

Ingredient Rationale: ProMotion®

Glucosamine HCl – Supports the body’s ability to generate new joint tissue, thereby supporting mobility. Supplementation of this bioavailable ingredient directly increases the production of hyaluronic acid, which is essential to the rehydration of the joint matrix. Glucosamine is also a rate-limiting nutrient for the production of the proteoglycan component of the cartilage matrix.

Hydrolyzed Collagen – Supports cartilage and joint matrix synthesis by supplying the amino acids necessary for collagen synthesis. Hydrolyzed collagen supplies both essential and nonessential amino acids in a highly purified, digestible form. One important amino acid it contains is hydroxyproline. Hydroxyproline makes up a major portion of collagen (approximately 10%) and is not readily available from the diet, so supplementation is important.

Bioflavanol – A potent free radical scavenger with vitamin C sparing properties. May also help support the replacement of broken collagen bundles, helping to restore flexibility to connective tissue.

Cysteine – Antioxidant that increases the body’s endogenous supply of glutathione. Cysteine is a sulfur-containing molecule, which can donate its sulfur groups to collagen for proper cross-linking and to proteoglycans to help them maintain their proper structure and function.

Vitamin C – Another important antioxidant necessary for collagen synthesis, it helps maintain normal connective tissue. Vitamin C will also stimulate the production of hydroxyproline, another necessary component of collagen.

Manganese – A significant trace mineral that can act alone as an antioxidant in the blood stream and is also a cofactor of the endogenous superoxide dismutase antioxidant system. Superoxide dismutase is important within the joint matrix to prevent oxidative damage in the joint. Manganese is also required by the body to maintain the strength of tendons, ligaments and bones.

Zinc – An important trace mineral that is an antioxidant on its own and is important as a coenzyme for metabolism. Zinc promotes healthy skin and supports the immune system. Supplementation is important, as zinc has been greatly depleted in the agricultural soils over the years.