# Copper Tripeptide: A Multifaceted Regenerative Compound

Copper Tripeptide is a naturally occurring human blood peptide with diverse regenerative properties. It declines with age but offers numerous benefits for tissue repair and cellular function.





# Tissue Regeneration and Wound Healing

Skin Repair Copper Tripeptide accelerates skin healing and regeneration, promoting faster wound closure. Hair Follicle Stimulation It enhances hair growth by rejuvenating dormant follicles and improving scalp health. Gastrointestinal Healing The peptide aids in repairing stomach and intestinal linings, supporting digestive health. Bone Tissue Regeneration It promotes bone tissue formation, potentially aiding in fracture healing and osteoporosis management.

## Extracellular Matrix Enhancement

#### Collagen Production

Copper Tripeptide stimulates collagen synthesis, improving skin elasticity and strength.

#### Glycosaminoglycans

It increases glycosaminoglycan production, enhancing tissue hydration and resilience.

#### Decorin Synthesis

The peptide promotes decorin production, crucial for proper collagen fiber organization.

### Vascular and Neural Effects

1 Angiogenesis

Copper Tripeptide stimulates the formation of new blood vessels, improving tissue oxygenation.

2 Nerve Outgrowth

It promotes nerve regeneration and growth, potentially aiding in neurological recovery.

3 Cellular Communication

The peptide enhances intercellular signaling, optimizing tissue function and repair processes.



# Antioxidant and Antiinflammatory Properties

#### Free Radical Scavenging

Copper Tripeptide acts as an antioxidant, protecting cells from oxidative stress.

#### Inflammation Reduction

It helps mitigate inflammatory responses, promoting a balanced healing environment.

#### Cellular Protection

The peptide shields cells from damage, potentially slowing aging processes.

#### Gene Activation

It activates antioxidant genes, enhancing the body's natural defense mechanisms.



# Molecular and Genetic Influences



#### DNA Repair

Copper Tripeptide activates DNA repair genes, maintaining genomic integrity.



#### Protein Regulation

It influences the Ubiquitin/Proteasome System, regulating protein turnover.



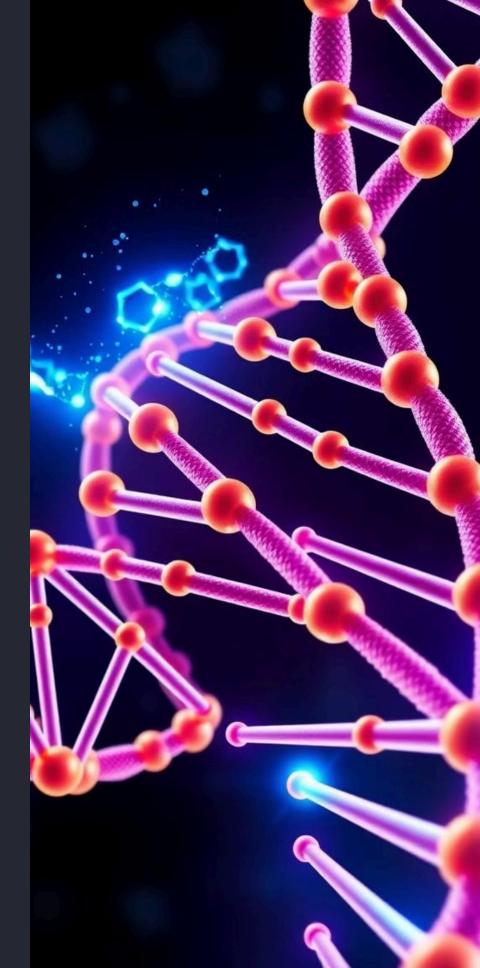
#### Cellular Stemness

The peptide increases cellular stemness, enhancing regenerative potential.



#### **Growth Factor Modulation**

It affects the TGF superfamily, influencing tissue repair processes.





# Metabolic and Cancer-Related Effects

| Effect                 | Function   | Potential Impact                   |
|------------------------|--|------------------------------------|
| Insulin Suppression    | Reduces insulin and insulin-like gene expression | May influence metabolism and aging |
| Fibrinogen Reduction   | Suppresses fibrinogen synthesis                  | Potential cardiovascular benefits  |
| Cancer Gene Modulation | Affects cancer-controlling genes                 | Possible anti-cancer properties    |

# Administration and Dosage

Vial Preparation

1 30 mg vial of Copper Tripeptide is reconstituted with 6 mL

solution.

Dosage Measurement

20 units are drawn into a syringe for each dose.

Administration

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The solution is injected subcutaneously daily for optimal effects.

