Clinical Evidence

PRODUCT, DESCRIPTION AND EVIDENCE | REFERENCE: FS10-50 | PUBLISH DATE: 19/08/2025

FREEZE

TX BOOST® SERUM

A revolutionary Tx Boost® Serum designed to extend and amplify the effects of cosmetic treatments by up to 8-weeks. The maximum strength Hexapeptide-8 delivers by not only reducing the appearance of existing wrinkles but focusing on muscle relaxation after facial expressions, which helps the skin recover faster from daily movements. The formula addresses age-related changes in all skin layers, provider younger, more voluminous skin.

KEY BENEFITS

- Visibly reduces wrinkle depth, making skin look up to 5 years younger in just 5 days, and up to 8 years younger after 28 days.
- Reduces the area of wrinkles by an average of 11% in just 5 days.
- Speeds up muscle relaxation time, helping the skin recover its appearance after facial expressions.
- Increases skin volume on the cheeks by 13.8% after 28 days.
- Improves skin firmness and elasticity, with a 14.1% increase in elasticity after 28 days.
- Diminishes fine lines by 14.7% in 14 days.
- Boosts new type I collagen synthesis by 53.7%.
- Increases skin radiance by 17.3% after 28 days.

DIRECTIONS FOR USE

For best results, apply a pea-sized amount of the serum to the targeted area. Gently massage into the skin until fully absorbed. Use post-treatment to boost and prolong the desired effects.

WARNINGS

For external use only. Avoid contact with eyes. If this occurs wash affected area thoroughly with water. If irritation occurs, discontinue use.

Store this product below 40°C.

INGREDIENTS

Aqua, Aloe Barbadensis Leaf Juice, Glycerin, Acetyl Hexapeptide-8, Carbomer, Sodium Gluconate, Benzyl Alcohol, Sodium Hydroxide, Dehydroacetic Acid, Sodium Benzoate, Potassium Sorbate.

ACTIVE INGREDIENTS

Aloe Barbadensis Leaf Juice 3%
Glycerin 3%
Acetyl Hexapeptide-8 0.05mg*

ALOE BARBADENSIS LEAF JUICE (ALOE VERA)

Ingredient Claims:

Soothes irritated skin	Moisturises and hydrates dry skin
Reduces trans epidermal water loss	Encourages skin healing and improves skin's overall condition
Improve skin elasticity	

The botanical name of Aloe Vera is Aloe Barbadensis miller. It belongs to Asphodelaceae (Liliaceae) family, and is a shrubby or arborescent, perennial, xerophytic, succulent, pea-green colour plant. The Aloe vera plant has been known and used for centuries for its health, beauty, medicinal and skin care properties. The name Aloe vera derives from the Arabic word "Alloeh" meaning "shining bitter substance," while "vera" in Latin means "true". 2000 years ago, the Greek scientists regarded Aloe vera as the universal panacea. The Egyptians called Aloe "the plant of immortality.

It grows mainly in the dry regions of Africa, Asia, Europe and America. Aloe Barbadensis is a useful additive for cosmetics as it has many different properties to counteract the effects of ageing and to protect the skin. Aloe barbadensis, or Aloe Vera, is a succulent plant which offers many benefits and is suited for all skin types, especially dry, damaged, broken, sensitive and irritated skin. It offers anti-inflammatory, antimicrobial, antioxidant, humectant and soothing and anti-itch properties for skin. Aloe Vera contains Vitamin B complex, folic acid, Vitamin C and carotene, which is a precursor of Vitamin A.

Aloe soothes the skin, prevents trans epidermal water loss (TEWL). It cools and hydrates the skin, moisturises and promotes healing from breakouts. Aloe vera contains 75 potentially active constituents: vitamins, enzymes, minerals, sugars, lignin, saponins, salicylic acids and amino acids.

Links:
https://www.ncbi.nlm.nih.gov/pmc/articles/PMC2763764/
https://www.researchgate.net/publication/334123567_Review_on_Aloe_Vera

GLYCERIN

Ingredient Claims:

Excellent moisturising properties	Enhances skin elasticity
Calms and soothes irritated skin	Promotes skin barrier function
Reduces trans epidermal water loss	Soothes hot or sunburned skin

Glycerin is a humectant which is present in all-natural lipids. Derived from natural substances by hydrolysis of fats and by fermentation of sugars. This palm-free vegetable Glycerin is widely used in cosmetic products and provides the following benefits:

- Moisturising: Glycerin has excellent moisturising properties. It attracts and retains moisture from the environment, helping to hydrate the skin and prevent dryness. It forms a protective layer on the skin, reducing water loss and maintaining its natural moisture balance.

- Skin barrier repair: Glycerin can support the skin's barrier function by strengthening the outermost layer of the skin, known as the stratum corneum. This can help improve the skin's ability to retain moisture and protect it from external irritants.

- Soothing and calming: Glycerin has soothing properties that can help alleviate skin irritation, itching, and inflammation. It can be beneficial for conditions such as eczema, psoriasis, or dry, sensitive skin.

- Anti-ageing effects: Glycerin has the ability to improve the appearance of fine lines and wrinkles. By maintaining skin hydration, it can enhance the skin's elasticity and firmness, giving it a smoother and more youthful appearance.

- Compatibility with various skin types: Glycerin is generally well-tolerated by different skin types, including sensitive and acne-prone skin. It is non-comedogenic, meaning it won't clog pores or contribute to breakouts.

- Enhances product effectiveness: Glycerin is often used as a key ingredient in skincare formulations because it helps other ingredients penetrate the skin more effectively. It can enhance the delivery of active ingredients, allowing them to work more efficiently.

- Cooling effect: Glycerin has a cooling effect on the skin, making it useful in products such as facial mists or soothing gels. It can provide relief for hot or sunburned skin.

Links:
International Journal of Cosmetic Science, August 2016, ePublication
British Journal of Dermatology, July 2008, pages 23-34
Journal of Cosmetic Dermatology, June 2007, pages 75-82
Proceeding of the National Academy of Sciences, June 2003, pages 7,360-7,365
https://www.ncbi.nlm.nih.gov/pmc/articles/PMC8395744/

ACETYL HEXAPEPTIDE-8

Ingredient claims:

Up to 31% faster relaxation of facial muscles	Reduced appearance of fine lines by up to 14.7%
Boosts type 1 collagen by up to 25.9% in aged skin	Skin looks 13.8% more plump
Enhances synthesis of new collagen by 53.7%	1.5% reduction in skin sagginess
Wrinkle area reduced by 11% in 5 days	Facial muscles up to 11.1% more relaxed
Crow's feet appear 5.9% smoother	

Commonly referred to as "Botox in a jar" because it inhibits the release of neurotransmitters and relaxes the facial muscles, this relaxation of facial muscles in turn reduces the appearance of expression lines and wrinkles. Acetyl Hexapeptide-8 is a peptide compound that is used to reduce the appearance of wrinkles brought on by repeated facial expressions. It is composed of chains of amino acids known as peptides. Fine lines and wrinkles around the eyes and mouth typically form due to repeated facial expressions (such as smiling, frowning, or furrowing the brow in deep concentration or frustration). Acetyl Hexapeptide-8 can temporarily remove the wrinkles by intercepting messages from the brain to facial muscles, thereby preventing muscle contractions that can lead to wrinkles.

When Hexapeptide-8 and Botulinum toxin type-A (BTA) injections are used together, they reduce wrinkles for almost eight weeks longer than BTA alone.

In a study of 45 Caucasian volunteers, aged 35 to 60, they were given 50 UI Botulinum toxin type A injections in their crow's feet, frown lines, and forehead. They also applied a cream with hexapeptide-8 or a placebo cream to their face twice a day for four months. To track changes in wrinkles, skin roughness, and wrinkle length on the crow's feet, frown lines, and forehead, researchers used 2D and 3D facial imaging.
The results showed that after one, three, and four months, participants who got the active peptide combination treatment had noticeably fewer wrinkles than those who received BTA with a placebo. This combination treatment extended the wrinkle-free period by nearly eight weeks more than BTA on its own.

Acetyl Hexapeptide-8 and Botulinum toxin type-A (BTA) injections can keep wrinkles at bay for nearly 8 weeks longer than BTA alone.
In the recent study, 45 Caucasian volunteers, both male and female, aged between 35 and 60, received 50 UI Botulinum toxin type A injections in the crow's feet, frown lines, and forehead areas. They also applied a cream containing 5% Acetyl Hexapeptide-8 solution or a placebo cream to their entire face twice daily for 4 months. Researchers utilized 2D and 3D facial imaging to monitor changes in wrinkle visibility, skin roughness, and wrinkle length in areas such as crow's feet, frown lines, and the forehead.

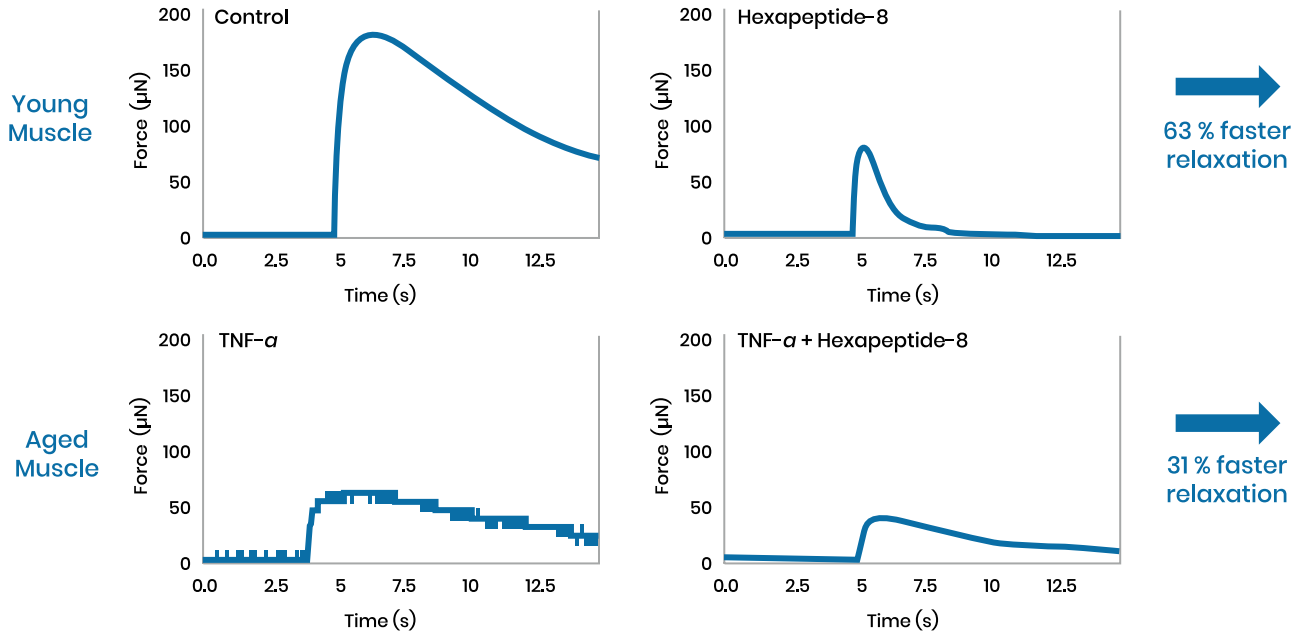
Results showed that after 1, 3, and 4 months, participants who received the active peptide combination treatment exhibited significantly fewer wrinkles compared to those who received BTA and a placebo. This combination treatment extended the wrinkle-free period by almost 8 weeks longer than BTA alone.

In addition to reducing the appearance of expression lines, Acetyl Hexapeptide-8 can also improve the texture of the skin. It stimulates collagen production, which helps to firm and tighten the skin, giving it a smoother and more youthful appearance.

Skin hydration also improves with Acetyl Hexapeptide-8 application. It increases the production of hyaluronic acid, which is a natural moisturiser that helps to keep the skin hydrated and plump.

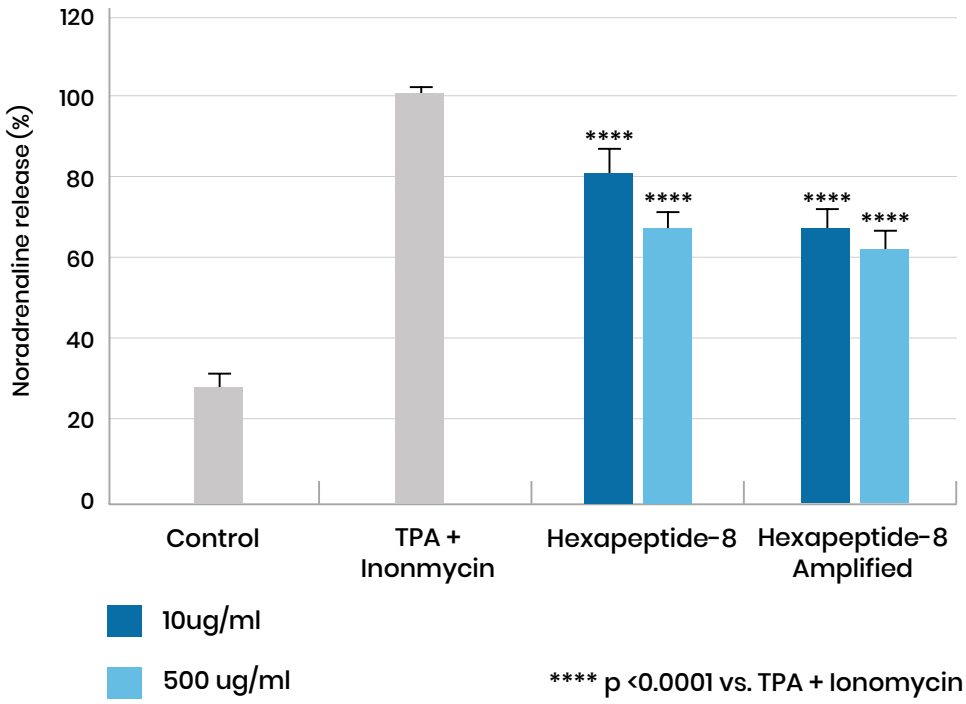
Reduced muscle contraction in 3D bioprinted muscles in both young and aged muscle. Faster muscle relaxation in both groups.

TPA + Ionomycin= calcium binding agent



The peptide helped decrease the relaxation half-time of young and aged muscles by 63% and 31%, respectively.

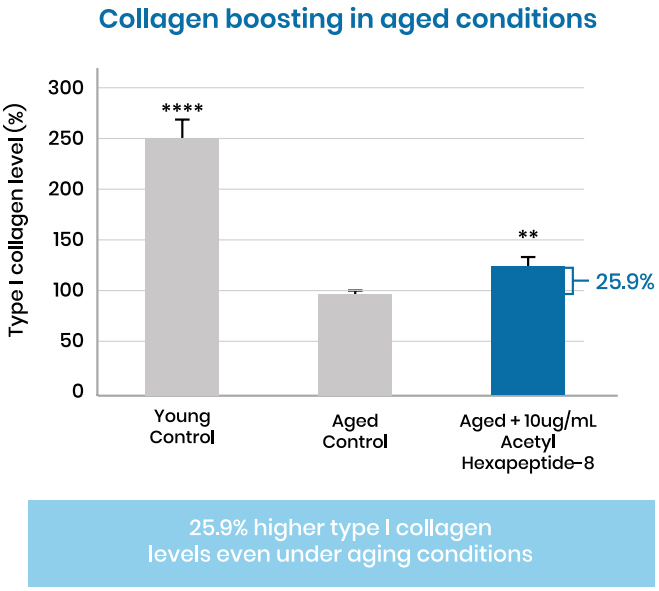
The peptide reduced the strength of muscle contraction, while also providing a faster muscle relaxation, helping to recover the skin appearance after facial expressions.



Collagen boosting in aged conditions

This test was performed to evaluate the ability of the peptide to induce type I collagen synthesis even under ageing conditions.

Replicative senescence was induced in human dermal fibroblasts while these were treated with 10µg/ml Hexapeptide-8 peptide or were left untreated control underwent half of the passages of the aged non-treated control.
Type I collagen levels were quantified by alphaLISA assay, and ß-galactosidase staining was performed to ensure the state of senescence of the culture.
ß-galactosidase is an enzyme considered a biomarker of senescence. When cells are treated with the substrate of galactosidase previously linked to a dye, if galactosidase is present and yields an insoluble coloured compound that stains the cells in blue colour. Therefore, the higher the number of senescent cells, the more blue colour in the images.

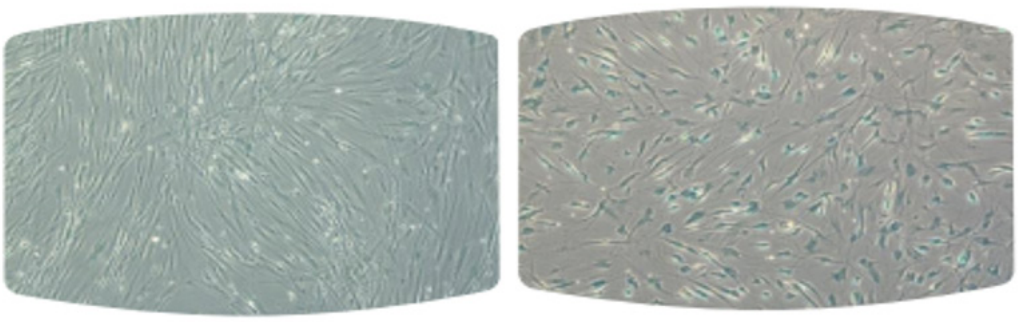


Control non-treated cells
vs. Aged control: **p<0.01 / ****p<0.0001

Senescence marker (ß-galactosidase)

Young fibroblasts

Aged fibroblasts



Human fibroblasts stained with ß-galactosidase (in blue), a biomarker to identify senescent cells.

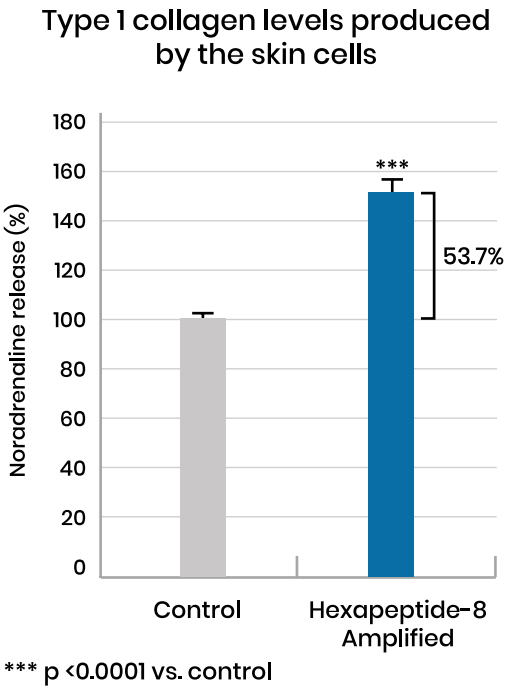
Increase in Type 1 collagen production

This test was performed to evaluate the ability of Acetyl Hexapeptide 8 to enhance the production of new collagen by non-senescent skin cells.

Human dermal fibroblasts co-cultured with human keratinocytes were incubated with 0.5µ/ml Hexapeptide-8 for 48hr or were left with only the medium as a control.

Then, the protein levels of type I collagen were evaluated by using an alphaLISA assay.

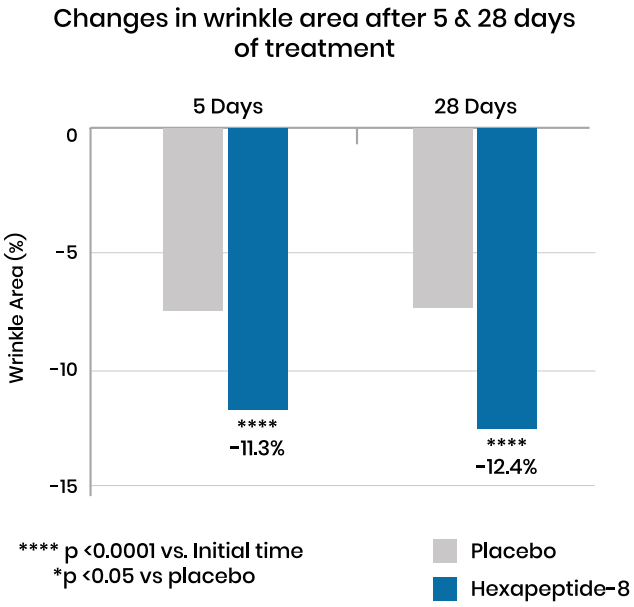
A notable increase in the level of new type 1 collagen was found after the treatment with Acetyl Hexapeptide 8. It has the ability to enhance the synthesis of new collagen by 53.7%.

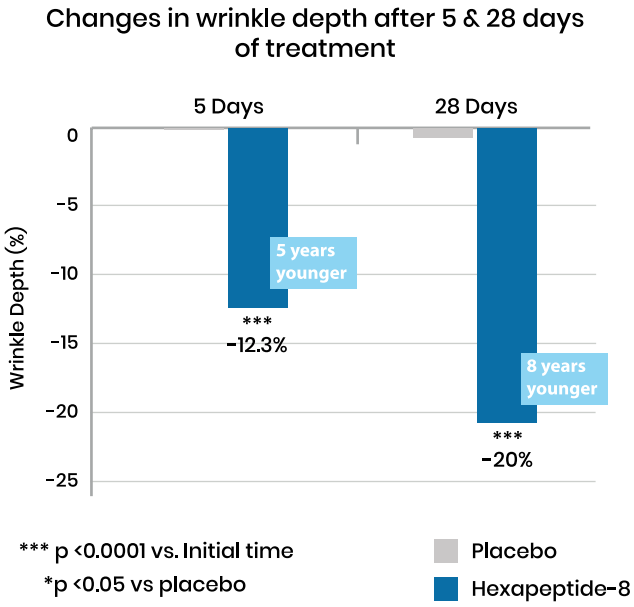


Improving the appearance of expression wrinkles

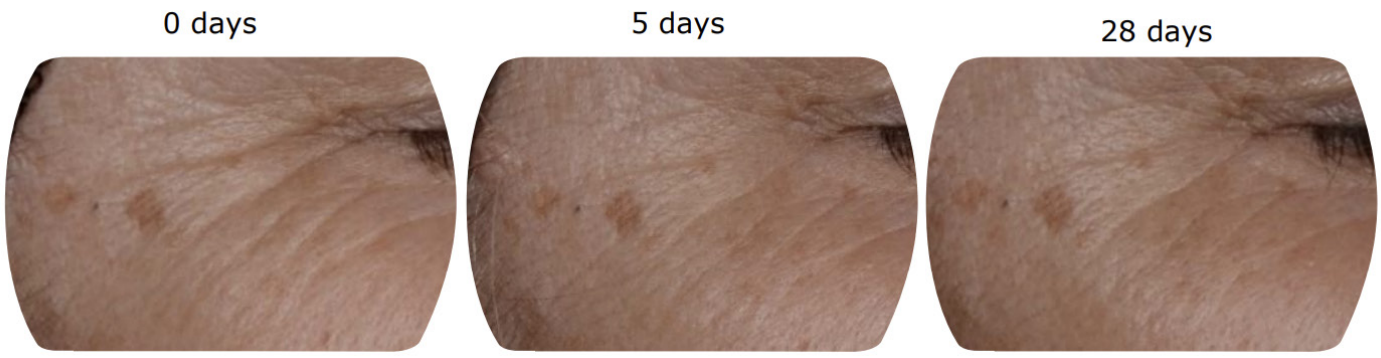
In-Vivo Efficacy
The aim of this study was to evaluate the ability of Acetyl Hexapeptide 8 to minimise expression wrinkles.

Two panels of 41 and 40 female volunteers between 34 and 60 years old applied either a cream containing 2% or 5% Acetyl Hexapeptide 8 solution on half face and a placebo cream on the other half, twice a day for 28 days.





After only 5 days the area (tested at 2%) and depth (tested at 5%) of wrinkles decreased by an average of 11.3% and 12.3%, respectively.



Reduced muscle relaxation at 5 days and 28 days of treatment vs placebo.

The ability of Acetyl Hexapeptide 8 to recover and relax the skin appearance after facial expressions was assessed by evaluating muscle stiffness and expression wrinkles after smiling.

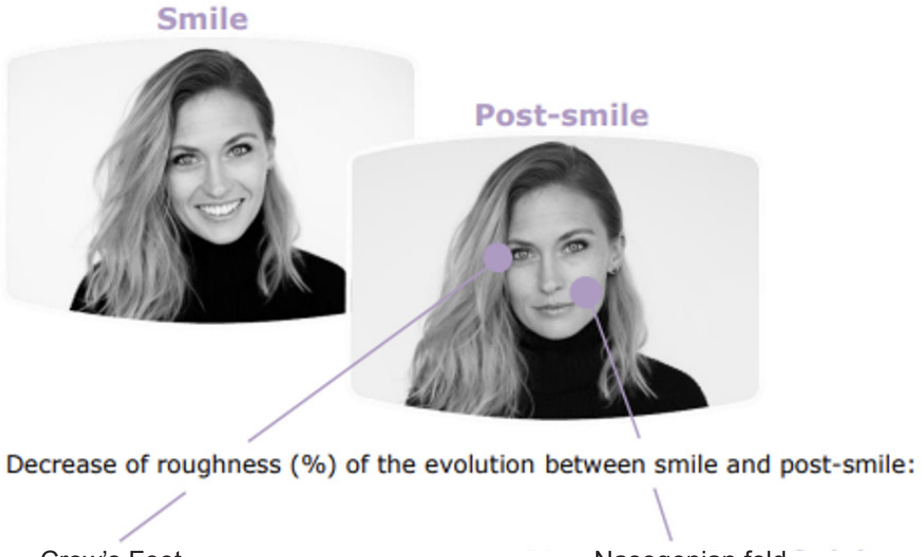
Muscle Stiffness

41 female volunteers between 35 & 59 years old applied a cream containing 2% Acetyl Hexapeptide 8 solution on half face and a placebo cream on the other half, twice a day for 28 days.

The stiffness of facial muscles, which increases with ageing and reflects the loss in the capacity to relax after a contraction, was measured by myotonometry on the masseter muscle.

Relaxation of facial expressions

43 female volunteers between 35 & 60 years old applied either a cream containing 2% Acetyl Hexapeptide 8 solution or a placebo cream on the whole face, twice a day for 28 days. The reduction in skin roughness was analyzed by means of 3D microtopography imaging system based on fringe projection (PRIMOS) 60 seconds after relaxing smiling facial expressions. The same evaluation was performed before and after 28 days of treatment.



Images of the crow's feet and nasogenian fold of two different volunteers 60 seconds after smiling.

Improved post-expression relaxtion, so you won't stop smiling.

Multi-level improvement in tissue functionality

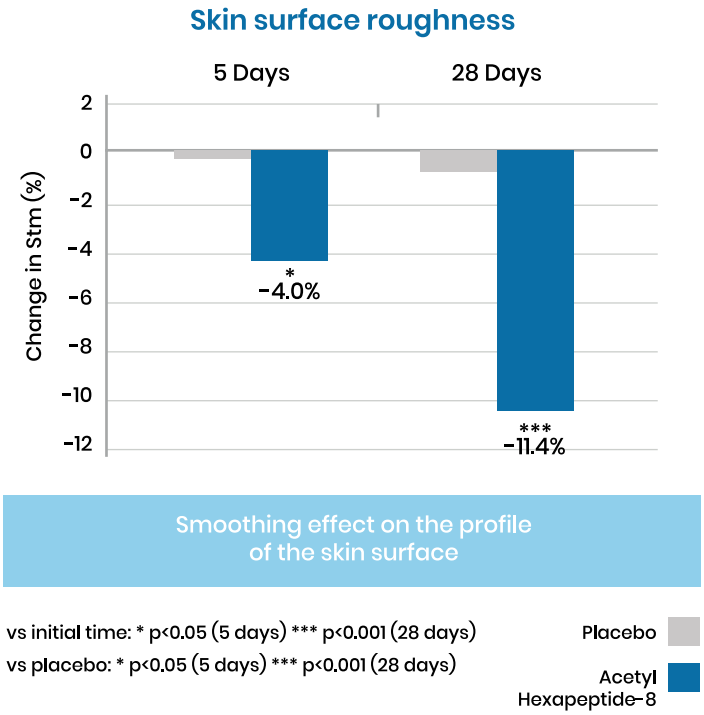
The multifunctionality of Acetyl Hexapeptide 8 was evaluated in this complete clinical study.

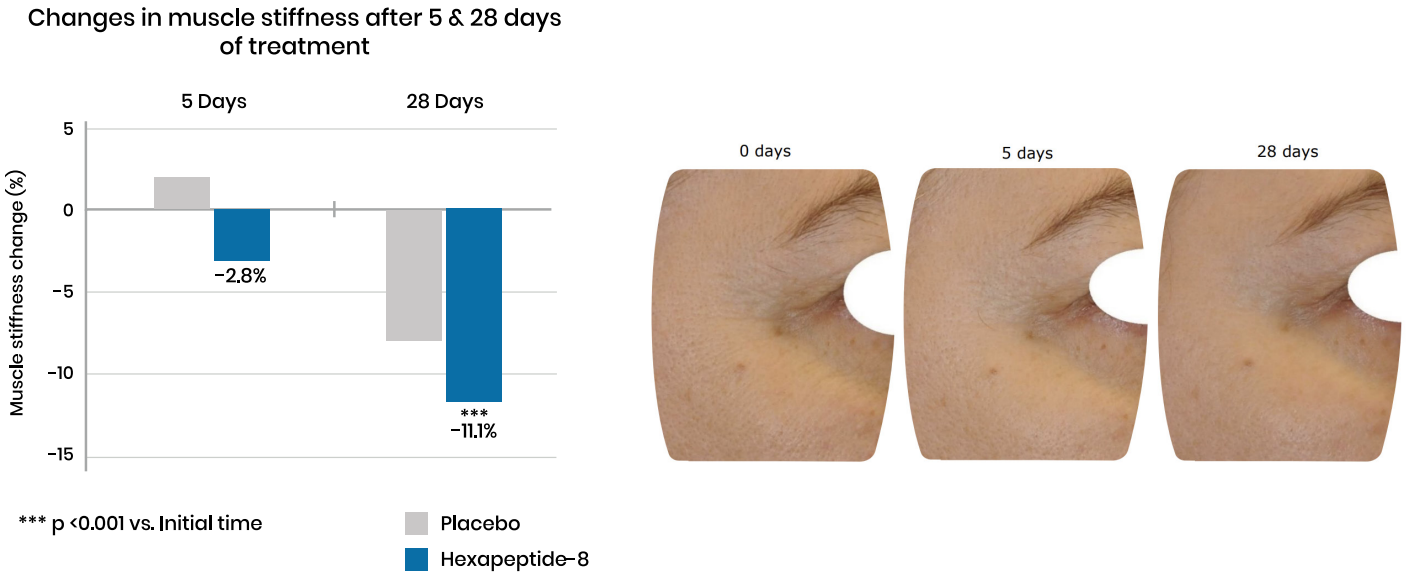
Two panels of 41 and 40 female volunteers between 35 and 60 years old applied a cream containing 2% Acetyl Hexapeptide 8 solution on half face an a placebo cream on the other half, twice a day for 28 days.

Different parameters related to a better and younger-looking skin were evaluated at different time points during the treatment.

Skin surface roughness

The homogeneity of the skin was assessed by measuring the skin surface roughness by means of 3D microtopography imaging system based on fringe projection (PRIMOS). The change in the average maxium height (Stm) of the skin profile, which corresponds to the average of the vertical distance between the 5 highest and 5 lowest points, was calculated.

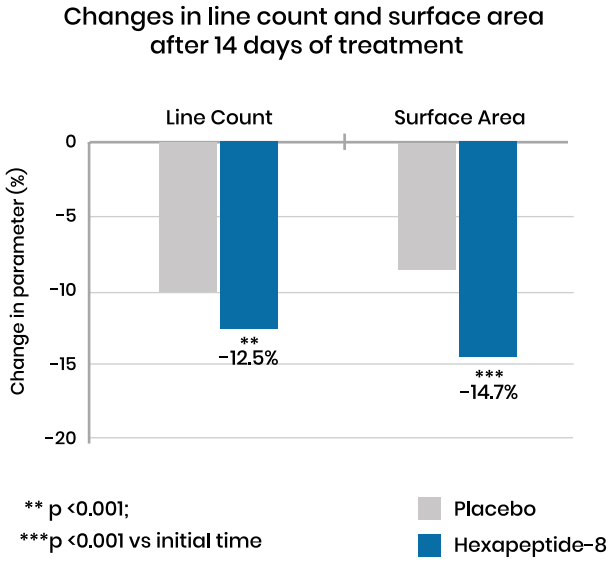


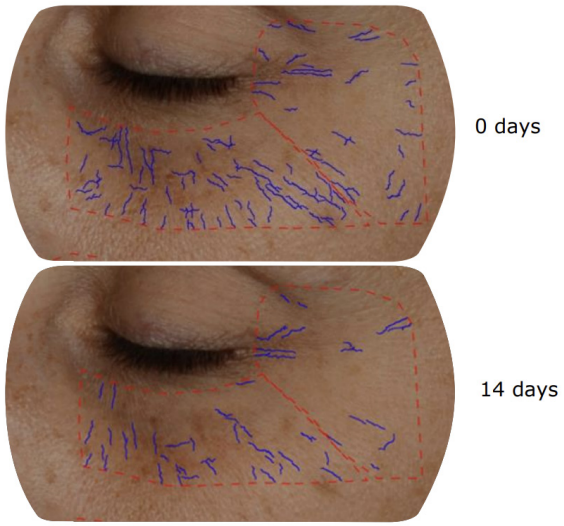


Less stiff and more relaxed facial muscles, which are linked to a youthful state with less expression wrinkles.

Fine lines

The presence of fine lines in the skin surface was measured on the crow's feet area and underneath the eye, after 14 days.

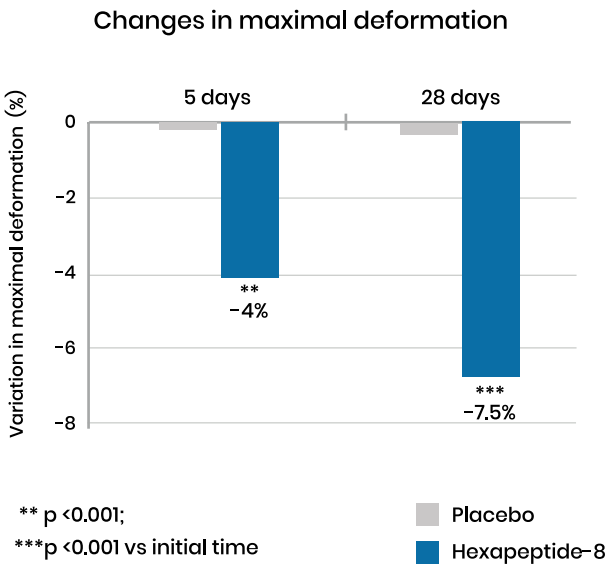




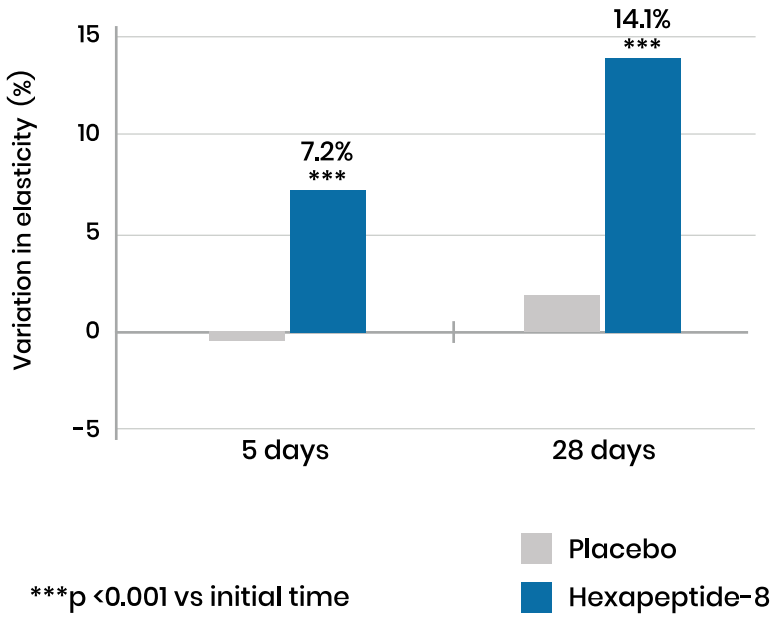
Global reduction of visible fine lines.

Firmness and elasticity

Maximal deformation (R0): represents the passive behaviour of the skin when a pulling force is applied. It is inversely related to firmness.



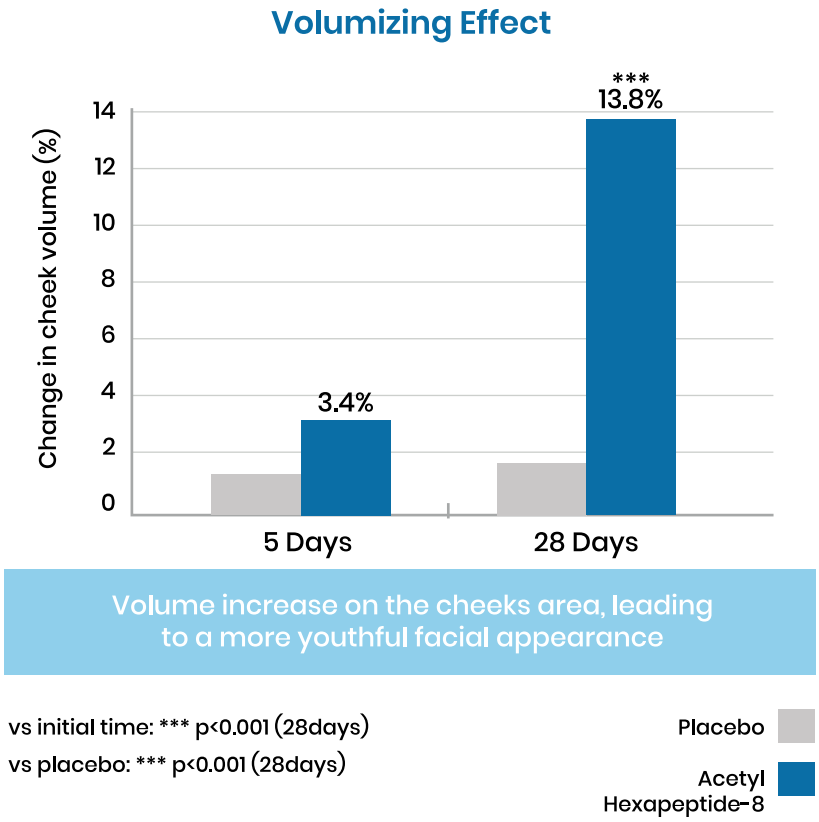
Elasticity (R2): gross elasticity of the skin. It corresponds to how easily the skin returns to its original state after releasing a suction force.



Increase in firmness and elasticity for a tenser effect.

Volumising effect

Changes in facial volume were evaluated on the cheeks by means of an image analysis involving the measurement of the distance between the cheekbone profile and a line passing vertically through the ear. A decrease in cheek distances (mm) corresponds to an increase in volume (%).

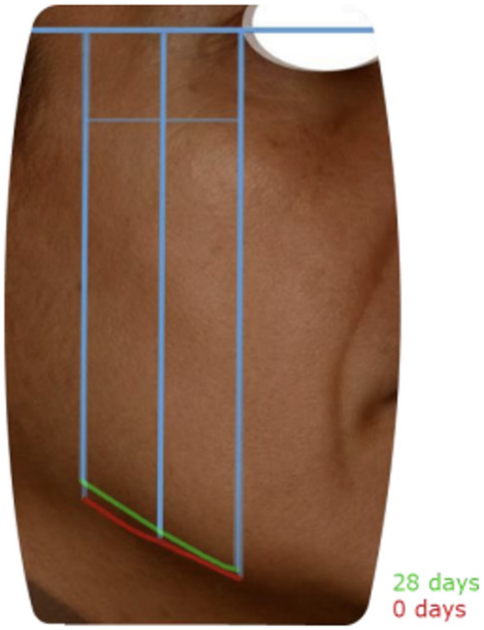


Lifting effect

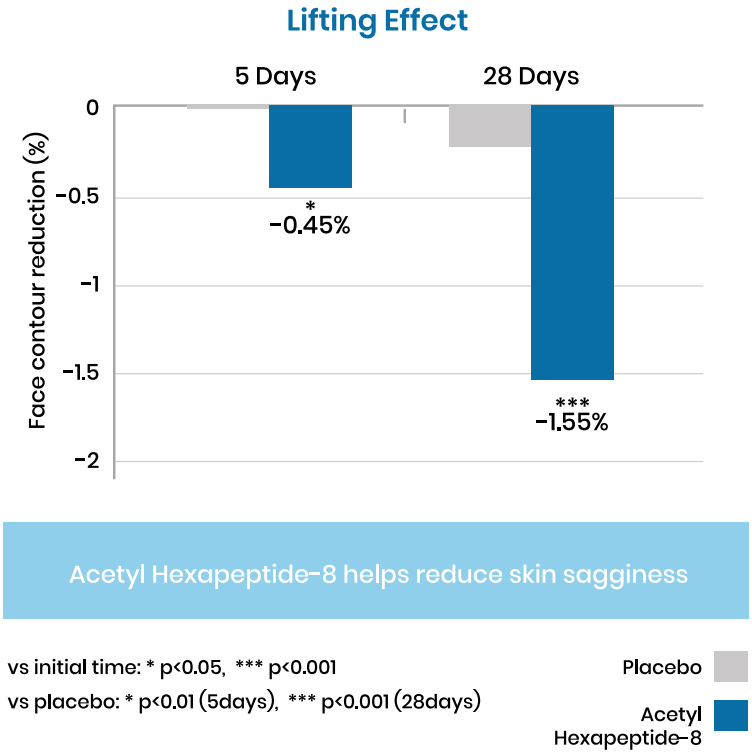
An image analysis was carried out in order to determine the lifting effect of the ingredient. The analysis consisted of drawing 3 vertical lines and analyzing the lines by means of a specific software as reported in the image below.

The first vertical line is drawn at the end of the eye, the third one is drawn at “the end of the face” where the sagging ends, and the second one is drawn in the middle of the distance between the first and third vertical lines.
The three vertical lines are drawn along the skin sagging on the face profile and they should cover the whole sagging in order to evaluate the tensor effect.

The shorter the distance of the 3 vertical lines, the bigger the lifting effect.



Superimposed before and after images of a volunteer, showing a visible lifting effect at the end of the treatment.



Links:
https://pubmed.ncbi.nlm.nih.gov/24754410/
https://pubmed.ncbi.nlm.nih.gov/23417317/
https://www.lubrizol.com/company/news/2025/02/new-data-unveils-argireline
https://www.ncbi.nlm.nih.gov/m/pubmed/29371611/?i=1&from=Argireline
Data on file

*mg/kg