



Clinical Applications

Aids reducing the depth of wrinkles

TRIO is a combination blend of Leuphasyl[®], Argireline[®], and GHK-Cu. One of the hallmarks of aging is facial wrinkling, characterized by folding, furrows, and creasing. The process of developing facial wrinkles is in large part due to changes in collagen production and increased collagen degradation in combination with environmental exposure. One of the most significant environmental contributors to the development of wrinkles is muscle contractions, which cause repetitive facial positioning. Therefore, treatment options that reduce facial muscular contractions and preserve collagen health are most useful to prevent and potentially reverse the rate of development of facial wrinkling.

Discussion

Biochemically, muscles contract due to the neural release of acetylcholine, a neurotransmitter, or chemical that the body uses to signal nerve activation or deactivation. Given this mechanism, BOTOX[®] has been widely used to combat the progression of facial wrinkling. While BOTOX[®] is generally a safe and effective treatment option, potentially more reliable options exist in the form of topical cosmeceutical peptides that have Botox-like and signaling mechanisms of action

Leuphasyl[®] (Pentapeptide-18) is a five amino acid botox-like peptide that reduces the depth of wrinkles and fine lines by modulating acetylcholine activity at the neuron's synaptic junction, thereby limiting muscle activity. Leuphasyl[®] improves skin firmness, tone, and serves as an effective moisturizer.

Argireline[®] (acetyl hexapeptide-8) is a six amino acid peptide first used in 2001. It, like Leuphasyl[®], is a non-toxic peptide that mimics the function of BOTOX[®]. Study participants using Argireline[®] topical cream have shown up to a 48% improvement in fine lines and wrinkles surrounding the eye area.

GHK-Cu (copper tripeptide) is a naturally occurring copper peptide found throughout the human body. GHK Cu acts directly on fibroblasts to increase the production of collagen, elastin, proteoglycans, glycosaminoglycans, and decorin, all of which play vital roles in tissue maintenance and repair. This copper tripeptide complex is proven effective in improving skin appearance by targeting skin firmness, thickness, light damage, elasticity, and wrinkling. Independently, GHK-Cu reduces fine lines and wrinkles by up to 35%

It is crucial to consider the use of cosmeceutical peptides at the first sign of facial wrinkling. The synergistic combination of Leuphasyl[®], Argireline[®], and GHK-Cu is both a safe and effective treatment for slowing, halting, and even reversing the progression of facial wrinkling. Furthermore, this topical product is an excellent adjuvant to regular BOTOX[®] administration, as it increases the lifetime and efficacy of a given BOTOX[®] treatment. Liv Health practitioners recommend a minimum 60-day trial for best results!



Nutrition

INGREDIENTS

Aqua (Deionized Water), Helianthus Annuus (Sunflower) Oil, Dimethicone, Cetyl Alcohol, Stearyl Alcohol, Ceteareth-20, Propylene Glycol, Polyacrylamide, C13-14 Isoparaffin, Laureth-7, Acetyl Hexapeptide-8, Pentapeptide-18, Caprylyl Glycol, Copper Peptide, Isopropyl Myristate, Caprylic/Capric Triglyceride, Lecithin, Dimethicone, Glycerin, Xanthan Gum, Tetrasodium EDTA, Phenoxyethanol, Ethylhexylglycerin

Directions: Apply four clicks to desired area once daily. Avoid contact with eyes

References

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2. Lim SH, Sun Y, Thiruvallur Madanagopal T, Rosa V, Kang L. Enhanced Skin Permeation of Anti-wrinkle Peptides via Molecular Modification [published correction appears in *Sci Rep.* 2018 Apr 20;8(1):6500]. *Sci Rep.* 2018;8(1):1596. Published 2018 Jan 25. doi:10.1038/s41598-017-18454-z
3. Errante F, Ledwoń P, Latajka R, Rovero P, Papini AM. Cosmeceutical Peptides in the Framework of Sustainable Wellness Economy. *Front Chem.* 2020;8:572923. Published 2020 Oct 30. doi:10.3389/fchem.2020.572923

