

THE THERAPY[®] ADVANCED PLUS

STIMULATING TREATMENT FOR PHYSIOLOGICAL HAIR GROWTH

fondonatura
natural hair care

THE FOREFRONT IN
RESEARCH

THE LOVE
FOR NATURE

THERAPY[®] PLUS ADVANCED

STIMULATING TREATMENT FOR PHYSIOLOGICAL HAIR GROWTH

Fondonatura, always careful with the well-being of scalp and hair, and always trying to get technologically advanced products, has created an intensive treatment which aims to stop hair loss and to stimulate the physiological hair growth by acting in a targeted manner on the main causes of this problem.

THERAPY PLUS ADVANCED contains highly specific active ingredients, combined with the great richness of natural products. A perfect synergy to tackle one of the biggest hair problems: the hair loss.

Hence the choice to act in two different steps, with two alternating lotions, each of which contains ingredients that act in a specific manner and time, in order to guarantee results that fully satisfy the needs of our customers.

**RESEARCH, EXPERIENCE
AND EVOLUTION**

Following all the tests carried out, both in vitro and in vivo, widely discussed in the following pages, we can state that THERAPY PLUS ADVANCED has the capacity to:

- increase the production of Collagen and Laminin, which improve and strengthen the bond between skin and epithelial sheath, favoring the union of the hair bulb with the scalp
- stimulate the synthesis of proteins in the extracellular matrix of the dermal papilla, with a positive effect on increasing the size of the hair follicle and on its anchorage.

THERAPY PLUS ADVANCED stimulates Collagen VII, which has a repairer effect on cellular junctions, improving their anchoring.

- THERAPY PLUS ADVANCED strongly stimulates hair growth
- protects energy metabolism, cutaneous microcirculation and cutaneous hydration, attenuating physiological inflammatory reactions
- contains a plant multi-extract that participates in prevention of hair loss and, together with Biochinin A, contributes to inhibit the 5-alpha reductase enzyme. It also has anti-inflammatory and antibacterial properties, and regulates sebaceous secretion:
 - protects energy metabolism
 - activates the microcirculation
 - induces an increase of capillary density in the Anagen phase (growth) and a reduction in capillary density in the Telogen phase (fall).

The results are also linked with a constant application of the product. The results may differ from person to person but, in general, after the first 10 days of application you can get visible results.

THERAPY[®] PLUS ADVANCED

Therapy PLUS ADVANCED bases its effectiveness on a blend of four biomimetic amino acids, Acetyl Tetrapeptide-3, and on plant extracts of red Trefoil and Pinus Pinaster. The anatomy of the hair follicle, in contrast to the epidermis, is not static or rigid. Human hair grow cyclically and the bulbar part suffers its almost total disintegration during the loss phase. The renewal of the proteins involved in the formation of the new hair follicle through the dermal papilla is, therefore, of fundamental importance.

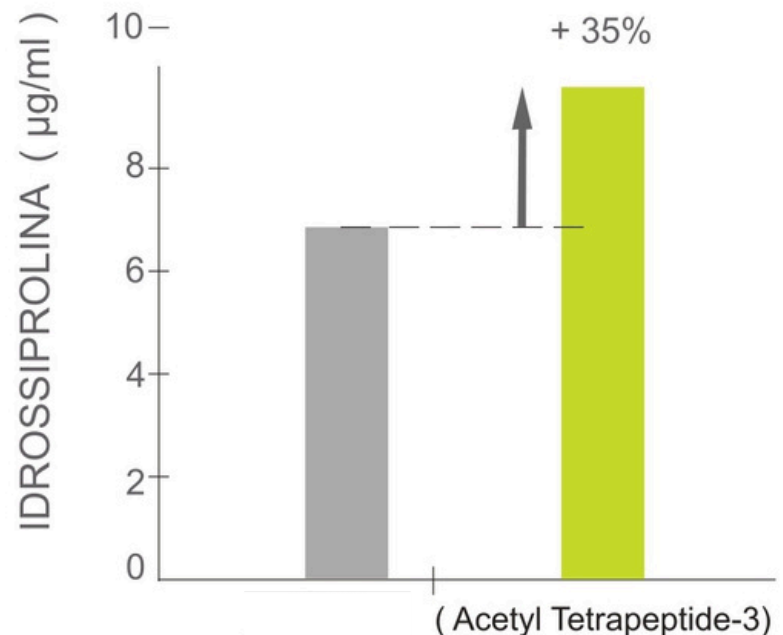
The dermal papilla consists of a group of highly active cells, in particular fibroblasts, which induce the follicular development and the production of hair. The main product of skin fibroblasts is Collagen. Collagen, main protein component of the dermis, plays an important role in the cell cohesion and renewal.

Collagen is characterized by the presence of 2 amino acids: Hydroxylisine and Hydroxyproline. Through the dose of Hydroxyproline it is possible to trace back the amount of Collagen produced in the cells.

PROTOCOL

Some cells have been incubated with Acetyl Tetrapeptide-3 [A-T-3] and others cells without; then the amount of hydroxyproline has been evaluated, which appeared visibly high (see graphic).

RESULT: by stimulating the synthesis of Collagen and the Collagen content in fibroblasts, Acetyl Tetrapeptide-3 renews the structure of the dermal papilla, improving the anchoring of the follicle.

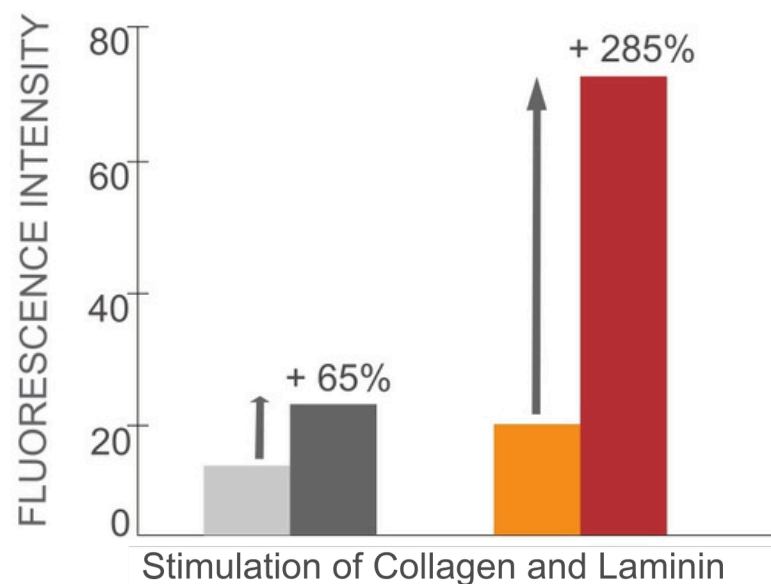
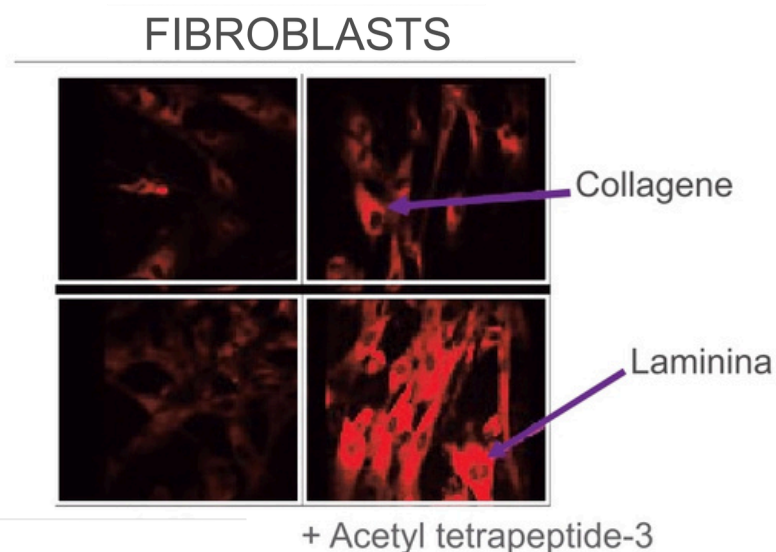




ACETYL TETRAPEPTIDE-3 Acetyl tetrapeptide-3, active ingredient of THERAPY PLUS ADVANCED, by penetrating the skin, increases the production of Collagen and Laminin in the extracellular matrix, which entails a direct effect on the hair follicle by increasing its size and avoiding its miniaturization. Furthermore, the increase in Collagen and Laminin considerably improves the anchoring of the hair follicle in the dermis.

The effect of Acetyl Tetrapeptide-3 on the synthesis of Collagen III and Laminin has been evaluated by a selective immunofluorescence, comparing treated and untreated fibroblasts. Immunofluorescence is a technique that allows the visualization of a specific protein (Collagen III or Laminin) in cells by chemically binding itself to a specific antibody conjugated with a fluorescent dye, the rhodamine (red color).

FIBROBLASTS Collagen, Laminin Control + Acetyl Tetrapeptide-3
FLUORESCENCE INTENSITY Stimulation of Collagen and Laminin



An increase of protein fiber in the dermal papilla has been pointed out (Collagen III and Laminin). Result: increase of follicle's volume and improved anchorage.



RED TREFOIL

The action of the red trefoil, rich in Biochinin A, is focused on the inhibition of 5-alpha-reductase type I and II. Further studies have also shown that Biochinin A reduces chronic inflammation and that Isoflavonoids, of which the Red trefoil is very rich, also have an important antioxidant function limiting the damage caused by free radicals on skin and scalp; so it essentially fights the process of aging of the in order to prevent the hair loss.

The synergic action of its components has multiple effects on the follicle:

- inhibits 5-alpha-reductase by negatively modulating the transformation of Testosterone in DHT (dihydrotestosterone) and preventing follicle miniaturization:

- renews extracellular matrix proteins, improving hair anchoring**
- reduces inflammation by normalizing the hair cycle**
- activates microcirculation and reduces the consequences of seborrhea thanks to its anti-inflammatory and antibacterial properties**
- induces an increase of capillary density in the Anagen phase and a decrease of capillary density in the Telogen phase.**



PINUS PINASTER

The soothing and anti-inflammatory action of Biochinin A is enhanced by Pinus Pinaster, which acts as an inhibitor in the release of inflammatory mediators by fibroblasts.

The Pinus Pinaster also has a remarkable action against the formation of free radicals. Its action blocks the aging process of the hair follicle cells. It also protects the energy metabolism.

PINUS PINASTER: protects and soothes the skin tackling the typical signs of aging. Boosts cellular defense against physiological oxidative stress
Protects the energy metabolism.

Mitigates physiological inflammatory reactions. Acts on the extracellular matrix by:

- fostering the neobiosynthesis of proteins

- protecting the existing proteins

- modulating negative production and activation of enzymes responsible for degradation of matrix proteins.

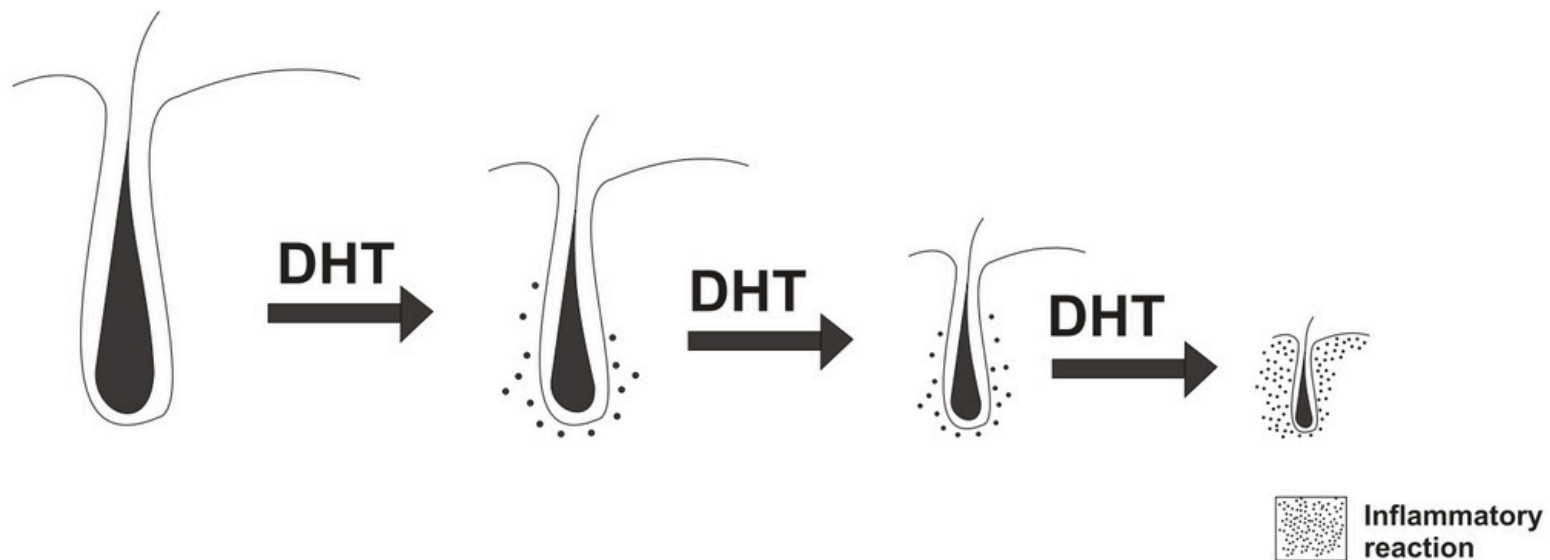


The action of the red Trefoil is assisted and enhanced by a plant multi-extract of Kigelia, Cinnamon, Ginko and Sage, which contribute to inhibit the enzyme 5-alpha reductase.

Kigelia and Sage have hormone-like properties and the capacity to intervene on 5-alpha reductase inhibiting it. These elements can stimulate the collagen synthesis.

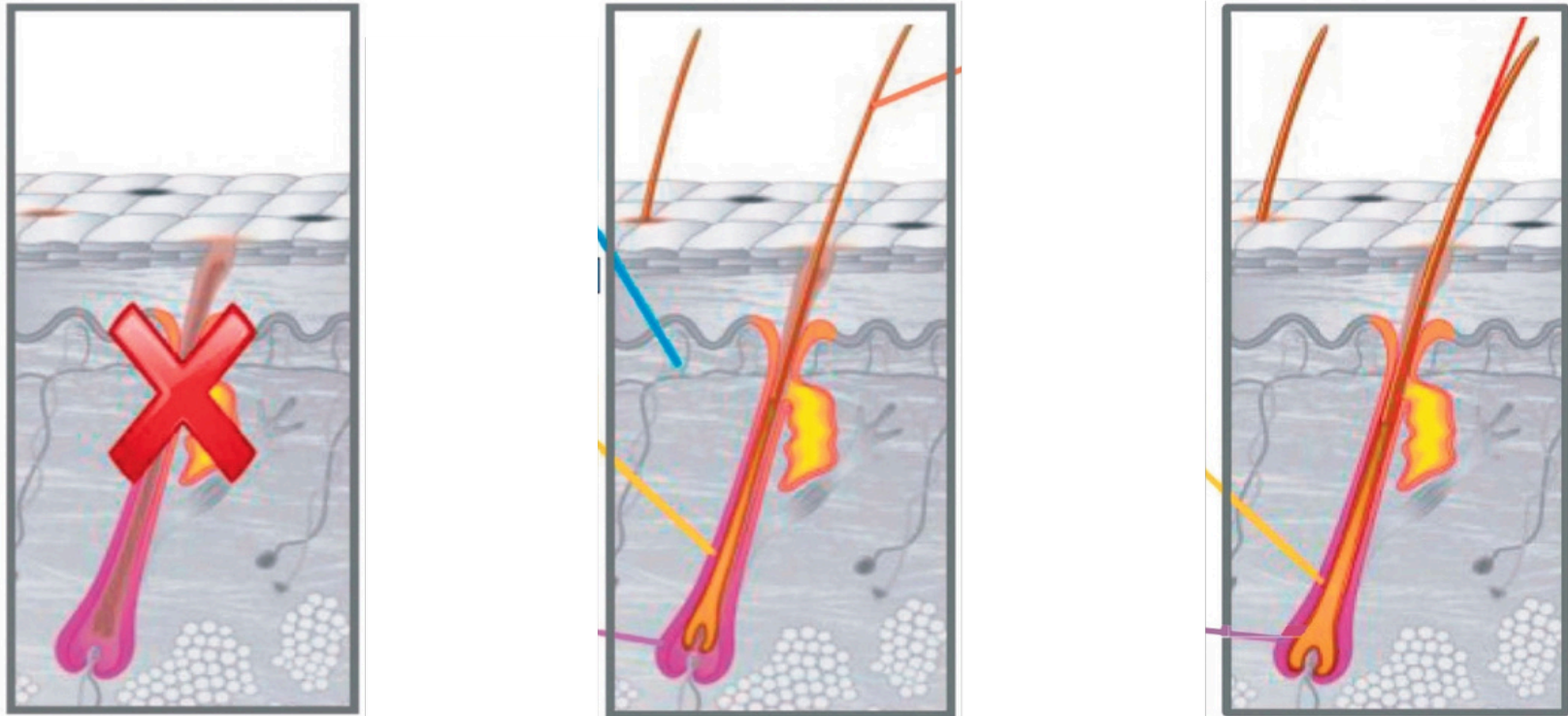
Ginko, Sage and Kigelia are rich in Flavonoids, which reactivate the microcirculation.

Ginko and Cinnamon also have anti-inflammatory and antibacterial properties, against any form of seborrhea.



TESTOSTERONE - 5-alpha reductase DHT Dihydrotestosterone Decrease in the Anagen phase and increase in the Telogen phase Miniaturization of follicles Hair loss

MODE OF ACTION OF THERAPY PLUS ADVANCED



EFFECTIVENESS

- reduces any inflammatory process
- inhibits the enzyme 5-alpha reductase
- renews extracellular matrix proteins, improving hair anchoring

BENEFITS + Anagen Telogen + Capillary density

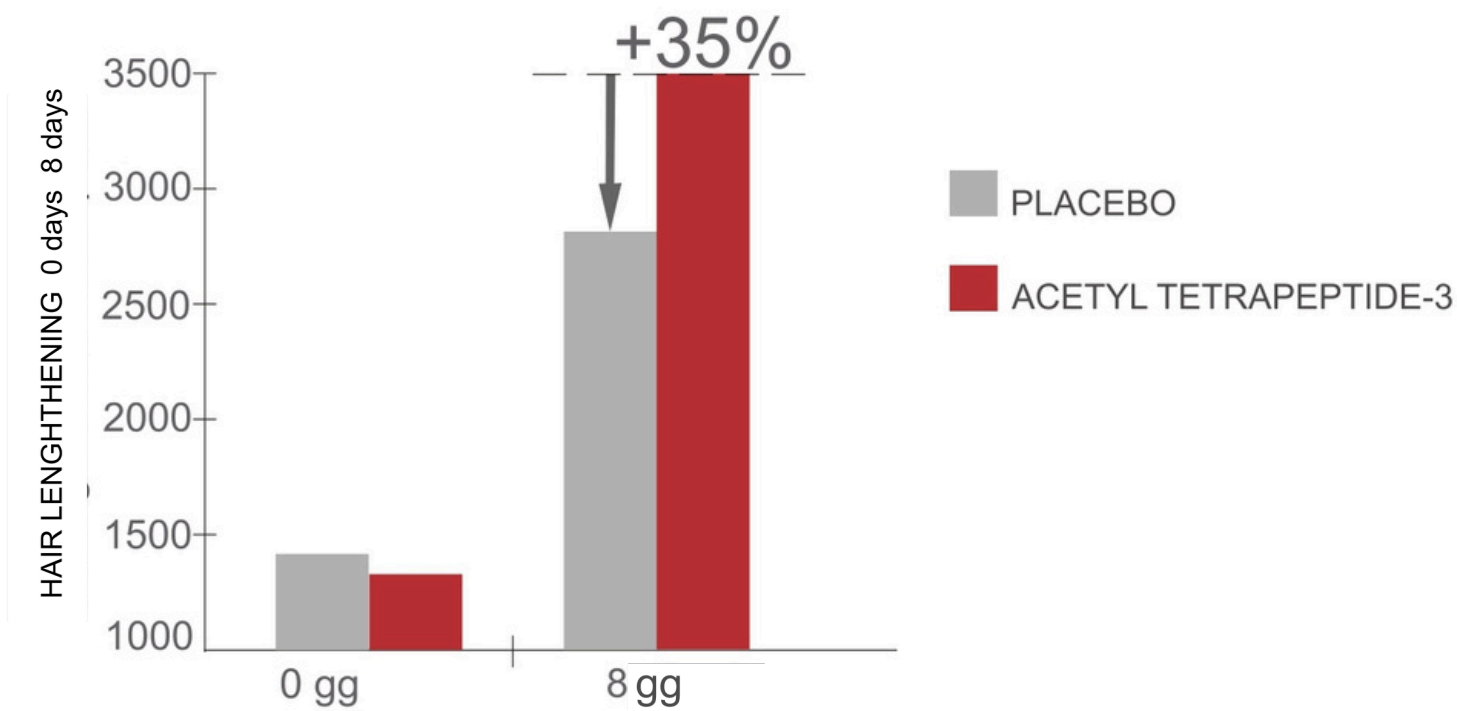
- prevents miniaturization of follicles
 - improves hair anchoring
 - It inhibits the enzyme 5-alpha reductase, therefore it modulates the transformation of testosterone in DHT, preventing follicle miniaturization
 - renews extracellular matrix proteins, improving hair anchoring
 - reduces inflammation by normalizing the hair cycle
 - activates microcirculation and reduces the consequences of seborrhea thanks to its anti-inflammatory and antibacterial properties
 - induces an increase in capillary density in the Anagen phase and a decrease of capillary density in the Telogen phase.
- From person to person however, usually after the first 10 days, you can get visible results. In any case, the treatment is highly effective only by following our use instructions. The results are almost always excellent in the short term. How many applications do I have to do per week?

As much as possible. The greatest response is obtained by applying the product on daily basis.

ASSESSMENT OF THE HAIR GROWTH STIMULATION

Hair follicles in the Anagen phase have been isolated by microdissection of the skin of the human scalp and immersed in a specific culture medium.

Some follicles have been added with Acetyl Tetrapeptide-3 and others not; then the percentage of growth has been evaluated.



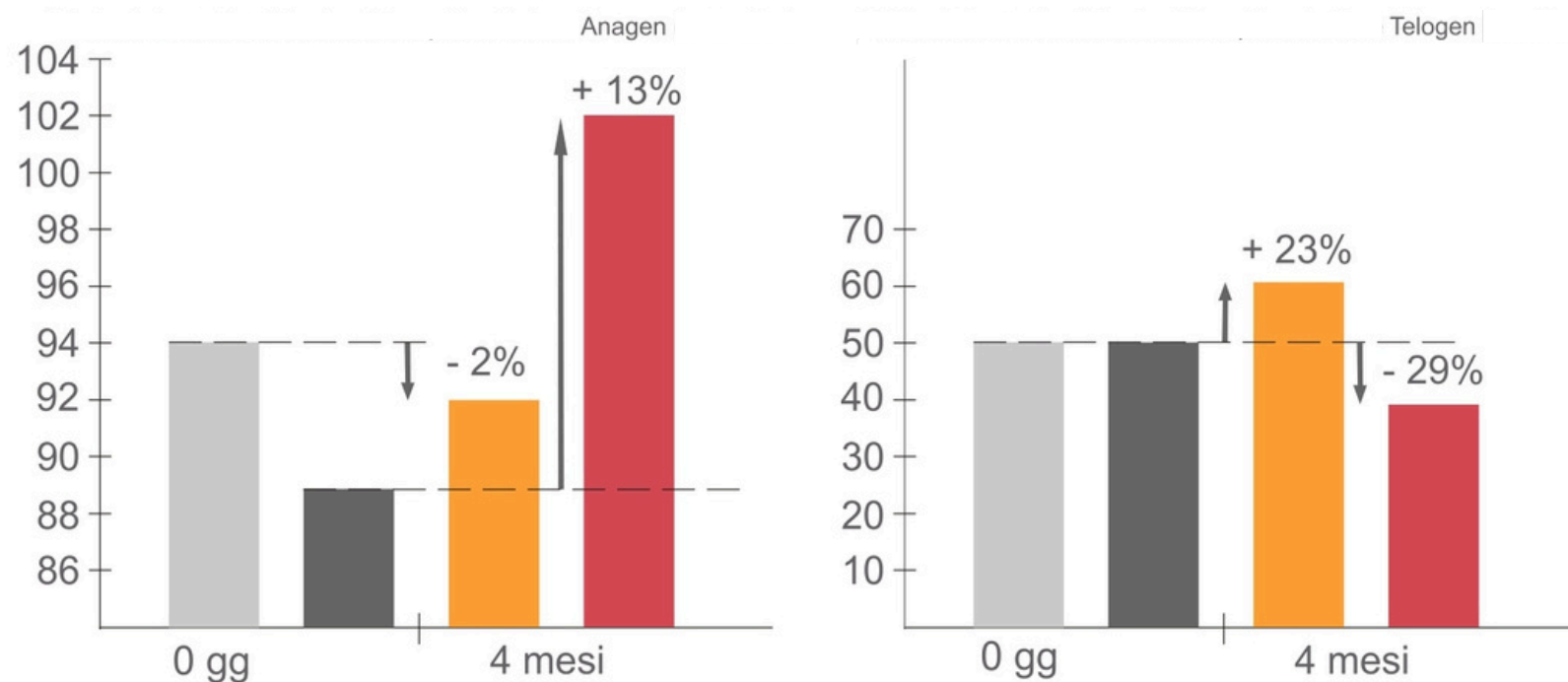
RESULTS OF THE ANALYSIS:

The growth rate was assessed after 8 days of treatment by analyzing the follicles. In these experimental conditions, a strong stimulation of 35% of hair growth has been observed in follicles treated with Acetyl Tetrapeptide-3 (active ingredient of THERAPY PLUS advanced) compared to untreated follicles.

CONCLUSION: Acetyl Tetrapeptide-3 is able to strongly stimulate the growth of human hair after 8 days of treatment.

The synergic action of the active ingredients in Therapy Plus Advanced, after a constant treatment, leads to a clear increase of capillary density in the Anagen phase (hair growth phase) in comparison with placebo, showing an effective result in hair growth. A reduction of capillary density in the Telogen phase (phase of hair loss), in comparison with placebo, with a visible reduction of the hair fall, has also been observed.

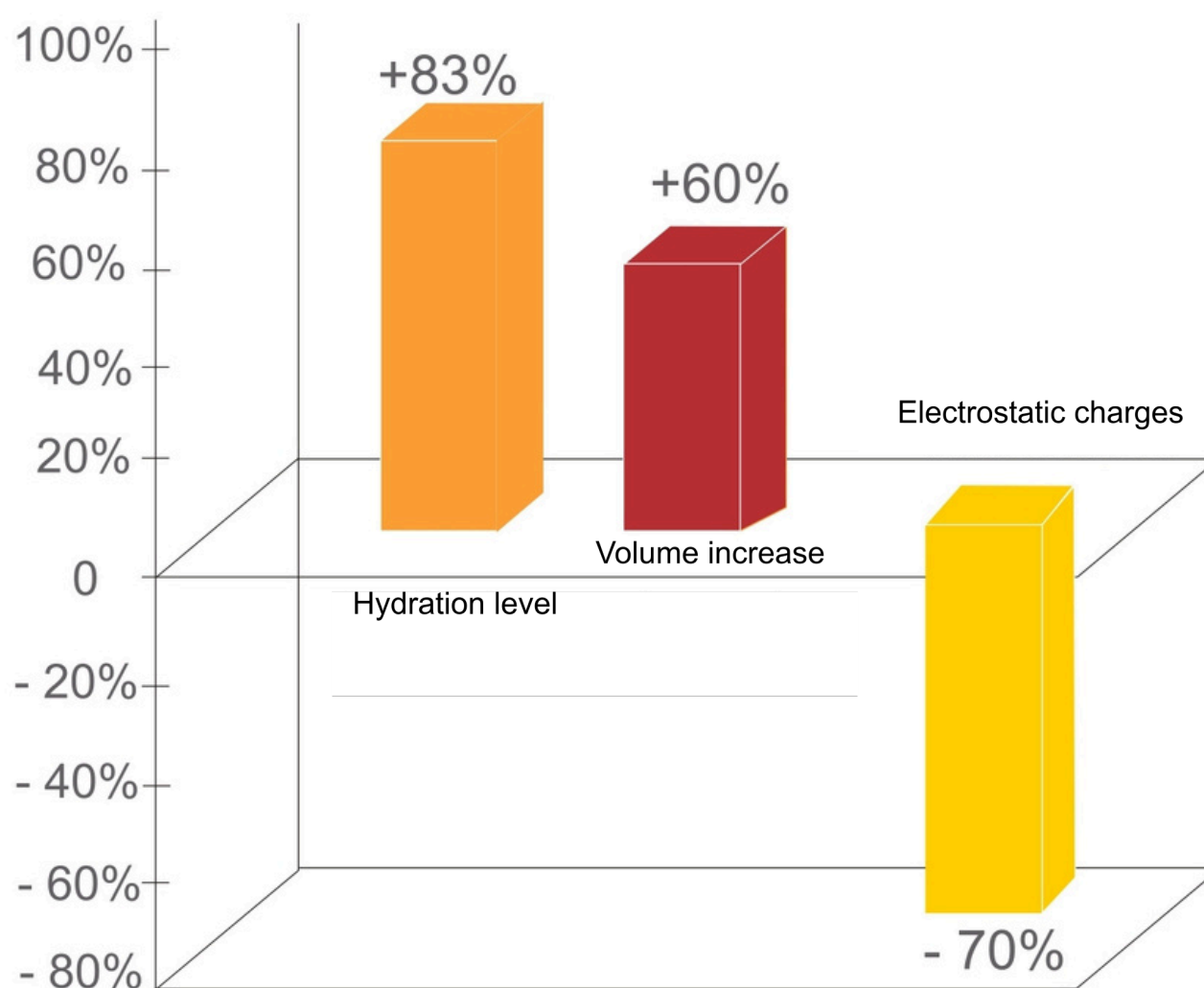
- Average calculation of capillary density in the Anagen phase (growth)
- Average calculation of capillary density in the Telogen phase (loss)



* Tests carried out on volunteers with an average age of 46 years. Results with an epiluminescence microscope that evaluates the capillary density (n/cm²) (Tricho scan). Clinical study: Unipex.

THERAPY PLUS ADVANCED also uses a vegetable derivative, Tilia Tomentosa, obtained by a cryo-extraction from the plant, which contains free sugars as Glucose and Fructose, Polysaccharides, Flavonoids and Proteins. This active ingredient determines a considerable increase in softness and a volume increase of the hair shaft.

Some lab tests have shown the effects of the active ingredient after about 25 days of use.



THERAPY PLUS ADVANCED (suitable for men and women) bases its effectiveness on quality and innovation of its natural active ingredients, extracted from medicinal plants, specifically combined with biosynthetic ingredients to block hair loss and strongly improve hair growth.

How does it work?

Its effectiveness is based on the combined action of its ingredients, which act on the inhibition of the 5-alpha-reductase enzyme, avoiding the follicle miniaturization, improving hair anchoring, increasing the size of its diameter and reducing follicular inflammation, which is a determining factor in hair loss.

What are the benefits of using Therapy Plus Advanced?

It blocks hair loss. It strongly improves the hair growth. It improves the nutrition of the follicles especially the most debilitated ones. It blocks the production of DHT, avoiding the miniaturization of the follicle. It gives a greater hair volume as it increases the thickness of the hair, making it stronger and more resistant. It improves blood circulation to the follicles, stimulating the regeneration of the hair fiber.

How soon will I see results?

The feedback varies from person to person however, usually after the first 10 days, you can get visible results. In any case, the treatment is highly effective only by following our use instructions. The results are almost always excellent in the short term.

How many applications do I have to do per week?

As much as possible. The greatest response is obtained by applying the product on daily basis.

THERAPY[®] PLUS ADVANCED

APPLICATION

FIRST 20 DAYS: wash your hair with the Energizing and Stimulating Bath included in the package. Buffer the water in excess and apply the vial A by performing a massage in order to ease the product penetration. The next application (the day after) involves the use of the vial B. Then, day after day, you have to alternate vial A and vial B until the end of package. Once the package of vials is finished, you will use the bottles for the continuation of the program, always alternating lotion A and lotion B. Your trusted hairdresser will advise you on how often you wash your hair according to your needs.

THE IMPORTANCE OF THE TWO DIFFERENT LOTIONS

THERAPY PLUS ADVANCED has been formulated using several active ingredients which operate in a synergistic and complementary way. Lotion A plays a stimulating role, completed by lotion B, which performs an energizing action.



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