# **COLLAGEN COMPLEX™**



# Research-backed collagen peptides for bones, joints, and skin\*

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#### WHAT ARE COLLAGEN PEPTIDES?

Collagen is a special type of protein essential in human anatomy and physiology that accounts for 25% to 30% of the body's total protein.<sup>1</sup> It is a primary structural component of connective tissue, including ligaments, tendons, and cartilage. Collagen proteins are rich in the amino acids hydroxyproline, glycine, and proline. The amino acid and peptide compositions of dietary collagens are very similar to those of human collagens, which may also be derived from various sources such as pork, beef, fish, or chicken. Consequently, dietary collagen peptides provide nutritional support for the optimization of body collagen turnover and renewal.\* Although other dietary proteins can provide these amino acids, collagen is a more concentrated source, which may play a role in supporting the strength and flexibility of bones, tendons, and cartilage.<sup>2</sup> Collagen peptides may be beneficial for athletes in that they can support muscle mass, tendon health, strength, and recovery following exerciseinduced muscle damage and may even promote athletic performance.<sup>3,4</sup> Supplementing with collagen peptides, such as those found in Collagen Complex™, may support sports performance through promoting the health of joints, bones, and muscles.<sup>2,3,5</sup>

#### FORMULA HIGHLIGHTS

- Delivers 12.5 g of absorbable, hydrolyzed collagen
   peptides per serving
- Features three patented collagen peptides, including FORTIGEL® and VERISOL®
- Derived from grass-fed bovine collagen peptides
- Easy-dissolving and flavorless with no added sweeteners
- Can add to any beverage or shake
- Soy-free, gluten-free, dairy-free; non-GMO
- NSF Certified for Sport<sup>®</sup>

### CLINICAL EVIDENCE

#### **Promotes Healthy Joints\***

Supplementing with collagen peptides may help attenuate activity-related joint pain.<sup>5-7</sup> Damage to connective tissues caused by prolonged use, misuse, and overuse often leads to persistent discomfort and even pain during exercise. One randomized controlled trial (RCT) involving 180 active men

and women between the ages of 18 and 30 who experienced exercise-related knee pain (from running, team sports, or fitness training) supplemented with either 5 g/day of FORTIGEL® or a placebo for 12 weeks.<sup>5</sup> The results showed that those who took the FORTIGEL® experienced a greater reduction in knee pain during exercise than the placebo.<sup>5</sup>



#### May Help Support Post-Exercise Recovery\*

Strenuous exercise can induce muscle damage, leading to multiple days of reduced performance, discomfort, and limited activity. Collagen peptides may help mitigate exercise-induced muscle soreness.<sup>38</sup> One RCT investigated 20 healthy men who did not exercise regularly over a 33-day period. During this time, they supplemented with either 10 g/day of collagen peptides or a placebo. At the end of the month, after performing a bout of squats, those who had taken collagen peptides reported less muscle soreness and fatigue immediately after the exercises, as well as two days later, compared to the placebo group.<sup>8</sup>

#### May Help Support Muscle Mass and Strength\*

The loss of muscle mass, often beginning around the age of 30, is a common aspect of aging.<sup>9</sup> However, this decline can potentially be mitigated through resistance training, increased protein intake, and supplementation with collagen peptides.<sup>10–13</sup> One randomized study involving 97 men found that supplementing 15 g/day of collagen peptides for 12 weeks, in combination with resistance training, resulted in a significantly greater increase in fat-free mass compared to the placebo group.<sup>10</sup>

#### May Help With Exercise Performance\*

In addition to aiding strength and recovery, collagen peptides have also been shown to support endurance in both male and female athletes.<sup>4,14</sup> A placebo-controlled study of 59

recreationally active women, aged 18 to 40, found that supplementing 15 g/day of collagen peptides for 12 weeks not only improved running times but also influenced a lower heart rate at lactate threshold compared to the placebo.<sup>14</sup> Similarly, another placebo-controlled study with the same parameters, conducted on 32 recreationally active men, also found that the collagen peptides led to slightly improved running performance compared to the placebo.<sup>4</sup>

#### BENEFITS

- Collagen peptides promote healthy joints in athletes<sup>5-7</sup>
- Collagen peptides may help with post-exercise muscle soreness due to muscle damage and repair<sup>3,8</sup>
- Collagen peptides may support lean muscle mass and strength when combined with resistance training<sup>10-13</sup>
- Collagen peptides may support athletic performance, specifically in runners<sup>4,14</sup>

# HOW TO TAKE

As a dietary supplement, mix 13 grams (approx. one scoop) in eight ounces of water per day, or as directed by your health-care practitioner. For best results, add powder prior to adding water.

## **COLLAGEN PEPTIDES SCIENCE**

Aging and joint overuse cause loss of volume and functionality of cartilage and other joining tissues.



PEPTIDE TYPE	BENEFITS*
FORTIGEL®	<ul> <li>Reduced post-exercise joint discomfort in athletes*</li> <li>Improved collagen in joints, cartilage structure, and tendon strength and elasticity*</li> </ul>
VERISOL*	<ul> <li>Upregulated collagen, elastin, and glycosaminoglycans*</li> <li>Support vibrancy and normal skin texture*</li> <li>Helps promote a healthy inflammatory response*</li> <li>Supports healthy skin elasticity and hydration*</li> <li>May support nail strength and integrity*</li> </ul>



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# References

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