

THE EYES

The medical specialty for the treatment of eye diseases is known as ophthalmology. Many common eye problems including conjunctivitis, diabetic retinopathy, ophthalmic herpes, macular degeneration and cataracts can be treated or prevented with herbal and nutritional supplements and dietary changes. The eyes are very sensitive to oxidative damage and a great deal of blindness is linked to poor diet and the resultant obesity, insulin resistance, diabetes and atherosclerosis.

The Eyes and Nutrition

A number of nutrients have been found to be essential to eye health. Carotenoids, especially lutein and zeaxanthin, help prevent age-related macular degeneration and cataracts.

Carotenoid-rich Foods and Herbs

Winter Squash (<i>Curcubita pepo</i> , <i>C. maxima</i>)	Sweet Potato (<i>Ipomoea batata</i>)
Collard greens (<i>Brassica oleracea</i>)	Kale (<i>Brassica oleracea</i>)
Cantaloupe (<i>Curcumis melo</i> var. <i>cantalupensis</i>)	Tomato paste/sauce (<i>Lycopersicon esculenta</i>)
Carrot (<i>Daucus carota</i>)	Spinach (<i>Spinacea oleracea</i>)
Pumpkin (<i>Curcubita pepo</i>)	Watermelon (<i>Citrullus lanatus</i>)
Red, Yellow or Orange pepper (<i>Capsicum annuum</i>)	Guava (<i>Psidium</i> spp.)
Apricot-dried (<i>Prunus armeniaca</i>)	Pink Grapefruit (<i>Citrus x paradisi</i>)
Chrysanthemum flower (<i>Chrysanthemum morifolium</i>)	

Vitamin E (mixed tocopherols with tocotrienols) helps prevent oxidative damage to the small capillaries in the eyes and reduces smoking-related visual/optic degeneration and the formation of cataracts. Flavonoids, including oligomeric proanthocyanidins (OPCs), flavones, flavonols, anthocyanins and isoflavones are powerful antioxidants and antiinflammatory phytochemicals which help stabilize connective tissue, veins, capillaries, and arteries and prevent damage caused by reactive oxygen species (ROS). Regular consumption of flavonoid-rich foods is linked to reduced incidence of diabetic retinopathy, cataracts and age-related macular degeneration. Good dietary sources of flavonoids and OPC's (also known as PCO's) include:

Flavonoid-rich Foods and Herbs

Cranberries (<i>Vaccinium macrocarpon</i>)	Black cherries (<i>Prunus</i> spp.)
Lycium fruit (<i>Lycium chinense</i> , <i>L. barbarum</i>)	Grape Seed extract (<i>Vitis vinifera</i>)
Elderberry fruit or solid extract (<i>Sambucus nigra</i>)	Pine Tree bark extract (<i>Pinus pinaster</i>)
Buddleia Flower (<i>Buddleia officinalis</i>)	Blueberry/Bilberry (<i>Vaccinium</i> spp.)
Green tea (<i>Camellia sinensis</i>)	Dark chocolate (<i>Theobroma cacao</i>)
Amla fruit (<i>Phyllanthus emblica</i>)	Mulberry fruit (<i>Morus alba</i>)
Black Currant fruit (<i>Ribes</i> spp.)	Rosemary herb (<i>Rosmarinus officinalis</i>)
Turmeric rhizome (<i>Curcuma longa</i>)	

Omega 3 fatty acids (fish oils are most effective) have been found to reduce the incidence of age-related macular degeneration (AMD) and help treat dry eyes. Other antioxidant/ antiinflammatory nutrients including zinc (pumpkin seeds, oysters), Vitamin C (chili peppers, guava, amla fruit), Vitamin A (liver, cod liver oil, sweet potato, carrot), selenium (Brazil nuts), and octacosanol (wheat germ, spinach, which also contain lutein) have all shown benefits for preventing visual degeneration. Reducing the intake of trans-fats, salt, and refined carbohydrates can improve overall health as well as eye health. Smoking, strong sunlight, obesity and diabetes are all significant risk factors for degenerative eye disease.

In Chinese medicine the liver opens to the eyes, so TCM treatments for poor vision, painful eyes, red inflamed eyes, excessive tearing, floaters, and ophthalmic hemorrhages are treated with “liver herbs” such as Lycium fruit, Buddleia flowers, Mulberry fruit, Dodder seed and Chrysanthemum flowers.

COMMON EYE DISEASES

Conjunctivitis

Acute conjunctivitis, or pink eye, is a viral or bacterial infection of the conjunctiva with symptoms including irritation of the eye, mild pain, excessive tearing, light sensitivity, and in bacterial cases, a purulent discharge. It is usually treated with antibiotic eye drops.

Herbs For Conjunctivitis

For bacterial conjunctivitis, antibacterial and antiinflammatory herbs are used as a saline eyewash. Berberine containing herbs, including Goldenseal root (*Hydrastis canadensis*), Barberry root bark (*Berberis* spp.), Oregon Grape root (*Mahonia* spp.), Chinese Coptis root (*Coptis sinensis*), Gold Thread rhizome (*Coptis groenlandica*), and Yellow Root (*Xanthorrhiza simplicissima*), have broad spectrum antibacterial activity.

For viral conjunctivitis, antiviral herbs are used including Eyebright herb (*Euphrasia* spp.), Licorice root (*Glycyrrhiza glabra*, *G. uralensis*), Self Heal herb (*Prunella vulgaris*), St. John’s wort flowering tops (*Hypericum perforatum*) and Sage herb (*Salvia officinalis*).

Antiinflammatory herbs for use in a saline eyewash for either bacterial, viral, or allergic conjunctivitis include Rose petals (*Rosa* spp.), Calendula flowers (*Calendula officinalis*), Chickweed herb (*Stellaria media*), Triphala, Sassafras pith (*Sassafras albidum*) and Purple Loosestrife flowering tops (*Lythrum salicaria*).

Cataracts

Cataracts are a clouding of the lens of the eye which causes impaired vision. Impaired circulation to the eye caused by metabolic syndrome, obesity, aging, diabetes and atherosclerosis are associated with cataract formation, as is taking steroids, exposure to UV radiation and possibly tranquilizers. The orthodox treatment, cataract surgery, is often very effective, but there are risks in this procedure. Herbs cannot achieve the dramatic benefits of surgery, but can help prevent formation of cataracts and slow their progression. Wearing sunglasses and quitting smoking can also help slow the progression of cataracts.

Herbs and Supplements For Cataracts

Alpha-lipoic acid

Is a powerful, naturally occurring chemical that enhances endogenous antioxidant status in the cells. The preferred form is R-lipoic acid, although the S-lipoic acid is active as well. In an animal study it delayed onset of cataracts and inhibited their progression (Kojima, et al, 2007).

Dose: 200-400 mg BID

Blueberry/Bilberry fruit (*Vaccinium* spp.)

Are rich sources of proanthocyanidin flavonoids which enhance the integrity of the capillaries of the eyes. Regular consumption of the berries can help prevent cataract formation and slow the progression of the condition. In animal studies Bilberry was superior to Vitamin E at preventing damage to the lens and retina in early stage cataracts (Fursova, et al, 2005).

Dose: Solid extract: 1/4-1/2 teaspoon BID

Cang Zhu root (Atractylodes lancea)

Is used in TCM along with Sesame seed, Lycium fruit and Mulberry fruit to nourish the eyes. It is commonly used (with other eye herbs) to inhibit cataracts, glaucoma and to improve night blindness.

Dose: Tea (Infusion): 1 tsp. dried root, 8 oz. water, steep covered 30 minutes, take 4 oz. 3x/day

Tincture (1:5): 1.5-2 ml TID

Cayenne fruit (Capsicum frutescens)

Is used as a dilute eyewash by neo-Thomsonian practitioners for cataracts. It usually causes irritation of the eye and should be discontinued if more than mild irritation occurs.

Dusty Miller succus (Jacobaea maritima)

The succus or dilute mother tincture is applied topically to the eye. This usually causes mild irritation, discontinue if severe inflammation occurs.

Dose: 1-2 gtt. in eye, 2 times a day

Flavonoid-rich supplements

Multiple animal studies show that supplements containing flavonoids (OPCs, flavones, anthocyanins, flavonols, isoflavones and stilbenes) can inhibit cataract formation. These include rutin (Isai, et al, 2009), soy isoflavones (Lu, et al, 2008), Grape Seed extract (Yamakashi, et al, 2002), and procyanidins (Chan, et al, 2008). In addition to preventing oxidative damage, many (or most) of these compounds have been found to strongly inhibit aldose reductase, the enzyme that initiates cataract formation in people with diabetes (Ghosh & Konishi, 2007).

Ginkgo leaf/standardized extract (Ginkgo biloba)

Increases circulation to the eye, and acts as an antioxidant inhibiting cataract formation. In animal studies Ginkgo protected against radiation-induced cataract formation (Okumus, et al, 2011; Ertekin, et al, 2004).

Dose: Standardized extract (24% Ginkgo flavones, 6% terpenes): 120-240 mg per day

***Pulsatilla fresh herb (Anemone pulsatilla, A. patens)**

Was used by the Eclectic physicians to treat gray or senile cataracts.

Dose: Fresh tincture (1:2): 10 gtt. in 4 oz. of water, mix, take 1 tsp. TID

Resveratrol

Contains phenolic compounds known as stilbenes. These antioxidant phytochemicals are found in red wine, purple and red grapes and Japanese Knotweed root. In animal studies, Resveratrol was found to help prevent cataract formation (Dogany, et al, 2006).

Triphala (Terminalia chebula, T. belerica, Phyllanthus emblica)

This important Ayurvedic formula has powerful antioxidant activity and is used both as an eyewash and taken orally to prevent and slow progression of cataracts.

Dose: Tea (Infusion): 1 tsp. dried, powdered fruits, 8 oz. hot water, steep 15-20 minutes, take 4 oz. 3x/day

Tincture (1:5): 2-4 ml TID

*TOXIC. Use only with appropriate supervision and under the guidance of a qualified medical/herbal professional.

Turmeric rhizome (Curcuma longa)

Has a long history of use in India and Southeast Asia for treating oxidative diseases including eye problems. Several animal studies have shown that Turmeric and its extract Curcumin can help prevent cataract formation and slow progression of existing cataracts (Pandya, et al, 2000, Suryanarayana, et al, 2005). In an in vivo study, Turmeric strongly inhibited aldose reductase, a lens enzyme involved with cataract-genesis (Guzma, et al, 2005).

Dose: Tea (Infusion): 1/2 tsp. dried, freshly powdered rhizome, 8 oz. hot water, steep covered for 45 minutes, take 4 oz. 4x/day

Tincture (1:2 or 1:4): 2-4 ml TID/QID

Curcumin capsules: use Curcumin that is mixed with Bioperine® or phosphatidylcholine for improved absorption and activity. 200-500 mg BID/TID

Glaucoma

Glaucoma is a condition where the intraocular pressure (IOP) in the eye increases and causes damage to the ocular nerve. There are 4 types of glaucoma, open angle (chronic) glaucoma, angle-closure (acute) glaucoma, congenital glaucoma and secondary glaucoma.

Orthodox treatment for glaucoma includes prescription eye drops (prostaglandins, beta blockers, alpha-adrenergic agonists, carbonic anhydrase inhibitors and parasympathomimetics), laser therapy and eye surgery. Research using electron microscopes has found that congestion of micro-capillaries and lymph vessels plays a role in glaucoma (Prünte, et al, 1998). Using herbs that move blood and lymph may enhance the efficacy of treatments for glaucoma.

Herbs and Supplements For Glaucoma

Blood moving herbs for glaucoma

Hong Hua/Safflower flos (*Carthamus tinctoria*)

Peach seed/Tao Ren (*Prunus persica*)

Tienqi Ginseng root (*Panax notoginseng*)

Tree Peony bark (*Paeonia suffruticosa*)

Dang Gui root (*Angelica sinensis*)

Dan Shen root (*Salvia miltiorrhiza*)

Red Peony root (*Paeonia albiflora*)

Lymphatic herbs for glaucoma

Poke root (*Phytolacca americana*)

Figwort herb/root (*Scrophularia marilandica*)

Self Heal herb (*Prunella vulgaris*)

Calendula flower (*Calendula officinalis*)

Red Clover blossoms (*Trifolium pratense*)

Cleavers herb (*Galium aparine*)

Burdock root (*Arctium lappa*, *A. minus*)

Cannabis (Cannabis sativa)

Regular use of the herb reduces intraocular pressure by enhancing uveoscleral outflow. With the exception of states with medical marijuana laws, this drug is illegal even when prescribed for medical usage. The synthetic derivatives, such as Marinol, are not effective for treating Glaucoma or for pain relief.

Coleus (Coleus forskohlii)

Eye drops made with the standardized extract (15-18% forskohlin) have shown benefits for treating glaucoma. Oral use of the product has not shown therapeutic activity for this condition. Unfortunately standardized Coleus eye drops are not available in the United States.

Ginkgo leaf/standardized extract (Ginkgo biloba)

Is an adjunctive therapy to help increase ophthalmic circulation, decrease oxidative damage to eye tissue and modestly improve vision in patients with normal tension glaucoma.

Dose: Standardized extract (24% Ginkgo flavones, 6% terpenes): 120-240 mg per day

***Jaborandi bark (*Pilocarpus microphyllus*)**

Increases circulation and promotes absorption of morbid exudates in acute glaucoma attacks.

Dose: Tincture (1:5): 2 gtt TID

Lycium fruit/Gou Qi Zi (*Lycium chinense*, *L. barbarum*)

This bright red fruit, known as Gou Qi Zi, is used in TCM for treating a wide variety of eye problems. In an animal study oral intake of a water extract of the fruit strongly protected the retinal ganglion cells (RGCs) from damage caused by an ocular hypertension model of glaucoma (Chan, et al, 2007).

Dose: Tea (Decoction): 2-3 tsp. dried fruit, 12 oz. water, decoct 15-20 minutes, steep 1 hour, take 3 cups/day

Tincture (1:4): 3-5 ml QID

***Pulsatilla fresh herb (*Anemone pulsatilla*, *A. patens*)**

Was recommended by Rudolf Weiss, MD for glaucoma caused by constitutional disturbance.

Dose: Fresh Tincture (1:2):10 gtt. in 4 oz. water, mix, take 1 tsp. TID

Pycnogenol® (*Pinus pinaster*) with Bilberry (*Vaccinium myrtillus*)

In a human clinical trial, patients with ocular hypertension were given either a pharmaceutical drug (Latanoprost), a supplement containing Pycnogenol® and Bilberry or both. All three groups had a significant drop in intraocular pressure with the group given the drug and supplement having the most significant results (Steigerwalt, et al, 2010).

Wu Ling San (Hoelen five herb formula)

This classic TCM formula is used to drain excess fluids and open the circulatory channels. It contains Poria, Water Plantain root, Polyporus/Zhu Ling, *Atractylodes macrocephala* root and Cinnamon twigs. In a Chinese study 63.6% of glaucoma patients had a significant decline in intraocular pressure after using this formula (Dharmananda, 1997).

Age-Related Macular Degeneration (AMD)

Is a condition that primarily affects older people (50+ years). Retinal damage causes a loss of central vision (the macula). This condition occurs in two forms, dry (atrophic) macular degeneration and wet (exudative) macular degeneration. In the dry form, cellular wastes accumulate between the retina and the choroid (this is the area behind the retina which contains the blood supply for the macula). This causes the retina to detach and impairs the central visual field. In wet macular degeneration, which is more severe, blood vessels grow uncontrollably from the choroid, impairing vision (the retina can become detached in this condition also). It is believed that elevated blood lipids, especially VLDL, may play a role in the genesis of these conditions. Other risk factors include a family history of AMD, excessive sun exposure, cigarette smoking, regular consumption of PUFAs (polyunsaturated fatty acids), trans-fats and dairy, obesity, blue eyes and a history of heart disease. Adequate vitamins E and C, carotenoids (lutein and zeaxanthin), zinc, selenium and Omega-3 fatty acids seem to be able to help prevent this condition and may be of benefit in treating it (Head, 1999). In a large RCT of over 5400 female health workers, those that took a supplement containing folic acid, B-6 and B-12 significantly reduced the risk of developing AMD (Christen, et al, 2009). Flavonoid- and carotenoid-rich foods/herbs can help prevent or slow the progression of AMD. See the list under eyes and diet.

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Herbs for Macular Degeneration

Bilberry/Blueberry fruit (Vaccinium spp.)

Both of these OPC-rich fruits can help prevent or slow the progression of AMD. In animal studies Bilberry prevented damage to the lens and retina in early stage macular degeneration (Fursova, et al, 2005).

Solid extract: 1/8 - 1/4 tsp. 2-3x/day

Dodder seed/Tu Si Zi (Cuscuta spp.)

Is rich in carotenoids and is used in TCM for a variety of eye problems including AMD. It is taken in formulas with other eye herbs such as Ligustrum fruit, Lycium fruit and Buddleia flowers.

Dose: Tea (Decoction): 1-2 tsp. dried seed, 10 oz. water, decoct 10-15 minutes, steep 1 hour, take 2-3 cups/day

Tincture (1:5): 2-3 ml TID

Ginkgo leaf/standardized extract (Ginkgo biloba)

In a small RCT, Ginkgo improved visual acuity in patients with atrophic macular degeneration (Lebuisson, et al, 1986). In a second study patients with dry macular degeneration had significant improvement of visual acuity when taking Ginkgo for 24 weeks (Fies & Dienel, 2002).

Dose: Standardized extract (24% Ginkgo flavones, 6% terpenes): 120-240 mg per day

Ligustrum fruit/Nu Zhen Zi (Ligustrum lucidum)

Is used in TCM for deficient liver and kidney yin patterns with eye symptoms such as dry macular degeneration, cataracts and retinitis pigmentosa. It is combined with Lycium fruit, Buddleia flowers, Sesame seed and Chrysanthemum flowers.

Dose: Tea (Decoction): 1-2 tsp. dried seed, 10 oz. water, decoct 10-15 minutes, steep 1 hour, take 2-3 cups/day

Tincture (1:5): 2-3 ml TID

Lycium fruit/Gou Qi Zi (Lycium chinense, L. barbarum)

Has a long history of use in Chinese medicine for treating a wide range of eye problems and diseases. In a human RCT, elderly patients were given this herb and it inhibited hypopigmentation and soft drusen (white or yellow deposits in the macula comprised of lipids and calcium) accumulation in the macula (Buchell, et al, 2011). Soft or hard accumulations of drusen are indications of macular degeneration.

Dose: Tea (Decoction): 2-3 tsp. dried fruit, 12 oz. water, decoct 15-20 minutes, steep 1 hour, take 3 cups/day

Tincture (1:4): 3-5 ml QID

Saffron stigmas (Crocus sativus)

In a RCT trial, Saffron improved visual acuity in patients with early stage age-related macular degeneration (Falsini, et al, 2010). A number of animal studies also indicate Saffron has ocular protective activity.

Dose: Tea: 4-6 stigmas to 8 oz. hot water, steep covered 10-15 minutes. Take 2 oz. BID*

Tincture (1:5): .25-.75 ml BID

Tienqi Ginseng root (Panax notoginseng)

Alan Tillotson, RH (AHG) specializes in treating eye problems. He uses Tienqi along with Gotu Kola herb and Bilberry fruit to treat wet macular degeneration.

Dose: Tea (Decoction): 1 tsp. dried, powdered, root, 12 oz. water, decoct 20 minutes, steep 1 hour, take 4 oz. 4x/day

Tincture (1:5): 1.5-2.5 ml QID

Diabetic Retinopathy

Is caused by oxidative damage to the small capillaries in the eyes. Both diabetes and injectable insulin (elevated levels of insulin) can damage these fragile blood vessels. The longer someone has diabetes, the more likely they are to develop diabetic retinopathy. Two types of diabetic retinopathy have been recognized. The first is non-proliferative, or background retinopathy, which is characterized by increased capillary permeability, edema, microaneurysms, eye bleeds and increased exudates. The second, proliferative retinopathy, has neovascularization from the retina to the vitreous humor with scarring, fibrous tissue growth and the possibility for detached retina (Hand, 1999). This condition can often be prevented or inhibited by good glycemic control and the use of high levels of carotenoid- and flavonoid-rich foods, herbs and nutritional supplements (see list under eyes and diet). Several nutrients have been associated with reduced risk of developing diabetic retinopathy, these include vitamins B-6, C and E, acetyl-L-carnitine, magnesium, carotenoids (lutein and zeaxanthin) and oligomeric proanthocyanidins (OPCs).

Herbs for Diabetic Retinopathy

Blueberry/Bilberry (*Vaccinium* spp.)

These berries are rich in OPCs which help to stabilize the small capillaries in the eyes. In both in vitro and in vivo studies, Bilberry has been shown to protect against retinal neuronal damage (Matsunaga, et al, 2009).

Dose: Solid Extract: 1/8 to ¼ tsp. 2-3 times/day

Cassia tora seed/Jue Ming Zi (*Cassia tora*)

Is used in TCM to clear liver heat. It is commonly used in eye formulas for helping to prevent or slow the progression of diabetic retinopathy, macular degeneration or cataracts.

Tea (Decoction): 2 tsp. crushed seed, 8 oz. water, decoct 5-10 minutes, steep 40 minutes, take 4 oz. BID
Tincture (1:5): 1.5-2.5 ml TID

Ginkgo leaf/standardized extract (*Ginkgo biloba*)

Enhances circulation to the eyes and inhibits oxidation damage to the capillaries while inhibiting capillary permeability.

Dose: Standardized extract (24% Ginkgo flavones, 6% terpenes): 120-240 mg per day

Lycium fruit/Gou Qi Zi (*Lycium chinese, L. barbarum*)

Also known as Goji berry, this is another flavonoid-rich herb used in TCM to nourish the eyes and help prevent or inhibit the progression of diabetic retinopathy. It is usually combined with other “TCM liver herbs” such as Chrysanthemum flowers, Dodder seed or Cassia tora seed.

Dose: Tea (Decoction): 2-3 tsp. dried fruit, 12 oz. water, decoct 15-20 minutes, steep 1 hour, take 3 cups/day

Tincture (1:4): 3-5 ml QID

Pycnogenol® (*Pinus pinaster*)

In a human RCT this Pine bark extract was found to improve ocular microcirculation, visual acuity and reduce retinal edema in early-stage diabetic retinopathy (Steigerwalt, et al, 2009).

Triphala (*Terminalia chebula, T. bellerica, Phyllanthus emblica*)

Is used in Ayurvedic medicine to protect the eyes against damage caused by oxidative diseases such as diabetes.

Dose: Tea (Infusion): 1 tsp. dried, powdered fruits, 8 oz. hot water, steep 15-20 minutes, take 4 oz. TID

Tincture (1:5): 2-4 ml TID

Turmeric rhizome (Curcuma longa)

As well as its extract, Curcumin, have powerful antiinflammatory activity and can be used to inhibit oxidative damage to the eyes and retina.

Dose: Tea (Infusion): 1/2 tsp. dried, freshly powdered rhizome, 8 oz. hot water, steep covered for 45 minutes, take 4 oz. 4x/day

Tincture (1:2 or 1:4): 2-4 ml TID/QID

Ophthalmic Herpes

Herpes is a persistent, chronic virus that primarily affects the lips and eyes (Herpes Simplex type I) and the genitalia (Herpes Simplex type II). Ophthalmic herpes, or herpes keratitis, usually affects the cornea or top layer of the eye. Symptoms of herpes keratitis include eye pain, blurred vision, light sensitivity and inflammation of the cornea. The usual treatment includes antiviral eye drops, and in cases where the infection penetrates deeper into the cornea, steroid eye drops may also be utilized. Increasing L-Lysine (diet and supplement) and decreasing L-arginine in the diet (peanuts, soy, shellfish, spinach, sesame seed, turkey, spirulina, tofu and game meats) may help inhibit herpetic outbreaks.

Several herbs have been shown to inhibit herpes and can be made into a decoction, strained and used as an eyewash to speed healing of herpes keratitis. One or more of the following herbs can be used:

Licorice root (*Glycyrrhiza glabra*, *G. uralensis*) St. John's wort flowering tops (*Hypericum perforatum*)
Pyrossia herb/Shi Wei (*Pyrossia lingua*) Self Heal herb (*Prunella vulgaris*)
Lemon Balm (*Melissa officinalis*)

In a human trial treating ophthalmic herpes the combination of Self Heal and Pyrossia "cured" 38 patients, 37 improved and 3 showed no benefit (Zhong, 1990).

THE EARS

Auditory Problems

The ear is a sensitive organ which allows us to hear and has a great deal to do with balance. In our modern world, excess noise significantly contributes to hearing loss. Loud music, leaf blowers and industrial equipment can all lead to decreased hearing and deafness. Other factors that can contribute to deafness include genetic defects, aging, diseases including measles, mumps, meningitis, diabetes and atherosclerosis, physical trauma, ototoxic medications (some antibiotics, antimalarials, NSAIDs), and environmental toxins (lead, pesticides, solvents and mercury). In TCM, the kidneys open to the ears and ringing in the ears, water in the ear, dizziness and impaired hearing are treated as a deficient liver and kidney yin condition. Herbs used to treat deficient liver and kidney yin include Eclipta, Lycium fruit, Ligustrum fruit and Dodder seed.

Hearing Loss

Several human and animal studies indicate that antioxidants including beta-carotene, vitamins A, C and E, as well as D-Methionine and N-Acetyl-Cysteine can protect against noise-induced hearing loss (La Prell, et al, 2011, Clifford, et al, 2011). Several herbs have been found to protect against ototoxic medications, including Red Ginseng (Choing, et al, 2011), Ginkgo (Yang, et al, 2010) and Pomegranate fruit extract (Yazici, et al, 2011). The classic TCM formula Liu Wei Di Huang Wan (Rehmannia Six Flavor Decoction) was found in an animal study to prevent medication-induced deafness (Zhuang, et al, 1992). It contains processed Rehmannia, Chinese Dogwood fruit, Tree Peony bark, Chinese Dioscorea root, Poria and Water Plantain root.

Otitis Media

In children, Otitis media, or ear infections, are probably the most common ear problem. Avoiding exposure to second-hand smoke, increasing Vitamin C and zinc intake, and eliminating dairy from the diet are good starting points for treating this condition. Many herbs can be used orally and topically to resolve this condition including:

Herbs For Otitis Media

(The doses listed here are adult doses, adjust using Clark's rule for children with otitis media)

***Aconite root (Aconitum napellus)**

Was used by the Eclectic physicians for acute inflammation of middle ear with a pulse that is small and frequent.

Dose: Tincture (1:10): 1/5-1/3 gtt. every hour (for adults only)

To use topically, mix 1 dram aconite, 4 drams mullein oil, and 4 drams Hydrastis glycerite. Put 2-3 gtt in the ear at night.

***Blue Flag rhizome (Iris versicolor)**

Can be used for chronic hypertrophic otitis media with enlarged lymph glands.

Dose: Fresh tincture (1:2): 5-10 gtt. in 4 oz. water, mix, take 1 tsp. every 4 hours

Collinsonia fresh herb/root (Collinsonia canadensis)

Chronic otitis media with venous congestion can be treated with Collinsonia. It can also be used for low-grade pain or a tickling sensation in the ear.

Dose: Fresh tincture (1:2): 1-1.5 ml TID/QID

Echinacea root (Echinacea angustifolia)

Is effective for acute ear infection with pain and a yellow or green mucus discharge. I usually combine it with Eyebright.

Dose: Fresh tincture (1:2): 2-3 ml. every 2-3 hours

Eyebright fresh herb (Euphrasia spp.)

Is indicated for otitis media with profuse secretion. There is often congestion in sinuses as well. Mix it with Echinacea for childhood ear infections.

Dose: Fresh tincture (1:2): 1-2 ml gtt. QID

***Jaborandi bark (Pilocarpus microphyllus)**

Can be used for non-suppurative otitis media with deafness. The mucous membranes and skin are hot and dry.

Dose: Tincture (1:5): 3-10 gtt. every 3 hours (for adults only)

***Poke root (Phytolacca americana)**

Is a powerful alterative used for acute purulent otitis media with enlarged lymph nodes. It can also be used for chronic hypertrophic otitis media.

Dose: Fresh tincture (1:2): 1 gtt. every 3 hours

***Pulsatilla fresh herb (Anemone pulsatilla, A. patens)**

Is of benefit for acute catarrhal or purulent otitis media and for pain relief. It is also indicated for chronic hypertrophic otitis media with severe neuralgic pain.

Dose: Fresh tincture (1:2): 1/2-1 gtt. every 2-3 hours

To use topically, moisten a cotton ball with the tincture and insert it into ear canal to relieve pain.

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Topical Applications

Chinese Coptis (*Coptis chinensis*)

Contains high levels of the antibacterial and antifungal alkaloid berberine. It can be used intra-aurally (as an ear wash) to treat bacterial or fungal otitis media. Other berberine containing plants such as Goldenseal root can also be used for this purpose.

Garlic oil (*Allium sativum*)

Is applied locally, use it only with intact eardrums (tympanic membrane). Use diluted, preferably no more than 10% of the total formula.

Lavender essential oil (*Lavendula angustifolia*)

Use it with Mullein flower oil for ear infections.

Dose: 1-2 gtt. diluted in other oils. Use topically as needed.

Mullein flower oil (*Verbascum thapsus*, *V. olympicum*)

Is applied locally, use it only with intact eardrums (tympanic membrane).

St. John's wort oil (*Hypericum perforatum*)

Is applied locally, use it only with intact eardrums. My "ear oil" formula combines 46% Hypericum oil, 46% Mullein flower oil, 8% Garlic oil, and a few drops EO of Lavender.

Tea Tree oil (*Melaleuca alternifolia*)

Can be used with Mullein flower oil for ear infections.

Dose: 1 gtt. diluted in other oils. Apply topically as needed.

Tobacco (*Nicotiana* spp.)

Is an old time remedy for acute catarrhal Otitis media. The warm tobacco smoke is gently blown into the ear to relieve pain.

Tinnitus

In the elderly, tinnitus, or "ringing in the ears", is one of the most common ear problems. It is often associated with dizziness and loss of hearing. A visit to an otolaryngologist (nose, ear, throat, doctor) can help determine if the condition is caused by a virus, calcification of the inner ear bones, or nerve damage. In Chinese medicine tinnitus is a common symptom of a pattern known as deficient liver and kidney yin. Several herbs including Processed Rehmannia, Shan Yao/Chinese Dioscorea, Lycium fruit, Chinese Dogwood fruit and Eclipta can be used for treating this condition. The classic TCM formula Liu Wei Di Huang Wan (Rehmannia Six Flavor Decoction) contains many of these herbs and is used to treat tinnitus.

Herbs For Tinnitus

Chrysanthemum flower/Ju Hua (*Chrysanthemum morifolium*)

Can be used for tinnitus caused by hypertension, along with Ligustrum fruit, Gambir spines, Cornus fruit and Eucommia bark.

Dose: Tincture (1:5): 2-4 ml TID/QID

Tea: 1-2 tsp. dried flowers, 8 oz. hot water, steep covered for 20-40 minutes, take 1-3 cups/day

Drynaria root/Gu Sui Bu (*Drynaria* spp.)

Is used in TCM for treating tinnitus, deafness and other hearing problems. It is usually combined with Processed Rehmannia, Lycium fruit and Chinese Dogwood fruit.

Dose: Tincture (1:5): 1.5-2 ml TID

Tea: 1 tsp. dried root, 8 oz. water, steep covered for 30 minutes, take 4 oz. three times/day

Eclipta herb (Eclipta prostrata)

Is used in TCM and Ayurvedic medicine. In China it is used to tonify deficient liver and kidney yin, which leads to symptoms such as tinnitus, dizziness and blurred vision. It is often combined with Drynaria, Ligustrum fruit, Eucommia bark and Lycium fruit.

Dose: Tea (Infusion): 1 tsp. dried herb, 8 oz. water, steep 30 minutes, take 4 oz. 4x/day

Tincture (1:5): 1.5-2 ml TID

Ginkgo leaf/standardized extract (Ginkgo biloba)

Can be used for early stage tinnitus caused by impaired circulation to the inner ear. It enhances blood flow and prevents oxidative damage. In several clinical trials, the standardized extract modestly improved tinnitus as well as vertigo (Morgenstern & Biermann, 2002; Holstein, 2001).

Dose: Standardized extract: 120-240 mg per day

St. John's wort flowering tops (Hypericum perforatum)

Is used for tinnitus caused by nerve damage in the inner ear, combine it with Ginkgo, Drynaria, Eclipta and Prickly Ash bark.

Dose: Tincture (1:5): 2-3 ml TID/QID

Tian Ma root (Gastrodia elata)

Gastrodia is probably the most effective herb for dizziness and tinnitus (caused by wind and wind/heat). It is also of use for hypertension, headaches, and supraorbital neuralgia. It is commonly used in a formula, Tian Ma Gou Teng Yin, for treating these symptoms. It contains Tian Ma, Gambir spines, Conch shell, Gardenia fruit, Scute root, Chinese Motherwort, Cyathula root, Eucommia bark, Mulberry Mistletoe, Ye Jiao Teng stem and Fu Shen.

Dose: Tincture (1:5): .75-1.25 ml TID

Tea: 1/2-1 tsp. dried root, 8 oz. water, steep 30-40 minutes, take 2 oz. TID

The Throat

Strep/Sore Throat/Tonsillitis/Pharyngitis

Sore throats are a common occurrence and many sore throats herald the beginning of a cold or influenza. Sore throats can be caused by allergies/post-nasal drip, dry air, bacterial (strep) or viral infection. Tonsillitis is usually caused by a bacterial or viral infection and involves inflammation of the tonsils, sore throat and, in some cases, a fever, cough, headache or body aches. Sore throats (including strep throat, tonsillitis and pharyngitis) caused by bacterial infections are commonly treated with antibiotics in orthodox medicine. Viral infections are managed by treating symptoms with analgesics, NSAIDs, and salt water gargles.

Herbs For Sore Throat

The doses listed here are for adults, adjust for children using Clark's rule. Do not use the toxic herbs (*) with children.

***Aconite root (Aconitum napellus)**

This potentially toxic botanical is used for acute tonsillitis or strep throat with pain and faucitis. Use the homeopathic mother tincture (1:10), heavily diluted with water and boric acid, as a throat spray (for adults only).

Andrographis herb (Andrographis paniculata)

Is a powerful antibacterial agent for hot/damp throat infections (it hurts to swallow, there is a fever and yellow or green sputum). Use it with Honeysuckle, Licorice, and Figwort. It can also be used for pharyngitis, tonsillitis, and bronchitis.

Dose: Tincture (1:5): 1.5-3 ml QID

Burdock seed (*Arctium lappa*)

The seed of this plant is used in TCM to expel wind heat. It is a frequent ingredient in formulas used to treat tonsillitis, painful sore throats and irritative coughs. It can be combined with Platycodon root and Sage.

Dose: Tea (Decoction): 1 tsp. dried seed, 8 oz., decoct 10-15 minutes, steep 45 minutes, take 2-3 cups/day

Tincture (1:5): 1.5-2 ml TID

Chinese Coptis/Huang Lian root (*Coptis chinensis*)

Is effective for acute bacterial and viral throat infections, use it with Honeysuckle flower. It is strongly antibacterial, antifungal and antiviral.

Dose: Tincture (1:5): 1-2 ml TID

Tea: ½ - 1 tsp. dried root, 8 oz. water, decoct 5 minutes, steep 40 minutes, take 4 oz. QID

Echinacea root (*Echinacea angustifolia*)

Is effective for putrid sore throat, and the tissue is inflamed, ulcerated and painful. The patient is often asthenic and depleted. Use it with Baptisia, Sage and Myrrh. In a clinical trial an Echinacea/Sage throat spray was as effective as a chlorhexidine/lidocaine spray for the treatment of acute sore throat (Schapowal, et al, 2009).

Dose: Fresh tincture (1:2): 2-3 ml every 2-3 hours (gargle & swallow)

Essential Oils (EO)

In a human RCT a combination of five EOs (Eucalyptus, Lemon, Peppermint, Oregano and Rosemary) was effective in relieving pain associated with sore throats (Ben-Arye, et al, 2001). It is likely most, if not all, of these oils would be effective even when used individually. Other antiviral/antibacterial EOs include Lavender EO and diluted Thyme EO.

Garlic (*Allium sativum*)

Can be used for a painful sore throat with difficulty swallowing. A common folk remedy is to chew 1 clove of garlic 2 to 3 times per day.

Goldenseal root (*Hydrastis canadensis*)

Is indicated for mucous membranes that are boggy, atonic, and have a tendency to bleed or over-secrete mucus.

Dose: Tincture (1:5): 1-1.5 ml QID (gargle & swallow)

Tea (Infusion): 1/4-1/2 tsp. powdered root, 8 oz. hot water, steep 40 minutes, take 4 oz. 3x/day

Guaiac resin (*Guaiacum officinale*)

Is little used, but is effective for sore throats with great swelling and a deep redness of tonsillar mucous membranes. The patient gets tonsillitis with every slight cold.

Dose: Tincture (1:5): 20-30 gtt. in 4 oz. water, mix, 1 tsp. every 1-2 hours

Honeysuckle flower/Jin Yin Hua (*Lonicera japonica*)

Is most effective for acute throat infection with pustules on the tonsils. Use it with Chinese Coptis or Hydrastis.

Dose: Tincture (1:5): 1.5-2 ml QID

Tea: 2 tsp dried flower, 8 oz. hot water, steep covered for 30 minutes, take up to 4 oz. QID

*TOXIC. Use only with appropriate supervision and under the guidance of a qualified medical/herbal professional.

Isatis herb/Da Qing Ye (Isatis spp.)

The leaf of this plant as well as the root (Ban Lan Gen) are powerful heat-clearing herbs. They have antibacterial, antiviral and antiinflammatory activity and are used to treat painful, red sore throats, usually combined with Scrophularia root, Chinese Coptis root, Andrographis or Honeysuckle flowers.

Dose: Tea (Decoction): 1/2-1 tsp. dried root, 8 oz. water, decoct 5-10 minutes, steep 1 hour, take 2 cups/day

Tincture (1:5): 1-2 ml QID

***Jack-In-The-Pulpit root (Arisaema triphyllum)**

This little-known herb was used by the Eclectic physicians for intensely sore throats with bleeding, marked fetor and fullness and swelling of throat and tongue (for adults only).

Dose: Fresh tincture (1:2): 1/10-1/2 gtt., diluted in juice or water.

Licorice root (Glycyrrhiza glabra, G. uralensis)

This sweet root has a long history of use for sore throat, dry coughs and laryngitis. It has been shown to have antibacterial activity against many common upper respiratory tract bacteria and has demulcent, cough suppressant and antiinflammatory effects. In a clinical trial, a tea made of Licorice, Slippery Elm and Marshmallow was effective for temporarily relieving painful sore throat caused by acute pharyngitis (Brinckmann, et al, 2003).

Dose: Tea (Decoction): 1/2 tsp. dried rhizome, 8 oz. water, decoct 10-15 minutes, steep 10-15 minutes, take 4 oz. 2x/day

Tincture (1:5): .5-1 ml TID/QID

Myrrh gum resin (Commiphora molmol)

I use Myrrh for ulcerated, engorged or flabby mucous membrane tissue with excessive secretions. It is strongly antibacterial and promotes healing of tonsillitis, gum disease and strep throat.

Dose: Tincture (1:5): .75-1.5 ml QID, as a gargle

***Poke root (Phytolacca americana)**

Is used for sore throats with ulceration and enlarged, hard lymph nodes. It mixes well as a gargle with Echinacea and Calendula.

Dose: Tincture (1:2): 1 gtt. every 3-4 hours

Propolis

Is a powerful antiseptic (antibacterial, antiviral, antifungal) useful for strep throat, tonsillitis, uvulitis and esophagitis. Avoid use in people with bee allergies.

Dose: Tincture (1:5): 1-1.5 ml QID

Sage herb (Salvia officinalis)

For painful sore throat with excessive mucus secretion, gargling with Sage is a highly effective treatment. It combines well with Echinacea (see Echinacea) and Goldenseal root. . In a RCT study, a throat spray with 15% Sage fluid extract was effective for treating acute pharyngitis (Hubbert, et al, 2006).

Dose: Tincture (1:5): 1-2 ml. TID/QID

Tea: 1 tsp. dried herb, 8 oz. hot water, steep covered for 20 minutes, gargle frequently with tea

*TOXIC. Use only with appropriate supervision and under the guidance of a qualified medical/herbal professional.

Spilanthes herb/flower (*Spilanthes spp.*)

Is beneficial for sore throats where it is painful to swallow and the tissue is red with a post-nasal drip. It can be combined with Echinacea and Sage to make a highly effective formula.

Dose: Tincture (1:5 or 1:2): 1.5-3 ml every 3 hours

Thyme herb (*Thymus vulgaris*)

Can be used for viral or bacterial sore throats. It inhibits infection and helps to relieve pain.

Dose: Tincture (1:5): 1.5-2 ml TID/QID

Tea: 1 tsp. dried herb, 8 oz. hot water, steep covered 10-20 minutes, gargle frequently with tea

Usnea lichen (*Usnea barbata*)

Is indicated for acute throat infections with an excessive mucus or bloody discharge. It has powerful antibacterial, antiviral and antifungal activity.

Dose: Tincture (1:5): 1-2 ml TID/QID, gargle and swallow

White Sage leaf (*Salvia apiana*)

Is an effective remedy for sore throats where swallowing is difficult and the throat is inflamed and painful.

Dose: Tincture (1:5): 1-1.5 ml in water, gargle as needed.

Tea: 1/2 tsp. dried leaf, 8 oz. hot water, steep covered 20-30 minutes gargle as needed

***Wild Indigo root** (*Baptisia tinctoria*)

Is indicated for faucial or pharyngeal inflammation, the mucous membranes have a dusky, leaden colored hue with a tendency toward septic ulceration and there is a putrid odor (use it with Echinacea and Myrrh).

Dose: Fresh tincture (1:2): .25-.75 ml TID/QID

Xuan Shen root (*Scrophularia ningpoensis*) or **Figwort herb/root** (*S. marilandica*)

For "fire poison" conditions where the tissue is red and inflamed, with little secretion, this herb is of significant benefit. It is usually combined with Chinese Coptis, Honeysuckle flowers or Isatis.

Dose: Tincture (1:5): 1-2 ml TID

Tea: 1/2-1 tsp. dried, powdered root in 8 oz. water, decoct 1/2 hour, drink 4 oz. QID

Laryngitis

Is an inflammation of the larynx and vocal chords. The symptoms include a hoarse voice or a loss of the voice. Laryngitis can last a few days (acute) or for weeks or months (chronic). Common causes include viral, bacterial or fungal infections, overuse of the voice (Minister's Throat), smoking, allergies and GERD. Orthodox treatment is usually symptomatic (salt water gargles) and not always effective.

Herbs for Laryngitis

Aromatic Collinsonia (*Collinsonia canadensis*)

The Eclectic physicians used the entire fresh plant (leaf, stem, flower and root) of this herb to treat chronic hoarseness and laryngitis caused by overuse of the voice (Minister's Throat). It can be combined with Sage and demulcents and gargled throughout the day.

Dose: Tea (Decoction): 1 tsp. dried root/herb, 10 oz. water, decoct 15 minutes, steep covered for 40 minutes take 4 oz. 3x/day

Tincture (1:2): 1-1.5 ml TID/QID

*TOXIC. Use only with appropriate supervision and under the guidance of a qualified medical/herbal professional.

Horehound herb (*Marrubium vulgare*)

Has been used for millennia for laryngitis, coughs, tonsillitis and sore throat. It has antiviral and anti-inflammatory activity. Horehound cough drops are an effective remedy for minor coughs and irritation of the throat.

Dose: Tea (Infusion): 1-2 tsp. dried herb, 8 oz. hot water, steep covered for 30 minutes, take 2-3 cups/day

Tincture (1:5, 1:2.5): 1.5-3 ml TID/QID

Platycodon root/Jie Geng (*Platycodon grandiflorum*)

Soothes irritated vocal chords and is useful for relieving Minister's Throat, laryngitis or pharyngitis.

Dose: Tea (Decoction): 1 tsp. dried root, 10 oz. water, decoct 5-10 minutes, steep 45 minutes, take 4 oz. 3x/day

Tincture (1:5): 2-3 ml TID

Sage leaf (*Salvia officinalis*)

Helps reduce inflammation and irritation of the throat and vocal chords. A gargle combining Sage, Aromatic Collinsonia and demulcent herbs such as Sterculia can be effective for treating laryngitis

Dose: Tea (Infusion): 1 tsp. dried herb, 8 oz. hot water, steep covered for 20-30 minutes, take 2-3 cups/day

Tincture (1:5): 1-2 ml TID/QID

Slippery Elm bark (*Ulmus rubra*)

A cold-water infusion of this demulcent herb can help soothe irritated mucosal tissue and relieve dry coughs, laryngitis and pharyngitis. Other demulcent herbs such as Marshmallow root can also be used.

Dose: Tea (Cold Infusion): 1/2-1 tsp. powdered bark, 8 oz. cool water, steep for 1-2 hours, take 3-4 cups/day

Sterculia seed (*Sterculia lychnophora*)

This seed, when soaked in water, expands to 8 times its volume and makes a soothing demulcent drink. It is known as Pang Da Hai in TCM and it is often used by opera singers for hoarseness and laryngitis.

Dose: 1-2 seeds soaked in water for 1-2 hours. Sip as needed.

THE SINUSES

Allergic Rhinitis

Also known as hay fever or pollinosis, is caused by seasonal pollen allergies. Spring and autumn are often the most symptomatic times, but depending on the country and region, these allergies can occur at other times of the year. In cases of chronic allergic rhinitis symptoms can occur throughout the year.

While pollen is the primary culprit for this condition, other factors such as dust and chlorine can exacerbate the symptoms which include excessive nasal mucus secretion (usually clear or white), itchy, watering eyes, sneezing, post-nasal drip and nasal obstruction. Orthodox treatment usually consists of OTC and prescription nasal antihistamines (oral and nasal sprays), nasal corticosteroids and decongestants. For serious cases allergen immunotherapy (desensitization) is used.

While some herbs have specific benefits for treating hay fever, prevention is the better choice. For prevention, the use of immune amphoteric, immunoregulators and herbs to stabilize mucosal tissue integrity should be started 4-6 weeks before the usual onset of allergy season. The occasional use of nasal irrigation (Neti pot) can be helpful for clearing pollen from the sinuses and facilitating drainage of thick or sticky mucus. A study showed that overuse of this therapy can increase risk of developing acute sinusitis (Fiore, 2009).

Immune amphoteric for allergic rhinitis

Astragalus root (*Astragalus membranaceus*)

Licorice root (*Glycyrrhiza uralensis*)

Cordyceps fungus (*Cordyceps sinensis*)
Holy Basil herb (*Ocimum sanctum*)
Jiaogulan herb (*Gynostemma pentaphyllum*)

Maitake fungus (*Grifola frondosa*)
Reishi fungus (*Ganoderma lucidum*)
Cat's Claw bark (*Uncaria tomentosa*)

Immunoregulators for allergic rhinitis

Bupleurum root (*Bupleurum chinensis*)
Cinnamon bark (*Cinnamomum cassia*)
Dan Shen root/Red Root Sage (*Salvia miltiorrhiza*)
Gotu Kola herb (*Centella asiatica*)

Huang Qin/Scute Root (*Scutellaria baicalensis*)
Sarsaparilla root (*Smilax officinalis*)
Turmeric root (*Curcuma longa*)
Unprocessed Rehmannia root (*Rehmannia glutinosa*)

Herbs to stabilize mucosal tissue and inhibit mast cells and histamine production

Amla fruit (*Phyllanthus emblica*)
Blueberry fruit (*Vaccinium* spp.)
Green tea (*Camellia sinensis*)
Indian Madder root (*Rubia tinctoria*)
Lycium fruit (*Lycium chinense*, *L. barbarum*)

Hawthorn fruit/flowers (*Crataegus oxycanthoides*)
Triphala (*Terminalia chebula*, *T. bellerica*,
Phyllanthus emblica)
Hibiscus flowers (*Hibiscus* spp.)

Specific Herbs and Supplements for Allergic Rhinitis

Bai Zhi root (*Angelica dahurica*)

Is used in TCM to dry up excessive sinus secretions. It is often combined with Cocklebur fruit and Magnolia flowers for allergic rhinitis.

Dose: Tea (Decoction): 1 tsp. dried root, 8 oz. water, decoct 10 minutes, steep covered, 40 minutes, take 1 cup 2-3x/day
Tincture (1:5): 1-2 ml TID/QID

Bayberry root bark (*Myrica cerifera*)

Can be used for patients with profuse nasal secretions that are clear or white. The tissue is atonic with post-nasal drip.

Dose: Tincture (1:5): .5-1 ml BID/TID

Cocklebur/Cang Er Zi fruit (*Xanthium sibiricum*)

Is used in TCM to expel wind/damp causing sinus congestion and sinus headaches. It is frequently combined with Magnolia flowers and *Angelica dahurica* root.

Dose: Tea: ½ tsp. dried fruit to 10 oz water, decoct 15 minutes and steep ½ hour. Take 2 oz. BID/TID

Coix seed/Yi Yi Ren (*Coix lachryma-jobi*)

Is used in TCM to clear damp heat infections. It also down-regulates Th₂T lymphocyte activity, helping to inhibit allergic reactions. It can be used to treat allergic rhinitis with heat (yellow mucus, nosebleeds), as well as sinusitis and purulent otitis media.

Dose: Tea (Decoction): 2 tsp. dried seeds, 10 oz. water, decoct 15-20 minutes, steep 45 minutes, take 4 oz. 4-6x/day
Tincture (1:5): 2-3 ml QID

Eyebright herb (*Euphrasia* spp.)

The fresh tincture of Eyebright is useful for helping to dry up excessive sinus secretions, stabilize mast cells and inhibit histamine response. It is also of benefit for the red, itchy eyes caused by hayfever.

Dose: Tincture (1:3): 1-2 ml QID

Horseradish root (*Armoracia rusticana*)

This common condiment is also antibacterial and a pungent sinus dilator. It is useful for profuse white or clear nasal secretions.

Dose: Fresh tincture (1:2): .5-1 ml QID

Kudzu root/Ge Gen (Pueraria lobata)

Acts as an antihistamine, helping to reduce excessive sinus secretions due to allergic rhinitis or colds.

Dose: Tea (Decoction): 1-2 tsp. dried root, 12 oz. water, decoct 15-20 minutes, steep 1 hour, take 2-3 cups/day

Tincture (1:5): 3-5 ml TID/QID

Magnolia flowers/Xin Yi Hua (Magnolia liliflora)

Is one of the most effective herbs used in TCM for dispersing wind/cold patterns with nasal congestion, sinus headache and hay fever. It is often used in a formula, Xin Yi San, which also contains Siler root, Notopterygium root, Chinese Wild Ginger root, Ligusticum root, Angelica dahurica root, Gao Ben root, Akebia bark, honey-fried Licorice root, and Chinese Black Cohosh root. In a RCT trial Xin Yi San was effective at relieving symptoms of chronic allergic rhinitis (Yang, et al, 2010).

Dose: Tea (Decoction): 1 tsp. dried flowers to 10 oz. water, decoct 15 minutes, steep ½ hour, take 4 oz. TID

Osha root (Ligusticum porteri)

Is used for conditions with profuse nasal secretions, either clear or white in color, and post-nasal drip.

Dose: Tincture (1:5) - 1-2 ml TID/QID

Tea (Infusion) - 1/4-1/2 tsp. powdered root, 8 oz. hot water, steep 40 minutes, take 4 oz. 3x/day

Quercetin

Is a flavonoid aglycone found in a wide variety of herbs and vegetables. Taken alone or with Bromelain, it can inhibit histamine release by stabilizing mast cells and preventing basophil degranulation as well as inhibiting inflammatory leukotrienes (Thornhill & Kelly, 2000).

Dose: 250-600 mg TID (before meals)

Yerba Mansa (Anemopsis californica)

Is used to reduce excessive sinus secretions, especially if the mucus is clear or white. It can be combined with Eyebright or Kudzu root.

Dose: Tincture (1:2 or 1:5): 1.5-3 ml QID

Tea: 1 tsp. dried herb, 8 oz. hot water, decoct 5 minutes, steep ½ hour. Take 4 oz. TID

Sinus Infection/Sinusitis

Sinus infections can be caused by bacteria, virus or fungi. Acute occasional infections are often associated with colds or seasonal allergies which cause sinus inflammation and an environment conducive to secondary infection. Chronic infections are often related to chronic allergies (mold, dust mites), fungal infections or chronic rhinosinusitis (CRS). Common symptoms of sinusitis include nasal congestion, sinus pain, a muco-purulent discharge and sinus headaches.

Herbs and Supplements For Sinus Infection/Sinusitis

Andrographis herb (Andrographis paniculata)

Is used for blood heat and hot/damp (bacterial or viral) infections. There is nasal pain and yellow, green, or bloody mucus.

Dose: Tincture (1:5): .5-1.5 ml QID

Tea (Infusion): 1 tsp. dried herb, 8 oz. hot water, steep 1/2 hour, take 4 oz. 3x/day

Bromelain

It is an antiinflammatory enzyme extracted from the Pineapple. In three double-blind clinical trials, Bromelain taken concurrently with antibiotics was superior to antibiotics alone for treating sinusitis. The Bromelain group had reduced nasal mucosal inflammation and nasal discharge, improved breathing and fewer headaches (Asher, et al, 2001).

Dose: 500 mg TID

Chinese Coptis/Huang Lian root (Coptis chinensis)

Is very effective as a neti pot or nasal douche for fungal sinusitis.

Dose: Tea (Decoction): 1/2 - 1 tsp. dried root, 8 oz. water, decoct 5 minutes, steep 40 minutes, take 4 oz.
4x/day

Tincture (1:4-1:5): 1-2 ml (20-40 gtt.) TID

Echinacea root (Echinacea angustifolia)

Is useful for acute sinusitis with fever and a yellow or green mucus discharge (use it with Baptisia and Sage).

Dose: Fresh tincture (1:2): 2-3 ml every 2-3 hours

Eyebright fresh herb (Euphrasia spp.)

Is effective for sinus congestion with inflammation and pain in frontal sinuses. The tissue is tender, ticklish or ulcerated. It is also of great benefit for allergic rhinitis.

Dose: Fresh tincture (1:2): 1-2 ml QID

Goldenseal root (Hydrastis canadensis)

Is used for atonic, boggy mucous membranes with increased secretions and a tendency to infection. A nasal douche is also useful, especially for fungal sinusitis.

Dose: Tincture (1:5): 1-1.5 ml TID

Tea (Infusion): 1/4-1/2 tsp. powdered root, 8 oz. hot water, steep 40 minutes, take 4 oz. 3x/day

Houttuynia/Yu Xing Cao herb (Houttuynia cordata)

Is used in China as a nasal douche for sinusitis and as eardrops for purulent otitis media.

Dose: Tea (Decoction): 1-2 tsp. dried herb, 8 oz. water, decoct 5-10 minutes, steep 45 minutes, take 2 cups/day

Tincture (1:5): 3-4 ml TID

N-acetyl-cysteine

Is a sulphur amino-acid compound that has effective mucolytic activity. It reduces the viscosity of mucus allowing it to be more easily expelled.

Dose: 500 mg - 2 g per day

Tea Tree essential oil (Melaleuca alternifolia)

The inhalation of the EO is useful for acute sinusitis with a profuse secretion of green, yellow or bloody mucus.

Inhalation: 2 gtt of essential oil in hot water, inhale vapors (use caution not to burn patient).

Tickseed herb (Bidens spp.)

This little-known herb is useful for people with profuse nasal secretions that are clear, white, yellow or green. The sinuses are tender and inflamed.

Dose: Fresh tincture (1:2): 1-1.5 ml TID

***Wild Indigo root (Baptisia tinctoria)**

Is used with Echinacea for purulent sinusitis with a foul smelling discharge.

Dose: Fresh tincture (1:2): .25-.75 ml TID/QID

*TOXIC. Use only with appropriate supervision and under the guidance of a qualified medical/herbal professional.

Witch Hazel leaf/bark (Hamamelis virginiana)

Can be used for sinus mucous membranes with venous congestion. The tissues are full with chronic over-secretion of mucus.

Dose: Tea (Infusion): 1/2 tsp. dried bark, 8 oz. hot water, steep covered for 40 minutes, take 4 oz.
3x/day

Fresh tincture (1:2) -.5-1 ml every 2-3 hours

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