.** 2000 Feb;9(4):355-63. *Inhibition of platelet aggregation and 5-HT release by extracts of Australian plants used traditionally as headache treatments.* Rogers KL, Grice ID, Griffiths LR.
[47] **J Ethnopharmacol.** 1997 Sep;58(1):59-73. *Inhibitory effects of Turkish folk remedies on inflammatory cytokines: interleukin-1alpha, interleukin-1beta and tumor necrosis factor alpha.* Yeşilada E, Ustün O, Sezik E, Takaishi Y, Ono Y, Honda G.
[48] **J Pharm Pharmacol.** 1997 Mar;49(3):329-31. *The effects of a triterpene fraction isolated from Crataegus monogyna Jacq. on different acute inflammation models in rats and mice. Leucocyte*

migration and phospholipase A2 inhibition. Ahumada C, Sáenz T, García D, De La Puerta R, Fernandez A, Martinez E.