

ZOI MEDICINALS



**MAKING NATURAL MEDICINE
RELEVANT TO EVERY FAMILY**

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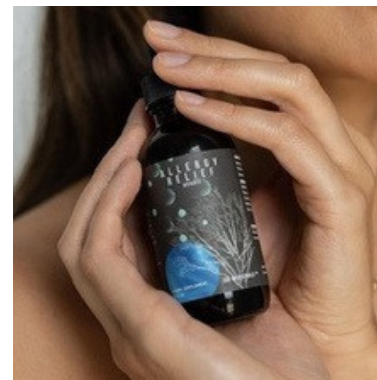


THE MODERNS

Allergy Relief Atsali	Allergy symptom relief, cold/flu prevention
Brain + Mood Xylo	Supports brain function & mood
Digestive Relief Edafos	Digestive symptom & pain relief
Hydration Nero	Hydration support, swelling relief, speeds recovery
Longevity The Zoi	Anti-inflammatory, supports healthy aging
Resilience Fos	Eases physical & mental stress, supports focus
Sleep Kyma	Sleep support
Women's Health Riza	Eases PMS & menstrual discomforts
Metabolic Balance	Manages cravings, improves blood sugar

THE ORGAN MERIDIANS

Heart Meridian	Heart health, improves vitality & joy in life
Kidney Meridian	Kidney health, bone fortifying, aging & hormone support
Liver Meridian	Liver health, detoxification support
Lung Meridian	Lung health, respiration support, cold/ flu prevention
Spleen Meridian	Digestion health, blood sugar & lipid management





WHERE MODERN SCIENCE MEETS TRADITIONAL CHINESE MEDICINE



Zoi Well is located in the serene town of Buda, Texas, and offers a holistic approach to health and wellness. We combine the traditional art of acupuncture with modern therapeutic techniques to promote balance, healing, and relaxation. At the heart of our offerings is acupuncture, an ancient technique designed to restore balance to the body's energy flow. Our skilled practitioners use precise needle placement to address a variety of concerns, including, but not limited to, chronic pain, stress, anxiety, digestive issues, and hormone imbalances.

We have a liquid herbal pharmacy that contains over 200 individually tinctured Chinese, Western, and Ayurvedic herbs. Through 10 years of clinical research and work in our clinic, we have developed 9 formulas for the most common modern ailments and 5 formulas for organ support.



MODERN HERBAL FORMULAS FOR A VIBRANT LIFE

Zoi Medicinals are all-natural, fast-acting liquids, designed by the licensed herbalists of Zoi Well, and clinically-proven to treat common ailments. These clinically tested and non-toxic tinctures are gentle, effective, and safe for the whole family!

For over a decade, we have formulated, tested, and perfected the two Zoi Medicinals lines of herbal medicine - The Moderns and The Organ Meridians. Zoi Medicinals is the sister company of Zoi Well Acupuncture & Herbal Medicine. We started this company to fill the needs of our own families, and, after seeing the benefits first hand, we wanted to share the power of this herbal medicine with you!

We combine ancient Chinese medicine with modern science to bring you the most comprehensive line of herbal medicine, that not only has daily success in our clinic, but is also supported by scientific evidence. On top of this, we have an herbal pharmacy of over 230 individual herbal extracts that we produce for customized formulas for our patients at Zoi Well, or for sale at Zoi Market, our brick and mortar in Buda, Texas. We can't forget to shout out our line of medicinal mocktails at our music venue, Meridian, attached to Zoi Market and menu incorporates our herbal formulas.





THE MODERNS



Unlike synthetic, over the counter medication that can lead to liver, kidney and digestive organ damage, our 9 modern formulas address the most common health concerns that families encounter without the dangerous side effects. Our formulas are designed to address pain, digestive issues, trouble sleeping, allergies, cold and flu, viruses, headache, heartburn, dehydration and swelling, women's health concerns, anxiety, mood and focus issues.

The fact pages for each formula are excellent guides to the function, uses and dosages as well as contraindications that you may have questions about.



ZOI MEDICINALS

Herbal Supplements

Making Natural Medicine Relevant To Every Family™

Designed by board certified herbalists | Perfected by clinical use

All-natural | Fast-acting | Safe

RESILIENCE | FOS



- Adaptogenic & supports adrenal function
- Increases resilience to stress & fatigue
- Enhances physical & cognitive performance
- Supports the nervous system
- Supports healthy aging

LONGEVITY | THE ZOI



- Anti-inflammatory & pain relieving
- Supports illness recovery & prevention
- Supports healthy aging
- Enhances cognitive functions
- Inspired by ancient masters' longevity herbs

ALLERGY RELIEF | ATSAI



- Eases allergy symptoms: sneezing, runny nose, itchy eyes, ears, nose & throat
- Anti-histamine activity
- Respiratory system support
- Anti-microbial
- Regulates immune function & defends against colds & flu

DIGESTIVE RELIEF | EDAFOS



- Relieves stomach upsets & symptoms of over-eating
- Eases nausea, bloating, pain, & reflux
- Promotes healthy blood sugar & blood lipid balance
- Supports the liver & digestive system
- Calms headache & symptoms of hangover

HYDRATION | NERO



- Eases any type of dryness: skin, mouth, cough, etc.
- Helps the body manage healthy fluid balance
- Speeds recovery from illness
- Protects from symptoms of mild dehydration

WOMEN'S HEALTH | RIZA



- Improves cramps, breast tenderness, & abdominal spasm
- Relieves mild menopause symptoms
- Gently regulates hormones for a smooth cycle
- Eases PMS & menstrual symptoms

BRAIN + MOOD | XYLO



- Enhances cognitive functions
- Promotes calm, uplifts the spirit, & balances mood
- Protects the nervous system
- Eases worry, stress & anxiety
- Calms & relaxes the mind & body

SLEEP | KYMA



- Fall asleep quickly with no daytime grogginess
- Improves quality & quantity of sleep
- Small doses ease daytime anxiety
- Dose prior to bed & with mid-night awakening

METABOLIC BALANCE



- Supports GLP-1 secretion & glucose uptake by cells
- Manages food cravings & improves metabolism
- Promotes healthy blood sugar
- Protects organ function
- Antimicrobial & supports a healthy gut microbiome

Available online at

WWW.ZOIMEDICINALS.COM



THE ORGANS



The Organ Meridian formulas balance, heal, and protect the primary organs of Traditional Chinese Medicine: Liver, Spleen, Heart, Lung, and Kidney. Not only do they have physiological impacts, but they also support the emotional aspect attached to each organ system!

These formulas have been the center of the Medicinal Mocktails at Meridian Buda for years, and have been used extensively with patients in clinic at Zoi Well. We have had incredible results in clinic and even in our mocktail servings at Meridian, where feedback on physical relief has been amazing!



ZOI MEDICINALS™

Herbal Supplements

Making Natural Medicine Relevant To Every Family™

Designed by board certified herbalists | Perfected by clinical use
All-natural | Fast-acting | Safe



HEART MERIDIAN

- Supports & protects the heart & vascular system
- Encourages proper blood sugar & blood lipid levels
- Protects the brain & nervous system
- Improves vitality & joy in life
- Calms restlessness & uplifts the spirit



SPLEEN MERIDIAN

- Supports healthy metabolism & digestion
- Encourages proper blood sugar & blood lipid levels
- May improve muscle function
- Protects from over-thinking & worry
- Benefits & protects the stomach



LIVER MERIDIAN

- Supports & protects liver health & detoxification
- Encourages liver repair
- Aids proper emotional regulation
- Can protect liver from drugs (including acetaminophen), alcohol, & other other toxins
- Soothes irritability & tension
- Helps maintain blood sugar & blood lipid levels



KIDNEY MERIDIAN

- Supports & protects the kidney
- Protects bone health & relieves pain
- Eases hot flashes & balances internal temperature
- Aids healthy blood sugar levels
- May improve fertility in men & women



LUNG MERIDIAN

- Support for allergies, asthma, & COPD
- Protects lungs & slows damage from chronic lung conditions
- Opens respiratory passages
- Aids cold & flu prevention & treatment
- Encourages healthy respiration, breathing, & oxygenation

Available online at
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Fact Sheet

LONGEVITY | The Zoi™



- Decreases inflammation and relieves pain
- Assists in prevention and treatment of illness
- Prolongs health and promotes youthfulness
- Supports healthy aging
- Enhances cognitive functions; supports the brain and nervous system

Inspired by ancient master herbalists, Longevity | The Zoi™ contains herbs renowned for preventing disease, prolonging life, and increasing vitality. Herbs in Longevity are powerful anti-inflammatories known for strengthening and protecting the body's organs and tissues, and supporting healthy biochemistry. Longevity | The Zoi™ complements other Zoi Medicinals™ tinctures, as it replenishes every body system.

Ingredients & Traditional Chinese Medicine View

Zoi Medicinals™ tinctures are alcohol and vegetable glycerin extracts of non-toxic herbs. All herbs used in the manufacturing of Zoi Medicinals™ products have been tested for heavy metals, bacteria, fungus, and pesticides.

About Alcohol

Zoi Medicinals™ formulas contain 18.25% alcohol. Alcohol has been used in herbal tinctures for centuries. It extracts active ingredients that are not water-soluble, such as essential oils, alkaloids and resins. It enables the tincture to be fast-acting, potent, shelf-stable for long periods of time, and enables their "grab and go" properties (easily portable, ready to take, no refrigeration required). Zoi Medicinals tinctures use organic ethyl alcohol that is USP certified. It is the same alcohol found in vanilla extract (used for cooking), other tinctures, and liquid homeopathic remedies. The dose is very small and can be diluted into water or other drink making the final alcohol content less than 0.1%, which is similar or less than, the amount of alcohol in a cup of kombucha.

- **Ling Zhi (Reishi Mushroom, *Ganoderma lucidum*)** is slightly warm, enters the HT, LIV, and LU meridians; tonifies Heart Qi, nourishes Heart Blood and calms the Spirit, tonifies Lung Qi, transforms phlegm to stop cough and wheezing, tonifies Qi and nourishes Blood.
- **Dong Chong Xia Cao (Cordyceps Mushroom, *Cordyceps sinensis*)** is slightly warm, enters the LU and KI meridians; tonifies the Kidney, strengthens Yang, augments Jing, nourishes Lung Yin, transform Phlegm, and stops bleeding.
- **Gou Qi Zi (Ningxia Wolfberry, *Lycium barbarum*)** is warm and enters the KI and LIV meridians; tonifies the Liver and Kidney, strengthens the sinews and bones, expels wind-damp, and warms and stabilizes the Kidney.
- **He Shou Wu (Fleeceflower Root, *Polygoni multiflori*)** is warm and enters the LIV and KI meridians; tonifies the Liver and Kidneys, nourishes the Blood and Jing, expels Wind from the skin, moistens the intestines and unblocks the bowels, and relieves Fire Toxin.
- **Ji Xue Cao (Gotu Kola, *Centella asiatica*)** is cold and enters the KI, LI, LIV, SI and SP meridians; clears heat and dries damp, relieves diarrhea due to Summerheat, cools the blood and stops bleeding, clears Liver heat and benefits the eyes.
- **Huang Qi (Astragalus Root, *Astragalus membranaceus*)** is slightly warm, enters the LU and SP meridians; tonifies Qi and Blood, strengthens Spleen and raises Yang Qi of the Spleen and Stomach, tonifies Wei Qi and the lungs, stabilizes the Exterior, promotes urination and reduces edema, promotes discharge of pus, generates flesh and expels toxins, generates body fluids, and relieves numbness and pain.
- **Dan Shen (Red Sage, *Salviae miltiorrhizae*)** is slightly cold and enters the HT, PC and LIV meridians; invigorates Blood and dispels stasis, clears Heat and soothes irritability, cools the Blood and reduces abscesses, nourishes the Blood and calms the Spirit.
- **Hou Po (Magnolia Bark, *Magnoliae officinalis*)** is warm and enters the LI, LU, SP, and ST meridians; moves Qi in the middle jiao and relieves food stagnation, promotes movement of Qi

downward, dries damp, transforms phlegm, descends rebellious Qi, reduces phlegm and calms wheezing.

- **Jie Gu Mu (Elderberry, *Sambucus nigra*)** enters the LU, KI and BL meridians; releases the Exterior, clears heat, dries damp, tonifies Lung, expels phlegm, and promotes lactation.
- **Fu Ling (Poria Mushroom Root, *Poriae cocos*)** enters the HT, SP, KI, and LU meridians; promotes urination and leeches dampness, strengthens the Spleen, harmonizes the middle, quiets the Heart, calms the Shen and soothes the nerves.
- **Shu Di Huang (Rehmannia Root, *Radix Rehmanniae Preparata*)** is slightly warm and enters the HT, KI and LIV meridians; nourishes the Blood, Liver and Kidney Yin, nourishes Jing and fills the Marrow, arrests coughing and wheezing.

Biomedical Details

Longevity | The Zoi™ is comprised of herbs, shown to have **anti-tumor, anti-inflammatory, immune-modulating, anti-aging, and disease prevention** properties. The herbs are known for broad therapeutic and health-enhancing properties, and have potential to prevent disease. Longevity is appropriate to use in combination with most conventional medical therapies, but should be discussed with your doctor.

Most of the herbs in Longevity | The Zoi™ have anti-inflammatory and immune regulating effects. (1, 2, 3, 4, 5, 6, 7, 8, 9, 10) Studies with gotu kola, specifically, have resulted in improvements in age-related conditions like hypertension, peripheral neuritis, insomnia, loss of appetite, constipation and age-related cognitive decline in the elderly (8), and rehmannia root has been shown to mitigate the progression osteoporosis. (11)

Cordyceps, fleeceflower, wolfberry, *Astragalus*, Dan Shen, and magnolia bark have **anti-tumor functions**. (1, 2, 3, 4, 5, 19, 14, 15, 16)

Cordyceps, specifically, has been used as an adjunct to conventional anti-cancer therapies in humans, supporting the immune system and body through cancer treatment. In animal studies, *Cordyceps* extract has been shown to directly kill cancer cells. (4, 5) Bioactive components of wolfberry and magnolia bark have been reported to enhance tumor regression when used in combination with other treatments. (3, 4) Magnolia bark extracts have been shown to cross the blood-brain barrier and exert anti-tumor effects. (6) Wolfberry has also exhibited potential anti-tumor functions. (6, 3) *Astragalus* has been shown to counteract side effects of chemotherapy. (3)

Fleeceflower and wolfberry have been shown to **decrease blood sugar and lipids** in animal tests (1, 3); rehmannia root has exhibited antidiabetic effects (11) and wolfberry, magnolia bark, Dan Shen and *Cordyceps* **benefit the cardiovascular system**. In China, pharmaceuticals containing Dan Shen (*Salviae miltiorrhizae*) have been developed, and are widely used in clinical practice. A recent overview of the pharmacological and therapeutic actions highlighted arterial-protective, anti-atherosclerotic, and cardioprotective effects. (8) A 2017 review described specific heart-benefitting effects, including lowering blood pressure, improving arteriosclerosis and myocardial ischemia reperfusion injuries (which may occur post-treatment of a heart attack). This article summarized the effectiveness of Dan Shen alone or as part of a Chinese herbal formula. It was shown to improve cardiovascular disease signs and symptoms such as frequency of angina attacks,

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Revised: April 22, 2025.

cardiac function and blood pressure. *Cordyceps*, specifically, has been associated with blood cholesterol and triglyceride reduction. In one randomized trial, 95% of patients treated with 3 grams a day saw improvement in their blood sugar profiles, while the control group showed only 54% improvement with treatment by other methods. (4) In another study, patients suffering from chronic heart failure were given *Cordyceps* in combination with their conventional treatments (digoxin, hydrochlorothiazide, dopamine, and dobutamine) and reported an increase in the overall quality of life (physical condition, mental health, sexual drive, and cardiac function) compared to the control group (4). A gotu kola component was used in a human study and showed a statistically significant decrease in circulating endothelial cells, indicating positive effects on the integrity of blood vessel walls. (17) In another human study, significant impacts were noted on kidney function as measured by ankle edema, as well as positive effects on microcirculation and capillary permeability in patients (17).

Neuro-protection is an effect that may result in recovery or regeneration of the nervous system, its cells and their structure and function. Wolfberry, *Cordyceps* and rehmannia root have exhibited some of these activities, and studies indicate wolfberry to be protective of, and regenerative to the **eye**. (3, 9, 11) Perhaps neuroprotective functions are at the root of some of these herb's influence on **stress and anxiety**. Some animal studies have shown that wolfberry protects the nervous system. Magnolia bark improves stress tolerance affecting symptoms of anxiety and depression. (6, 13) Several gotu kola studies have indicated positive effects on the brain and nervous system. One double-blind, placebo-controlled human study noted anti-anxiety effects of gotu kola, and another study in elderly subjects showed significant **improvements in cognition and mood** with gotu kola. (17)

How to use Longevity | The Zoi™

- For long-term anti-inflammatory, longevity, and disease prevention effects, standard dose consistently
- For acute conditions (illness, pain, injury) take up to 5 doses per day
- During cold and flu season, travel, or times of stress, take standard dose

Dosage

Liquid formulas are rapidly absorbed by the body and should be taken

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***This product is not intended to diagnose, treat, cure, or prevent any disease.**

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Revised: April 22, 2025.

Fact Sheet

BRAIN & MOOD | XYLO™



- Promotes calm, uplifts the spirit, and balances mood
- Protects and supports healing of the brain & nervous system
- Nootropic actions to enhance cognitive functions & memory

Brain & Mood | Xylo™ is a balanced mix of herbs exhibiting anti-anxiety, anti-depressant, cognitive-enhancing and neuro-protective properties, and Chinese herbs with actions to “calm the spirit”. Brain & Mood is ideal to support symptoms of anxiety or depression, to optimize memory, learning and clear thinking, and to heal and protect those with brain or nervous system injuries or weakness.

Ingredients & Traditional Chinese Medicine View

Zoi Medicinals™ tinctures are alcohol and vegetable glycerin extracts of non-toxic herbs. All herbs used in the manufacturing of Zoi Medicinals™ products have been tested for heavy metals, bacteria, fungus, and pesticides.

About Alcohol

Zoi Medicinals™ formulas contain 18.25% alcohol. Alcohol has been used in herbal tinctures for centuries. It extracts active ingredients that are not water-soluble, such as essential oils, alkaloids and resins. It enables the tincture to be fast-acting, potent, shelf-stable for long periods of time, and enables their “grab and go” properties (easily portable, ready to take, no refrigeration required). Zoi Medicinals tinctures use organic ethyl alcohol that is USP certified. It is the same alcohol found in vanilla extract (used for cooking), other tinctures, and liquid homeopathic remedies. The dose is very small and can be diluted into water or other drink making the final alcohol content less than 0.1%, which is similar or less than, the amount of alcohol in a cup of kombucha.

- **Xi Fan Lian (Passion flower, *Passiflora incarnate*)** is not included in the Chinese Materia Medica, but has been described as cool, enters HT and LIV meridians; calms the Shen, tonifies Yin.
- **Skullcap Leaf (*Scutellaria lateriflora*)** is cold, enters the LU, ST, GB, and LI meridians, clears Heat and dries Damp, drains Fire and detoxifies, cools the Blood and stops bleeding, clears Heat, calms the fetus, and calms ascending Liver Yang.
- **Hou Tou Gu (Lion’s Mane, *Hericium erinaceus*)** enters the HT, LIV, SP, KI and LU meridians, tonifies the Heart, heals wounds, regenerates flesh, improves cognitive function, memory, concentration, and muscular coordination. Supports heart health, nervous system, and digestion function.
- **Dan Shen (Red Sage, *Salviae miltiorrhizae*)** is slightly cold and enters the HT, PC and LIV meridians; invigorates Blood and dispels stasis, clears Heat and soothes irritability, cools the Blood and reduces abscesses, nourishes the Blood and calms the Spirit.
- **Brahmi (True Brahmi, *Bacopa monnieri*)** is not included in the Chinese Materia Medica but has been revered for ages as a brain tonic in Ayurvedic medicine. It is used to strengthen cognitive functions, balances the nervous system, supports emotional stability and calm, and improves sleep quality. It is cooling and can benefit joints, blood, hair, and skin.
- **Tian Ma (Gastrodia Rhizome, *Gastrodia elata*)** is neutral and enters the LIV meridian; extinguishes Wind, calms the Liver, stops spasms and tremors, subdues rising Liver Yang, alleviates pain and disperses Wind-Damp Bi.

- **Wu Wei Zi (Schisandra Fruit, *Fructus schisandrae*)** is warm, enters the HT, KI and LU meridians and all five Zang organs; tonifies Qi, astringes Lung Qi leakage and stops coughing, tonifies Kidney and binds Essence, astringes sweat and generates fluids, quiets the Spirit, and calms and contains Heart Qi.
- **Shi Chang Pu (Sweetflag Rhizome, *Rhizoma Acori talarinowii*)** is warm and aromatic and enters the HT, ST and LU meridians; opens the orifices, vaporizes Phlegm, calms the Spirit, disperses Wind, transforms Damp, harmonizes the Spleen, moves Qi and Blood, reduces swelling, alleviates sores and benefits the throat.
- **Yuan Zhi (Milkwort, *Radix Polygalae*)** is slightly warm and enters the HT and LU meridians. Calms the Spirit, sedates the Heart and clears the meridian joining the Heart and Kidney, expels Phlegm, opens the orifices, clear the Lungs and stops coughing, reduces abscesses and dissipates swellings.
- **Ji Xue Cao (Gotu Kola, *Centella asiatica*)** is cold and enters the KI, LI, LIV, SI and SP meridians; clears heat and dries damp, relieves diarrhea due to Summerheat, cools the blood and stops bleeding, clears Liver heat and benefits the eyes.
- **Bai Gou Ye (Ginkgo, *Ginkgo biloba*)** enters LU meridian; calms the Lungs and moves Blood, relieves cough with copious mucous and wheezing, pain from coughing, hypertension, coronary artery disease, and angina pectoris.
- **Suan Zao Ren (Chinese Date Seed, Jujube Seed, *Zizyphus spinosae*)** is neutral and enters the GB, HT, LIV, and SP meridians; nourishes Heart Yin, tonifies Liver Blood, calms the spirit, astringes sweat and generates fluids.
- **Da Zao (Jujube, Chinese Date, *Zizyphus jujube*)** is warm and enters the SP and ST meridians; tonifies the Spleen and Stomach, augments Qi, and nourishes Blood and calms the Spirit.

Biomedical Details

Brain & Mood | Xylo™ is comprised of herbs that affect the nervous system and cognition with **anti-anxiety, anti-depressive, cognitive enhancing (nootropic) and neuro-protective functions**.

Passionflower, skullcap, ginkgo, gotu kola, lion’s mane, *Gastrodia*, and Yuan Zhi have exhibited **anti-anxiety** effects in various studies. (1, 2, 3, 4, 5) One clinical trial of participants with generalized anxiety disorder (GAD) showed that passionflower extract was as effective (and with less side effects) as oxazepam (30 mg/day) in reducing symptoms of anxiety. (1) Other human studies examining passionflower’s effects on pre-operative anxiety reported significant benefits in comparison to placebo and pharmaceuticals. (6) Passionflower

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Revised: April 22, 2025.

has also exhibited **sedating properties** in animal studies. (7) Another random controlled trial of ginkgo in those with GAD and adjustment disorder with anxious mood, resulted in significant decreases in the HAMA (Hamilton anxiety rating) scale. (1)

Gastrodia, gotu kola, lion's mane, Shi Chang Pu and Yuan Zhi also have reported **anti-depressant** effects. (2, 3, 4, 5) In a clinical trial of *Gastrodia*, 58 patients with post-stroke depression (PSD) were divided into two groups. Both received mirtazapine (15–30 mg/d) for 4 weeks, and one group also used *Gastrodia* as an additional therapy. Symptoms of depression improved significantly in the group that was also given *Gastrodia*. (4)

Many herbs, including *Gastrodia*, gotu kola, lion's mane, and Yuan Zhi have both anti-anxiety and anti-depressant functions. (2, 4, 5, 8) Lion's mane and Shi Chang Pu have been shown to **modulate neurotransmitter levels** which may explain the bivalent functions observed. (8, 9) A clinical study using lion's mane supplementation in women with both anxiety and depression resulted in an improvement in symptoms after 4 weeks of use. (8)

Neuroinflammation, along with nerve cell damage and death, play important roles in the recovery from acute injuries of the nervous system, and neurodegeneration in diseases such as Parkinson's and Alzheimer's. *Gastrodia*, gotu kola, lion's mane, brahmi, Shi Chang Pu, and Yuan Zhi have exhibited strong **anti-inflammatory** and **neuro-protective** properties in many studies. (2, 4, 8, 9, 10) Gotu kola and brahmi are Ayurvedic herbs renowned for revitalizing the brain and nerves. Brahmi has displayed nervous system detoxification effects (the removal of heavy metals and other toxins). (10) Gotu kola and Dan Shen has been shown to cross the blood-brain barrier without toxic effects. (10, 11) Gotu kola, lion's mane, Shi Chang Pu and Yuan Zhi have exhibited **nerve regenerative properties**. (5, 9, 11, 12) Studies of lion's mane in cells, animals and clinical tests have shown, through several mechanisms, growth enhancement and improved survival of neurons. (8) Taken together, these studies suggest that Brain & Mood may be beneficial to reduce the impact of degenerative brain diseases, and improve healing of nerve/brain injuries. (8)

Lion's mane and other herbs have exhibited **cognitive enhancement (nootropic)** properties and the ability to **reduce cognitive decline** in clinical trials. (3, 8) Clinical evidence shows that brahmi can improve verbal learning, information processing, and memory, even in older adults. (10) It has also displayed benefits in children with ADHD symptoms. (10) Clinical studies of ginkgo have shown improved recall and speed of information and executive processing. (13) Gotu kola can improve working memory and mood in healthy elderly adults. (13) Yuan Zhi and Chinese date also have cognitive enhancing properties. (5, 14)

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How to use Brain & Mood | Xylo™

- Use standard dose daily for protection of the nervous system and brain, cognitive enhancement and consistent mood support
- Use standard dose 4-5 times a day with increased depression, anxiety or recovery from injury of the brain or nervous system

Dosage

Liquid formulas are rapidly absorbed by the body and should be taken by mouth. Hold under the tongue a few moments prior to swallowing; or take in a small amount of water or juice. If alcohol content is a concern, a standard dose (1.5 ml) in one cup of water dilutes the alcohol content to less than 0.1%, or formula can be added to hot tea (alcohol will evaporate) and drink once cooled.

The standard, adult dose is three droppers full (1.5 ml) three times a day, or as directed by your health care professional. One full compression of the dropper bulb is a dropper full (the dropper may not appear "full").

- Standard adult dose (100-250 lb) – 3 droppers full (1.5 ml), three times a day.
- Standard adult dose (>250 lb) – 4 droppers full (2.0 ml), three times a day.
- Standard child dose (30-100 lb) – 1 dropper full (0.5 ml), three times a day.
- If sensitive to herbs and supplements, start with 1 dropper full (0.5 ml), three times a day.

For some, it may take several weeks to notice an effect. Consistency is more important than dose, so take some each day even if you can't keep to a regular schedule. As your body responds to the formula, you may decrease the dose, accordingly.

Cautions

- If you have a medical condition or take medication, consult with your doctor before use.
- Do not use if pregnant or breastfeeding, unless directed by your health care practitioner.
- Discontinue use if any new symptoms appear, including symptoms of allergic reaction.
- Not to exceed five droppers full at a time.
- With minor stomach upset, take with food.
- If experiencing minor headache or other discomfort, reduce the dosage to 1/3 of starting dose. Gradually increase the dosage each day until you reach to the desired dosage.
- Every body is different, as the formula alters internal processes, your best dosage may change (always stay within the recommended dosage range).

***This product is not intended to diagnose, treat, cure, or prevent any disease.**

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Fact Sheet

RESILIENCE | FOS™



- Adaptogenic—increases resilience to stress & fatigue
- Encourages healthy cortisol levels
- Enhances physical & cognitive performance
- Improves symptoms of stress-related anxiety & depression
- Neuro-protective—benefits wellness & healthy aging

Resilience | Fos™ is an adaptogenic formula with herbs created to manage stress, support adrenal function, and increase energy, performance and resilience to physical and mental pressure. It improves symptoms of fatigue and protects the nervous system. Ideal for someone with a busy, demanding life, or those with anxiousness and difficulty coping with life's demands due to long-term stress.

Ingredients & Traditional Chinese Medicine View

Zoi Medicinals™ tinctures are alcohol and vegetable glycerin extracts of non-toxic herbs. All herbs used in the manufacturing of Zoi Medicinals™ products have been tested for heavy metals, bacteria, fungus, and pesticides.

About Alcohol

Zoi Medicinals™ formulas contain 18.25% alcohol. Alcohol has been used as a solvent in herbal tinctures for centuries. It extracts active ingredients that are not water-soluble, such as essential oils, alkaloids and resins. It enables the tincture to be fast-acting, potent, shelf-stable for long periods of time, and enables their "grab and go" properties (easily portable, ready to take, no refrigeration required). Zoi Medicinals tinctures use organic ethyl alcohol that is USP certified. It is the same alcohol found in vanilla extract (used for cooking), other tinctures, and liquid homeopathic remedies. The dose is very small and can be diluted into water or other drink making the final alcohol content less than 0.1%, which is similar or less than, the amount of alcohol in a cup of kombucha.

- **Ci Wu Jia (Siberian Ginseng Root, *Eleutherococcus senticosus*)** is warm, enters the SP, HT, and KI meridians; tonifies Qi of the Spleen and Stomach, warms the Kidney, augments the Heart, calms the Shen, invigorates Blood and unblocks the collaterals.
- **Huang Qi (Astragalus Root, *Astragalus propinquus*)** is slightly warm, enters the LU and SP meridians; tonifies Qi and Blood, strengthens the Spleen, raises Yang Qi of the Spleen and Stomach, tonifies Wei Qi and the Lungs, stabilizes the Exterior, promotes urination and reduces edema, promotes discharge of pus, generates flesh and expels toxins, generates body fluids, and relieves numbness and pain.
- **Ren Shen (Asian Ginseng, *Radix ginseng*)** is slightly warm and enters the LU and SP meridians; powerfully tonifies Qi, tonifies Spleen, Stomach and Lung Qi, generates Fluids and stops thirst, tonifies Heart Qi and calms the Spirit.
- **Gou Qi Zi (Ningxia Wolfberry, *Lycium barbarum*)** is warm and enters the KI and LIV meridians; tonifies the Liver and Kidney, strengthens the sinews and bones, expels Wind-Damp, and warms and stabilizes the Kidney.
- **Wu Wei Zi (Schisandra Fruit, *Fructus schisandrae*)** is warm, enters the HT, KI and LU meridians and all five Zang organs; tonifies Qi, astringes Lung Qi leakage and stops coughing, tonifies Kidney and binds Essence, astringes sweat and generates fluids, quiets the Spirit, and calms and contains Heart Qi.
- **Hong Jing Tian (Rhodiola, *Rhodiola rosea*)** is cold,

enters the HT, KI, LIV, SP and LU meridians; tonifies, clears Lung heat, nourishes Lung Yin and relieves cough, and invigorates the Blood.

- **Hou Po (Magnolia Bark, *Magnolia officinalis*)** is warm and enters the LI, LU, SP, and ST meridians; moves Qi in the middle and relieves food stagnation, promotes movement of Qi downward, dries damp, transforms phlegm, descends rebellious Qi, reduces phlegm and calms wheezing.
- **Huang Bai (Philodendron, *Cortex phellodendri*)** is cold and enters the KI and BL meridians; drains Damp-Heat especially from the Lower Jiao, drains Kidney Fire and relieves toxicity.
- **Nan Fei Zui Jia (Ashwaganda, *Withania somnifera*)** enters the LU, HT and SP meridians; tonifies Qi and Wei Qi, tonifies Lung Qi, Spleen, and Jing, and calms the Shen.
- **Da Zao (Jujube, Chinese Date, *Ziziphus jujube*)** is warm and enters the SP and ST meridians; tonifies the Spleen and Stomach, augments Qi, nourishes Blood and calms the Spirit.

Biomedical Details

Resilience | Fos™ is comprised largely of adaptogenic herbs, which studies have shown to have **neuro-protective, anti-fatigue, anti-depressive, anxiety-reducing, nootropic (cognitive-enhancing), CNS-stimulating and cortisol-regulating** activities. A number of clinical trials demonstrate that anti-fatigue herbs in Resilience support mental work capacity and enhanced attention, particularly with a background of stress and fatigue. Other herbs in Resilience have been shown to relieve inflammation, protect the nervous system, eye, and muscle tissue during exercise, and enhance recovery from injury. (1, 2, 3, 4, 5, 6, 7)

A recent review summarized the specific effects on the brain and nervous system of the adaptogenic herbs schisandra, Siberian ginseng, rhodiola and ashwaganda. These four herbs have been shown to extend the lifespan of stressed animals, **support memory and learning, and decrease stress sensitivity**. (7, 8) Wolfberry has also been shown to improve memory, stimulate growth of new neurons in animals and protect the eye. (6, 9) Schisandra has neuro-protective and antidepressant effects and was able to reverse cognitive impairment in animal studies. Ashwagandha decreased neuroinflammation associated with cognitive impairment and drug abuse in animals, and one study showed that it decreased inflammation better than hydrocortisone. (2, 7)

Several studies have indicated that herbs in Resilience have a direct **impact on cortisol** and the HPA (hypothalamus-pituitary-

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adrenal) or **stress axis**. One author suggested that improvements in fatigue seen by panax ginseng use is linked to modulation of cortisol release through the HPA axis. (10) A component of magnolia bark has been shown to have anti-depressant functions and calm the hyperactivity of the HPA axis in animals. (11, 12) The combination of magnolia and *Phellodendron* barks has been shown to reduce the impact of cortisol exposure, decrease fatigue, and feelings of stress and anxiety. (13) Rhodiola also decreased neuroinflammation induced by stress as measured by cortisone-related molecules. (7) Components of these plants have been shown to cross the blood-brain barrier and act on the nervous system directly. (14)

An important tonic herb in traditional medicine, ginseng has been widely used for thousands of years. Its first mention was in the Chinese medical text, *Shen Nong*, in 196 AD. Modern pharmacology is now detailing its medicinal effects and mechanisms of action. One study with Siberian ginseng tested over 6000 individuals (aged 19 to 72) with stressful occupations and observed **improvements in the capacity for physical and mental work** in all cases. (1) Clinical studies of panax (Asian) ginseng have shown significant improvement in mental fatigue symptoms with daily dosing for 4 weeks. Also noted were **benefits on short-term working memory** in middle aged adults, and improvements in those with mood disorders and depression.

A study of cancer survivors showed a significant improvement in cancer-related **fatigue** in 8 weeks of daily use. (10) Astragalus has also been shown to impact fatigue. One random controlled trial of sixty four patients with post-stroke fatigue showed improvements in quality of life and Brief Fatigue Index scores after 28 days of use of astragalus. (15)

Resilience also supports **healthy aging**. Studies have shown that adaptogens protect, and increase the lifespan of cells, improve mitochondrial function, and increase the body's resistance to physical, chemical, and biological stress agents. Resilience contains herbs known for their antioxidant, radical scavenging and immune regulating properties (10, 16, 17).

How to use Resilience | FOS™

- Use standard dose daily for consistent energy support and to improve the body's ability to handle stress.
- Use standard dose daily for stress-related anxiety.
- Use standard dose daily for injury and illness recovery.
- Use standard dose every 2 hours in times of stress and

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when extra energy is required.

Dosage

Liquid formulas are rapidly absorbed by the body and should be taken by mouth. Hold under the tongue a few moments prior to swallowing; or take in a small amount of water or juice. If alcohol content is a concern, a standard dose (1.5 ml) in one cup of water dilutes the alcohol content to less than 0.1%, or formula can be added to hot tea (alcohol will evaporate) and drink once cooled.

The standard, adult dose is three droppers full (1.5 ml) three times a day, or as directed by your health care professional. One full compression of the dropper bulb is a dropper full (the dropper may not appear "full").

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- Standard adult dose (>250 lb) – 4 droppers full (2.0 ml), three times a day.
- Not recommended for children.
- If sensitive to herbs and supplements, start with 1 dropper full (0.5 ml), three times a day.

For some, it may take several weeks to notice an effect. Consistency is more important than dose, so take some each day even if you can't keep to a regular schedule. As your body responds to the formula, you may decrease the dose, accordingly.

Cautions

- If you have a medical condition or take medication, consult with your doctor before use.
- If product interferes with sleep, take last dose earlier in the day; 3 or more hours before bedtime.
- Do not use if pregnant or breastfeeding, unless directed by your health care practitioner.
- Discontinue use if any new symptoms appear, including symptoms of allergic reaction.
- Not to exceed five droppers full at a time.
- With minor stomach upset, take with food.
- If experiencing minor headache or other discomfort, reduce the dosage to 1/3 of starting dose. Gradually increase the dosage each day until you reach to the desired dosage.
- Every body is different, as the formula alters internal processes, your best dosage may change (always stay within the recommended dosage range).

***This product is not intended to diagnose, treat, cure, or prevent any disease.**

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Fact Sheet

DIGESTIVE RELIEF | EDAFOS™

- Relieves symptoms of overeating, indigestion, nausea and bloating
- Eases any type of pain and spasm
- Protects and improves health of the digestive organs and the liver
- May benefit blood sugar and blood lipids

Digestive Relief | Edafos™ is comprised of Chinese herbs that relieve food stagnation (symptoms of overeating), improve circulation of Blood and Qi and relieve pain. The herbs have positive effects on digestion and metabolism (blood sugar and blood lipid levels) as well as anti-inflammatory and antimicrobial functions. Many herbs exhibit stomach and liver protective properties. An ideal formula for travel, Digestive Relief benefits any kind of digestive upset, along with headache or pain.

Ingredients & Traditional Chinese Medicine View

Zoi Medicinals™ tinctures are alcohol and vegetable glycerin extracts of non-toxic herbs. All herbs used in the manufacturing of Zoi Medicinals™ products have been tested for heavy metals, bacteria, fungus, and pesticides.

About Alcohol

Zoi Medicinals™ formulas contain 18.25% alcohol. Alcohol has been used in herbal tinctures for centuries. It extracts active ingredients that are not water-soluble, such as essential oils, alkaloids and resins. It enables the tincture to be fast-acting, potent, shelf-stable for long periods of time, and enables their "grab and go" properties (easily portable, ready to take, no refrigeration required). Zoi Medicinals tinctures use organic ethyl alcohol that is USP certified. It is the same alcohol found in vanilla extract (used for cooking), other tinctures, and liquid homeopathic remedies. The dose is very small and can be diluted into water or other drink making the final alcohol content less than 0.1%, which is similar or less than, the amount of alcohol in a cup of kombucha.

- **Chen Pi (Tangerine Peel, *Citri reticulatae*)** is warm and enters the LU, SP and ST meridians; regulates Qi, adjusts the Middle menses, relieves the diaphragm, dries Damp, transforms Phlegm, descends Qi.
- **Bai Shao (White Peony Root, *Paeoniae alba*)** is cool and enters the LIV and SP meridians; nourishes the Blood, regulates the menses, astringes Yin and adjusts Ying and Wei, Calms Liver Yang, Liver Wind, softens the liver and alleviates pain.
- **Crampbark, (*Viburnum opulus*)** is not included in the Chinese Materia Medica; however its TCM functions are described as: tonifies Liver Blood, invigorates the Blood, and reduces spasms and abdominal pain.
- **Shan Zha (Hawthorn Fruit, *Crataegus pinnatifida*)** is slightly warm and enters the LIV, SP and ST meridians; reduces and guides out food stagnation, transforms accumulations and blood stasis, invigorates the Blood, dissipates clumps, and stops diarrhea.
- **Sha Ren (Black Cardamom, *Villous amomum*)** is warm and aromatic and enters the SP and ST meridians; promotes the movement of Qi, aromatically transforms Damp, strengthens the Spleen, warms the Middle and stops diarrhea, and calms the fetus.
- **Ge Gen (Kudzu Root, *Puerariae lobatae*)** is cool and enters the SP and ST meridians; discharges exterior conditions, releases muscles especially of the neck and back, relieves Heat, generates Fluids, raises Spleen Yang and stops diarrhea.
- **Hou Po (Magnolia Bark, *Magnoliae officinalis*)** is warm and enters the LI, LU, SP, and ST meridians; moves Qi in the middle and relieves food stagnation, promotes movement of Qi downward, dries damp, transforms phlegm, descends rebellious Qi, reduces phlegm and calms wheezing.
- **Skullcap Leaf (*Scutellaria lateriflora*)** is cold, enters the LU, ST, GB, and LI meridians, clears Heat and dries Damp, drains Fire, detoxifies, cools the Blood and stops bleeding, clears Heat, calms the fetus, and calms ascending Liver Yang.
- **Yan Hu Suo (*Rizoma corydalis*)** is warm and enters the HT, LIV, and ST meridians; invigorates Blood, circulates Qi, stops pain, induces and prolongs sleep.
- **Liu Shu Pi (Willow Bark, *Salix alba*)** is cool and enters the KI, BL and HT meridian; clears Heat and inflammation, drains Damp-

- Heat in the Bladder, encourages Yin and supports Stomach Qi.
- **Bai Zhu (White Atractylodes Root, *Atractylodes macrocephalae*)** is warm and enters the SP and ST meridians; tonifies the Spleen and augments Qi, dries Damp and promotes water metabolism, stabilizes the Exterior, stops sweating, and calms the fetus.
- **Mu Xiang (Costus Root, *Aucklandiae lappae*)** is warm and enters the GB, LI, SP, ST, and SJ meridians; promotes the movement of Qi and alleviates pain, regulates stagnant Qi in the intestines, strengthens the Spleen, prevents stagnation, dispels Damp-Heat, and harmonizes the Liver and Spleen.
- **Gan Jiang (Dried Ginger Root, *Zingiberis officinalis*)** is hot and enters the HT, LU, SP, and ST meridians; warms the Middle, expels Cold, dispels Wind-Damp in the Lower Jiao, rescues devastated Yang, expels interior Cold, warms the Lung, transforms mucus, warms the meridians and stops bleeding.
- **Gui Zhi (Cinnamon Twig, *Ramulus cinnamomi*)** is warm and enters the HT, LU, and BL meridians; releases the Exterior, assists Yang, adjusts Ying and Wei, releases muscle layer, warms meridians and collaterals to relieve pain, unblocks Yang, transforms Qi, thins mucus, assists Heart Yang and warms and facilitates Yang Qi in the chest, warms and facilitates Qi flow in the meridians and collaterals and Blood through the vessels, and warms the Middle and directs turbid Yin downward.

Biomedical Details

Digestive Relief | Edafos™ contains herbs that improve digestive function, protect digestive organs, and relieve spasm and pain. Many herbs have positive impacts on metabolism as well as anti-inflammatory and antimicrobial functions.

Several clinic trials have shown the effectiveness of ginger for **nausea and vomiting**, with 14 clinical trials showing significant improvement in nausea and vomiting of pregnancy. (1) Seven trials showed that ginger enhances digestion by improving gastric emptying and regulating peristalsis. (1) Many herbs have effects on **gastric ulcers and antimicrobial activity** against *H. pylori* (a known cause of stomach ulcers). *Corydalis* had a strong inhibitory effect on ulcers, whether caused by *H. pylori* infection or stress in one study. (2) Cardamom and cinnamon also have clinical applications for gastritis and *H. pylori* infection. (3, 4, 5) In animal studies, *Aucklandiae* showed several beneficial effects on the GI tract including decreasing inflammation, protection of mucus-secreting cells, healing gastric lesions and improving GI motility. (6, 7, 8) *Pueraria* has also shown promising *H.pylori* inhibitory activity. (9)

Tangerine peel, crampbark, hawthorn, cardamom, cinnamon, *Pueraria*, skullcap, and *corydalis* have all exhibited **gastro-protective** properties. (2, 5, 10, 11, 12, 13, 14, 15) In addition to the stomach and intestines, the liver is an important organ of digestion. It is involved in the regulation of blood sugar and lipids and detoxification of drugs, alcohol, and other toxins. Digestive Relief contains herbs that have **liver-protective** effects in studies, including tangerine peel, skullcap, white peony, *Pueraria*, and *Atractylodes*. (10, 16, 17, 18, 19) *Pueraria* has been shown in many studies to be protective of the liver, decrease markers of liver damage (AST/ALT), and reverse signs of liver fibrosis. (9)

Several herbs in Digestive Relief have widely **known pain-relieving and anti-spasmodic properties**. Aspirin is one of the most commonly

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Revised: April 22, 2025.



used drugs in the world and is derived from white willow bark. A recent meta analysis of random controlled trials totaling 329 patients with arthritis showed a significant effect on pain reduction using willow bark. (20) *Corydalis* is widely used in China to treat spastic pain, abdominal pain and pain due to injury. Studies have shown that it acts on GABA or opioid receptors to relieve pain, without risk of tolerance (it has not been shown to be addictive). A clinical trial of *corydalis* extract resulted in a significant decrease in pain intensity and pain scores for mild and moderate pain. (2) In addition to being known as a pain killer, *corydalis* has many beneficial effects on the digestive, cardiovascular, and nervous systems. (2) Ginger improved menstrual cramps in seven clinical studies, and eight other studies of arthritis patients showed a reduction in inflammation and pain with ginger use. (1) *Pueraria* has fever reducing, pain killing and muscle relaxing properties in some studies. (9) Eighty-five patients with intestinal spasms and cramps showed remission of symptoms with taking a formula of white peony root, cinnamon and other herbs. (21) *Aucklandiae* showed significant anti-inflammatory effects in the intestine and improved gastric ulcer healing in animal studies (6, 22). White peony root has reported sedative and analgesic functions and has been shown to inhibit intestinal smooth muscles contraction and gastric acid secretion in mice. (23) Crampbark, tangerine peel, and magnolia bark have also been shown to have relaxant and antispasmodic effects. (21, 24, 25)

Several of the herbs in Digestive Relief have **positive effects on metabolism**, including **improvement of blood sugar and blood lipid levels**. One clinical review suggested cinnamon can improve glycemic control in those with type 2 diabetes; with some studies reporting reductions in fasting blood glucose and decreases in hemoglobin A1c (26). Clinical studies of ginger have shown it to have positive impact on fasting blood sugar, hemoglobin A1c, insulin sensitivity and resistance. It also has been shown to positively impact body weight and cholesterol levels. (1) *Atractylodes* significantly reduces fasting blood glucose and serum insulin in some studies (27). Hawthorn fruit lowered blood sugar and exhibited anti-obesity effects in many animal studies (28) Significant improvements in blood sugar control have been observed with use of cardamom and cinnamon. (5, 29) Crampbark and hawthorn fruit studies have reported anti-diabetic activities, benefits to blood lipids, and overall digestion. (28, 30) Many of these effects seem to be related to interactions with digestive enzymes. Crampbark appears to interfere with many processes of adipogenesis (formation of fat tissue). (30)

Hawthorn fruit has been approved by the Chinese Drug and Food Administration for the **treatment of hyperlipidemia** (28) and is the most popular TCM treatment available for high cholesterol. Some evidence indicates that it can also prevent heart failure and hypertension (28). *Pueraria* and magnolia bark lower triglycerides and have anti-diabetic activities. (9, 25). *Atractylodes* decreased body weight gain, serum lipid and insulin levels and improved glucose tolerance in animal studies (27). Tangerine peel also reduced body weight, total cholesterol and triglyceride levels (31).

Most herbs in Digestive Relief exhibit **anti-microbial and anti-inflammatory activities**. Crampbark and magnolia bark have broad antimicrobial functions against many different types of bacteria and *Candida* (25, 30) and *corydalis* has significant activity against a wide

variety of bacteria, as well as viruses, and parasites (2). *Pueraria*, crampbark, ginger, *corydalis*, and magnolia bark tree have known anti-inflammatory activity. (1, 9, 25, 30)

How to use Digestive Relief | Edafos™

- Use standard dose daily for proper absorption and digestive support, or for digestive discomfort, digestive spasms, pain or fullness
- Use standard dose daily to support blood sugar and cardiovascular health
- For acute gastrointestinal distress, take 3 droppers full every 30 minutes until resolved, not to exceed 5 doses.
- Take as needed for pain or headache, not to exceed 5 doses per day.
- See a medical practitioner if symptoms persist.

Dosage

Liquid formulas are rapidly absorbed by the body and should be taken by mouth. Hold under the tongue a few moments prior to swallowing; or take in a small amount of water or juice. If alcohol content is a concern, a standard dose (1.5 ml) in one cup of water dilutes the alcohol content to less than 0.1%, or formula can be added to hot tea (alcohol will evaporate) and drink once cooled.

The standard, adult dose is three droppers full (1.5 ml) three times a day, or as directed by your health care professional. One full compression of the dropper bulb is a dropper full (the dropper may not appear "full").

- Standard adult dose (100-250 lb) – 3 droppers full (1.5 ml), three times a day.
- Standard adult dose (>250 lb) – 4 droppers full (2.0 ml), three times a day.
- Standard child dose (30-100 lb) – 1 dropper full (0.5 ml), three times a day.
- If sensitive to herbs and supplements, start with 1 dropper full (0.5 ml), three times a day.

For some, it may take several weeks to notice an effect. Consistency is more important than dose, so take some each day even if you can't keep to a regular schedule. As your body responds to the formula, you may decrease the dose, accordingly.

Cautions

- Do not use if pregnant or breastfeeding, unless directed by your health care practitioner.
- Discontinue use if any new symptoms appear, including symptoms of allergic reaction.
- Not to exceed five droppers full at a time.
- With minor stomach upset, take with food.
- If experiencing minor headache or other discomfort, reduce the dosage to 1/3 of starting dose. Gradually increase the dosage each day until you reach to the desired dosage.
- Every body is different, as the formula alters internal processes, your best dosage may change (always stay within the recommended dosage range).

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Revised: April 22, 2025.

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***This product is not intended to diagnose, treat, cure, or prevent any disease.**

Fact Sheet

ALLERGY RELIEF | ATSALI™



- Eases allergy symptoms
- Regulates immune system during, and prior to allergy season
- Acts as a preventative during cold and flu season, travel, or other stressful times
- Beneficial for ongoing immune and respiratory support

Allergy Relief | Atsali™ quiets common symptoms caused by environmental allergens (tree and grass pollen, mold, pets, etc.) such as sneezing and runny, itchy nose, throat, eyes and ears. Because Allergy Relief regulates the immune system, strengthens the respiratory systems, and has anti-microbial properties, it can be used to ward off colds and flus during the season, times of stress, or when traveling.

Ingredients & Traditional Chinese Medicine View

Zoi Medicinals™ tinctures are alcohol and vegetable glycerin extracts of non-toxic herbs. All herbs used in the manufacturing of Zoi Medicinals™ products have been tested for heavy metals, bacteria, fungus, and pesticides.

About Alcohol

Zoi Medicinals™ formulas contain 18.25% alcohol. Alcohol has been used in herbal tinctures for centuries. It extracts active ingredients that are not water-soluble, such as essential oils, alkaloids and resins. It enables the tincture to be fast-acting, potent, shelf-stable for long periods of time, and enables their "grab and go" properties (easily portable, ready to take, no refrigeration required). Zoi Medicinals tinctures use organic ethyl alcohol that is USP certified. It is the same alcohol found in vanilla extract (used for cooking), other tinctures, and liquid homeopathic remedies. The dose is very small and can be diluted into water or other drink making the final alcohol content less than 0.1%, which is similar or less than, the amount of alcohol in a cup of kombucha.

- **Ling Zhi (Reishi Mushroom, *Ganoderma lucidum*)** is slightly warm, enters the HT, LIV, LU, meridians; tonifies Heart Qi, nourishes Heart Blood and calms the Spirit, tonifies Lung Qi, transforms Phlegm to stop cough and wheezing, tonifies Qi and nourishes Blood.
- **Xun Ma (Stinging Nettle Leaf, *Urtica dioica*)** enters the LU, LIV, and KI meridians; tonifies the lung and skin, purifies and tonifies Blood, Kidney and Liver Yin, transforms Phlegm, and stops bleeding.
- **Mu Dan Pi (Peony Tree Root Cortex, *Cortex radices moutan*)** is slightly cold and enters the HT, LIV, and KI meridians; clears excess and deficiency Heat, cools and invigorates Blood, clears Liver Fire, drains pus and reduces swelling.
- **Zi Zhu Hua (Purple Coneflower, *Echinacea purpurea*)** enters the LU and SP meridians; purifies Blood, clears toxins, disperses Wind-Heat and releases the Exterior, benefits the stomach.
- **Xin Yi Hua (Magnolia Flower, *Magnoliae lilliflorae*)** is slightly warm and enters the LU and ST meridians; expels Wind-Cold and unblocks the nasal passages.
- **Jie Gu Mu (Elderflower, *Sambucus nigra*)** enters the LU, KI and BL meridians; releases the Exterior, clears Heat, dries Damp, tonifies Lung, expels Phlegm, and eliminates toxins.
- **Dong Chong Xia Cao (Cordyceps Mushroom, *Cordyceps sinensis*)** is slightly warm, enters the LU and KI meridians; tonifies the Kidney, strengthens Yang, augments Jing, nourishes Lung Yin, transform Phlegm, and stops bleeding.

- **Gui Zhi (Cinnamon Bark, *Ramulus cinnamomi cassiae*)** is warm and enters the HT, LU, and BL meridians; releases the Exterior, assists Yang, adjusts the Ying and Wei, releases the muscle layer, warms the meridians and collaterals, unblocks Yang, transforms Qi, thins mucus, supplements the Heart Yang, warms the Yang Qi in the chest, warms and moves Qi and Blood, warms the middle and directs turbid Yin downward.
- **Jie Gu Mu (Elderberry, *Sambucus nigra*)** enters the LU, KI and BL meridians; releases the Exterior, clears heat, dries damp, tonifies Lung, expels phlegm, and promotes lactation.

Biomedical Details

Allergy Relief | Atsali™ contains herbs that influence allergic and asthmatic responses in clinical and laboratory studies, and have strong **immune enhancing**, **anti-inflammatory**, and **anti-microbial** properties. Because of its anti-bacterial and anti-viral activities, it eases minor colds or flu symptoms

Allergies and asthma are both mediated by allergic responses and inflammation in the respiratory system. Many herbs in Allergy Relief have **reduce overall inflammation**, with distinct action on bronchial inflammation. (1, 2, 3, 4) Nettle, echinacea, magnolia flower, and cordyceps have activities directly related to the allergic response. Nettle has inhibitory effects on cells and pathways involved in **allergic rhinitis**. (5) One clinical study found freeze-dried nettle effective in relieving allergy symptoms with almost half of the patients finding it equally or more effective than their allergy medicine. (6) An animal study showed nettle decreased eosinophil cell infiltration and inflammation (markers for asthma). (7)

Echinacea and magnolia flower both have **anti-histamine activities** by way of mast cell modulation. A clinical trial of 148 asthmatic patients showed a beneficial effect in symptom control, quality of life and sleep interruption when magnolia flower was taken along with their inhaled corticosteroids. (8) In an animal model of asthma, Echinacea showed a decrease in airway resistance and histamine levels. (9) Magnolia flower has been shown to modulate allergic reactions and mast cell degranulation (release of histamines). (10, 11) In a random controlled trial of 120 patients, cordyceps significantly improved AQLQ (Asthma Quality of Life Questionnaire) scores, lung function measures and **decreased inflammation in asthma patients**. (12) In animal studies, cordyceps demonstrated the ability to reduce allergic nasal symptoms, IgE levels, and airway responsiveness (airway sensitivity). (13) Peony tree root has been shown to down-regulate eosinophil (white blood cells involved in allergic and asthmatic reactions) migration into the respiratory system. (14) Reishi has been

demonstrated to modulate allergic asthma symptoms via its strong anti-inflammatory and immune modulating activities. (15)

Herbs in Allergy Relief have positive **impacts on the immune system**. Cordyceps has many anti-inflammatory and immune regulating properties and has been shown to improve immune function in many animal studies. (16, 17) Reishi has been shown to enhance both the adaptive and innate immune responses. (18)

Cordyceps and reishi has vast **anti-microbial functions**, with activity against a broad spectrum of bacteria, viruses, fungus, and parasites. (18, 19) Elderberry has been shown in many studies to have strong anti-microbial effects against many bacteria and viruses, with most research involving activities against influenza viruses, types A and B). (18,19, 20, 21)

How to use Allergy Relief | Atsali™

- At first sign of allergy symptoms, take hourly, up to 7 doses a day; once symptoms ease, take standard dose
- Four to six weeks prior to the onset of your allergy season, take standard dose.
- During cold and flu season, travel, or times of stress, take standard dose.

Dosage

Liquid formulas are rapidly absorbed by the body and should be taken by mouth. Hold under the tongue a few moments prior to swallowing; or take in a small amount of water or juice. If alcohol content is a concern, a standard dose (1.5 ml) in one cup of water dilutes the alcohol content to less than 0.1%, or formula can be added to hot tea (alcohol will evaporate) and drink once cooled.

The standard, adult dose is three droppers full (1.5 ml) three

times a day, or as directed by your health care professional. One full compression of the dropper bulb is a dropper full (the dropper may not appear “full”).

- Standard adult dose (100-250 lb) – 3 droppers full (1.5 ml), three times a day.
- Standard adult dose (>250 lb) – 4 droppers full (2.0 ml), three times a day.
- Standard child dose (30-100 lb) – 1 dropper full (0.5 ml), three times a day.
- If sensitive to herbs and supplements, start with 1 dropper full (0.5 ml), three times a day.

For some, it may take several weeks to notice an effect. Consistency is more important than dose, so take some each day even if you can't keep to a regular schedule. As your body responds to the formula, you may decrease the dose, accordingly.

Cautions

- Do not use if pregnant or breastfeeding, unless directed by your health care practitioner.
- Discontinue use if any new symptoms appear, including symptoms of allergic reaction.
- Not to exceed five droppers full at a time.
- With minor stomach upset, take with food.
- If experiencing minor headache or other discomfort, reduce the dosage to ½ of starting dose. Gradually increase the dosage each day until you reach to the desired dosage.
- Every body is different, as the formula alters internal processes, your best dosage may change (always stay within the recommended dosage range).

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Fact Sheet

SLEEP | KYMA™

- Calms and relaxes the body and mind
- Aids in falling asleep quickly
- Improves quality of sleep and sleep time
- No daytime grogginess
- Eases daytime anxiety

Sleep | Kyma™ is ideal for anyone who has trouble falling asleep or staying asleep. It includes western herbs, such as valerian and chamomile, which are historically known for relaxation and sleep, along with Chinese herbs that “calm the spirit” to quiet the mind and relax the body. Use of these gentle, natural herbs improves sleep quality while avoiding the hangover effect seen with some other medications.

Ingredients & Traditional Chinese Medicine View

Zoi Medicinals™ tinctures are alcohol and vegetable glycerin extracts of non-toxic herbs. All herbs used in the manufacturing of Zoi Medicinals™ products have been tested for heavy metals, bacteria, fungus, and pesticides.

About Alcohol

Zoi Medicinals™ formulas contain 18.25% alcohol. Alcohol has been used as a solvent in herbal tinctures for centuries. It extracts active ingredients that are not water-soluble, such as essential oils, alkaloids and resins. It enables the tincture to be fast-acting, potent, shelf-stable for long periods of time, and enables their “grab and go” properties (easily portable, ready to take, no refrigeration required). Zoi Medicinals tinctures use organic ethyl alcohol that is USP certified. It is the same alcohol found in vanilla extract (used for cooking), other tinctures, and liquid homeopathic remedies. The dose is very small and can be diluted into water or other drink making the final alcohol content less than 0.1%, which is similar or less than, the amount of alcohol in a cup of kombucha. Zoi Medicinals™ tinctures are alcohol (27%) and vegetable glycerin (10%) extracts of non-toxic herbs. All herbs used in the manufacturing of Zoi Medicinals™ products have been tested for heavy metals, bacteria, fungus, and pesticides.

- **Xie Cao (Valerian Root, *Valeriana officinalis*)** is warm and enters the LIV and HT meridians; induces tranquilization, stops bleeding and alleviates pain.
- **Huang Chu Ju (Chamomile Flower, *Matricaria recutita*)** enters the LU, HT and ST meridians; moves Qi, tonifies the Liver, stops pain, strengthens stomach, releases Exterior, clears Heat, stops cough, moves Blood and calms Shen.
- **Suan Zao Ren (Chinese Date Seed, Jujube Seed, *Zizyphus spinosae*)** is neutral and enters the GB, HT, LIV, and SP meridians; nourishes Heart Yin, tonifies Liver Blood, calms the spirit, astringes sweat and generates fluids.
- **Da Zao (Jujube, Chinese Date, *Zizyphus jujube*)** is warm and enters the SP and ST meridians; tonifies the Spleen and Stomach, augments Qi, and nourishes Blood and calms the Spirit.
- **Tian Ma (Gastrodia Rhizome, *Gastrodia elata*)** is neutral and enters the LIV channel; extinguishes Wind, calms the Liver, stops spasms and tremors, subdues rising Liver Yang, alleviates pain and disperses Wind-Damp Bi.
- **Wu Wei Zi (Schisandra Fruit, *Fructus schisandrae*)** is warm, enters the HT, KI and LU meridians and all five Zang organs; tonifies Qi, astringes Lung Qi leakage and stops coughing, tonifies Kidney and bind Essence,

astringes sweat and generates fluids, quiets the Spirit, and calms and contains Heart Qi.

Biomedical Details

Sleep | Kyma™ is comprised of Chinese and western herbs traditionally known for inducing, and improving the quality of sleep. Current biomedical research is showing clinical and laboratory support for these functions.

A systematic review of valerian research found it to have a statistically significant effect on **improving sleep quality**, and a trend favoring a **decrease in the time needed to fall asleep without a hangover effect** (next-day drowsiness or grogginess). Several studies have shown that components of valerian inhibit the breakdown of gamma-aminobutyric acid (GABA) in the brain, decreasing central nervous system activity and inducing sedation in mice. (1) Chamomile also has reported sedative properties; increasing the quality of sleep, decreasing the amount of time needed to fall asleep, decreasing the number of nighttime awakenings, and decreasing daytime fatigue. (2, 3) Studies show jujube seeds significantly **increase total sleep time**. (4) Schisandra extracts have exhibited sedative and hypnotic activities in mice and rats, including significantly inhibiting motor activity, prolonging sleeping time and reducing sleep latency. (5) A component of gastrodia has been shown to significantly decrease motor activity and increase sleep times in mice. (6)

How to use Sleep | Kyma™

- Use standard dose 30 minutes prior to bedtime.
- Use 2-3 droppers full upon waking in the night to go back to sleep.
- Use 1 dropper full up to three times a day for mild anxiety and/or tension.

Dosage

Liquid formulas are rapidly absorbed by the body and should be taken by mouth. Hold under the tongue a few moments prior to swallowing; or take in a small amount of water or juice. If alcohol content is a concern, a standard dose (1.5 ml) in one cup of water dilutes the alcohol content to less than 0.5%, or formula can be added to hot tea (alcohol will evaporate) and drink once cooled.

The standard, adult dose is three droppers full (1.5 ml) three times a day, or as directed by your health care professional. One full compression of the dropper bulb is a dropper full (the dropper may not appear “full”).

- Standard adult dose (100-250 lb) – 3 droppers full (1.5

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ml), prior to bedtime.

- Standard adult dose (>250 lb) – 4 droppers full (2.0 ml), prior to bedtime.
- Standard child dose (30-100 lb) – 1 dropper full (0.5 ml), prior to bedtime.

Cautions

- Do not use if pregnant or breastfeeding, unless directed by your health care practitioner.
- Discontinue use if any new symptoms appear, including symptoms of allergic reaction.
- Not to exceed five droppers full at a time.

- With minor stomach upset, take with food.
- If experiencing minor headache or other discomfort, reduce the dosage to 1/3 of starting dose. Gradually increase the dosage each day until you reach to the desired dosage.
- Every body is different, as the formula alters internal processes, your best dosage may change (always stay within the recommended dosage range).

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Fact Sheet

WOMEN'S HEALTH | RIZA™



- Eases PMS and menstrual symptoms (abdominal spasm, bloating, pain, breast tenderness and headaches)
- Balances moodiness and insomnia
- Relieves mild symptoms of menopause (hot flashes, insomnia and anxiety)

Women's Health | Riza™ was created to soothe a variety of common symptoms related to the natural rhythms of women's hormones. With nerve-calming, muscle-relaxing and hormone-regulating herbs, Women's Health is an ideal natural treatment for symptoms of PMS, menstruation and menopausal discomforts.

Ingredients & Traditional Chinese Medicine View

Zoi Medicinals™ tinctures are alcohol and vegetable glycerin extracts of non-toxic herbs. All herbs used in the manufacturing of Zoi Medicinals™ products have been tested for heavy metals, bacteria, fungus, and pesticides.

About Alcohol

Zoi Medicinals™ formulas contain 18.25% alcohol. Alcohol has been used in herbal tinctures for centuries. It extracts active ingredients that are not water-soluble, such as essential oils, alkaloids and resins. It enables the tincture to be fast-acting, potent, shelf-stable for long periods of time, and enables their "grab and go" properties (easily portable, ready to take, no refrigeration required). Zoi Medicinals tinctures use organic ethyl alcohol that is USP certified. It is the same alcohol found in vanilla extract (used for cooking), other tinctures, and liquid homeopathic remedies. The dose is very small and can be diluted into water or other drink making the final alcohol content less than 0.1%, which is similar or less than, the amount of alcohol in a cup of kombucha.

Zoi Medicinals™ tinctures are alcohol (27%) and vegetable glycerin (10%) extracts of non-toxic herbs. All herbs used in the manufacturing of Zoi Medicinals™ products have been tested for heavy metals, bacteria, fungus, and pesticides. Zoi Medicinals™ tinctures are alcohol (27%) and vegetable glycerin (10%) extracts of non-toxic herbs. All herbs used in the manufacturing of Zoi Medicinals™ products have been tested for heavy metals, bacteria, fungus, and pesticides.

- **Skullcap Leaf (*Scutellaria lateriflora*)** is cold, enters the LU, ST, GB, and LI meridians; clears Heat and dries Damp, drains Fire and detoxifies, cools the Blood and stops bleeding, clears Heat, calms the fetus, and calms ascending Liver Yang.
- **Crampbark, (*Viburnum opulus*)** is not included in the Chinese Materia Medica; however its TCM functions are described as: tonifies Liver Blood, invigorates the Blood, and reducing spasms and abdominal pain.
- **Dang Gui (*Angelica Root, Angelicae sinensis*)** is warm and enters the HT, LIV and SP meridians; tonifies Blood and regulates the menses, invigorates the Blood and disperses Cold, moistens the intestines and unblock bowels, reduces swelling, expels pus, generates flesh, alleviates pain, and stops cough.
- **Jie Gu Mu (Elderberry, *Sambucus nigra*)** enters the LU, KI and BL meridians; releases the Exterior, clears Heat, dries Damp, tonifies Lung, expels phlegm, and promotes lactation.
- **Man Jing Zi (Chasteberry *Vitex agnus castus*)** is cool and enters the BL, LIV and ST meridians; disperses Wind and clears Heat, dispels Wind-Heat in the LIV channel, clears and benefits the eyes, dries damp, expels wind and

relieves pain.

- **Bai Shao (White Peony Root, *Paeoniae alba*)** is cool and enters the LIV and SP meridians; nourishes the Blood, regulates the menses, astringes Yin and adjusts Ying and Wei, Calms Liver Yang, Liver Wind, softens the liver and alleviates pain.
- **Bai Zhu (White *Atractylodes Rhizome, Atractylodes macrocephala*)** is warm and enters the SP and ST meridians; tonifies the Spleen and augments Qi, dries Damp and promotes water metabolism, stabilizes the Exterior, stops sweating, and calms the fetus.
- **Chai Hu (Thorowax Root, *Bupleurum chinensis*)** is cool and enters the GB, LIV, PC and SJ meridians; resolves Shao Yang disorder, reduces fever, spreads Liver Qi, relieves Stagnation, raises Yang Qi, disperses Wind-Heat, and resolves Phlegm.
- **Bo He (Field Mint, *Herba menthae haplocalycis*)** is cool and enters LU and LIV meridians; disperses Wind-Heat, cools and clears the head and eyes, benefits the throat, vents rashes, relieves Liver Qi Stagnation, and expels turbid filth.
- **Xie Cao (Valerian Root, *Valeriana officinalis*)** is warm and enters the LIV and HT meridians; induces tranquilization, stops bleeding and alleviates pain.
- **Chi Shao (Red Peony Root, *Paeoniae rubra*)** is cool and enters the LIV and SP meridians; invigorates Blood, dispels Blood Stasis, relieves pain, clears Heat, cools the Blood, clears Liver Fire, relieves eye pain, and reduces swelling from sores and abscesses.

Biomedical Details

Women's Health | Riza™ is largely comprised of herbs with a rich history in treating women's health. Today, modern science is validating many of the actions traditionally ascribed to these herbs. Animal and other studies indicate that chasteberry, skullcap, valerian and *Angelica* have hormone-regulating properties (2), which may explain their benefits for PMS, menstrual and menopausal symptoms.

Many of the herbs in Women's Health have been shown to have **anti-spasmodic and analgesic effects**. Animal and human studies have shown that crampbark acts as an analgesic and relaxes smooth muscles, specifically those of the uterus. Peony and *Angelica* have also been shown to have antispasmodic effects and *Angelica* improves microcirculation in the uterine wall. (1, 2) *Angelica* and *Bupleurum* also have **anti-inflammatory properties**. (2, 3). Chasteberry use dates back to ancient Greek times, and it has been approved by the German Commission E as an effective treatment for PMS and irregularities of the menstrual cycle. (1, 2) Reports show that chasteberry helps to relieve symptoms such as breast tenderness, fluid retention, headache, constipation and

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Revised: April 23, 2025

depression. (1)

Other herbs in Women's Health have **anxiety and mood regulating properties**. Animal studies show elderberry to have better effects on **depression** than the tricyclic anti-depressant (TCA), imipramine. (4) A systematic review of elderberry's effects concluded that, in animal studies, elderberry fruit extract sedate the nervous system producing analgesic effects (sedation and pain relief). (5) Many clinical studies with valerian report improvement of sleep and lower anxiety as measured by the Hamilton Anxiety scale. (1)

Women's Health also includes herbs that may improve **symptoms of menopause**, including anxiety and other mood disturbances, hot flashes, and bone loss. As stated above, many of the herbs appear to have gentle **hormone regulating properties** and many studies indicate effects on mood and mental state. Valerian (present in Women's Health at a small percentage), in particular, is renowned for its tranquilizing and sedative properties and has been used as a sleep aid for centuries. Current evidence suggests it may also be effective for **night sweats**. In a double-blind placebo-controlled clinical trial, 8 weeks of valerian use resulted in a significant reduction in hot flash frequency and intensity. (2) Laboratory studies have shown that skullcap inhibited the production of inflammatory chemicals and prevented destruction of cartilage in animals with osteoarthritis. (6) Another animal study, indicated that skullcap had a positive impact on bone mass. (7) Together, these studies suggest that skullcap may be beneficial in easing symptoms of **menopause-related bone loss** and deterioration.

How to use Women's Health | Riza™

- For PMS, take standard dose during symptoms & standard dose daily for prevention
- For menstrual symptoms, take standard dose during symptoms.
- For menstrual cramps, take standard dose, 1-2 days prior to onset of pain continuing until pain subsides.
- For menopausal symptoms, take standard dose daily.
- With consistent monthly symptoms, take 1 dropper full (1.5 ml), three times a day

Dosage

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Liquid formulas are rapidly absorbed by the body and should be taken by mouth. Hold under the tongue a few moments prior to swallowing; or take in a small amount of water or juice. If alcohol content is a concern, a standard dose (1.5 ml) in one cup of water dilutes the alcohol content to less than 0.1%, or formula can be added to hot tea (alcohol will evaporate) and drink once cooled.

The standard, adult dose is three droppers full (1.5 ml) three times a day, or as directed by your health care professional. One full compression of the dropper bulb is a dropper full (the dropper may not appear "full").

- Standard adult dose (100-250 lb) – 3 droppers full (1.5 ml), three times a day.
- Standard adult dose (>250 lb) – 4 droppers full (2.0 ml), three times a day.
- If sensitive to herbs and supplements, start with 1 dropper full (0.5 ml), three times a day.

For some, it may take several weeks to notice an effect. Consistency is more important than dose, so take some each day even if you can't keep to a regular schedule. As your body responds to the formula, you may decrease the dose, accordingly.

Cautions

- Do not use if pregnant or breastfeeding, unless directed by your health care practitioner.
- Discontinue use if any new symptoms appear, including symptoms of allergic reaction.
- Not to exceed five droppers full at a time.
- With minor stomach upset, take with food.
- If experiencing minor headache or other discomfort, reduce the dosage to 1/3 of starting dose. Gradually increase the dosage each day until you reach to the desired dosage.
- Every body is different, as the formula alters internal processes, your best dosage may change (always stay within the recommended dosage range).

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Fact Sheet

HYDRATION | NERO™



- Helps the body's cells retain moisture and manage fluids
- Supports proper distribution of fluid; may benefit mild swelling or edema
- Relieves headaches & other symptoms of mild dehydration
- Speeds recovery from illness
- Eases dryness due to menopausal hot flashes

Hydration | Nero™ is a perfect companion for athletes and those who work or play outside. Even before you feel thirsty, mild dehydration can cause headache, fatigue, and altered mood, energy, and ability to think clearly. Nero™ can be thought of as herbal electrolytes, is cooling to the body, and has protective and regenerating effects. Comprised of herbs that Chinese medicine describes as “fluid generating”, Hydration increases the ability for cells to retain moisture and balances fluid distribution nourishing skin, muscle, joints, and organs. A deficiency or maldistribution of these “fluids” cause symptoms such as dry skin, dry cough, thirst, burning pain in the stomach, constipation, dark urine, night sweats and some types of insomnia. Because of its ability to manage fluids, it may benefit those with mild swelling or edema. Use Hydration during times of any fluid loss, via work, exercise, menopausal hot flashes, illnesses with fever, vomiting, and/or diarrhea.

Ingredients & Traditional Chinese Medicine View

Zoi Medicinals™ tinctures are alcohol and vegetable glycerin extracts of non-toxic herbs. All herbs used in the manufacturing of Zoi Medicinals™ products have been tested for heavy metals, bacteria, fungus, and pesticides.

About Alcohol

Zoi Medicinals™ formulas contain 18.25% alcohol. Alcohol has been used as a solvent in herbal tinctures for centuries. It extracts active ingredients that are not water-soluble, such as essential oils, alkaloids and resins. It enables the tincture to be fast-acting, potent, shelf-stable for long periods of time, and enables their “grab and go” properties (easily portable, ready to take, no refrigeration required). Zoi Medicinals tinctures use organic ethyl alcohol that is USP certified. It is the same alcohol found in vanilla extract (used for cooking), other tinctures, and liquid homeopathic remedies. The dose is very small and can be diluted into water or other drink making the final alcohol content less than 0.1%, which is similar or less than, the amount of alcohol in a cup of kombucha.

- **Tian Men Dong (Asparagus Root, *Asparagus cochinchinensis*)** is cold and enters the KI and LU meridians; nourishes Kidney Yin, clears Lung Heat, sedates Fire, moistens Lungs, generates Fluids and resolves Phlegm.
- **Mai Men Dong (Ophiopogon Tuber, *Ophiopogon japonicus*)** is cool and enters the HT, LU, and ST meridians; moistens the Lungs, nourishes Yin, stops cough, nourishes Stomach Yin, generates Fluids, moistens Intestines, clears Heart and eliminates irritability.
- **Hei Zhi Ma (Black Sesame Seeds, *Sesame nigrum*)** is neutral and enters the KI, LIV and LI meridians; nourishes and fortifies Liver and Kidney Yin, nourishes Jing and Blood, extinguishes Wind, moistens and lubricates Intestines and Lung.
- **Shan Yao (Chinese Yam Rhizome, *Dioscorea oppositae*)** is neutral and enters the KI, LU, and SP meridians; tonifies Spleen, nourishes Stomach Yin, stops diarrhea, tonifies Lung Qi, nourishes Lung Yin, tonifies Kidney Yin and astringes Jing.
- **Bo He (Field Mint, *Herba menthae haplocalycis*)** is cool and enters LU and LIV meridians, disperses Wind-Heat, cools and clears the head and eyes, benefits the throat, vents rashes, relieves Liver Qi Stagnation, and expels turbid filth.

- **Da Zao (Jujube, Chinese Date, *Ziziphus jujube*)** is warm and enters the SP and ST channel; tonifies the Spleen and Stomach, augments Qi, and nourishes Blood and calms the Spirit.
- **Fang Feng (Siler Root, *Ledebouriella sesloidis*)** is warm and enters the BL, LIV, SP, and LU meridians; releases the Exterior, expels external Wind, expels Wind-damp, alleviates pain, expels internal Wind, stops spasms, relieves diarrheas and stops bleeding.
- **Tian Ma (Gastrodia Rhizome, *Gastrodia elata*)** is neutral and enters the LIV channel; extinguishes Wind, calms the Liver, stops spasms and tremors, subdues rising Liver Yang, alleviates pain and disperses Wind-Damp Bi.
- **Lu Gen (Reed Rhizome, *Phragmites communis*)** is cold and enters the LU and ST meridians; clears Heat and irritability from the Lungs and Stomach, generates Fluid, regulates Stomach Qi, relieves thirst, stops vomiting, clears Heat, promotes urination, vents rashes and relieves food poisoning.

Biomedical Details

Hydration | Nero™ is comprised of herbs which traditional Chinese medicine describes as “generating fluids”; however, biomedical research on hydration functions of these herbs is scant. One recent human study used ophiopogon tuber as a single herb and a component of herbal formulas to treat an autoimmune disease causing dryness, Sjögren's syndrome (1). Research does show that many of the herbs in Nero™ have **anti-inflammatory, antioxidant, neuroprotective** and other beneficial properties. (2, 3, 4, 5)

How to use Hydration | Nero™

- Use standard dose daily for daily hydration and to manage mild swelling or edema
- Use standard dose daily for illness recovery
- Use standard dose every 2 hours with water consumption in hot weather, or when at risk for heat exhaustion.

Dosage

Liquid formulas are rapidly absorbed by the body and should be taken by mouth. Hold under the tongue a few moments prior to swallowing; or take in a small amount of water or juice. If alcohol content is a concern, a standard dose (1.5 ml) in one cup of water dilutes the alcohol content to less than 0.1%, or formula can be added to hot tea (alcohol will evaporate) and drink once

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cooled.

The standard, adult dose is three droppers full (1.5 ml) three times a day, or as directed by your health care professional. One full compression of the dropper bulb is a dropper full (the dropper may not appear "full").

- Standard adult dose (100-250 lb) – 3 droppers full (1.5 ml), three times a day.
- Standard adult dose (>250 lb) – 4 droppers full (2.0 ml), three times a day.
- Standard child dose (30-100 lb) – 1 dropper full (0.5 ml), three times a day.
- If sensitive to herbs and supplements, start with 1 dropper full (0.5 ml), three times a day.

For some, it may take several weeks to notice an effect. Consistency is more important than dose, so take some each

day even if you can't keep to a regular schedule. As your body responds to the formula, you may decrease the dose, accordingly.

Cautions

- Do not use if pregnant or breastfeeding, unless directed by your health care practitioner.
- Discontinue use if any new symptoms appear, including symptoms of allergic reaction.
- Not to exceed five droppers full at a time.
- With minor stomach upset, take with food.
- If experiencing minor headache or other discomfort, reduce the dosage to 1/3 of starting dose. Gradually increase the dosage each day until you reach to the desired dosage.
- Every body is different, as the formula alters internal processes, your best dosage may change (always stay within the recommended dosage range).

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***This product is not intended to diagnose, treat, cure, or prevent any disease.**

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Fact Sheet

Metabolic Balance™



- Supports GLP-1 secretion and glucose uptake by cells
- Manages food cravings and improves metabolism
- Promotes healthy blood sugar—regulates carbohydrate metabolism, reduces A1c & fasting blood glucose, insulin, and insulin resistance
- May improve blood lipids
- Protects kidney & digestive organ function
- Antimicrobial and supports a healthy gut microbiome

Metabolic Balance™ contains berberine and other herbs to manage food cravings and healthy body weight, support healthy blood sugar and blood lipid balance, relieve digestive upset and pain, while supporting and protecting the heart, liver and digestive system. Bitter is better! Bitter herbs have a long history of use for soothing digestive complaints, encouraging digestive secretions, and promoting gentle detox. Berberine is a plant alkaloid with an unfortunate bitter taste, but that bitter molecule has been associated with its ability to stimulate glucagon-like peptide-1 (GLP-1) secretion, regulate blood sugar and control appetite. Berberine in a liquid form is absorbed more efficiently and acts faster than capsules. The bitter taste can be lessened by combining with acidic/sour or salty flavors. Other herbs in Metabolic Balance™ contribute to berberine's ability to impact metabolism, protect and support organ function, ease pain and inflammation, and fight infection.

Ingredients & Traditional Chinese Medicine View

Zoi Medicinals™ tinctures are alcohol and vegetable glycerin extracts of non-toxic herbs. All herbs used in the manufacturing of Zoi Medicinals™ products have been tested for heavy metals, bacteria, fungus, and pesticides.

About Alcohol

Zoi Medicinals™ formulas contain 18.25% alcohol. Alcohol has been used in herbal tinctures for centuries. It extracts active ingredients that are not water-soluble, such as essential oils, alkaloids and resins. It enables the tincture to be fast-acting, potent, shelf-stable for long periods of time, and enables their "grab and go" properties (easily portable, ready to take, no refrigeration required). Zoi Medicinals tinctures use organic ethyl alcohol that is USP certified. It is the same alcohol found in vanilla extract (used for cooking), other tinctures, and liquid homeopathic remedies. The dose is very small and can be diluted into water, tea, or other drink, making the final alcohol content less than 0.1%, which is similar to the amount of alcohol in a cup of kombucha.

- **Huang Lian (*Coptidis Rhizoma*)** is cold and enters the HT, LI, LIV and ST meridians; clears Heat and drains Damp, drains Fire and Fire toxicity, clears Heat and stops bleeding and drains Stomach Fire.
- **Huang Qin (*Scutellariae Rhizoma*)** is cold and enters the LU, ST, GB, and LI meridians; clears Heat and drains Damp, drains Fire and detoxifies, cools Blood and stops bleeding, clears Heat and calms the fetus, and calms Liver Yang rising.
- **Shan Zha (*Hawthorn Fruit, *Crataegus pinnatifida*)*** is slightly warm and enters the LIV, SP and ST channels; reduces and guides out food stagnation, transforms accumulations and blood stasis, invigorates the Blood, dissipates clumps, and stops diarrhea.
- **Gui Zhi (*Cinnamon Twig, *Ramulus cinnamomi*)*** is warm and enters the HT, LU, and BL channels; releases the Exterior, assists Yang, adjusts Ying and Wei, releases muscle layer, warms channels and collaterals to relieve pain, unblocks Yang, transforms Qi, thins mucus, assists Heart Yang and warms and facilitates Yang Qi in the chest, warms and facilitates Qi flow in the channels and collaterals and Blood through the vessels, and warms the Middle and directs turbid Yin downward.
- **Fu Ling (*Poria Mushroom Root, *Poriae cocos*)*** enters the HT, SP, KI, and LU channels; promotes urination and leeches dampness, strengthens the Spleen, harmonizes the middle, quiets the Heart, calms the Shen and soothes the nerves.
- **Bai Zhu (*White Atractylodes Root, *Atractylodes macrocephalae*)*** is warm and enters the SP and ST channels; tonifies the Spleen and augments Qi, dries Damp and promotes water metabolism, stabilizes the Exterior, stops sweating, and calms the fetus.
- **Sha Ren (*Black Cardamom, *Villous amomum*)*** is warm and aromatic and enters the SP and ST channels; promotes the

- movement of Qi, aromatically transforms Damp, strengthens the Spleen, warms the Middle and stops diarrhea, and calms the fetus.
- **Dang Shen (*Bellflower Root, *Radix Codonopsis pilosula*)*** is neutral and enters the LU and SP channels; tonifies the Middle Jiao and augments Qi, tonifies the Lung, restores the constitution, nourishes the Blood and Body Fluids.
- **Bai Shao (*White Peony Root, *Paeoniae alba*)*** is cool and enters the LIV and SP channels; nourishes the Blood, regulates the menses, astringes Yin and adjusts Ying and Wei, Calms Liver Yang, Liver Wind, softens the liver and alleviates pain.
- **Hou Po (*Magnolia Bark, *Magnoliae officinalis*)*** is warm and enters the LI, LU, SP, and ST channels; moves Qi in the middle and relieves food stagnation, promotes movement of Qi downward, dries damp, transforms phlegm, descends rebellious Qi, reduces phlegm and calms wheezing.
- **Chen Pi (*Tangerine Peel, *Citri reticulatae*)*** is warm and enters the LU, SP and ST channels; regulates Qi, adjusts the Middle relieves the diaphragm, dries Damp, transforms Phlegm, descends Qi.
- **Mu Xiang (*Costus Root, *Aucklandiae lappae*)*** is warm and enters the GB, LI, SP, ST, and SJ channels; promotes the movement of Qi and alleviates pain, regulates stagnant Qi in the intestines, strengthens the Spleen, prevents stagnation, dispels Damp-Heat, and harmonizes the Liver and Spleen.
- **Crampbark (*Viburnum opulus*)** is not included in the Chinese Materia Medica; however its TCM functions are described as: tonifies Liver Blood, invigorates the Blood, and reduces spasms and abdominal pain.
- **Yan Hu Suo (*Rhizoma corydalis*)** is warm and enters the HT, LIV, and ST meridians; invigorates Blood, circulates Qi, stops pain, induces and prolongs sleep.

Biomedical Details

Berberine, high in herbs such as Huang Lian (*Coptidis*) and Huang Qin (*Scutellariae*), has been shown to have significant effects on metabolism and weight management. It has been shown to diminish food cravings, have anti-obesity and anti-diabetic effects with positive impacts on blood cholesterol and triglycerides. Berberine-containing herbs comprise the majority of Metabolic Balance™. Other herbs in Metabolic Balance™ contribute to berberine's ability to impact metabolism, protect and support organ function, ease pain and inflammation, and fight infection.

Metabolic syndrome is a diagnosis made when a patient has three or more of the following: abdominal obesity, high triglycerides, low HDL-cholesterol, high blood pressure and/or high fasting blood sugar. Metabolic syndrome increases the risk of obesity, type 2 diabetes, cardiovascular disease, stroke, fatty liver, cancer, and other diseases. Metabolic Balance™ addresses many of these concerns.

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Revised: April 8, 2025.

Studies with animals on a high-fat diet showed that adding berberine impacted several **metabolic factors related to obesity** along with **food cravings**. The berberine-treated animals showed significantly reduced food intake, body weight, percent body fat, blood glucose and leptin. Leptin, also called the "satiety" hormone, helps maintain normal weight and is often elevated in those overweight. Leptin resistance is when the brain is not responding properly to the hormone, resulting in hunger. (1) Interestingly, one study showed berberine's benefit in preventing relapse of morphine and cocaine addiction, suggesting it may impact brain or neurotransmitter functions. (2)

Huang Lian (*Coptidis*) has been used in Traditional Chinese Medicine for over 2000 years for blood sugar disorders. Modern pharmacology is now relating its **anti-diabetic effects** to its bitter berberine alkaloids. (3) It directly impacts glucagon-like peptide-1 (GLP-1) secretion, which is involved in regulating insulin and glucose secretion. Berberine's bitter flavor stimulates GLP-1 release from hormone-secreting cells of the digestive tract. (4) Many studies have shown berberine's effects on blood sugar. A review of 46 random controlled clinical trials showed significant reductions to HbA1c, fasting blood glucose, 2-hr post-prandial (after meal) blood glucose, fasting blood insulin, insulin resistance, triglycerides, LDL and inflammation, while up-regulating HDL. The studies also indicated its safety and efficacy. (5) Another review of 14 random controlled trials of Huang Lian in the treatment of type 2 diabetes showed benefits comparable to conventional drug treatments, including improving insulin sensitivity and regulation of insulin secretion and carbohydrate metabolism. (3)

Some research has suggested that the anti-diabetic effects of berberine may involve modulation of the gut microbiome. Studies have shown that berberine, decreases inflammation and increases types of bacteria producing beneficial fatty acids (SCFAs and butyrate). These fatty acids are involved in healing the gut lining, promoting the growth of beneficial bacteria and serving as an energy source for nearby cells. It also has been shown to increase the number of beneficial bacteria while reducing the number of bacterial pathogens. (6, 7)

Several other herbs in Metabolic Balance™ have **positive effects on metabolism**, including **improvement of blood sugar and blood lipid levels**. Hawthorn fruit (Shan Zha) has been approved by the Chinese Drug and Food Administration for the **treatment of hyperlipidemia** (8) and is the most popular TCM treatment available for high cholesterol. Magnolia bark lowers triglycerides and has anti-diabetic activities. (9) *Atractylodes* decreases weight gain, serum lipid and insulin levels while improving glucose tolerance in animal studies. (10) Tangerine peel also reduces body weight, total cholesterol and triglyceride levels. (11) One clinical review suggested cinnamon can improve glycemic control in those with type 2 diabetes; with some studies reporting reductions in fasting blood glucose and decreases in HbA1c. (12) *Atractylodes* significantly reduces fasting blood glucose and serum insulin in some studies. (10) Hawthorn fruit lowered blood sugar and exhibited anti-obesity effects in many animal studies. (8) Significant improvements in blood sugar control have been observed with use of cardamom and cinnamon. (13, 14) Crampbark and hawthorn fruit studies have reported anti-diabetic activities, benefits to blood lipids, and digestion. (8, 15) Many of these effects seem to be related to interactions with digestive enzymes. Crampbark appears to interfere with many processes of adipogenesis (formation of fat tissue). (15)

Berberine has **strong anti-viral and anti-microbial functions**, studies have shown activity against *H.pylori*, herpes virus, HPV, fungus and many protozoan or parasitic species (16). It can inhibit toxins and bacteria, and protect and repair the liver and gut lining. (17) It also can enhance the effectiveness of antibiotics by inhibiting antibiotic efflux (transport of antibiotic out of bacterial cells), disrupting bacterial biofilms including MRSA (methicillin-resistant *Staphylococcus aureus*), modulating the immune response and restoring gut microbiota balance. (18, 19, 20) Corydalis also has a strong inhibitory effect on ulcers, whether caused by *H. pylori* infection or stress. (21) Cardamom and cinnamon have clinical applications for gastritis and *H.pylori* infection. (22, 23, 24) In animal studies, *Aucklandiae* showed several beneficial effects on the GI tract including decreasing inflammation, protecting mucus-secreting cells, healing gastric lesions and improving GI motility. (25, 26, 27)

Herbs in Metabolic Balance™ have widely **known pain-relieving and anti-spasmodic properties**. A recent review noted that berberine has anti-inflammatory and pain relieving properties for neuropathy and sciatic nerve injury. (28) Corydalis is widely used in China to treat spastic pain, abdominal pain and pain due to injury. Studies have shown that it acts on GABA or opiod receptors to relieve pain, without risk of tolerance (non-addictive). A clinical trial of corydalis extract resulted in a significant decrease in pain intensity and pain scores for mild and moderate pain. (21) In addition to being known as a pain killer, corydalis has many beneficial effects on the digestive, cardiovascular, and nervous systems. (21) Eighty-five patients with intestinal spasms and cramps showed remission of symptoms with taking a formula of white peony root, cinnamon and other herbs. (29) *Aucklandiae* showed significant anti-inflammatory effects in the intestine and improved gastric ulcer healing in animal studies. (25, 30) White peony root has reported sedative and analgesic functions and has been shown to inhibit intestinal smooth muscles contraction and gastric acid secretion in mice. (31) Crampbark, tangerine peel, and magnolia bark have also been shown to have relaxant and anti-spasmodic effects. (29, 32, 9)

Berberine and other components of Metabolic Balance™ have benefits for many body organs and tissues. Berberine improves **cardiovascular** function, suppresses ischemic arrhythmias, slows atherosclerosis, and reduces hypertension. Berberine shows potent anti-oxidative, anti-apoptotic, and anti-ischemic effects. (17) A Cochrane review of laboratory and clinical trials studying the effects of hawthorn fruit showed significant benefits to symptom control and outcomes when used with conventional treatments for congestive heart failure. (33) Effects noted include **anti-cardiac remodeling** (changes in wall thickness, chamber size, etc) functions, **anti-platelet** or blood thinning effects, along with cardioprotection.

Other pharmacological activities of berberine include alleviating nonalcoholic fatty liver disease, and protecting the **digestive tract and liver, heart, kidney and nervous system**. (17, 34) Tangerine peel, crampbark, hawthorn, cardamom, cinnamon, skullcap, and corydalis have all exhibited gastro-protective properties. (2, 5, 10, 11, 12, 13, 15) and other herbs have liver-protective effects, including tangerine peel, skullcap, white peony, and *Atractylodes*. (35, 40, 41, 42)

How to use Metabolic Balance

- Use daily to support healthy metabolism, weight loss and food cravings
- Use as needed for stomach upset and pain
- Contains bitter herbs. Bitter taste can be countered with acidic (i.e. lemon juice, apple cider vinegar) or salty flavors.

Dosage

Liquid formulas are rapidly absorbed by the body and should be taken by mouth. Hold under the tongue a few moments prior to swallowing; or take in a small amount of water or juice. If alcohol content is a concern, a standard dose (1.5 ml) in one cup of water dilutes the alcohol content to 0.1%. Alternatively, formula can be added to hot tea so that most alcohol will evaporate.

The standard, adult dose is three droppers full (1.5 ml) three times a day, or as directed by your health care professional. One full compression of the dropper bulb is a dropper full (the dropper may not appear "full").

- Take with, or after meals
- Standard adult dose (100-250 lb) – 2-3 droppers full (1.5 ml), three times a day.
- Standard adult dose (>250 lb) – 3-4 droppers full (2.0 ml), three times a day.
- Standard child dose (30-100 lb) – 1 dropper full (0.5 ml), three times a day. Not for children under the age of 6 years.
- If sensitive to herbs and supplements, start with 1 dropper full (0.5 ml), three times a day.

Cautions

- May be contraindicated with prescription blood thinners or anti-diabetic drugs.
- Do not use if pregnant or breastfeeding, unless directed by your health care practitioner.
- Do not use with children under the age of 6 years.

- With minor stomach upset, take with food.
- If experiencing minor headache or other discomfort, reduce the dosage to ½ of starting dose. Gradually increase the dosage each day until you reach the desired dosage.
- Discontinue use if any new symptoms appear, including symptoms of intestinal upset or allergic reaction.
- Not to exceed five droppers full at a time.

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***This product is not intended to diagnose, treat, cure, or prevent any disease.**

Fact Sheet

LUNG Meridian

Supports & protects Lung. Opens nasal & respiratory passages. Eases symptoms of cold, flu and allergies. Strengthens adaption to change.

- Opens nasal & respiratory passages
- Support for allergies, asthma, and COPD
- Protects lung & slows damage from chronic lung conditions
- Aids cold & flu prevention and treatment
- Encourages healthy respiration, breathing and oxygenation

Lung Meridian formula contains Chinese herbs that enter the Lung Meridian and act upon the respiratory system. The actions include: unblock nasal passages, open the lung, stop cough, and benefits the throat and sinuses. Healthy lung function provides oxygen and proper energy to the entire body. The Lung is damaged by the emotion "grief", and Lung dysfunction increases feelings of sadness or hopelessness. Strong Lung function benefits letting-go and smooth adaptation to life's changes. It is an ideal formula for relief of allergy and cold/flu symptoms, and to support and protect respiration and lung health.

Ingredients & Traditional Chinese Medicine View

Zoi Medicinals™ tinctures are alcohol and vegetable glycerin extracts of non-toxic herbs. All herbs used in the manufacturing of Zoi Medicinals™ products have been tested for heavy metals, bacteria, fungus, and pesticides.

About Alcohol

Zoi Medicinals™ formulas contain 18.25% alcohol. Alcohol has been used in herbal tinctures for centuries. It extracts active ingredients that are not water-soluble, such as essential oils, alkaloids and resins. It enables the tincture to be fast-acting, potent, shelf-stable for long periods of time, and enables their "grab and go" properties (easily portable, ready to take, no refrigeration required). Zoi Medicinals tinctures use organic ethyl alcohol that is USP certified. It is the same alcohol found in vanilla extract (used for cooking), other tinctures, and liquid homeopathic remedies. The dose is very small and can be diluted into water or other drink making the final alcohol content less than 0.1%, which is similar or less than, the amount of alcohol in a cup of kombucha.

Chinese herbs in Lung Meridian unblock nasal passages, open the lung, stop cough, benefit the throat, tonify Qi and Blood, clear the head and eyes, moisten the lung, and eliminate toxins.

- **Bo He (Field Mint, *Herba menthae haplocalycis*)** is cool and enters LU and LIV meridians, disperses Wind-Heat, cools and clears the head and eyes, benefits the throat, vents rashes, relieves Liver Qi Stagnation, and expels turbid filth.
- **Shi Chang Pu (Sweetflag Rhizome, *Rhizoma Acori talarinowii*)** is warm and aromatic and enters the HT, ST and LU meridians; opens the orifices, vaporize Phlegm, calms the Spirit and disperses Wind, transforms Damp, harmonizes the Spleen and moves Qi and Blood, reduces swelling, alleviates sores and benefits the throat.
- **Xin Yi Hua (Magnolia Flower, *Magnoliae lilliflorae*)** is slightly warm and enters the LU and ST meridians; expels Wind-Cold and unblocks the nasal passages.
- **Bai Zhi (Angelica Root, *Radix Angelicae dahuricae*)** is warm and enters the LU, ST and SP meridians; expels Wind, eliminates Damp, unblocks the nasal passages and relieves pain, reduces swelling, and eliminates toxins
- **Jie Geng (Balloon Flower Root, *Radix Platycodi*)** is neutral and enters the LU meridians; opens the lung, spreads Lung Qi, expels Phlegm and benefits the throat, expels pus, raises Lung Qi and directs other herbs to the

upper body.

- **Huang Qin (Chinese skullcap, *Scutellaria baicalensis*)** is cold and enters the LU, ST, GB, LI and SI meridians; clears heat, dries Damp, drains Fire and detoxifies, cools the Blood and stops bleeding, calms the fetus and calms rising Liver Yang.
- **Jin Yin Hua (Magnolia flower, *Flos Magnoliae*)** is cold and enters the LI, LU, and ST meridians; clears heat and resolves toxicity, vents and disperses external Wind-Heat, and clears Damp-Heat from the lower jiao.
- **Huo Xiang (Patchouli, *Herba Pogostemonis*)** is warm and aromatic and enters the LU, SP and ST meridians; transforms damp, releases the exterior, harmonizes the Middle Jiao, stops vomiting and treat fungal infection.
- **Pu Gong Ying (Dandelion, *Herba Taraxaci*)** is cold and enters the LIV and ST meridians; dissipates nodules, calms the Liver and clears the eyes, clears Heat, resolves Damp, relieves toxicity.
- **Bai Zhu (White Atractylodes Root, *Atractylodes macrocephalae*)** is warm and enters the SP and ST meridians; tonifies the Spleen and augments Qi, dries Damp and promotes water metabolism, stabilizes the Exterior, stops sweating, and calms the fetus.
- **Huang Qi (Astragalus Root, *Astragalus membranaceus*)** is slightly warm, enters the LU and SP meridians; tonifies Qi and Blood, strengthens the Spleen, raises Yang Qi of the Spleen and Stomach, tonifies Wei Qi and the lungs, stabilizes the Exterior, promotes urination and reduces edema, promotes discharge of pus, generates flesh and expels toxins, generates body fluids, and relieves numbness and pain.
- **Wu Wei Zi (Schisandra Fruit, *Fructus schisandrae*)** is warm, enters the HT, KI and LU meridians and all five Zang organs; tonifies Qi, astringes Lung Qi leakage and stops coughing, tonifies Kidney and binds Essence, astringes sweat and generates fluids, quiets the Spirit, and calms and contains Heart Qi.
- **Mai Men Dong (Ophiopogon Tuber, *Ophiopogon japonicus*)** is cool and enters the HT, LU, and ST meridians; moistens the Lungs, nourishes Yin, stops cough, nourishes Stomach Yin, generates Fluids, moistens Intestines, clears Heart and eliminates irritability.
- **Dang Shen (Bellflower Root, *Radix Codonopsis pilosula*)** is neutral and enters the LU and SP meridians; tonifies the Middle Jiao and augments Qi, tonifies the Lung, restores the constitution, nourishes the Blood and Body Fluids.



- **Dong Chong Xia Cao (Cordyceps Mushroom, *Cordyceps sinensis*)** is slightly warm, enters the LU and KI meridians; tonifies the Kidney, strengthens Yang, augments Jing, nourishes Lung Yin, transform Phlegm, and stops bleeding.

Biomedical Details

Modern herbal pharmacology shows that the herbs in Lung Meridian benefit the respiratory system, with specific **anti-histamine, anti-inflammatory, immune modulating, and anti-microbial functions.**

Laboratory studies have shown both *Magnoliae* and *Angelicae* to have **anti-histamine functions.** (1,4) And most of the herbs in the formula have noted anti-inflammatory functions, with *Magnoliae*, *Angelicae*, *Platycodi*, skullcap, schisandra fruit, *Cordyceps*, and *Ophiopogon* showing **strong anti-inflammatory action specific to the respiratory tract.**

Studies, some of them clinical, have also shown herbs in this formula to **improve lung function, protect lung tissue from damage, and prevent microbial infection in asthma and COPD patients or animal models.** (1, 2, 3, 4, 5, 6, 7, 8, 9, 10, 11, 12, 13, 24) One study had patients with moderate to severe asthma take *Cordyceps* daily for 3 months. The results showed a significant increase in AQLQ (Asthma Quality of Life Questionnaire) scores and lung function, and a decrease in inflammation. (12) A study of *Codonopsis* showed improved forced expiratory volume, quality of life, increased walking distance, and reduced frequency of COPD exacerbation compared to conventional drugs. (9) Schisandra fruit, lowered airway hyperresponsiveness, IgE levels and immune cell infiltration in asthmatic mice. (10) *Magnoliae* was shown to benefit asthma patients when combined with corticosteroids, compared to corticosteroids alone. (1) In an animal model, *Cordyceps* was shown to reduce lung fibrosis and inflammation (13) and schisandra fruit alleviated lung injury (11).

Many of the herbs in Lung Meridian have broad-spectrum **activity against virus, bacteria, and other pathogens.** (2, 7, 15) *Codonopsis* was shown to protect the lung from infection in animals. (8) Skullcap was shown to prevent death, prolong survival time and decrease flu virus load in mice and protect them from *Staph aureus* infection. (5) *Magnoliae* showed broad anti-microbial activity against *Listeria*, *E. coli*, *Staph aureus*, RSV, flu, SARS and other microbes. (6)

Various herbs have **immune-enhancing effects.** A clinical study with *Astragalus* showed a 2.7 times lower risk of colds and flu in children with a history of allergies and chronic bronchitis. (7) *Astragalus*, *Ophiopogon*, *Codonopsis*, and

dandelion have also been shown to have immunomodulation properties. (16, 17, 18, 7)

How to use Lung Meridian

- Use standard dose daily for consistent lung support
- Use standard dose 4-5 times a day with increased allergy or respiratory symptoms

Dosage

Liquid formulas are rapidly absorbed by the body and should be taken by mouth. Hold under the tongue a few moments prior to swallowing; or take in a small amount of water or juice. If alcohol content is a concern, a standard dose (1.5 ml) in one cup of water dilutes the alcohol content to 0.1%. Alternatively, formula can be added to hot tea (most alcohol will evaporate).

The standard, adult dose is three droppers full (1.5 ml) three times a day, or as directed by your health care professional. One full compression of the dropper bulb is a dropper full (the dropper may not appear "full").

- Standard adult dose (100-250 lb) – 3 droppers full (1.5 ml), three times a day.
- Standard adult dose (>250 lb) – 4 droppers full (2.0 ml), three times a day.
- Standard child dose (30-100 lb) – 1 dropper full (0.5 ml), three times a day.
- If sensitive to herbs and supplements, start with 1 dropper full (0.5 ml), three times a day.

For some, it may take several weeks to notice an effect. Consistency is more important than dose, so take some each day even if you can't keep to a regular schedule. As your body responds to the formula, you may decrease the dose, accordingly.

Cautions

- Do not use if pregnant or breastfeeding, unless directed by your health care practitioner.
- Discontinue use if any new symptoms appear, including symptoms of allergic reaction.
- Not to exceed five droppers full at a time.
- With minor stomach upset, take with food.
- If experiencing minor headache or other discomfort, reduce the dosage to 1/3 of starting dose. Gradually increase the dosage each day until you reach to the desired dosage.
- Every body is different, as the formula alters internal processes, your best dosage may change (always stay within the recommended dosage range).

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***This product is not intended to diagnose, treat, cure, or prevent any disease.**

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Revised: April 22, 2025

Fact Sheet

HEART Meridian

Supports & protects Heart & vascular system. Calms restlessness & uplifts the spirit.



- Supports and protects the heart & cardiovascular system
- May improve blood lipid and blood sugar levels
- Protects the brain & nervous system
- Improves vitality and joy in life

Heart Meridian is comprised of Chinese herbs that invigorate and nourish the Blood, soothe irritability and the Heart, and calm the Spirit. The Heart is damaged by the emotion “joy” (overexcitement) and Heart dysfunction can cause a lack of enthusiasm or feelings of depression or anxiety. Strong Heart energy improves vitality, and feelings of satisfaction and happiness in life. It is an ideal formula to maintain health, prevent diseases of the cardiovascular system, as well as support healthy levels of blood sugar and lipids. It also has positive effects on the nervous system, so it is perfect for those with both heart and mild mental and emotional health concerns.

Ingredients & Traditional Chinese Medicine View

Zoi Medicinals™ tinctures are alcohol and vegetable glycerin extracts of non-toxic herbs. All herbs used in the manufacturing of Zoi Medicinals™ products have been tested for heavy metals, bacteria, fungus, and pesticides.

About Alcohol

Zoi Medicinals™ formulas contain 18.25% alcohol. Alcohol has been used as a solvent in herbal tinctures for centuries. It extracts active ingredients that are not water-soluble, such as essential oils, alkaloids and resins. It enables the tincture to be fast-acting, potent, shelf-stable for long periods of time, and enables their “grab and go” properties (easily portable, ready to take, no refrigeration required). Zoi Medicinals tinctures use organic ethyl alcohol that is USP certified. It is the same alcohol found in vanilla extract (used for cooking), other tinctures, and liquid homeopathic remedies. The dose is very small and can be diluted into water or other drink making the final alcohol content less than 0.1%, which is similar or less than, the amount of alcohol in a cup of kombucha.

Chinese herbs in Heart Meridian invigorate and nourish the Blood, soothe irritability and the Heart, and calm the Spirit.

- **Shan Zha (Hawthorn Fruit, *Crataegus pinnatifida*)** is slightly warm and enters the LIV, SP and ST meridians; reduces and guides out food stagnation, transforms accumulations and blood stasis, invigorates the Blood, dissipates clumps, and stops diarrhea.
- **Dan Shen (Red Sage, *Salvia miltiorrhizae*)** is slightly cold and enters the HT, PC and LIV meridians; invigorates Blood and dispels stasis, clears Heat and soothes irritability, cools the Blood and reduces abscesses, nourishes the Blood and calms the Spirit.
- **Gou Qi Zi (Ningxia Wolfberry, *Lycium barbarum*)** is warm and enters the KI and LIV meridians; tonifies the Liver and Kidney, strengthens the sinews and bones, expels wind-damp, and warms and stabilizes the Kidney.
- **Ge Gen (Kudzu Root, *Puerariae lobatae*)** is cool and enters the SP and ST meridians; discharges exterior conditions, releases muscles especially of the neck and back, relieves Heat, generates Fluids, raises Spleen Yang and stops diarrhea.
- **Wu Wei Zi (Schisandra Fruit, *Fructus schisandrae*)** is warm, enters the HT, KI and LU meridians and all five Zang organs; replenishes fluids, quiets the Spirit, and calms and contains Heart Qi.
- **Yuan Zhi (Milkwort, *Radix Polygalae*)** is slightly warm and enters the HT and LU meridians. Calms the Spirit, sedates

the Heart and clears the channel joining the Heart and Kidney, expels Phlegm, opens the orifices, clear the Lungs and stops coughing, reduces abscesses and dissipates swellings.

- **Shi Chang Pu (Sweetflag Rhizome, *Rhizoma Acori talarinowii*)** is warm and aromatic and enters the HT, ST and LU meridians; opens the orifices, vaporizes Phlegm, calms the Spirit, disperses Wind, transforms Damp, harmonizes the Spleen, moves Qi and Blood, reduces swelling, alleviates sores and benefits the throat.
- **Dang Gui (Angelica Root, *Angelicae sinensis*)** is warm and enters the HT, LIV and SP meridians; tonifies Blood and regulates the menses, invigorates the Blood and disperses Cold, moistens the intestines and unblock bowels, reduces swelling, expels pus, generates flesh, alleviates pain, and stops cough.
- **Bai Zi Ren (Arbor Vitae Seed *Thuja orientalis*)** is neutral and enters the HT, KI, and LI meridians; nourishes the Heart, calms the Spirit, moistens the Intestines, unblocks bowels and astringes Yin Deficiency sweat.

Biomedical Details

Modern applications of this formula include many symptoms of the cardiovascular system, management of blood sugar and lipids, and support of a healthy brain and nervous system. The herbs in Heart Meridian have been shown to have a broad range of pharmacological activities including **antioxidant, anti-inflammatory, cardioprotective, neuroprotective, anti-atherosclerotic, and anti-arrhythmic effects** as well as impacts on blood pressure, blood sugar and blood lipids. (1, 3, 4, 6, 7, 8, 9, 10, 11, 12, 13, 14, 23)

A Cochrane review of laboratory and clinical trials studying the effects of hawthorn fruit on the treatment and prevention of cardiovascular disease showed significant benefits to symptom control and outcomes when used with conventional treatments for congestive heart failure. (1) Effects noted include **anti-cardiac remodeling** (changes in wall thickness, chamber size, etc) functions, **anti-platelet** or blood thinning effects, along with cardioprotection. *Puerariae* also has anti-cardiac remodeling activity. Clinical studies in Asia have shown that it inhibits cardiac hypertrophy (heart enlargement), improves energy metabolism in the heart, and suppresses inflammation thus attenuating or preventing cardiac remodeling. (10) *Angelicae* is also protective of the heart and cardiac remodeling (fibrosis). (23) Wolfberry exhibited similar improvements in diabetic rat hearts. (5)

In China, pharmaceuticals containing Dan Shen (*Salvia miltiorrhizae*) have been developed and are widely used in clinical practice. A recent overview of the pharmacological and therapeutic actions highlighted arterial-protective, anti-atherosclerotic, and cardioprotective effects. (14) A 2017 review described specific heart-benefitting effects, including lowering blood pressure, improving arteriosclerosis and myocardial ischemia reperfusion injuries (which may occur post-treatment of a heart attack). This article summarized some key clinical trials of Dan Shen alone or as part of a Chinese herbal formula. The effects include **improvement of clinical symptoms and physical signs such as frequency of angina attacks, cardiac function and blood pressure**. Also seen were improvements in antioxidant indexes, inflammation markers, blood lipid levels and ECG measures. (7) *Angelicae* is another herb supported by research showing its protective effects against myocardial infarction, fibrosis, and arteriosclerosis, while improving cardiac function and protecting from cardiac disease. (23)

Other herbs in the Heart Meridian formula have **positive impacts on blood sugar and blood lipids**. A random controlled clinical trial of wolfberry showed a significant lowering of blood sugar, and increase of HDL after 3 months in 67 Type 2 diabetic patients. Animal studies have shown significant reductions in cholesterol, triglycerides and LDL with wolfberry. (3) Hawthorn berry extract was shown to lower blood sugar, cholesterol and triglyceride levels in animals. (2) *Puerariae* also resulted in significant reduction of total cholesterol and triglycerides in mice. (9) *Angelicae* also shows positive impact on blood pressure and blood lipid levels. (23)

Many herbs in the formula are described in Traditional Chinese Medicine as calming the spirit and soothing irritability. These functions are supported by modern pharmacology in their impact on the nervous system. Hawthorn fruit, Dan Shen, wolfberry, schisandra, *Polygalae* and *Acori* all have shown both **anti-anxiety and anti-depressant effects** in animal and other studies. (12, 15, 16, 17, 18, 19, 20, 21, 22) One animal study compared hawthorn fruit extract to escitalopram (an SSRI) and found it to work similarly. (15) There is also evidence that schisandra and *Polygalae* have the ability to **regulate neurotransmitters** and positively impact stress hormone (corticosterone) levels. (10, 15, 20, 22) Some herbs have been shown to **improve cognitive function and regenerate nerve cells**. (12, 18, 19, 22)

How to use Heart Meridian

- Use standard dose daily for consistent cardiovascular support.
- Use standard dose daily for management of anxiety and/or depressive symptoms and to support health of the brain and nervous system.

Dosage

Liquid formulas are rapidly absorbed by the body and should be taken by mouth. Hold under the tongue a few moments prior to swallowing; or take in a small amount of water or juice. If alcohol content is a concern, a standard dose (1.5 ml) in one cup of water dilutes the alcohol content to 0.1%. Alternatively, formula can be added to hot tea (most alcohol will evaporate) and drink once cooled.

The standard, adult dose is three droppers full (1.5 ml) three times a day, or as directed by your health care professional. One full compression of the dropper bulb is a dropper full (the dropper may not appear "full").

- Standard adult dose (100-250 lb) – 3 droppers full (1.5 ml), three times a day.
- Standard adult dose (>250 lb) – 4 droppers full (2.0 ml), three times a day.
- Standard child dose (30-100 lb) – 1 dropper full (0.5 ml), three times a day.
- If sensitive to herbs and supplements, start with 1 dropper full (0.5 ml), three times a day.

For some, it may take several weeks to notice an effect. Consistency is more important than dose, so take some each day even if you can't keep to a regular schedule. As your body responds to the formula, you may decrease the dose, accordingly.

Cautions

- Do not use if pregnant or breastfeeding, unless directed by your health care practitioner.
- Discontinue use if any new symptoms appear, including symptoms of allergic reaction.
- Not to exceed five droppers full at a time.
- With minor stomach upset, take with food.
- If experiencing minor headache or other discomfort, reduce the dosage to ½ of starting dose. Gradually increase the dosage each day until you reach to the desired dosage.
- Every body is different, as the formula alters internal processes, your best dosage may change (always stay within the recommended dosage range).

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***This product is not intended to diagnose, treat, cure, or prevent any disease.**

Fact Sheet

KIDNEY Meridian

Supports & protects Kidney. Benefits healthy aging, joints, hair and ears, regulates hormones for fertility & menopause. Inspires courage & improves stamina.



- Eases hot flashes & balances internal temperature
- May improve fertility in men and women
- Protects bone health & relieves pain
- Supports and protects the kidney
- Aids healthy blood sugar levels
- Encourages healthy will power and longevity

Kidney Meridian is comprised of Chinese herbs that enter the Kidney meridian, encourage healthy aging, and balance internal temperature and healthy hormones (both male and female). The Kidney is damaged by the emotion “fear”, and Kidney dysfunction can increase this feeling. Strong Kidney energy improves willpower and determination. Modern applications of this formula include symptoms associated with aging such as low back and knee pain (osteoarthritis), diabetes, diminished kidney function, and menopausal symptoms. It also may be used to support hormones. It is an ideal formula to support healthy aging and fertility.

Ingredients & Traditional Chinese Medicine View

Zoi Medicinals™ tinctures are alcohol and vegetable glycerin extracts of non-toxic herbs. All herbs used in the manufacturing of Zoi Medicinals™ products have been tested for heavy metals, bacteria, fungus, and pesticides.

About Alcohol

Zoi Medicinals™ formulas contain 18.25% alcohol. Alcohol has been used in herbal tinctures for centuries. It extracts active ingredients that are not water-soluble, such as essential oils, alkaloids and resins. It enables the tincture to be fast-acting, potent, shelf-stable for long periods of time, and enables their “grab and go” properties (easily portable, ready to take, no refrigeration required). Zoi Medicinals tinctures use organic ethyl alcohol that is USP certified. It is the same alcohol found in vanilla extract (used for cooking), other tinctures, and liquid homeopathic remedies. The dose is very small and can be diluted into water or other drink making the final alcohol content less than 0.1%, which is similar or less than, the amount of alcohol in a cup of kombucha

Chinese herbs in Kidney Meridian enrich Kidney Yin, warm Kidney Yang and nourish the Essence (Jing).

- **Shu Di Huang (Rehmannia Root, *Radix Rehmanniae Preparata*)** is slightly warm and enters the HT, KI and LIV meridians; nourishes the Blood, Liver and Kidney Yin, nourishes Jing and fills the Marrow, arrests coughing and wheezing.
- **Shan Zhu Yu (Cornelian cherry, *Fructus Corni, Cornus mas*)** is slightly warm and enters the KI and LIV meridians; stabilizes the Kidney, astringes Jing and Body Fluids, stops excessive sweating, tonifies Liver and Kidney Yin and strengthens Kidney Yang.
- **Shan Yao (Chinese Yam Rhizome, *Dioscorea oppositae*)** is neutral and enters the KI, LU, and SP meridians; tonifies Spleen, nourishes Stomach Yin, stops diarrhea, tonifies Lung Qi, nourishes Lung Yin, tonifies Kidney Yin and astringes Jing.
- **Fu Ling (Poria Mushroom, *Poria cocos*)** is neutral and enters the HT, SP, KI, and LU meridians; promotes urination and leaches out Dampness, strengthens the Spleen and harmonizes the Middle Jiao, quiets the Heart, and calms the Spirit.
- **Mu Dan Pi (Peony Tree Root Cortex, *Cortex radialis moutan*)** is slightly cold and enters the HT, LIV, and KI

meridians; clears excess and deficiency Heat, cools and invigorates Blood, clears Liver Fire, drains pus and reduces swelling.

- **Ze Xie (Water Plantain Root, *Rhizoma Alismatis*)** is cold and enters the KI and BL meridians; promotes urination and leaches out Dampness, settles Ministerial Fire in Kidneys by draining Damp-Heat, drains Kidney Fire.
- **Rou Gui (Cinnamon Bark, *Cortex Cinnamomi*)** is hot and enters the HT, LIV, KI and SP meridians; warms the Kidneys, Spleen and Heart, strengthens Yang and Ming Men Fire, disperses deep Cold, warms and unblocks the meridians, alleviates pain, leads the Fire back to its source.
- **Tu Si Zi (Chinese Dodder Seeds, *Semen Cuscutae*)** is neutral and enters the KI and LIV meridians; strengthens Yang, nourishes Yin, astringes Jing and urine and benefits the Marrow, tonifies the Kidney and Liver, benefits the Spleen, stops diarrhea, calms the fetus.

Biomedical Details

The herbs in Kidney Meridian have been shown to have a broad range of pharmacological activity including **anti-inflammatory, antioxidant, anti-osteoporosis, anti-diabetic, nephro-, hepato- and neuroprotective functions, antimicrobial activity and effectiveness against metabolic diseases**, such as high blood pressure and diabetes. (1, 2, 3, 4)

Many of the herbs in Kidney Meridian show **anti-diabetic effects**—modulating blood sugar, improving insulin resistance and renal function and protecting the kidneys from damage. *Rehmania, Dioscorea, Cortex radialis moutan* and *Cinnamomi* all reduce fasting blood glucose and insulin resistance. (5, 9, 7, 8) In animal studies. *Dioscorea* and *Cortex radialis moutan* decrease urinary protein and serum creatinine. (6, 7) *Rehmania, Dioscorea, Cortex radialis moutan*, Cornelian cherry (*Cornus mas*), and *Alismatis* have anti-inflammatory properties and have been shown to slow pathological changes and **protect the kidney** (1, 3, 6, 9, 10, 11) in animals.

Yin deficiency is a common Chinese medical pattern with deficient heat and dryness seen in menopausal women. Interestingly, many of the herbs in Kidney Meridian have shown **positive effects on menopausal symptoms and osteoporosis**. *Semen Cuscutae* has been shown to increase bone density, improve bone microstructure, and increase bone mass in an osteoporotic model. (12, 13) Random controlled

trials (RCT) of Cornelian cherry in menopausal women, significantly reduced body weight, BMI, LDL to HDL and cholesterol to HDL ratios, fasting insulin levels and insulin resistance. (14) Another RCT showed a decrease in vasomotor symptoms (hot flashes and night sweats) and an increase in estrogen. (15) *Rehmanniae* (with other herbs) and *Poria* have been shown to treat osteoporosis in over 100 clinical studies. (16, 17) Cornelian cherry has demonstrated effects in slowing the progression of osteoarthritis by increasing healthy levels of collagen and slowing bone cell death in animal studies. (18)

Several herbs in Kidney Meridian may have **positive impacts on fertility** in both men and women. *Alismatis*, *Semen Cuscutae*, and Cornelian cherry have positive effects on estrogen levels, ovulation and progesterone signaling in animal studies. (17, 18) In male animal studies, *Semen Cuscutae* and Cornelian cherry were shown to improve sperm concentration and motility, and to improve oxidation status in the testicles. (19, 20)

How to use Kidney Meridian

- Use standard dose daily for consistent kidney, bone and metabolic support.
- Use standard dose daily for consistent hormonal support.

Dosage

Liquid formulas are rapidly absorbed by the body and should be taken by mouth. Hold under the tongue a few moments prior to swallowing; or take in a small amount of water or juice. If alcohol content is a concern, a standard dose (1.5 ml) in one cup of water dilutes the alcohol content to 0.1%. Alternatively, formula can be added to hot tea (most alcohol will evaporate) and drink once cooled.

The standard, adult dose is three droppers full (1.5 ml) three times a day, or as directed by your health care professional. One full compression of the dropper bulb is a dropper full (the dropper may not appear "full").

- Standard adult dose (100-250 lb) – 3 droppers full (1.5 ml), three times a day.
- Standard adult dose (>250 lb) – 4 droppers full (2.0 ml), three times a day.
- Standard child dose (30-100 lb) – 1 dropper full (0.5 ml), three times a day.
- If sensitive to herbs and supplements, start with 1 dropper full (0.5 ml), three times a day.

For some, it may take several weeks to notice an effect. Consistency is more important than dose, so take some each day even if you can't keep to a regular schedule. As your body responds to the formula, you may decrease the dose, accordingly.

Cautions

- With minor stomach upset, take with food.
- Do not use if pregnant or breastfeeding, unless directed by your health care practitioner.
- Not to exceed five droppers full at a time.
- Discontinue use if any new symptoms appear, including symptoms of allergic reaction.
- If experiencing minor headache or other discomfort, reduce the dosage to 1/3 of starting dose. Gradually increase the dosage each day until you reach to the desired dosage.
- Every body is different, as the formula alters internal processes, your best dosage may change (always stay within the recommended dosage range).

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***This product is not intended to diagnose, treat, cure, or prevent any disease.**

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Revised: April 22, 2025

Fact Sheet

LIVER Meridian

Supports & protects Liver and healthy detoxification. Soothes irritability & tension.



- Supports healthy liver detoxification
- Protects liver from drugs (including acetaminophen), alcohol and other toxins
- Helps maintain blood sugar and blood lipid levels
- Encourages liver repair
- Soothes irritability & supports proper emotional regulation

Liver Meridian is comprised of Chinese herbs that enter the Liver meridian, calm the Liver, support detoxification and relieve Liver Qi and Blood stagnation. The Liver is damaged by the emotion "anger", and Liver dysfunction increases irritability and hard-to-regulate emotions. Strong Liver energy is required for smooth flow and proper intensity of emotions. Modern pharmacological studies are showing the herbs in this formula to be liver-protective, -reparative, and supportive of liver function, making this an ideal formula to assist healthy detoxification and metabolism.

Ingredients & Traditional Chinese Medicine View

Zoi Medicinals™ tinctures are alcohol and vegetable glycerin extracts of non-toxic herbs. All herbs used in the manufacturing of Zoi Medicinals™ products have been tested for heavy metals, bacteria, fungus, and pesticides.

About Alcohol

Zoi Medicinals™ formulas contain 18.25% alcohol. Alcohol has been used in herbal tinctures for centuries. It extracts active ingredients that are not water-soluble, such as essential oils, alkaloids and resins. It enables the tincture to be fast-acting, potent, shelf-stable for long periods of time, and enables their "grab and go" properties (easily portable, ready to take, no refrigeration required). Zoi Medicinals tinctures use organic ethyl alcohol that is USP certified. It is the same alcohol found in vanilla extract (used for cooking), other tinctures, and liquid homeopathic remedies. The dose is very small and can be diluted into water or other drink making the final alcohol content less than 0.1%, which is similar or less than, the amount of alcohol in a cup of kombucha.

Chinese herbs in Liver Meridian calm and nourish the Liver, and relieve Liver Qi and Blood stagnation.

- **Wu Wei Zi (Schisandra Fruit, *Fructus schisandrae*)** is warm, enters the HT, KI and LU meridians and all five Zang organs; tonifies Qi, astringes Lung Qi leakage and stops coughing, tonifies Kidney and binds Essence, astringes sweat and generates fluids, quiets the Spirit, and calms and contains Heart Qi.
- **Tu Fu Ling (Greenbriar Root, *Smilacis glabrae*)** is neutral and enters the LIV and ST meridians; relieves toxicity and eliminates Damp, clears Damp-Heat from skin, promotes normal urination.
- **Chai Hu (Thorowax Root, *Bupleurum chinensis*)** is cool and enters the GB, LIV, and PC meridians; relieves Shao Yang disorders, reduces fever, spreads Liver Qi, relieves stagnation, raises Yang Qi, disperses Wind-Heat and resolves phlegm.
- **Da Ji (Milk Thistle, *Silybum marianum*)** enters the LIV and HT meridians; removes stagnation, promotes urination, dispels Cold, stimulates Qi, move Blood, stops bleeding, cools Blood, reduces swelling, generates flesh, tonifies the Liver.
- **Bo He (Field Mint, *Herba menthae haplocalycis*)** is cool and enters LU and LIV channels, disperses Wind-Heat, cools and clears the head and eyes, benefits the throat, vents rashes, relieves Liver Qi Stagnation, and expels turbid filth.

- **Gou Qi Zi (Ningxia Wolfberry, *Lycium barbarum*)** is warm and enters the KI and LIV meridians; tonifies the Liver and Kidney, strengthens the sinews and bones, expels wind-damp, and warms and stabilizes the Kidney.
- **Ge Gen (Kudzu Root, *Puerariae lobatae*)** is cool and enters the SP and ST meridians; discharges exterior conditions, releases muscles especially of the neck and back, relieves Heat, generates Fluids, raises Spleen Yang and stops diarrhea.
- **Pu Gong Ying (Dandelion, *Herba Taraxaci*)** is cold and enters the LIV and ST meridians; dissipates nodules, calms the Liver and clears the eyes, clears Heat, resolves Damp, relieves toxicity.

Biomedical Details

The liver has vital roles in metabolism. These include breaking down harmful substances and toxins so they can be removed from the body, balancing blood sugar, digesting proteins, storing nutrients and filtering the blood. It also produces bile which is stored in the gall bladder.

Schisandra fruit, *Smilacis*, *Bupleurum*, milk thistle, wolfberry, mint, *Puerariae* and dandelion have been shown to be **protective of the liver**. (1, 2, 3, 4, 5, 6, 7, 8, 9, 10) Animal studies have shown schisandra fruit, to protect the liver from acetaminophen damage. Milk thistle has been shown to protect the liver from a wide range of both biological and chemical toxic agents including mold toxins, snake venom, pesticides and toxic metals. (2, 5, 11) Milk thistle, wolfberry, and *Puerariae* **protect the liver from alcohol damage** in animal studies. (6, 7, 9) Also, *Puerariae* was shown to lessen blood alcohol levels and intoxication in rats. (10) Other studies have shown blood markers indicative of liver damage, alanine aminotransferase (ALT) and aspartate aminotransferase (AST), to decrease after treatment with schisandra fruit, wolfberry, *Puerariae* and dandelion. (2, 11, 12, 13, 14) In one clinical study, milk thistle was used in a trial of 2637 patients with chronic liver disease. After 8 weeks of taking the herb, ALT and AST levels had decreased along with the frequency of liver enlargement (palpable hepatomegaly). (15) *Bupleurum*, milk thistle, dandelion and wolfberry, have even been shown to **slow or alleviate damage from liver fibrosis**. (4, 7, 10, 16)

Other effects include **improvement of liver fat accumulation** (fatty liver) with schisandra fruit, milk thistle, and wolfberry. (2, 7, 17, 20, 21, 22) **Antiviral activities** of milk thistle towards the Hepatitis C virus have been seen (7), and **improved levels of glutathione** (master antioxidant) with schisandra fruit and

Puerariae. (11, 17, 18) **Liver regeneration** has been observed in some studies with schisandra fruit and milk thistle. (19, 20)

Many of the herbs also have specific **effects on blood sugar and blood lipid levels**. Schisandra fruit and wolfberry have been shown to decrease total cholesterol and triglycerides in rats (21, 22). Positive impacts on insulin resistance and blood sugar levels have been noted in studies using schisandra fruit, milk thistle, wolfberry, *Puerariae*, and dandelion. (1, 7, 15, 21, 13, 10, 23, 24)

How to use Liver Meridian

- Use standard dose daily for consistent liver support.
- Use when exposed to toxins such as acetaminophen or alcohol, start with 4 times a day for 2 days, then standard daily dose for 2 weeks.
- If you anticipate exposure to toxins (such as anesthesia exposure during surgery), start standard daily dose for 2 weeks prior to exposure, continue during (check with your health practitioner if needed), and for 2 weeks after.

Dosage

Liquid formulas are rapidly absorbed by the body and should be taken by mouth. Hold under the tongue a few moments prior to swallowing; or take in a small amount of water or juice. If alcohol content is a concern, a standard dose (1.5 ml) in one cup of water dilutes the alcohol content to 0.1%. Alternatively, formula can be added to hot tea (most alcohol will evaporate) and drink once cooled.

The standard, adult dose is three droppers full (1.5 ml) three

times a day, or as directed by your health care professional. One full compression of the dropper bulb is a dropper full (the dropper may not appear "full").

- Standard adult dose (100-250 lb) – 3 droppers full (1.5 ml), three times a day.
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For some, it may take several weeks to notice an effect. Consistency is more important than dose, so take some each day even if you can't keep to a regular schedule. As your body responds to the formula, you may decrease the dose, accordingly.

Cautions

- With minor stomach upset, take with food.
- Do not use if pregnant or breastfeeding, unless directed by your health care practitioner.
- Not to exceed five droppers full at a time.
- Discontinue use if any new symptoms appear, including symptoms of allergic reaction.
- If experiencing minor headache or other discomfort, reduce the dosage to 1/3 of starting dose. Gradually increase the dosage each day until you reach to the desired dosage.
- Every body is different, as the formula alters internal processes, your best dosage may change (always stay within the recommended dosage range).

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***This product is not intended to diagnose, treat, cure, or prevent any disease.**

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Created: April 22, 2025.

Fact Sheet

SPLEEN Meridian

Supports & protects digestive organs. Improves metabolism & muscle health. Enhances mental clarity.



- Supports healthy metabolism & digestion
- Encourages proper blood sugar & blood lipid levels
- Benefits & protects the stomach
- May improve muscle function
- Protects digestion from over-thinking and worry

Spleen Meridian is comprised of Chinese herbs that enter the Spleen Meridian. They strengthen digestion and proper movement of foodstuffs through the system. They also balance body fluids, decrease inflammation, stop vomiting and diarrhea, and relieve pain. Healthy Spleen function is responsible for whole body energy and muscle strength. The Spleen is damaged by the emotion “worry” or over-thinking, and dysfunction in the Spleen increases these emotions. Strong Spleen function favors clear thinking and analysis. This formula is great for those prone to digestive upset and weakness, recovering from a digestive illness, or needing balanced support and improved metabolism; also for over-thinkers and those with a tendency to worry.

Ingredients & Traditional Chinese Medicine View

Zoi Medicinals™ tinctures are alcohol and vegetable glycerin extracts of non-toxic herbs. All herbs used in the manufacturing of Zoi Medicinals™ products have been tested for heavy metals, bacteria, fungus, and pesticides.

About Alcohol

Zoi Medicinals™ formulas contain 18.25% alcohol. Alcohol has been used in herbal tinctures for centuries. It extracts active ingredients that are not water-soluble, such as essential oils, alkaloids and resins. It enables the tincture to be fast-acting, potent, shelf-stable for long periods of time, and enables their “grab and go” properties (easily portable, ready to take, no refrigeration required). Zoi Medicinals tinctures use organic ethyl alcohol that is USP certified. It is the same alcohol found in vanilla extract (used for cooking), other tinctures, and liquid homeopathic remedies. The dose is very small and can be diluted into water or other drink making the final alcohol content less than 0.1%, which is similar or less than, the amount of alcohol in a cup of kombucha.

Chinese herbs in Spleen Meridian tonify and move Qi, strengthen the Spleen, dry Dampness, stop vomiting and diarrhea, and relieve pain in the digestive system.

- **Dang Shen (Bellflower Root, *Radix Codonopsis pilosula*)** is neutral and enters the LU and SP meridians; tonifies the Middle Jiao and augments Qi, tonifies the Lung, restores the constitution, nourishes the Blood and Body Fluids.
- **Bai Zhu (White Atractylodes Rhizome, *Atractylodes macrocephala*)** is warm and enters the SP and ST meridians; tonifies the Spleen and augments Qi, dries Damp and promotes water metabolism, stabilizes the Exterior, stops sweating, and calms the fetus.
- **Fu Ling (Poria Mushroom Root, *Poriae cocos*)** enters the HT, SP, KI, and LU meridians; promotes urination and leeches dampness, strengthens the Spleen, harmonizes the middle, quiets the Heart, calms the Shen and soothes the nerves.
- **Sha Ren (Black Cardamom, *Villous amomum*)** is warm and aromatic and enters the SP and ST meridians; promotes the movement of Qi, aromatically transforms Damp, strengthens the Spleen, warms the Middle and stops diarrhea, and calms the fetus.
- **Mu Xiang (Costus Root, *Aucklandia lappae*)** is warm and

enters the GB, LI, SP, ST, and SJ meridians; promotes the movement of Qi and alleviates pain, regulates stagnant Qi in the intestines, strengthens the Spleen, prevents stagnation, dispels Damp-Heat, and harmonizes the Liver and Spleen.

- **Chen Pi (Tangerine Peel, *Citri reticulatae*)** is warm and enters the LU, SP and ST meridians; regulates Qi, adjusts the Middle relieves the diaphragm, dries Damp, transforms Phlegm, descends Qi.
- **Ban Xia (Crow Dipper, *Rhizoma Pinellia Preperata*)** is warm and enters the Lung, Spleen, Stomach meridians; dries Damp and transforms Phlegm, descends rebellious Qi, dissipates nodules and reduces Stagnation, treats sores and reduces swelling.
- **Gan Cao (Licorice Root, *Radix Glycyrrhizae*)** is warm & neutral-warm, enters all 12 meridians; tonifies Spleen, augments Qi, moistens the Lung, resolves Phlegm and stops cough, moderates spasm and alleviates pain, antidote for many toxins, harmonizes and guides other herbs.

Biomedical Details

Spleen Meridian is comprised of herbs that affect metabolism and the digestive system. The herbs included have a variety of effects on the body including protecting the liver, nerves, stomach and kidneys from damage. (1, 2, 3, 4, 5, 6, 7) Many herbs have **anti-inflammatory, antiviral, antioxidant, immunomodulatory, and antimicrobial actions**. (1, 4, 8, 10, 12)

Several of the herbs in Spleen Meridian have shown **positive effects on metabolism**. *Codonopsis*, *Atractylodes*, and *Poria cocos* significantly reduce fasting blood glucose and serum insulin. (9, 11, 12) *Codonopsis* also increases antioxidant levels, has positive effects on the gut microbiome and acts as a prebiotic. (1, 11, 13) Cardamom has been shown to significantly increase insulin-stimulated glucose uptake into cells. (15) *Atractylodes* decreased body weight gain, serum lipid and insulin levels and improved glucose tolerance in animal studies. (12) Tangerine peel also reduced body weight, total cholesterol and triglyceride levels. (14)

Several of the herbs in the formula have **beneficial effects on the stomach**. *Glycyrrhizae* was shown in clinical studies to have anti-ulcer properties, promote healthy mucus secretion

and strengthen the cells of the GI tract. (3) A meta-analysis of clinical studies showed tangerine peel effective in the treatment of functional dyspepsia. (16) Cardamom has clinical applications for gastritis and *H.pylori* infection, along with gastro-protective effects. (5, 17) In animal studies, *Aucklandia* has been shown to have several beneficial effects on the GI tract including decreasing inflammation, protection of mucus-secreting cells, healing gastric lesions and improving GI motility. (6, 7, 18)

In parallel with the Chinese medical theory that “Spleen governs muscle”, some studies have described impacts on muscle tissue. *Codonopsis* has been shown to increase liver and muscle glycogen providing **increased oxygen and energy to the muscles** and some studies indicate *Atractylodes* stimulates mitochondrial function and muscle energy metabolism (1, 8, 19).

How to use Spleen Meridian

- Use standard dose daily for consistent digestive support
- Use standard dose 4-5 times a day with increased digestive disruption.

Dosage

Liquid formulas are rapidly absorbed by the body and should be taken by mouth. Hold under the tongue a few moments prior to swallowing; or take in a small amount of water or juice. If alcohol content is a concern, a standard dose (1.5 ml) in one cup of water dilutes the alcohol content to 0.1%. Alternatively, formula can be added to hot tea (most alcohol will evaporate) and drink once cooled.

The standard, adult dose is three droppers full (1.5 ml) three times a day, or as directed by your health care professional.

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Revised: April 22, 2025.