GHK

Molecular Formula: glycyl-L-histidyl-L-lysine
Molecular Weight: 340.4 g/mol | Sequence: C14H24N6O4

DESCRIPTION:

GHK is a tripeptide with the amino acid sequence glycyl-histidyl-lysine. It naturally occurs in human plasma, saliva, and urine. In plasma the level of GHK is about 200 ng/mL at age 20, but declines to 80 ng/mL by age 60. This decline in the GHK-level coincides with the noticeable decrease in regenerative capacity of an organism. Scientific research has shown that Scientific research has revealed that GHK can assist in wound healing, infection control, hair growth, cancer, cognitive health, and facial cosmetic use.

PROTOCOL:

Content & **Potency:** Provided as a 10mg lyophilized vial

Vial reconstitution: 1ml sterile water for injection

Suggested dosage: Inject 2.5mg (0.25ml or 25units) subcutaneously 3 times per week

CLINICAL RESEARCH:

GHK and DNA: Resetting the Human Genome to Health

During human aging there is an increase in the activity of inflammatory, cancer promoting, and tissue destructive genes plus a decrease in the activity of regenerative and reparative genes. The human blood tripeptide GHK possesses many positive effects but declines with age. It improves wound healing and tissue regeneration (skin, hair follicles, stomach and intestinal linings, and boney tissue), increases collagen and glycosaminoglycans, stimulates synthesis of decorin, increases angiogenesis, and nerve outgrowth, possesses antioxidant and anti-inflammatory effects, and increases cellular stemness and the secretion of trophic factors by mesenchymal stem cells. Recently, GHK has been found to reset genes of diseased cells from patients with cancer or COPD to a more healthy state. Cancer cells reset their programmed cell death system while COPD patients' cells shut down tissue destructive genes and stimulate repair and remodeling activities. In this paper, we discuss GHK's effect on genes that suppress fibrinogen synthesis, the insulin/insulin-like system, and cancer growth plus activation of genes that increase the ubiquitin-proteasome system, DNA repair, antioxidant systems, and healing by the TGF beta superfamily. A variety of methods and dosages to effectively use GHK to reset genes to a healthier state are also discussed.

Pickart, L., Vasquez-Soltero, J. M., & Margolina, A. (2014). GHK and DNA: resetting the human genome to health. BioMed research international, 2014, 151479. https://doi.org/10.1155/2014/151479