

GHK-Cu (Copper Peptide) Overview

What is GHK-Cu?

GHK-Cu (Glycyl-L-Histidyl-L-Lysine Copper) is a naturally occurring copper-binding tripeptide found in human plasma and tissues. Levels of naturally occurring GHK-Cu decline with age.

GHK-Cu acts as a signaling molecule involved in:

- Tissue remodeling
- Collagen production
- Wound healing
- Angiogenesis (formation of new blood vessels)
- Anti-inflammatory pathways
- Skin regeneration

GHK-Cu is one of the most researched regenerative peptides, particularly in dermatology and tissue repair. Research demonstrates effects on fibroblast activity, extracellular matrix remodeling, and collagen synthesis, although large-scale human trials for injectable anti-aging applications remain limited. (Clinical Peptide)

How Does GHK-Cu Work?

GHK-Cu works by binding copper and influencing cellular repair pathways.

Potential mechanisms include:

- Stimulating fibroblasts to produce collagen and elastin
- Supporting extracellular matrix remodeling
- Increasing glycosaminoglycan production (including hyaluronic acid pathways)
- Modulating inflammatory signaling
- Supporting angiogenesis and tissue oxygenation
- Promoting wound repair signaling
- Supporting healthier skin structure and resilience

Research has shown GHK-Cu can stimulate collagen synthesis and influence genes involved in tissue repair and regeneration. (PubMed Central (PMC))

Potential Benefits

GHK-Cu is commonly used or studied for:

Skin & Aesthetic Applications

- Increased collagen production

- Improved skin firmness and elasticity
- Improved fine lines and wrinkles
- Improved skin texture
- Support after aesthetic procedures
- Improved wound healing response
- Improved appearance of photoaged skin

Hair Applications

- Support of hair follicle health
- Potential improvement in scalp environment
- Support for hair thickness and quality

Regenerative Applications

- Tissue repair support
- Scar remodeling support
- Improved healing environment

GHK-Cu is particularly popular in aesthetics because its mechanism aligns with collagen induction treatments such as microneedling, laser resurfacing, and other regenerative procedures. (PeptideJournal)

Typical Dosing (Injectable Use)

Because injectable GHK-Cu is not FDA-approved for cosmetic or wellness use and standardized dosing is not established, protocols vary widely.

Injection Method

Administration:

- Subcutaneous injection
- Abdomen, thigh, or upper arm
- Rotate injection sites

Timing:

- **Preferred in the morning**

Common schedules include:

- **Daily dosing**
- **30 days on / 15 days off**

Maintenance cycles may be repeated depending on goals and patient response.

Possible side effects include:

- Injection-site irritation
- Redness or swelling
- Temporary tenderness
- Headache (uncommon)
- Possible skin sensitivity changes

Because GHK-Cu involves copper biology, excessive dosing may theoretically affect copper balance, although the clinical significance with peptide dosing is not well established.

Recommended Monitoring

Depending on duration and dosing, consider:

- CBC
- CMP
- Serum copper (especially with prolonged use)
- **Zinc level (because zinc and copper balance each other)**

Clinical Pearls

- **GHK-Cu is primarily a regenerative/collagen peptide, not a fat-loss peptide, immune peptide, or growth hormone peptide.**
- It does not stimulate GH or IGF-1 like CJC/Ipamorelin or Sermorelin.
- It is often paired conceptually with:
 - **Microneedling**
 - **Laser resurfacing**
 - **SkinPen treatments**
 - **Collagen-stimulating injectables**
 - **Tissue repair protocols**

GHK-Cu is best viewed as a long-term remodeling peptide where results are gradual and related to cellular repair pathways rather than immediate cosmetic changes.

Price and dosing:

- **\$220** for 100 mg vial
- **We** mix the powder with 3 ml of sterile solution

- **Keep refrigerated after mixing**
- **300 units in the vial after you mix it**
- **daily injection is 4 units in belly or back of the arm, absorbs best in fat**
- **75 shots per vial**
- **Purchase multiple vials at the same time and receive 5% off**
- **Available for pick up at 700 court street, suit 3, Clearwater FL 33756**