

TECHNICAL MONOGRAPH

PRODUCT NAME: UTP

CONSTITUENTS:	Common Name	Botanical Name
	Chamomile	
	Deglycyrrhizinated licorice	
	Marshmallow	
	Meadowsweet	<i>Filipendula ulmaria</i>
	Slippery Elm	

INTENDED PURPOSE

UTP (ulcer therapy plus) improves overall joint health, reduces pain, reduces inflammation, provides cellular nourishment and boosts cartilage synthesis. Reduces further damage due to exercise or strain. Rich in glycosaminoglycans and antioxidant herbs. Powerfully anti-inflammatory.

EVIDENCE FOR EFFICACY

- **Chondroitin sulphate is a complex structural carbohydrate that is the main structural component of cartilage and provides much of its resistance to compression. Oral supplements of chondroitin sulfate improve synovial fluid properties in osteoarthritis patients, reduce inflammatory markers and oxidative stress. When used with glucosamine it may prevent cartilage GAG degradation. Chondroitin has beneficial effects on the metabolism of tissues involved in osteoarthritis including chondrocytes, synoviocytes and cells from subchondral bone (Hochberg et al. 2013; Dechant et al. 2005; Matsuno et al. 2009). Alleviated symptoms of degenerative joint disease are evidenced by improved stride characteristics in horses (Forsyth et al. 2006).**
- **Curcuma longa (Turmeric) has a long history of use as a spice, food additive, and an herbal medicine. Curcumin, a bioactive extract of Turmeric, has a broad range of health benefits including stimulating anti-oxidant and anti-inflammatory activities, suppression of ageing-related genes, skin tissue regeneration and wound healing, and has anti-cancer properties (Lans et al. 2006; Epstein et al. 2010; Thangapazham et al. 2013).**
- **Filipendula ulmaria (Meadowsweet) contains the anti-pain drug salicin and has traditionally been used to treat inflammation and pain (Drummond et al. 2013). Meadowsweet may have potential to prevent or reduce the severity of gastric ulcers by inhibiting the growth of bacteria (H. pylori) that cause ulceration (Cwikla et al. 2010).**
- **FISH OIL 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).**
- **MENTHA X PIPERITAE (PEPPERMINT) MINT HAS LONG BEEN USED IN EVERY DAY LIFE IN VARIOUS FOOD ITEMS AS A FLAVOURING AGENT AND AS A MEDICINAL INGREDIENT. EXTRACTS FROM THE**

- VINEYARD ET AL. 2010).
- **MENTHA X PIPERITAE** (PEPPERMINT) MINT HAS LONG BEEN USED IN EVERY DAY LIFE IN VARIOUS FOOD ITEMS AS A FLAVOURING AGENT AND AS A MEDICINAL INGREDIENT. EXTRACTS FROM THE LEAVES HAVE SIGNIFICANT ANTIMICROBIAL AND ANTIVIRAL ACTIVITIES, STRONG ANTIOXIDANT ACTIONS, AND POTENTIAL TO ENHANCE IMMUNE SYSTEM FUNCTIONS (McKAY AND BLUMBERG 2006; SHARAFI ET AL. 2010; AHMAD ET AL. 2012).
 - **Methyl sulfonyl methane** (MSM) is a naturally occurring sulfur compound with well-known antioxidant and anti-inflammatory properties. MSM alleviated pain, inflammation and improved physical function on osteoarthritis patients (Debbi et al. 2011; Kalman et al. 2012). These benefits were enhanced when MSM was used in combination with glucosamine (Usha and Naidu 2004). Chronic daily oral supplementation exerts protective effects on oxidative and inflammatory exercise-induced injury in humans and horses (Marañón et al. 2008).
 - **Vitamin C** (ascorbic acid) is a powerful antioxidant found in many fresh fruits and vegetables and which is also synthesized to some degree in horses. (Gallagher et al. 2014; Rosenbaum et al. 2010; Wang et al. 2007; Frech and Clegg 2007).

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