Fact Sheet

LONGEVITY | The Zoi™

- Decreases inflammation
- 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 disease prevention, prolonging life, and increasing vitality. Herbs in Longevity are powerful anti-inflammatories known for strengthening and protecting all 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 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.

- 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.
- 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.
- He Shou Wu (Fleeceflower Root, Polygoni multioflori) 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, which research has shown to have_anti-tumor, anti-inflammatory, immune-modulating, antiaging, and disease prevention properties. The herbs included in Longevity 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 ZoiTM have anti-inflammatory (1, 2, 3, 4, 5, 6, 7, 8, 9) and immune regulating effects (2, 3, 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); rhemannia 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 arterialprotective, 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 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. Cordyceps, specifically, has been associated with blood cholesterol and triglyceride reduction. In one randomized trial, 95% of the patients treated with 3 g/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, hydrochlorothiaside, 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, 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 dav
- During cold and flu season, travel, or times of stress, take standard dose

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. Óne 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 formal alters internal processes, your best dosage may change (always stay within the recommended dosage range).

Dosage

- References

 References

 1.
 Bounda, G-A., Feng. Y.U. 2015. Review of clinical studies of Polygonum multiflorum Thunb. and its isolated bioactive compounds. Pharmocognosy Res. Jul-Sep; 7(3): 225–236. https://doi.org/ 10.4103/0974-8490.157957.

 10.4103/0974-8490.157957.
 Dotto the destroy of clinical studies of Polygonum multiflorum Thunb. and its isolated bioactive compounds. Pharmocognosy Res. Jul-Sep; 7(3): 225–236. https://doi.org/ 10.4103/0974-8490.157957.
 Benzie IFF, Wachtel-Galor S, editors. 2011. Herbal Medicine: Biomolecular and Clinical Aspects. 2nd edition. Boca Raton, FL: CRC Press/Taylor & Frances. https://www.ncbi.nlm.nih.gov/books/ NBK92756/.
- 3.
- NBK92756/. Tin, M.M.Y., Cho, C., Chan, K., James, A.E. 2007. Astragalus saponins induce growth inhibition and apoptosis in human colon cancer cells and tumor xenograft. Carcinogenesis. 28(6): 1347–1355. https://doi.org/10.1093/carcin/bgl238. Holliday, J. 2011. On the Trail of The Yak Ancient Cordyceps in the Modern World. https://www.earthpulse.com/cordyceps_inc/cordyceps_story.pdf. Lee, H.H., Lee, S., Lee, K., Shin, Y.S., Kang, H., Cho, H. 2015. Anti-cancer effect of Cordyceps militaris in human colorectal carcinoma RKO cells via cell cycle arrest and mitochondrial apoptosis. Daru J Pharm Sci. 23(1):35. https://doi.org/10.1186/s40199-015-0117-6. Eliaz, I. 2013.Honokiol Research Review A promising extract with multiple applications. Natural Medicine Journal. 5(7). https://www.naturalmedicinejournal.com/journal/2013-07/honokiol-research-review. 4. 5.
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- Daru J Pharm Sci. 23(1):5b. https://doi.org/10.1100/s40195-015-0117-0.
 Eliaz, I. 2013. Honokiol Research Review A promising extract with multiple applications. Natural Medicine Journal. 5(7). https://www.naturalmedicinejournal.com/journal/2013-07/honokiol-research-review.
 Wu, K., Fan, J., Huang, X., Wu, X., Guo, C. 2018. Hepatoprotective effects exerted by Poria Cocos polysaccharides against acetaminophen-induced liver injury in mice. *Int J Biol Macromol.* Jul 15(114):137-142. https://doi.org/10.1016/j.ijbiomac.2018.03.107.
 Wang, L., Ma, R., Liu, C., Liu, H., Zhu, R., Guo, S., Tang, M., Li, Y., Niu, J., Fu, M., Gao, S., Zhang, D. 2017. *Salvia miltiorrhiza*: A Potential Red Light to the Development of Cardiovascular Diseases. *Curr Pharm Des.* 2017;23(7):1077-1097. doi: 10.2174/138/16128226661610105242.
 Kim, S.H., Yook, T.H., Kim, J.U. 2017. *Rehmanniae Radix*, an Effective Treatment for Patients with Various Inflammatory and Metabolic Diseases: Results from a Review of Korean Publications. *J Pharmacopuncture.* Jun;20(2):81-88. doi: 10.3831/KPI.2017.20.010.
 Tiralongo, W.J., Wee, S.S., Lea, R.A. 2016. Elderberry Supplementation Reduces Cold Duration and Symptoms in Air-Travellers: A Randomized, Double-Blind Placebo-Controlled Clinical Trial. *Nutrients.* Apr. 8(4):182. https://doi.org/10.3390/nu8040182.
 Li, M., Jiang, H., Hao, Y., Du, H., Ma, C., Tu, H., He, Y. 2022. A systematic review on botany, processing, application, phytochemistry and pharmacological action of Radix Rehmnniae. *J Ethnopharmacol.* 304: 1265:114520. doi: 10.1016/j.jep.2021.114820.
 Liu, Y., Wang, J., Wang, W., Zhang, H. Zhang, X., Han, C. 2015. The Chemical Constituents and Pharmacological Actions of *Cordyceps sinensis. Evid Based Complement Alternat Med.* 2015: 575063. https://doi.org/10.1155/2015/675063.
 Woodbury, A., Yu, S.P., Wei, L., Garcia, P. 2013. Neuro-Modulating Effects of RadiX Astragali (Astragalia Mastragalis Ma 15 16
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*This product is not intended to diagnose, treat, cure, or prevent any disease.