

# Fact Sheet



## EDAFOS™ DIGESTIVE RELIEF

- Relieves symptoms of overeating, indigestion, nausea and bloating
- Eases hangover symptoms, including pain and digestive discomfort
- Improves health of the stomach and liver
- May benefit blood sugar and blood lipids

Edafos™ is perfect for travel, the holidays, and other times when you're out of your normal eating routine, or when you overindulge in food and drink. Comprised primarily of Chinese herbs known for their ability to relieve food stagnation, Edafos™ moves Qi in the digestive system, and relieves pain. Many of the herbs in Edafos™ exhibit stomach and liver protective properties and may even benefit blood sugar and blood lipid levels.

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.

### How to use Edafos™

- Use standard dose daily for proper absorption and digestive support
- Use standard dose daily for digestive discomfort, digestive spasms or fullness
- Use as needed, not to exceed 5 doses, for acute gastrointestinal distress
- Use standard dose daily to support blood sugar and cardiovascular health

### Dosage

Liquid tinctures are rapidly absorbed by the body and may be taken directly by mouth or 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%.

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

- Standard adult dose (100-150 lb) – 3 droppers full (1.5 ml), three times a day.
- Standard adult dose (>150 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.

Best results require 4-6 weeks of consistent use. Consistency is more important than dose, so we encourage you to take some tincture each day even if you can't keep to a regular schedule. As your body responds to the tincture, you may decrease the dose, accordingly.

### Cautions

- Consult a medical professional if pregnant or breastfeeding.
- Not to exceed five droppers full at a time.
- Discontinue use if any new symptoms appear, including symptoms of allergic reaction.
- May decrease blood pressure (hawthorn fruit).

- If experiencing minor headache or digestive 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 and herbs alter internal processes, so your best dosage may change while you're using the product or between uses (always stay within the recommended dosage range).

### Biomedical Details

Various laboratory and clinical studies have shown effects of the herbs in Edafos™ on the stomach, liver, and digestive metabolism. Tangerine peel has medicinal properties that benefit the gastrointestinal tract, particularly for stomach pain (1, 2). Crampbark, hawthorn, cardamom, kudzu root, and skullcap have shown **gastro-protective** properties (3, 4, 5, 6, 7). Many of the herbs, including hawthorn, skullcap and white peony, have **anti-inflammatory** functions (4, 8, 9). White peony also has **anti-spasmodic and pain relieving** properties (9). Other herbs in Edafos™ have exhibited effects on metabolism in laboratory studies. Skullcap, hawthorn, magnolia bark extracts, atracylodes, and cinnamon regulate **blood sugar levels** (8, 10, 11, 12, 13, 14, 15, 16). One clinical review suggested that cinnamon can help those with type 2 diabetes achieve better glycemic control; with some studies reporting moderate reductions in fasting blood glucose and modest decreases in HbA1c (16). **Blood lipid levels** have also shown to be moderated in animal studies with hawthorn, magnolia bark, atracylodes, and skullcap (10, 11, 12, 13, 14, 15, 17, 18).

Along with the stomach, the liver is an important organ of digestion. It processes drugs, alcohol, and other chemical and natural toxins, and is important in the regulation of blood sugar and lipids. Because the liver is the first organ that processes food and drink, it is susceptible to injury. Edafos™ contains herbs that have exhibited **liver-protective** effects in studies, including skullcap, white peony, kudzu root, atracylodes, and bupleurum (8, 19, 20, 21, 22).\*

### Ingredients & Traditional Chinese Medicine View

- **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.

- **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.
- **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.
- **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.
- **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.
- **Ge Gen (Kudzu Root, *Puerariae lobatae*)** is cool and enters the SP and ST channels; 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 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.
- **Skullcap Leaf (*Scutellaria lateriflora*)** is cold, enters the LU, ST, GB, and LI channels, 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.
- **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.
- **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.
- **Chai Hu (Thorowax Root, *Bupleurum chinensis*)** is cool and enters the GB, LIV, and PC channels; relieves Shao Yang disorders, reduces fever, spreads Liver Qi, relieves stagnation, raises Yang Qi, disperses Wind-Heat and resolves phlegm.
- **Gan Jiang (Dried Ginger Root, *Zingiberis officinalis*)** is hot and enters the HT, LU, SP, and ST channels; 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 channels and stops bleeding.
- **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.

#### References

1. Yu, X., Sun, S., Guo, Y., Liu, Y., Yang, D., Li, G., Lu, S. 2018. *Citri Reticulata Pericarpium* (Chenpi): Botany, ethnopharmacology, phytochemistry, and pharmacology of a frequently used traditional Chinese medicine. *J Ethnopharmacol.* Jun 28;220:265-282. <https://doi.org/10.1016/j.jep.2018.03.031>.
2. Wang, C., Zhu, M., Xia, W., Jiang, W., Li, Y. 2012. Meta-analysis of traditional Chinese medicine in treating functional dyspepsia of liver-stomach disharmony syndrome. *J Tradit Chin Med. Dec;*32(4):515-22. <https://www.ncbi.nlm.nih.gov/pubmed/23427381>.
3. Zayachkivska, O.S., Gzhegotsky, M.R., Terletska, O.I., Lutsyk, D.A., Yaschenko, A.M., Dzhuha, O.R. Influence of *Viburnum opulus* proanthocyanidins on stress-induced gastrointestinal mucosal damage. *J Physiol Pharmacol.* 57:Suppl 5:155-67. <https://www.ncbi.nlm.nih.gov/pubmed/17218766>.
4. Tadic, V.M., Dobric, S., Markovic, G.M., Dordjevic, S.M., Arsic, I.A., Menkovic, N.R., Stevic, T. 2008. Anti-inflammatory, gastroprotective, free-radical-scavenging, and antimicrobial activities of hawthorn berries ethanol extract. *J Agric Food Chem.* Sep 10;56(17):7700-9. <https://doi.org/10.1021/jf801668c>.
5. Jamal, A., Javed, K., Aslam, M., Jafri, M.A. 2006. Gastroprotective effect of cardamom, (*eleteria cardamomum maton*) fruits in rats. *J Ethnopharmacol.* 16:103(2):149-53. <https://doi.org/10.1016/j.jep.2005.07.016>.
6. Zhong, Z., Yao, Z.Z. 2006. Protective effect of puerarin on stress-induced gastric mucosal injury in rats. *Mar*;31(6):504-6. <https://www.ncbi.nlm.nih.gov/pubmed/16722386>.
7. Ribeiro, A.R., do Nascimento Valenca, J.D., da Silva Santos, J., Boeing, T., da Silva L.M., de Andrade, S.R., Albuquerque-Junior, R.L., Thomazzi, S.M. 2016. The effects of baicalin on gastric mucosal ulcerations in mice: Protective pathways and anti-secretory mechanisms. *Chem Biol Interact.* 260:33-41. <https://doi.org/10.1016/j.cbi.2016.10.016>.
8. Yin, H., Huang, L., Ouyang, T., Chen, L. 2018. Baicalin improves liver inflammation in diabetic db/db mice by regulating HMGB1/TLR4/NF-κB signaling pathway. *Int Immunopharmacol.* 55:55-62. <https://doi.org/10.1016/j.intimp.2017.12.002>.
9. Romm, A. MD. 2010. *Botanical Medicine for Women's Health*. St. Louis MO: Churchill Livingstone (Elsevier, Inc.). ISBN: 978-0-443-07277-2.
10. Lee, Y.H., Jin, B., Lee, S.H., Song, M., Bae, H., Min B.J. Park, J., Lee, D., Kim H. 2016. Herbal Formula HT048 Attenuates Diet-Induced Obesity by Improving Hepatic Lipid Metabolism and Insulin Resistance in Obese Rats. *Molecules.* 25;21(11). <https://doi.org/10.3390/molecules21111424>.
11. Aierken, A., Buchholz, T., Chen, C., Zhang, X., Melzig, M.F. 2017. Hypoglycemic effect of hawthorn in type II diabetes mellitus rat model. *J Sci Food Agric.* 97(13):4557-4561. <https://doi.org/10.1002/jsfa.8323>.
12. Wang, T., An, Y., Zhao, C., Han, L., Boakye-Yiadom, M., Wang, W., Zhang, Y. 2011. Regulation effects of *Crataegus pinnatifida* leaf on glucose and lipids metabolism. *J Agric Food Chem.* 11;59(9):4987-94. <https://doi.org/10.1021/jf1049062>.
13. Sun, J., Fu, X., Liu, Y., Wang, Y., Huo, B., Guo, Y., Gao, X., Li, W., Hu, X. 2015. Hypoglycemic effect and mechanism of honokiol on type 2 diabetic mice. *Drug Des Devel Ther.* Dec 4;9:6327-42. <https://doi.org/10.2147/DDDT.S92777>.
14. Song, M.Y., Lim, S.K., Wang, J.H., Kim, H. 2018. The Root of *Atractylodes macrocephala koidzumi* Prevents Obesity and Glucose Intolerance and Increases Energy Metabolism in Mice. *Int J Mol Sci.* 19:1. <https://doi.org/10.3390/ijms19010278>.
15. Song, M.Y., Kang, S.Y., Oh, T.W., Kumar, R.V., Jung, H.W., Park, Y.K. 2015. The Roots of *Atractylodes macrocephala koidzumi* Enhanced Glucose and Lipid Metabolism in C2C12 Myotubes via Mitochondrial Regulation. *Evid Based Complement Alternat Med.* Epub 2015 Nov 4. <https://doi.org/10.1155/2015/643654>.
16. Costello, R.B., Dwyer, J.T., Saldanha, L., Baily, R.L., Merkel, J., Wambogo, E. 2016. Do Cinnamon Supplements Have a Role in Glycemic Control in Type 2 Diabetes? A Narrative Review. *J Acad Nutr Diet.* 116(11):1794-1802. <https://doi.org/10.1016/j.jand.2016.07.015>.
17. Shao, F., Gu, L., Chen, H., Liu, R., Huang, H., Ren, G. 2016. Comparison of Hypolipidemic and Antioxidant Effects of Aqueous and Ethanol Extracts of *Crataegus pinnatifida* Fruit in High-Fat Emulsion-Induced Hyperlipidemia Rats. *Pharmacogn Mag.* 12(45):64-9. <https://doi.org/10.4103/0973-1296.176049>.
18. Seo, M.J., Choi, H.S., Jeon, H.J., Woo, M.S., Lee, B.Y. 2014. Baicalin inhibits lipid accumulation by regulating early adipogenesis and m-TOR signaling. *Food Chem Toxicol.* May;67:57-64. <https://doi.org/10.1016/j.fct.2014.02.009>.
19. Xie, T., Li, K., Gong, X., Jiang, R., Huang, W., Chen, X., Tie, H., Zhou, Q., Wu, S., Wan, J., Wang, B. 2018. Paeoniflorin protects against liver ischemia/reperfusion injury in mice via inhibiting HMGB1-TLR4 signaling pathway. *Phytother Res.* Jul 26. <https://doi.org/10.1002/ptr.6161>.
20. Li, L., Yin, H., Zhao, Y., Zhang, X., Duan, C., Liu, J., Huang, C., Liu, S., Yang, S., Li, X. 2018. Protective role of puerarin on LPS/D-Gal induced acute liver injury via restoring autophagy. *Am J Transl Res.* 10(3):957-965. <https://www.ncbi.nlm.nih.gov/pubmed/29636885>.
21. Jin, C., Zhang, P.J., Bao, C.Q., Gu, Y.L., Xu, B.H., Li, C.W., Li, J.P., Bo, P., Liu, X.N. 2011. Protective effects of *Atractylodes macrocephala* polysaccharide on liver ischemia-reperfusion injury and its possible mechanism in rats. *Am J Chin Med.* 39(3):489-502. <https://doi.org/10.1142/S0192415X11008981>.
22. Lin, L., Que, R., Shen, Y., Chen, Y., Yan, N., Li, Y. 2018. Saikosaponin-d alleviates carbon-tetrachloride induced acute hepatocellular injury by inhibiting oxidative stress and NLRP3 inflammasome activation in the HL-7702 cell line. *Mol Med Rep.* 17(6):7939-7946. <https://doi.org/10.3892/mmr.2018.8849>.

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