

# Collagen Overview

## Why We Need It

Collagen is the most abundant structural protein in the human body, making up about 30% of total protein. It forms the foundation of connective tissues like skin, joints, tendons, cartilage, bones, and ligaments. Collagen production naturally declines with age, stress, UV exposure, and poor nutrition — leading to visible signs of aging, joint discomfort, and tissue breakdown.

## Functions in the Body

### Type I Collagen

Found in skin, bones, tendons, and ligaments  
Supports skin elasticity and wound healing  
Promotes bone strength and structure

### Type III Collagen

Found in skin, blood vessels, and internal organs  
Supports skin firmness and vascular health  
Works alongside Type I in skin and tissue repair

### Type II Collagen

Found in cartilage and joints  
Essential for joint lubrication and shock absorption  
Helps reduce symptoms of osteoarthritis

## There is no official RDI for collagen, but general supplementation guidelines suggest:

General support: 5–10 g/day of hydrolyzed collagen peptides

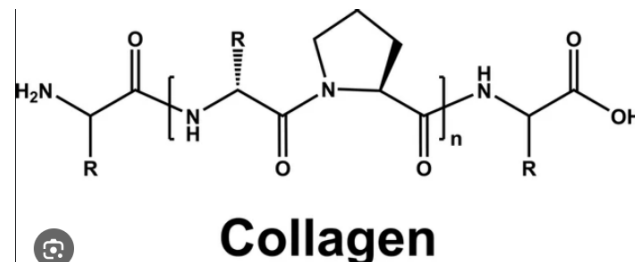
Joint/skin benefits: 10–15 g/day

Post-exercise recovery: 15–20 g/day (with 50–100 mg Vitamin C)

Collagen is most effective when combined with cofactors like Vitamin C, zinc, and amino acids.

## Benefits of Supplementation

- Improves skin elasticity, hydration, and appearance
- Supports joint health and reduces stiffness or pain
- Enhances hair and nail strength
- Promotes bone density and structure
- Aids in gut lining repair and muscle recovery
- Supports wound healing and tissue regeneration



## Most Bioavailable Form

Hydrolyzed Collagen (Peptides): Easily absorbed and most commonly used in supplements.

Undenatured Type II (UC-II): Effective for joint support in small doses.

Whole Food (Bone Broth): Contains gelatin, amino acids, and minerals — slower absorption but nutritionally rich.

## Best Food Sources

Animal-Based Sources: Bone broth, Chicken skin, Fish skin and scales, Beef or pork tendons, Gelatin-based foods

Note: Collagen is only found in animal tissues. While some plant-based products claim to support collagen, they actually provide precursors (like Vitamin C or silica), not collagen itself.

## When & How to Take It

- Take once daily, preferably on an empty stomach or before meals
- Combine with Vitamin C to boost natural collagen production
- For joint support, take 30–60 minutes before exercise
- Stay consistent — visible benefits typically appear within 8–12 weeks

## Conclusion

Collagen is a foundational protein for skin, joints, bones, and connective tissues. Natural production declines with age, but supplementing with high-quality collagen — especially when paired with cofactors like Vitamin C — helps support structure, beauty, and recovery from the inside out.