# designs for health Australia

# Complete Joint Collagen



Helps to support healthy tendons, ligaments and joint cartilage in active individuals, relieving joint soreness and helping to reduce cartilage wear and tear.





### **OVERVIEW**

- > Contains 10 g hydrolysed collagen from both TENDOFORTE® and FORTIGEL®
- > Contains 396 mg curcumin from HydroCurc®, a water dispersible and highly bioavailable Turmeric extract
- > In active individuals, Complete Joint Collagen may:
  - Support healthy tendons and ligaments
  - Aid connective tissue production and enhance connective tissue health
  - Support joint health
  - Support cartilage health and reduce cartilage loss and
  - Reduce mild joint soreness

#### Each 11 g serve contains: Curcumin 396 ma From Min. HydroCurc® 440 mg Hydrolysed Collagen 10 g\*

\*From a blend of FORTIGEL® 5 g and TENDOFORTE® 5 g Collagen Peptides (hydrolysed bovine collagen)

Serving Form	Oral Powder
Flavour	Raspberry
Pack Size	330 g
Servings Per Pack	30

## **Directions for Use**

Dissolve 11 g (1 level scoop) in 200 ml water and consume immediately. Take once daily or as directed by your health professional.

## **Excipients**

Organic Raspberry Juice Powder Dried Raspberry Powder Maltodextrin Silicon dioxide dl-alpha-tocopheryl acetate

Ethoxylated hydrogenated castor oil Glyceryl monooleate Lecithin Cold pressed lime oil Medium chain triglycerides

# Allergen Information

No added: Gluten, soy, lactose, nuts or dairy.

# Warnings

- If symptoms persist, talk to your health professional.
- · Contains phenylalanine and sulfites.

Designed and packed in Australia from imported ingredients.



No Added Soy



No Added Gluten



No Added Dairy



No Added Nuts



No Artificial Flavours or Colours



No Added Preservatives











# Complete Joint Collagen



#### **EDUCATION**

Complete Joint Collagen has been formulated with two specific collagen peptides – FORTIGEL® and TENDOFORTE® – to target the health of the connective tissues of the joints (cartilage, tendons and ligaments), plus a highly bioavailable form of Turmeric to combat oxidative stress and inflammation in stressed, painful and injured joints.

#### **GELITA®** Hydrolysed Collagen

Dietary collagens are very similar in nature to the collagens found in human tissues. This makes dietary collagens ideal for supporting body collagen health and production. Collagen has a unique amino acid profile and is rich in the modified amino acid hydroxyproline (12%), glycine (22%) and proline (13%). This makes it unique as a concentrated source of these amino acids and a more effective choice when the clinical goal is to provide support to the various connective tissues of the body such as bone, tendons, ligaments, muscles, cartilage and skin.

GELITA® Bioactive Collagen Peptides (BCPs) directly target and stimulate connective tissue cells, via both cell signalling and by contribution to the body's total amino acid pool from which amino acids are drawn when required. Each of the BCPs due to their unique molecular weights have the ability to bind to specific receptors found on the surface of each cell type, stimulating the metabolism of the target cells, and decreasing the enzymatic breakdown of the same collagenous tissues. In this case, TENDOFORTE® supports tendon and ligament health by stimulating type I, II and IV collagen, proteoglycan and elastin synthesis, and FORTIGEL® supports the health of the joints by acting on chondrocytes.

## **FORTIGEL®**

The specific collagen peptides in FORTIGEL® have been shown in a number of clinical studies 1.2.3.4 to improve the composition of hyaline cartilage in subjects with early signs of joint degeneration as well as younger sports people with functional joint pain. Supplementation with FORTIGEL® peptides results in statistically significant increases in proteoglycan content, and decreases in proteoglycan breakdown compared with placebo, suggesting a supportive role in joint health via a reduction in progressive wear and tear processes which can help to reduce the risk of joint deterioration. This can support athletic performance and quality of life for those of us who wish to maintain an active lifestyle.

#### TENDOFORTE®

TENDOFORTE® has been trialled in athletes with joint instability following tendon and ligament injuries and has been shown to support the functional and mechanical properties of connective tissues including proteoglycans and elastin in ligaments and tendons. TENDOFORTE® supplementation (along with well-structured strengthening exercises and back-to-fitness plans) supports the tensile strength of ligaments and tendons, helping to alleviate existing injury, stabilise the injured joint, supporting joint function and helping to prevent re-injury.<sup>5,6</sup>

#### HvdroCurc®

A cold-water dispersible turmeric extract. HydroCurc® utilises patented LipiSperse® technology to enhance the bioavailability of lipid soluble curcuminoids which are ordinarily poorly absorbed in the aqueous environment of the gut.<sup>7</sup>

The anti-inflammatory properties of curcumin are well established in the literature. It is a dual inhibitor of the arachidonic acid cascade (inhibiting both LOX and COX) preventing the formation of inflammatory leukotrienes. <sup>8,9</sup> It also quells NF- $\kappa\beta$  activation by decreasing I $\kappa$ B- $\alpha$  phosphorylation therefore also inhibiting the NF- $\kappa\beta$  activation pathway (inhibiting the transcription of these proteins rather than their enzymatic functions). <sup>9</sup> Further to this, Curcumin is able to affect prostaglandins, thromboxane, nitric oxide, collagenase, elastase, hyaluronidase, TNF- $\alpha$  and the cytokines IL-6, 8 and 12. It also downregulates Matrix Metalloproteinase formation. <sup>8,9</sup>

Curcumin also possesses antioxidant activities. It's unique chemical structure consisting of carbon-carbon double bonds, b-diketo group and phenyl rings with hydroxyl, and o-methoxy groups gives Curcumin the ability to bind free radicals, hydrogen atom donors, and electron donors, neutralising free radicals. It can quench superoxide radicals, hydrogen peroxide, and nitric oxide and also inhibit lipid peroxidation by increasing the activity of various antioxidant enzymes such as SOD, CAT, GPx, and OH-1. It also upregulates the activity of glutathione transferase thereby increasing GSH levels.<sup>10</sup>

Curcumin's anti-inflammatory and antioxidant activities give it a unique ability to halt the cyclic progressive relationship between tissue oxidation and inflammation.<sup>10</sup>

References supplied on request.