
A Compendium of Scientific References Supporting the Efficacy of Ingredients Used in the Formulation of xEO Mega[®] Essential Oil Omega Complex

The following is a compendium of scientific references supporting the health and wellness benefits associated with the consumption of the botanical ingredients and essential dietary nutrients used in the formulation of dōTERRA's xEO Mega Essential Oil Omega Complex. xEO Mega is part of dōTERRA's Lifelong Vitality Pack and is formulated to be used daily by adults as part of a foundational dietary supplement program. Regular use of xEO Mega, along with eating a healthy diet, exercising regularly, managing stress and getting enough rest, and managing exposure to harmful environmental stressors will increase the likelihood of a lifetime full of vitality and wellness and decrease the likelihood of the premature onset of some conditions associated with aging.* xEO Mega Essential Oil Omega Complex is not formulated or intended as treatment or cure for disease. Persons with known medical conditions and pregnant or lactating women should consult a physician before starting any dietary supplement program.

Health Benefit Claims of xEO Mega Essential Oil Omega Complex:

- Promotes cardiovascular health by reducing oxidative stress and mediating healthy cellular response to inflammatory markers*
- Supports health joint function and comfort*
- Provides important modulating nutrients for healthy immune function *
- Protects against lipid oxidation*
- Supports healthy function of the brain*
- Promotes healthy skin*

* These statements have not been evaluated by the Food and Drug Administration. This product is not intended to diagnose, treat, cure, or prevent disease.

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xEO Mega[®] Ingredient Highlights

Marine Omega Blend:

1. Fish Oil Concentrate (340 mg EPA, 240 mg DHA)

Alternative names: Docosahexaenoic acid, Eicosapentaenoic acid

Key Scientific References:

1. Yashodhara BM., et al., *Omega-3 fatty acids: a comprehensive review of their role in health and disease*. Postgrad Med J., 2009 Feb;85(1000):84-90.
2. Majkova Z., et al., *Omega-3 fatty acid oxidation products prevent vascular endothelial cell activation by coplanar polychlorinated biphenyls*. Toxicol Appl Pharmacol, 2010 Dec 1.
3. Richardson ES., et al., *Electrophysiological mechanisms of the anti-arrhythmic effects of omega-3 fatty acids*. J Cardiovasc Transl Res, 2010 Dec 2.
4. Avraham Y., et al., *Fish oil promotes survival and protects against cognitive decline in severely undernourished mice by normalizing satiety signals*. J Nutr Biochem, 2010 Nov 24.
5. Bloomer RJ., et al., *Effect of eicosapentaenoic and docosahexaenoic acid on resting and exercise-induced inflammatory and oxidative stress biomarkers: a randomized, placebo controlled, cross-over study*. Lipids Health Dis., 2009 Aug 19;8:36.
6. SanGiovanni, JP and Chew, EY. *The role of omega-3 long chain polyunsaturated fatty acids in health and disease of the retina*. Prog Retin Eye Res, 2005 Jan;24(1):87-138.
7. Fakhrzadeh H., et al., *The effects of low dose n-3 fatty acids on serum lipid profiles and insulin resistance of the elderly: a randomized controlled clinical trial*. Int J Vitam Nutr Res. 2010 Apr;80(2): 107-16.
8. Shapiro, H., et al., *Effects of polyunsaturated fatty acid consumption in diabetic nephropathy*. Nat Rev Nephrol. 2010 Dec 7.
9. Mozaffarian D., et al., *Interplay between different polyunsaturated fatty acids and risk of coronary heart disease in men*. Circulation. 2005 Jan 18;111(2):157-64.

2. ASTAPURE^{®†} Astaxanthin (1 mg)

Common name: Astaxanthin

Key Scientific References:

1. Yuan JP., et al., *Potential health-promoting effects of astaxanthin: A high-value carotenoid mostly from microalgae*. Mol Nutr Food Res. 2010 Nov 18.
2. Monroy-Ruiz J., et al., *Astaxanthin-enriched-diet reduces blood pressure and improves cardiovascular parameters in spontaneously hypertensive rats*. Pharmacol Res. 2010 Sep.
3. Lu YP., et al., *Neuroprotective effect of astaxanthin on H₂O₂-induced neurotoxicity in vitro and on focal cerebral ischemia in vivo*. Brain Res. 2010 Nov 11;1360:40-8.
4. Marin DP., et al., *ROS production in neutrophils from alloxan-induced diabetic rats treated in vivo with astaxanthin*. Int Immunopharmacol. 2010 Nov 4.
5. Macedo RC., et al., *Astaxanthin addition improves human neutrophils function: in vitro study*. Eur J Nutr. 2010 Dec;49(8):447-57.
6. Wang HQ., et al., *Astaxanthin upregulates heme oxygenase-1 expression through ERK 1/2 pathway and its protective effect against beta-amyloid-induced cytotoxicity in SH-SY5Y cells*. Brain Res. 2010 Nov 11;1360:159-67.
7. Jyonouchi H., et al., *Antitumor activity of astaxanthin and its mode of action*. Nutr Cancer. 2000;36(1):59-65.
8. Kim JH., et al., *Astaxanthin improves the proliferative capacity as well as the osteogenic and adipogenic differentiation potential in neural stem cells*. Food Chem Toxicol. 2010 Jun;48(6).

Land Omega Blend:

1. Flax seed oil (220 mg)

Alternative name: *Linum usitatissimum* L.

Key Scientific References:

1. Prasad K. *Flaxseed and cardiovascular health*. J Cardiovasc Pharmacol. 2009 Nov;54(5):369.
2. Pan A., et al., *Meta-analysis of the effects of flaxseed interventions on blood lipids*. Am J Clin Nutr. 2009 Aug;90(2):288-97.
3. Williams D., et al., *Flax seed oil and flax seed meal reduce the formation of aberrant crypt foci (ACF) in azoxymethane-induced colon cancer in Fisher 344 male rats*. Food Chem Toxicol. 2007 Jan;45(1):153-9.
4. Barcelo-Coblijn G., et al., *Flaxseed oil and fish-oil capsule consumption alters human red blood cell n-3 fatty acid composition: a multiple-dosing trial comparing 2 sources of n-3 fatty acid*. Am J Clin Nutr. 2008 Sep;88(3):801-9.

5. Sekine, S., et al., *Alpha-linolenic acid-rich flaxseed oil ingestion increases plasma adiponectin level in rats*. Int J Vitam Nutr Res. 2008 Jul-Sep;78(4-5):223-9.
6. Ogborn, MR., et al., *Dietary flax oil reduces renal injury, oxidized LDL content, and tissue n-6/n-3 FA ratio in experimental polycystic kidney disease*. Lipids. 2002 Nov;37(11):1059-65.

2. Borage seed oil (100 mg)

Alternate name: Borago officinalis

Key Scientific References:

1. Brosche, T. and Platt, D. *Effect of borage oil consumption on fatty acid metabolism, transepidermal water loss and skin parameters in elderly people*. Arch Gerontol Geriatr. 2000 Mar-Apr;30(2):139-50.
2. Shahidi F. *Antioxidant factors in plant foods and selected oilseeds*. Biofactors. 2000;13(1-4):179-85.
3. Chilton, FH., et al., *Mechanisms by which botanical lipids affect inflammatory disorders*. Am J Clin Nutr. 2008 Feb;87(2):498S-503S.
4. Wu, CC., et al., *Metabolism of omega-6 polyunsaturated fatty acids in women with dysmenorrhea*. Asia Pac J Clin Nutr. 2008;17 Suppl 1:216-9.
5. Weaver KL., et al., *Effect of dietary fatty acids on inflammatory gene expression in healthy humans*. J Biol Chem. 2009 Jun 5;284(23):15400-7.
6. Rossetti RG., et al., *Oral administration of unsaturated fatty acids: effects on human peripheral blood T lymphocyte proliferation*. J Leukoc Biol. 1997 Oct;62(4):483-43.

3. Cranberry seed oil (40 mg)

Alternate name: Vaccinium macrocarpon

Key Scientific References:

1. Seeram, NP., et al., *Blackberry, black raspberry, blueberry, cranberry, red raspberry, and strawberry extracts inhibit growth and stimulate apoptosis of human cancer cells in vitro*. J Agric Food Chem. 2006 Dec 13;54(25):9329-39.
2. Neto CC. *Cranberry and its phytochemicals: a review of in vitro anticancer studies*. J Nutr. 2007 Jan;137(1 suppl):186S-193S.
3. Puupponen-Pimiä, R. et al., *Bioactive berry compounds-novel tools against human pathogens*. Appl Microbiol Biotechnol. 2005 Apr;67(1):8-18.

4. Neto CC., *Cranberry and blueberry: evidence for protective effects against cancer and vascular diseases*. Mol Nutr Food Res. 2007 Jun;51(6):652-64.
5. Chatelain K., et al., *Cranberry and Grape Seed Extracts Inhibit the Proliferative Phenotype of Oral Squamous Cell Carcinomas*. Evid Based Complement Alternat Med. 2008 Jul 23.
6. Bodet, C., et al., *Potential oral health benefits of cranberry*. Crit Rev Food Sci Nutr. 2008 Aug;48(7):672-80.

4. Pomegranate seed oil (40 mg)

Alternate name: Punica Granatum

Key Scientific References:

1. Mirmiran, P., et al., *Effect of pomegranate seed oil on hyperlipidaemic subjects: a double-blind placebo-controlled clinical trial*. Br J Nutr. 2010 Aug;104(3):402-6.
2. Grossmann, ME., et al., *Punicic acid is an omega-5 fatty acid capable of inhibiting breast cancer proliferation*. Int J Oncol. 2010 Feb;36(2):421-6.
3. Lansky, EP. and Newman, RA. *Punica granatum (pomegranate) and its potential for prevention and treatment of inflammation and cancer*. J Ethnopharmacol. 2007 Jan 19;109.
4. Albrecht, M., et al., *Pomegranate extracts potently suppress proliferation, xenograft growth, and invasion of human prostate cancer cells*. J Med Food. 2004 Fall;7(3):274-83.
5. Kohno, H., et al., *Pomegranate seed oil rich in conjugated linolenic acid suppresses chemically induced colon carcinogenesis in rats*. Cancer Sci. 2004 Jun;95(6):481-6.
6. McFarlin, BK., et al., *Pomegranate seed oil consumption during a period of high-fat feeding reduces weight gain and reduces type 2 diabetes risk in CD-1 mice*. Br J Nutr. 2009 Jul;102.

5. Natural vitamin D (Cholecalciferol 800 IU)

Alternate name: Cholecalciferol

Key Scientific References:

1. Jiménez, Álvaro S., et al., *Cholecalciferol supplements improve vitamin D deficiency in renal transplant recipients*. Transplant Proc. 2010 Oct;42(8):2921-3.
2. Hari, P., et al., *Vitamin D insufficiency and effect of cholecalciferol in children with chronic kidney disease*. Pediatr Nephrol. 2010 Dec;25(12):2483-8.
3. Verhave, G. and Siebert CE. *Role of vitamin D in cardiovascular disease*. Neth J Med. 2010 Mar;68(3):113-8.

4. Hildebolt, CF., *Effect of vitamin D and calcium on periodontitis*. J Periodontol. 2005 Sep;76.
5. Khan, QJ., et al., *The relationship between vitamin D and breast cancer incidence and natural history*. Curr Oncol Rep. 2010 Mar;12(2):136-42.
6. Mascitelli, L., et al., *[Vitamin D deficiency and cardiovascular diseases]*. Recenti Prog Med. 2010 May;101(5):202-11.
7. Zhang, HL. and Wu, J., *Role of vitamin D in immune responses and autoimmune diseases, with emphasis on its role in multiple sclerosis*. Neurosci Bull. 2010 Dec;26(6):445-54.
8. Pfeifer, M. and Mine, HW. *[The role of vitamin D in the treatment of osteoporosis in the elderly]*. Med Klin (Munich). 2006 Jun;101 Suppl 1:15-9.

6. Natural Vitamin E (d-Alpha & mixed tocopherols 60 IU)

Key Scientific References:

1. Naguib, Y., et al., *Antioxidant activities of natural vitamin E formulations*. J Nutr Sci Vitaminol (Tokyo). 2003 Aug;49(4):217-20.
2. Torricelli, P., et al., *Synergic effect of α -tocopherol and naringenin in transglutaminase-induced differentiation of human prostate cancer cells*. Amino Acids. 2010 Oct 28.
3. Cook-Mills, JM., and McCary, CA. *Isoforms of Vitamin E Differentially Regulate Inflammation*. Endocr Metab Immune Disord Drug Targets. 2010 Nov 5.
4. Engin, KN. *Alpha-tocopherol: looking beyond an antioxidant*. Mol Vis. 2009;15:855-60.
5. De la Fuente, M., et al., *Vitamin E ingestion improves several immune functions in elderly men and women*. Free Radic Res. 2008 Mar;42(3):272-80.
6. Vignini, A., et al., *A study on the action of vitamin E supplementation on plasminogen activator inhibitor type 1 and platelet nitric oxide production in type 2 diabetic patients*. Nutr Metab Cardiovasc Dis. 2008 Jan;18(1):15-22.

CPTG[®] Essential Oil Blend (60 mg):

1. Clove

Alternate name: Syzygium aromaticum

Key Scientific References:

1. Santin, JR., et al., *Gastroprotective activity of essential oil of the Syzygium aromaticum and its major component eugenol in different animal models*. Naunyn Schmiedebergs Arch Pharmacol. 2010 Dec 8.

2. Arung, ET., et al., *Inhibitory components from the buds of clove (Syzygium aromaticum) on melanin formation in B16 melanoma cells*. Fitoterapia. 2010 Sep 19.
3. Devi, KP., et al., *Eugenol (an essential oil of clove) acts as an antibacterial agent against Salmonella typhi by disrupting the cellular membrane*. J Ethnopharmacol. 2010 Jul 6;130(1).
4. Pinto, E., et al., *Antifungal activity of the clove essential oil from Syzygium aromaticum on Candida, Aspergillus and dermatophyte species*. J Med Microbiol. 2009 Nov;58(Pt 11).
5. Rodrigues, TG., et al., *In vitro and in vivo effects of clove on pro-inflammatory cytokines production by macrophages*. Nat Prod Res. 2009;23(4):319-26.
6. Chaieb, K., et al., *The chemical composition and biological activity of clove essential oil, Eugenia caryophyllata (Syzygium aromaticum L. Myrtaceae): a short review*. Phytother Res. 2007 Jun;21(6):501-6.

2. Frankincense

Alternate names: Boswellia Frereana, Boswellia Serrata, Boswellia Carterii, Boswellia Rivae, Boswellia Neglecta, Boswellia Sacra

Key Scientific References:

1. Blain, EJ., et al., *Boswellia frereana (frankincense) suppresses cytokine-induced matrix metalloproteinase expression and production of pro-inflammatory molecules in articular cartilage*. Phytother Res. 2010 Jun;24(6):905-12.
2. Chang, SY. *[Effects of aroma hand massage on pain, state anxiety and depression in hospice patients with terminal cancer]*. Taehan Kanho Hakhoe Chi. 2008 Aug;38(4):493.
3. Pedretti, A., et al., *Effects of topical boswellic acid on photo and age-damaged skin: clinical, biophysical, and echographic evaluations in a double-blind, randomized, split-face study*. Planta Med. 2010 Apr;76(6):555-60.
4. Moussaieff, A., et al., *Incensole acetate, and incense component, elicits psychoactivity by activating TRPV3 channels in the brain*. FASEB J. 2008 Aug;22(8):3024-34.
5. Frank, MB., et al., *Frankincense oil derived from Boswellia carteri induces tumor cell specific cytotoxicity*. BMC Complement Altern Med. 2009 Mar 18;9:6.
6. Ammon, HP. *Modulation of the immune system by Boswellia serrata extracts and boswellic acids*. Phytomedicine. 2010 Sep; 17(11):862-7.

3. Thyme

Alternate names: Thymus Vulgaris, Thymus Ciliatus,

Key Scientific References:

1. Ait M'barek, L., et al., *Cytotoxic effect of essential oil of thyme (Thymus broussonetti) on the IGR-OV1 tumor cells resistant to chemotherapy*. Braz J Med Biol Res. 2007 Nov;40(11).
2. Segvić, Klarić M., et al., *Antifungal activity of thyme (thymus vulgaris L.) essential oil and thymol against moulds from damp dwellings*. Lett Appl Microbiol. 2007 Jan;44(1):36-42.
3. Youdim, KA. and Deans, SG. *Dietary supplementation of thyme (Thymus vulgaris L.) essential oil during the lifetime of the rat: its effects on the antioxidant status in liver, kidney and heart tissues*. Mech Ageing Dev. 1999 Sep 8;109(3):163-75.
4. Soković, M., et al., *Antifungal activity of the essential oil of THymus vulgaris L. and thymol on experimentally induced dermatomycoses*. Drug Dev Ind Pharm. 2008 Dec;34(12):1388.
5. Woollard, AC., et al., *The influence of essential oils on the process of wound healing: a review of the current evidence*. J Wound Care. 2007 Jun;16(6):255-7.
6. Burt, SA., et al., *Increase in activity of essential oil components of carvacrol and thymol against Esherichia coli 0157:H7 by addition of food stabilizers*. J Food Prot. 2005 May;68.

4. Cumin

Alternate names: Cuminum cyminum, Apiaceae

Key Scientific References:

1. Wanner, J., et al., *Chemical composition and antimicrobial activity of cumin oil (Cuminum cyminum, Apiaceae)*. Nat Prod Commun. 2010 Sep;5(9):1355-8.
2. Janahmadi, M., et al., *Effects of the fruit essential oil of Cuminum cyminum Linn. (Apiaceae) on pentylenetetrazol-induced epileptiform activity in F1 neurones of Helix aspersa*. J Ethnopharmacol. 2006 Mar 8;104(1-2):278-82.
3. Lacobellis, NS., et al., *Antibacterial activity of Cuminum cyminum L. and Carum carvi L. essential oils*. J Agric Food Chem. 2005 Jan 12;53(1):57-61.
4. Hashim, S., et al., *Modulatory effects of essential oils from spices on the formation of DNA adduct by aflatoxin B1 in vitro*. Nutr Cancer. 1994;21(2):169-75.

5. Hajlaoui, H., et al., *Chemical composition and biological activities of Tunisian Cuminum cyminum L. essential oil: a high effectiveness against Vibrio spp.* Food Chem Toxicol. 2010 Aug-Sep;48(8-9):2186-92.
6. Pai, MB., et al., *Antifungal efficacy of Punica granatum, Acacia nilotica, Cuminum cyminum, and Foeniculum vulgare on Candida albicans: and vitro study.* Indian J Dent Res. 2010 Jul-Sep;21(3):334-6.

5. Orange

Alternate name: Citrus sinensis

Key Scientific References:

1. Araújo, CP Jr., et al., *Acaricidal activity against Tetranychus urticae and chemical composition of peel essential oil of three Citrus species cultivated in NE Brazil.* Nat Prod Commun. 2010 Mar;5(3):471-6.
2. Singh, P., et al., *Chemical profile, antifungal, antiaflatoxigenic and antioxidant activity of Citrus maxima Burm. and Citrus sinensis (L.) Osbeck essential oils and their cyclic monoterpene, DL-limonen.* Food Chem Toxicol. 2010 Jun;48(6):1734-40.
3. Jimbo, D. et al., *Effect of aromatherapy on patients with Alzheimer's disease.* Psychogeriatrics. 2009 Dec;9(4):173-9.
4. Michaelakis, A., et al., *Citrus essential oils and four enantiomeric pinenes against Culex pipiens (Diptera: Culicidae).* Parasitol Res. 2009 Sep;105(3):769-73.
5. O'Bryan, CA., et al., *Orange essential oils antimicrobial activities against Salmonella spp.* J Food Sci. 2008 Aug;73(6):M264-7.
6. Fisher, K. and Phillips, C. *The mechanism of action of a citrus oil blend against Enterococcus faecium and Enterococcus faecalis.* J Appl Microbiol. 2009 Apr; 106(4):1343.
7. Yip, YB. and Tam, AC. *An experimental study on the effectiveness of massage with aromatic ginger and orange essential oil for moderate-to-severe knee pain among the elderly in Hong Kong.* Complement Ther Med. 2008 Jun;16(3):131-8.

6. Peppermint

Alternate name: Mentha Piperita

Key Scientific References:

1. Sharafi, SM., et al., *Protective effects of bioactive phytochemicals from Metha piperita with multiple health potentials.* Pharmacogn Mag. 2010 Jul;6(23):147-53.

2. Kang, HY, et al., *[Effects of oral care with essential oil on improvement in oral health status of hospice patients]*. J Korean Acad Nurs. 2010 Aug;40(4):473-81.
3. Schmidt, E., et al., *Chemical composition, olfactory evaluation and antioxidant effects of essential oil from Mentha x piperita*. Nat Prod Commun. 2009 Aug;4(8):1107-12.
4. Rakover, Y., et al., *[The treatment of respiratory ailments with essential oils of some aromatic medicinal plants]*. Harefuah. 2008 Oct;147(10):783-8, 838.
5. Moss, M., et al., *Modulation of cognitive performance and mood by aromas of peppermint and ylang-ylang*. Int J Neurosci. 2008 Jan;118(1):59-77.
6. Hur, MH., et al., *Reduction of mouth malodour and volatile sulphur compounds in intensive care patients using an essential oil mouthwash*. Phyther Res. 2007 Jul;21(7):641-3.
7. Shkurupiř, VA., et al., *[Use of essential oil of peppermint (Mentha piperita) in the complex treatment of patients with infiltrative pulmonary tuberculosis]*. Probl Tuberk Bolezn Legk. 2006;(9):43-5.

7. Ginger

Alternate name: Zingiber officinale Roscoe

Key Scientific References:

1. Nogueira de Melo, GA., et al., *Inhibitory effects of ginger (Zingiber officinale Roscoe) essential oil on leukocyte migration in vivo and in vitro*. J Nat Med. 2011 Jan;65(1):241-6.
2. Yang, L., et al., *[Antioxidative and cytotoxic properties of diarylheptanoids isolated from Zingiber officinale]*. Zhongguo Zhong Yao Za Zhi. 2009 Feb;34(3):319-23.
3. Norajit, K., et al., *Antibacterial effect of five Zingiberaceae essential oils*. Molecules. 2007 Aug 23;12(8):2047-60.
4. Shukla, Y. and Singh, M. *Cancer preventive properties of ginger: a brief review*. Food Chem Toxicol. 2007 May;45(5):683-90.
5. Zhou, HL., et al., *The modulatory effects of the volatile oil of ginger on the cellular immune response in vitro and in vivo in mice*. J Ethnopharmacol. 2006 Apr 21;105(1-2):301-5.
6. Huang, Q., et al., *[The effect of ginger on serotonin induced hypothermia and diarrhea]*. Yakugaku Zasshi. 1990 Dec;110(12):936-42.
7. Surh, YJ., et al., *Anti-tumor-promoting activities of selected pungent phenolic substances present in ginger*. J Environ Pathol Toxicol Oncol. 1999;18(2):131-9.

8. Caraway

Alternate names: Carum carvi L., Nigella sativa.

Key Scientific References:

1. Dadkahah, A., et al., *Inhibitory Effects of Dietary Caraway Essential Oils on 1,2-Dimethylhydrazine-Induced Colon Carcinogenesis is Mediated by Liver Xenobiotic Metabolizing Enzymes*. Nutr Cancer. 2010 Nov 23:1.
2. Samojlik, I., et al., *Antioxidant and hepatoprotective potential of essential oils of coriander (Coriandrum sativum L.) and caraway (Carum carvi L.) (Apiaceae)*. J Agric Food Chem. 2010 Aug 11;58(15):8848-53.
3. Freise, J. and Köhler, S. [*Peppermint oil-caraway oil fixed combination in non-ulcer dyspepsia--comparison of the effects of enteric preparations*]. Pharmazie. 1999 Mar;54(3).
4. Shwaireb, MH. *Caraway oil inhibits skin tumors in female BALB/c mice*. Nutr Cancer. 1993;19(3):321-5.
5. Terzi, A., et al., *Protective effects of Nigella sativa on intestinal ischemia-reperfusion injury in rats*. J Invest Surg. 2010 Feb;23(1):21-7.
6. Ebru, U., et al., *Cardioprotective effects of Nigella sativa oil on cyclosporine A-induced cardiotoxicity in rats*. Basic Clin Pharmacol Toxicol. 2008 Dec;103(6):574-80.

9. German Chamomile

Alternate names: Chamomilla recutita (L.) Rauschert, Compositae

Key Scientific References:

1. Srivastava, JK., et al., *Chamomile: A herbal medicine of the past with bright future*. Mol Med Report. 2010 Nov 1;2(6):895-901.
2. Lee, SH., et al., *Effect of German chamomile oil application on alleviating atopic dermatitis-like immune alterations in mice*. J Vet Sci. 2010 Mar;11(1):35-41.
3. Yoshinari, T., et al., *Spiroethers of German chamomile inhibit production of aflatoxin G and trichothecene mycotoxin by inhibiting cytochrome P450 monooxygenases involved in their biosynthesis*. FEMS Microbiol Lett. 2008 Jul;284(2):184-90.
4. Babenko, NA. and Shakhova, EG. *Effects of flavonoids on sphingolipid turnover in the toxin-damaged liver and liver cells*. Lipids Health Dis. 2008 Jan 28;7:1.

5. Kobayashi, Y., et al., *Antipruritic effect of the single oral administration of German chamomile flower extract and its combined effect with antiallergic agents in ddY mice*. J Ethnopharmacol. 2005 Oct 3;101(1-3):308-12.
6. Uteshev, BS., et al., *[The immunomodulating activity of the heteropolysaccharides from German chamomile (Matricaria chamomilla) during air and immersion cooling]*. Eksp Klin Farmakol. 1999 Nov-Dec;62(6):52-5.

xEO Mega Essential Oil Omega Complex Labeling

Supplement Facts		
Serving Size: Three (4) Liquicaps		
Servings per Container: 30		
Amount Per Serving		% DV
Marine Omega Blend:		
Fish oil concentrate (340 mg EPA, 240 DHA) (1000mg)		**
ASTAPURE®† Astaxanthin (1 mg)		**
Land Omega Blend:		
Flax seed oil (220 mg)		**
Borage seed oil (100 mg)		**
Cranberry seed oil (40 mg)		**
Pomegranate seed oil (40 mg)		**
Natural Vitamin D (cholecalciferol) (800 IU)		200%
Natural Vitamin E (d-Alpha & mixed tocopherols) (60 IU)		200%
CPTG® Essential Oil Blend: 60 mg		
Clove, Frankincense, Thyme, Cumin, Orange, Peppermint, Ginger, Caraway, German Chamomile		

** Daily Value not established



Other Ingredients: Fatty acid of coconut, vegetable cellulose, silica, fatty acid of palm.

Directions: Take 2 liquicaps with morning and evening meals (4 liquicaps per day)

Caution: Keep out of reach of children. Pregnant or lactating women and people with known medical conditions should consult a physician before using. Do not use if safety seal is broken. Does not contain milk or wheat products. Store in a cool, dry place.

Note: The products in dōTERRA's Lifelong Vitality Pack including Alpha CRS+, xEO Mega, and Microplex VMz contain no wheat or milk. Additionally, no nuts are used in the manufacturer of these products. However, these products are produced in a facility that uses nut fruits.

Manufactured in the U.S.A. exclusively for dōTERRA Int., LLC, 370 West Center Street, Orem, UT 84057, www.doterra.com. For customer support, call 801-615-7200.