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GHK-Cu Peptide Patient Education

Health and wellness optimization depend on reasonable preventative efforts which includes making sure that all of the essential nutrients and minerals our cells need are available. GHK-Cu is one of these essential nutrients that our body needs. It is found naturally in the blood and aids the body in activating tissue remodeling and repair, attracting immune cells, and plays a crucial role in the body's regeneration processes. Supplementing GHK-Cu can be a great way to increase the aging body's ability to regenerate itself the way it could when it was younger. GHK-Cu was first discovered in 1973 and since then, has been extensively studied. It has a wealth of positive and health-promoting effects in many tissues and systems and has been widely used in anti-aging and cosmetic products in humans for decades without any adverse effects. It has become known as one "the anti-aging peptide."

What is GHK-Cu?

GHK-Cu (also known as copper tripeptide), is a short chain of amino acids that naturally occurs in the body. Amino acids are the building blocks of protein, so peptides are sort of like shorter proteins. This peptide is made up of three amino acids: Glycine, Histidine, and Lysine (GHK). These amino acids then bind together with a copper molecule to make GHK-Cu.

GHK-Cu occurs naturally in the human body. It is most commonly found in the plasma of the blood, although it can also be found in urine and saliva. While it occurs in all of us, it tends to decline with age. In healthy 20 years olds, you will usually see levels of GHK-Cu at about 200 ng/ml in your blood plasma. By the time you reach 60, your GHK-Cu declines to an average of about 80 ng/ml

What are GHK-Cu Peptides used for?

Because of its properties, GHK-Cu is typically used as a tissue regeneration, antiaging, and renewal agent. It has been found to help repair tissue and lung damage and it may even help to regenerate nerves. It is an anti-inflammatory, can help repair damaged DNA and may even help prevent cancer. GHK-Cu has also been found to increase how quickly ulcers heal. It also has been shown to reduce wrinkles and stimulate hair growth.

Skin Repair: GHK-Cu's most well-known effects are in skin and wound repair. It does this by elevating levels of antioxidant enzymes, contracting wounds, and speeding up tissue growth.

Anti-Aging: One of the more promising uses of GHK-Cu is actually in cosmetics. It seems to have powerful anti-aging effects, including the substantial reduction of wrinkles and fine lines on the skin as well as increasing skin firmness and elasticity. Studies suggest that GHK-Cu peptides are better than

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vitamin C and retinoic acid in increasing collagen and reducing fine lines and wrinkles. It's now a very well-known anti-aging agent and can be commonly found in skincare products.

Tissue Remodeling: GHK-Cu peptides help repair damaged tissue, including creating protein synthesis of collagen. It plays a big role in signaling tissue remodeling which removes damaged/scarred tissue and generates new, healthy tissue. Some studies have also found that there is an effect on the repair of lung tissue and also in tissue in the digestive system.

Hair growth/thickness: GHK-Cu has been found to be effective in treating hair loss, including male-pattern baldness. It can be used for thinning hair as well, stimulating growth and improving the strength of the hair that's already there. It can also improve the likelihood that hair transplants will be successful.

Anti-tumor and cancer: GHK-Cu has also been found to stimulate the creation of decorin, which is an important component not only in the formation of collagen but also in the defense against cancerous tumors. Some studies have shown that GHK-Cu changed the expression of some genes that are involved in the formation and spread of colon cancer, meaning that it could be effective as a preventative measure.

How does GHK-Cu work?

Recent research suggests that it probably has an effect through its influence on genes. Each of your cells has a copy of your genes. These are basically the blueprint to help your cells duplicate and create new cells. With age, the DNA gets damaged and changed so they express themselves differently. Research suggests GHK-Cu prevents and reverses some of this damage. Some studies have found that this peptide can change how genes are expressed and can reverse expression to their healthier state. That basically means that the cells are able to repair themselves and duplicate better.

It also has some properties that make it a potent anti-aging agent. GHK-Cu has been shown to significantly reduce wrinkles in the skin and increase collagen formation. As a result, the skin becomes more elastic and it reduces its aging appearance. It also appears that this peptide can stimulate hair growth. GHK-Cu hair growth occurs by regenerating and protecting hair follicles from damage.

Who can take GHK-Cu?

Most individuals can take GHK-Cu for the benefits it provides. However, you should not use this product if you are allergic to GHK-Cu. In addition, before using GHK-Cu, talk to your provider because your dose may need to be different, if:

- you have kidney disease
- you smoke
- you are pregnant or breastfeeding

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- taking any prescription medications
- taking over-the-counter medicines, vitamins, and herbal products

What are the potential side effects of GHK-Cu peptides?

GHK-Cu is considered very safe for most individuals. One of the likely reasons that it's not toxic is that it already occurs naturally in your body, thus, it's not a foreign substance. However, some individuals may experience short-term side effects such as headache, dizziness/fatigue, slightly elevated blood pressure, nausea, redness/pain in the area of injection, and an increase in appetite. Although rare, some people may be allergic to GHK-Cu. Allergic reactions can include hives, difficulty, and/or swelling of your face, lips, tongue, or throat. Notify your medical provider if you have any of these rare side effects.

It is important that you continue to see your regular medical doctor for your usual health care, tests, and routine health maintenance. We are not replacing your primary physician.

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