

TECHNICAL MONOGRAPH

PRODUCT NAME: Pulmonair

CONSTITUENTS:	Common Name	Botanical Name
	Aniseed	<i>Pimpinella anisum</i>
	Fish oil	<i>Jecorus oleum</i>
	Spirulina	<i>Spirulina maxima</i>

INTENDED PURPOSE

Pulmonair is an herbal and fish oil composite rich in trace minerals, all essential amino acids and antioxidants. Spirulina reduces the release of histamines in allergic reactions. Its antiviral activity encourage the proliferation of good bacteria in the gut, such as Lactobaccili.

EVIDENCE FOR EFFICACY

- **PIMPINELLA ANISUM (ANISEED)** IS AN AROMATIC PLANT THAT HAS BEEN USED IN TRADITIONAL MEDICINE (ESPECIALLY ITS FRUITS) AS A CARMINATIVE, AROMATIC, DISINFECTANT, AND GALACTAGOGUE. THESE COMPOUNDS EXHIBIT ANTIFUNGAL, ANTIVIRAL, ANTIBACTERIAL, ANTI-INFLAMMATORY AND ANTI-ULCER PROPERTIES (KOSALEC ET AL. 2005; TABANCA ET AL. 2007; AL-BAYATI 2008; LEE ET AL. 2011; SHOJAI AND ABDOLLAHI FARD 2012). EXTRACTS FROM THE SEEDS ARE ASSOCIATED WITH NEUROPROTECTIVE AND IMMUNE ENHANCING EFFECTS. AN HERBAL COMPOSITE CONTAINING FENNEL REDUCED THE PRESENCE OF INFLAMMATORY CELLS IN THE RESPIRATORY TRACT AND REDUCED BREATHING RATE IN HORSES WITH HEAVES (PEARSON ET AL. 2007).
- **Fish Oil (Jecorus oleum)** is the partially destearinated fixed oil from fresh livers of cods, haddocks and other fish. It is a good dietary source of vitamins A, D, E and is a rich source of N-3 polyunsaturated fatty acids, popularly known as omega-3 fatty acids. The main omega-3 fatty acids in fish oil are eicosapentaenoic acid (C20:5 n-3, EPA) and docosahexaenoic acid (C22:6 n-3, DHA). Dietary fish oil has been associated with maintenance of good health, maintenance and support cardiovascular health, reduced pain of rheumatoid arthritis, improved cognitive health and/or brain function, improved mood balance and reduced serum triglycerides / triacylglycerols (de Moffarts et al. 2007; Anonymous 2010; Vineyard et al. 2010). It can be also be used topically to promote wound healing. (Jecoris Oleum Summary Report, Committee for Veterinary Medical Products, The European Agency for the Evaluation of Medicinal Products, June 1999. http://www.ema.europa.eu/docs/en_GB/document_library/Maximum_Residue_Limits_-_Report/2009/11/WC500014508.pdf).
- **SPIRULINA MAXIMA.** SPIRULINA IS ONE OF THE BLUE-GREEN MICROALGAE AND HAS HIGH NUTRITIONAL VALUE. ANIMALS REGULARLY CONSUMING THIS MICROALGAE SHOW IMPROVEMENTS IN GROWTH AND FERTILITY. ANIMALS ALSO SHOW IMPROVED BLOOD LIPID PROFILE, INCREASED ANTIOXIDANT ACTIVITY AND SHOWS POTENTIAL FOR COMBATTING CARDIOVASCULAR DISEASES, INFLAMMATORY DISEASES, CANCER, AND VIRAL INFECTIONS. (DENG AND CHOW 2010; HOLMAN BW, MALAU-ADULI 2013; KAHN ET AL. 2005).

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