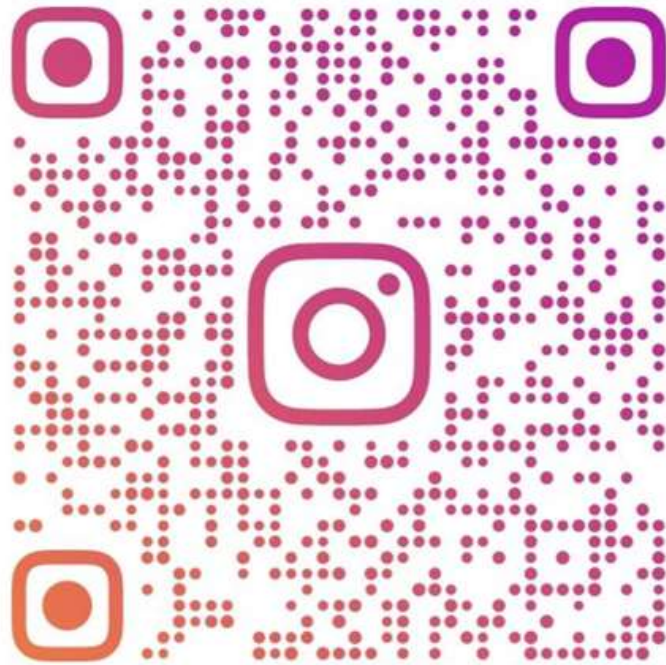


JALUPRO[®]
— SUPER HYDRO —

Improve hair growth and
treat hair loss with amino
acid replacement therapy
Jalupro





DR.SHELEMBA

Evgeniya Shelemba

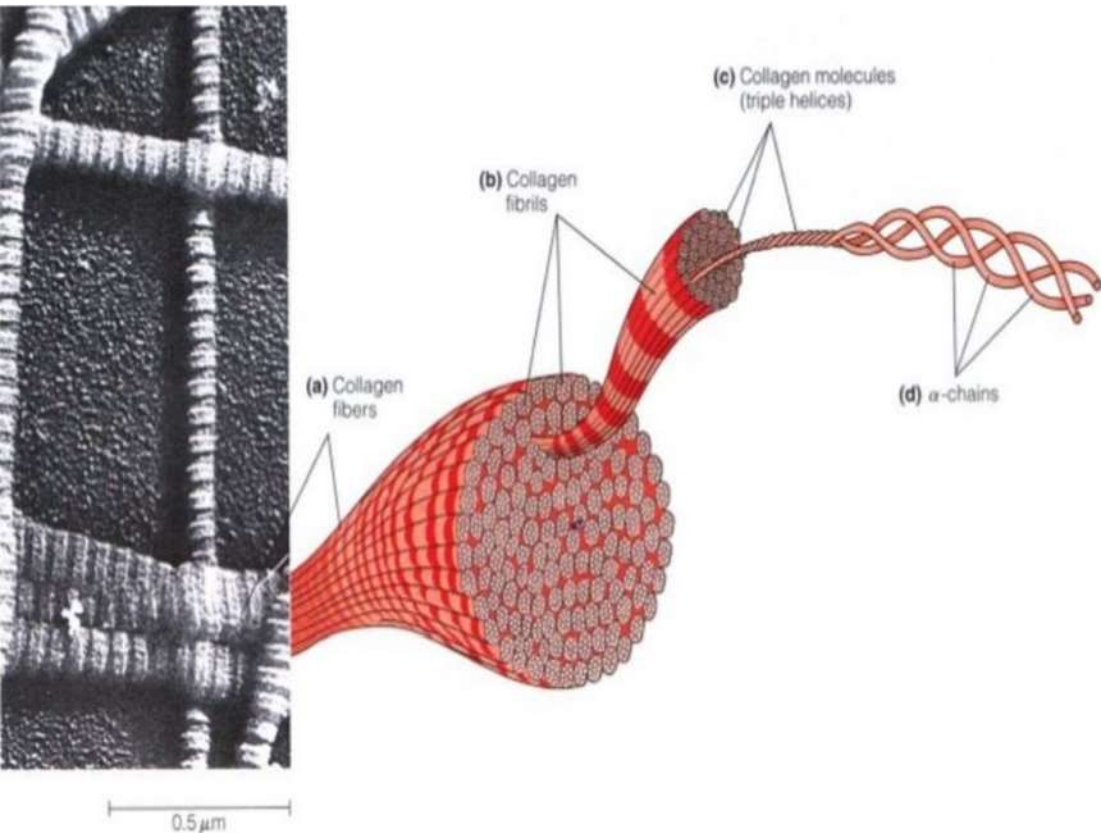
Dermatologist MD, PhD

**Fellow of American Academy of Anti-Age
Medicine, member of EADV**

**Head of research and training
department at Innovaesthetic, Kiev**

**Certified Professional Derma and
Galderma international speaker**

Collagen = firmness

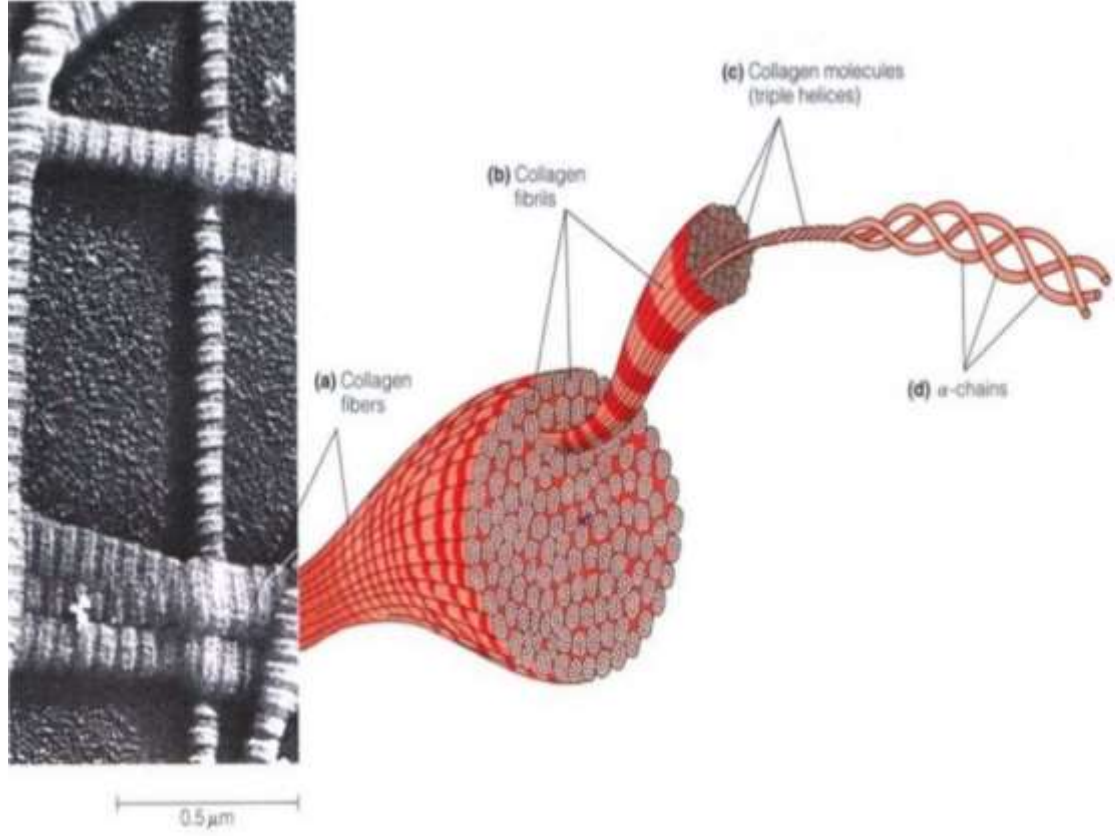


Collagen molecule consists of 3 polypeptide chains, each of them containing ~1000 amino acids

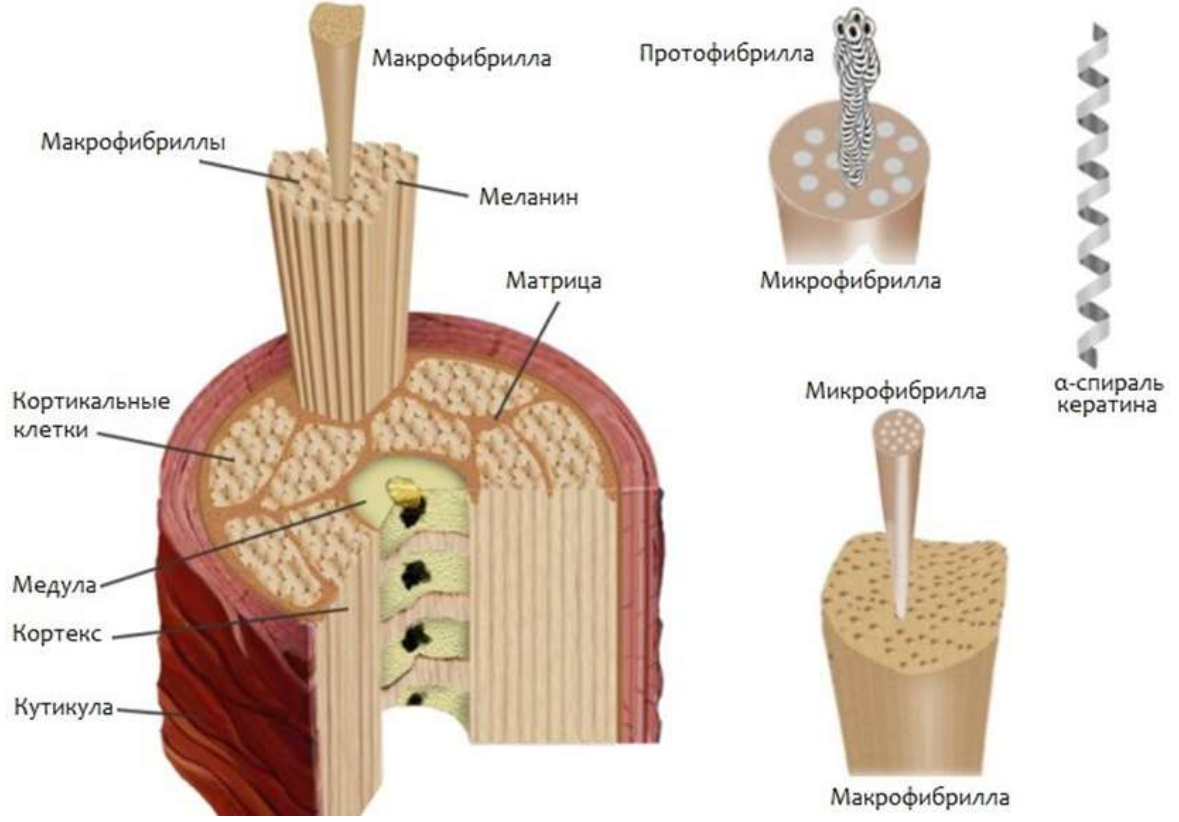
Every third amino acid is **glycine**
20% - **proline** and hydroxyproline
10% - alanine
40% - other amino acids

Triplets: **glycine-X-Y**

Collagen – firmness of the connective tissue, dermis, retinacula cutis

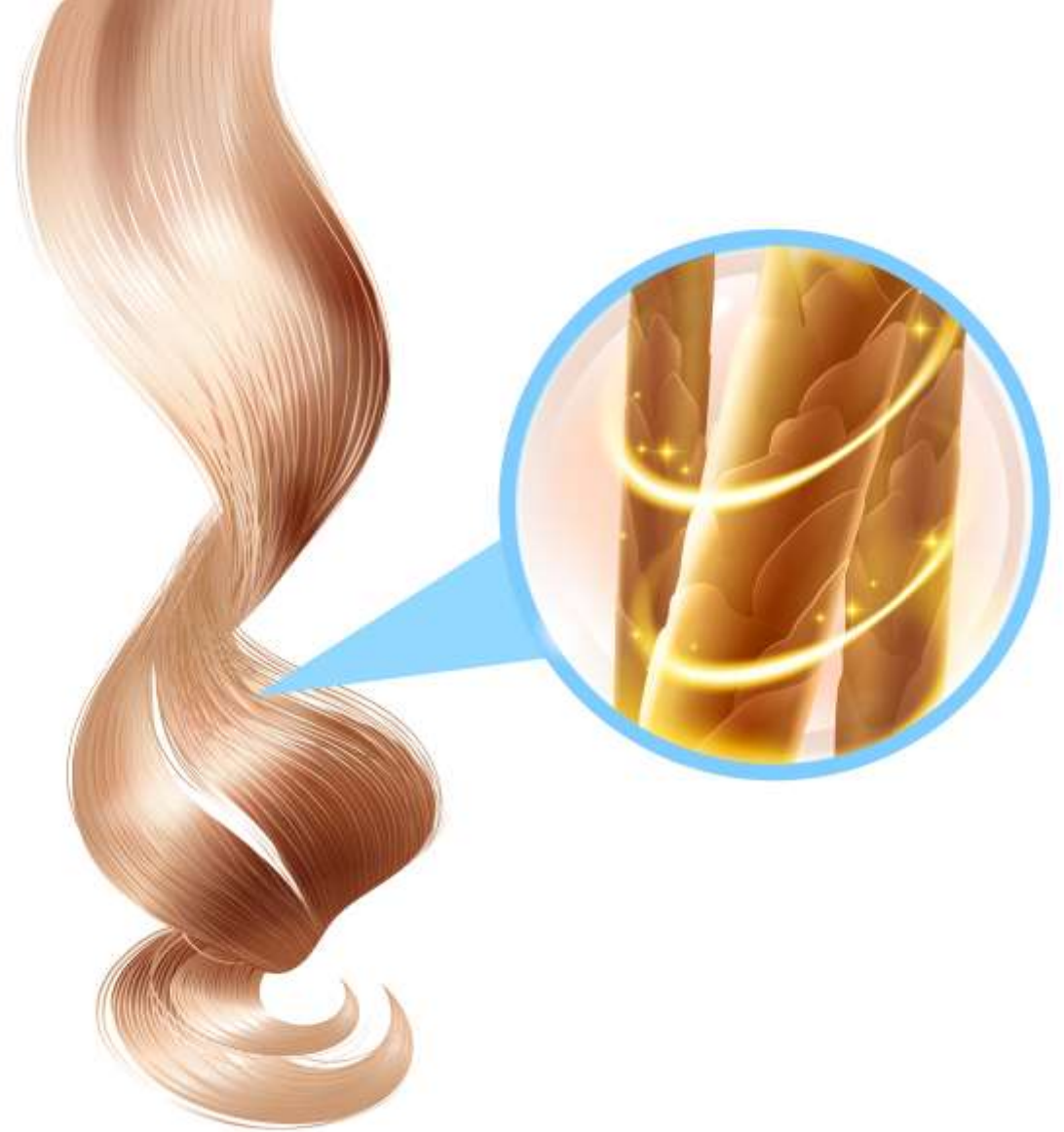


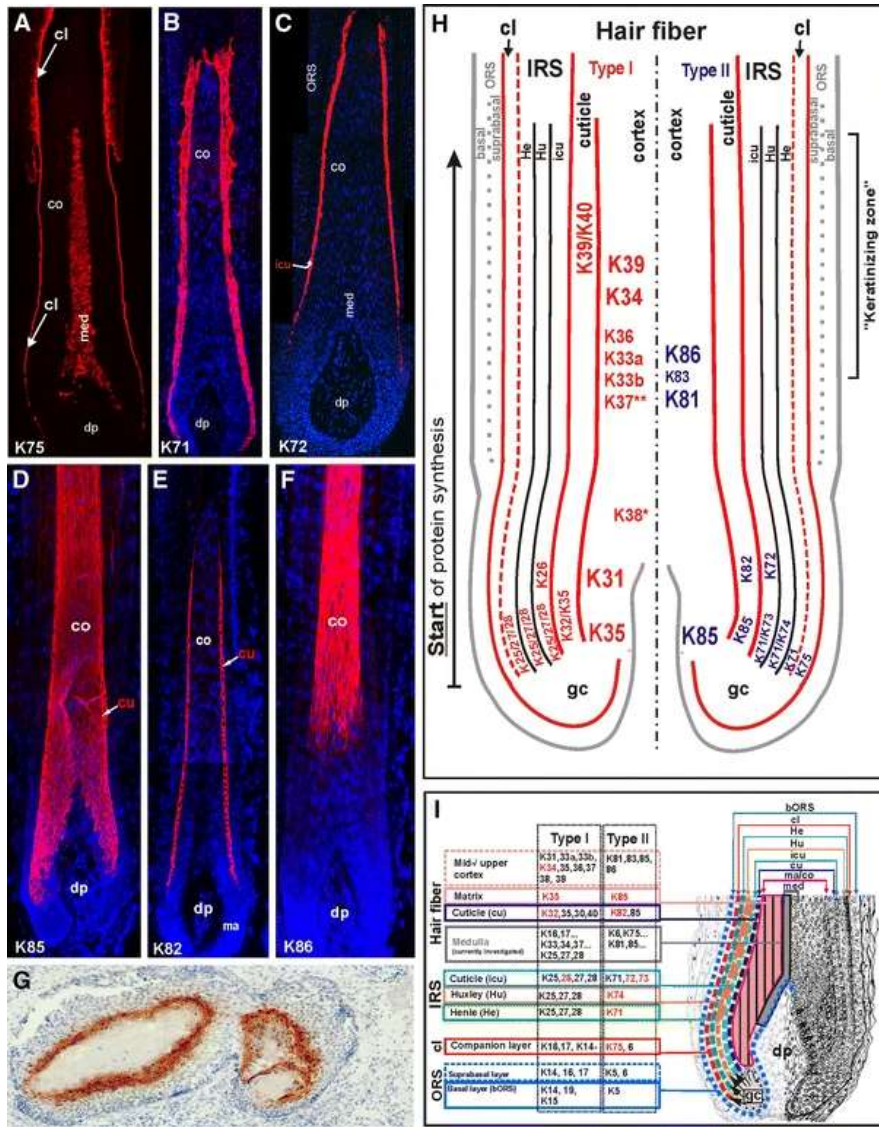
Keratin - strength of hair, nails and the outer layer of the skin



Collagen and hair

- Small amounts of collagen are found in the outer layers of the hair
- Collagen plays a key role in the normal functioning of the hair follicle





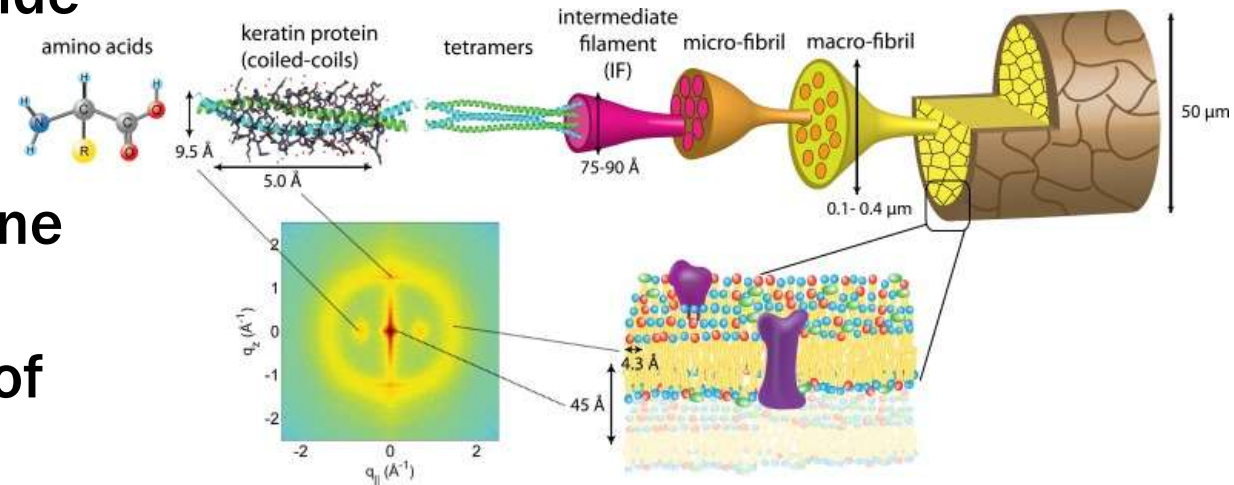
Keratin composes 95% of hair

- Keratin is a fibrous, spiral-shaped protein
- α - and β -keratin are distinguished, α -keratin is mainly found in the human body
- α -keratins have a conformation in the form of dense branches around the long axis of the molecule (α -helix)

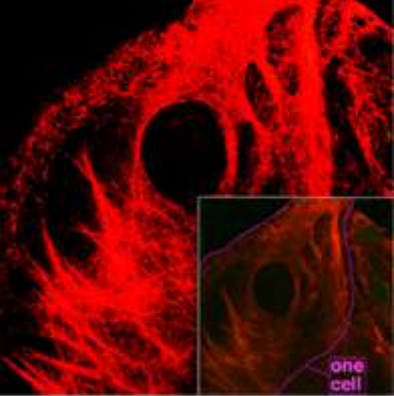
Amino acid composition of keratin

About 18 amino acids can be found in hair:

- Glycine (every 2nd element in the polypeptide chain), proline, leucine
- Phenylalanine, isoleucine, valine, methionine and alanine (hydrophobic amino acid residues that ensure complete insolubility of keratin)
- Cysteine (stabilizing amino acid), which forms disulfide bonds between molecules, adding rigidity and stability to the entire structure



unlike collagen, there is no periodicity in the alternation of amino acid residues in keratin molecules

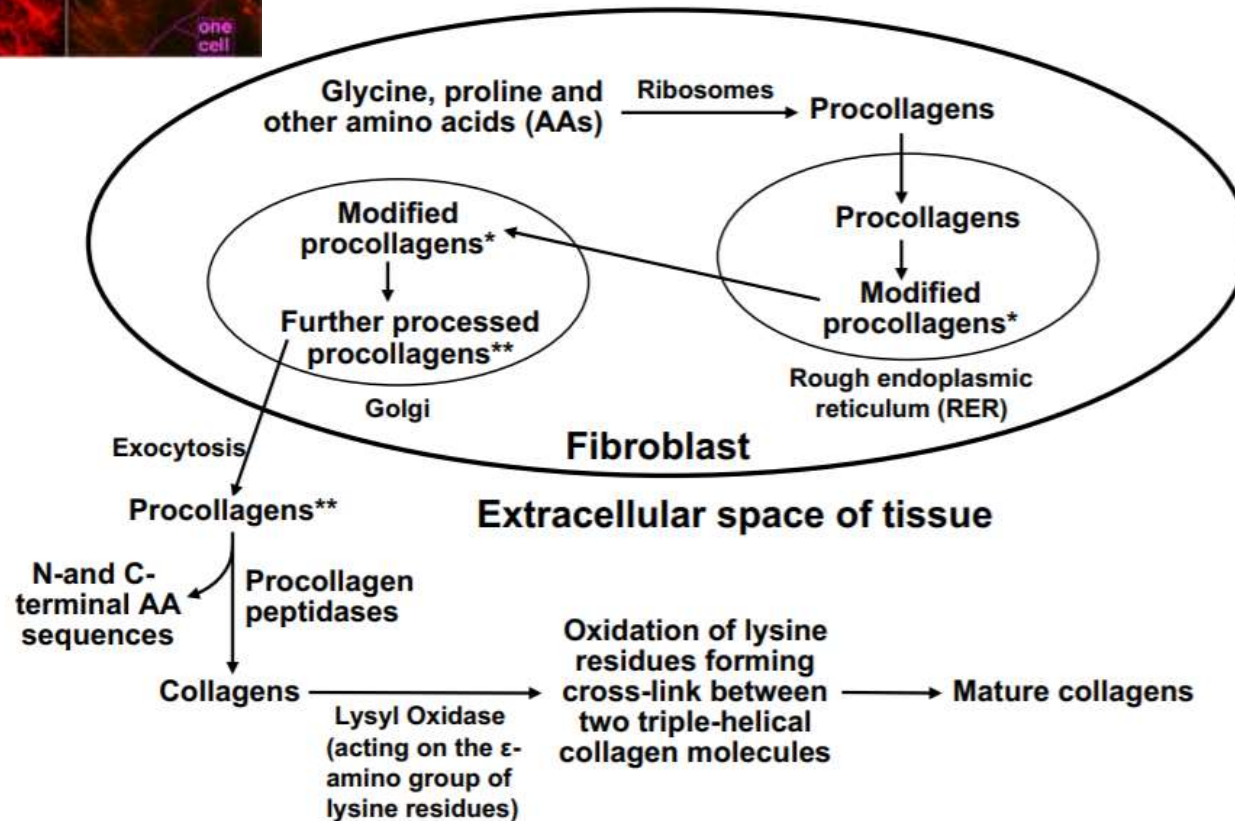


The quality of produced collagen and elastin is important

Glycine and proline are the structural blocks of collagen

Lysine – for stabilization of amino acid chains (firmness)

Insufficient intake with food



Lack of copper, sulfur, iron, zinc, selenium, vitamins C and D

Synthesis of abnormal, loose collagen

Amino acid functional cluster Jalupro:

Glycine – 50%

L-Proline – 37%

L-Lysine – 6%

L-Leucine – 7%



- ❑ All necessary amino acids in strictly balanced proportions (%)
- ❑ High degree of refinement (only L-forms)
- ❑ Minimalistic formula (does not clutter the extracellular matrix)
- ❑ Registered by *Professional Derma*, Switzerland

JALUPRO®

Study of efficacy of Jalupro oral supplement in trichology

CLINICAL TRIAL ON HAIR

Single blind controlled clinical and instrumental study for the evaluation of the activity of "Proglyme® Food Supplement of Amino Acids" on hair and nails vs reference product (Inneov Trico Masse).

24 subjects of both sexes (23-47 years) divided into 2 groups:

- Inneov group: subjects took 2 tablets/day for 90 days
- Proglyme® group: subjects took 1 stickpack a day for 90 days

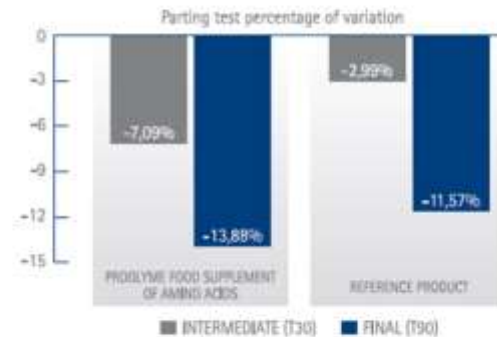
METHOD

3 study visits were planned (basal, intermediate and final visit) and the following evaluations were performed:

- Hair regrowth (parting test)
- Hair shaft thickness (optical microscopy)
- Hair resistance to traction

RESULTS: parting test

Both food supplements determined after 3 month treatment a statistically significant hair thickening and a consequent decrease of the parting amplitude (Dunnet test $p < 0.05$ T90 vs T0 with a variation percentage versus T0 equal to 13,88% for PROGLYME® and to 11,57% for the reference product).

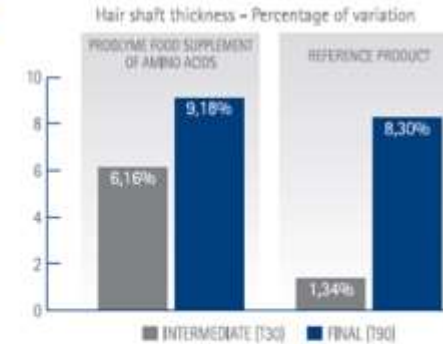


PARTING TEST: PHOTOGRAPHIC DOCUMENTATION (Proglyme® group)



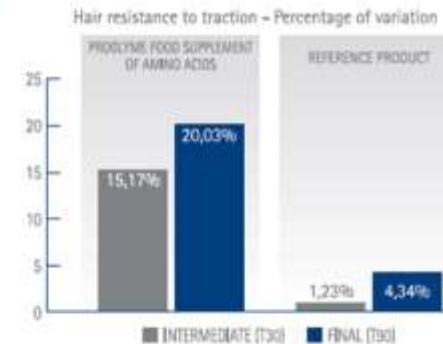
RESULTS: hair shaft thickness

Both tested products determined at the end of the study a statistically significant increase of shaft thickness (Dunnet test $p < 0.05$ T90 vs T0), with a diameter measurement increase of 9,18% for PROGLYME and 8,30% for the reference product. In particular concerning Proglyme® Food Supplement of Amino Acids this increase was already evident after 1 month treatment (6,16% versus T0).



RESULTS: hair resistance to traction

Already after 1 month treatment with Proglyme®, hair resistance to traction resulted significantly increased (Dunnet test $p < 0.05$ T30 vs T0 with an increase of 15,17%). This increase was yet more consistent at the end of the trial (Dunnet test $p < 0.05$ T90 vs T0 with a percentage of increase equal to 20,03%). No statistically significant variation of the considered parameter was observed due to the assumption of the reference product.



CONCLUSIONS:

Proglyme® Food Supplement of Amino Acids determined after 90 days treatment a statistically significant general hair thickening (parting amplitude reduction) and a significant thickening of the hair shaft (diameter increase). These results were comparable with the ones obtained for Inneov Trico Masse®. Moreover, compared to the reference product, Proglyme® determined a significant increase of hair resistance to traction yet 1 month after trial starting. Both products were well tolerated and no adverse event occurred.

JALUPRO®

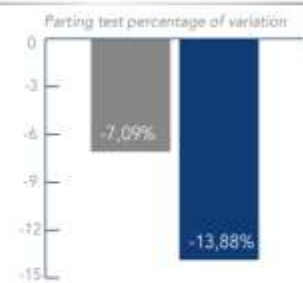
Clinical study results of Jalupro oral supplement efficacy in trichology

13,88%

REDUCTION HAIR LOSS

After 3 month treatment a statistically significant hair thickening and a consequent decrease of the parting amplitude.

■ INTERMEDIATE (T30)
■ FINAL (T90)

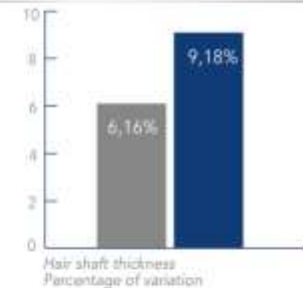


9,18%

INCREASE OF SHAFT THICKNESS

A statistically significant increase of shaft thickness, with a diameter measurement increase of 9,18%. This increase was already evident after 1 month treatment (6,16% versus T0).

■ INTERMEDIATE (T30)
■ FINAL (T90)

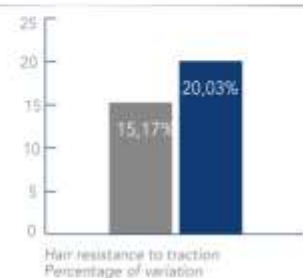


20%

INCREASE HAIR RESISTANCE

Already after 1 month treatment hair resistance to traction resulted significantly increased 15,17%. This increase was yet more consistent at the end of the trial 20,03%.

■ INTERMEDIATE (T30)
■ FINAL (T90)



- A controlled clinical and instrumental study of the effectiveness of Jalupro oral supplement in trichology
- 24 people of both sexes (23-47 years old)
- Patients took 1 sachet for 90 days

JALUPRO®

JALUPRO oral supplement – results

VOL 8



T0
(basal)



T30
(intermediate)



T90
(final)

JALUPRO oral supplement – results

VOL 21



T0
(basal)



T30
(intermediate)

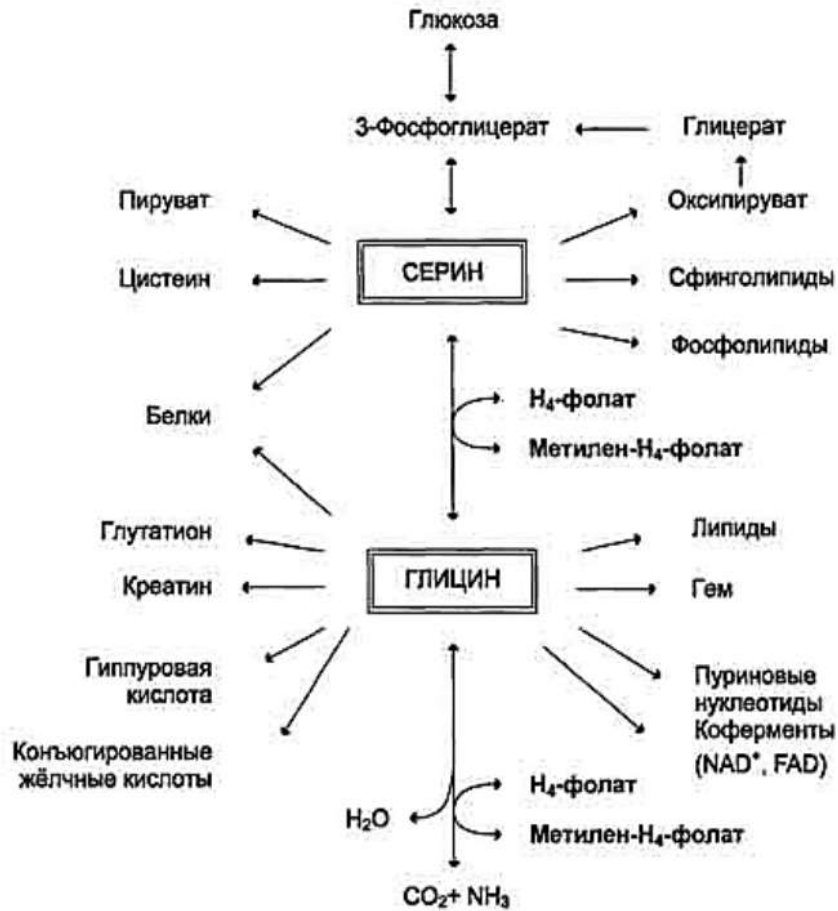


T90
(final)

JALUPRO®

Glycine is necessary for synthesis of:

- Collagen
- Keratin
- Serotonin, growth hormone
- Nucleotides
- Glutathione (protects from oxidative stress)
- Inhibits melanogenesis ($\downarrow \alpha\text{MSH}$)
- Is able to enter into peptide conjugation with xenobiotics and neutralize them



Сыровая А.О., Шаповал Л.Г., Макаров В.А., Петюнина В.Н., Грабовецкая Е.Р., Андреева С.В., Наконечная С.А., Бачинский Р.О., Лукьянова Л.В., Козуб С.Н., Левашова О.Л. Аминокислоты глазами химиков, фармацевтов, биологов: в 2-х т. Том 1 / – X. «Щедра садиба плюс», 2014 – 228 с.

Amino acid functional cluster Jalupro

Glycine – 50 mg (50%)

L-proline – 37.6 mg (37%)

L-lysine – 5.4 mg (6%)

L-leucine – 7 mg (7%)



Lysine is involved in the formation of collagen through the absorption of calcium from the body, so lysine deficiency leads to reduced calcium adsorption, as well as excessive production of DHT

JALUPRO®

JALUPRO



2 AMPOULES

Freeze dried Amino Acids (100mg)

- Glycine
- L-Proline
- L-Lysine
- L-Leucine

2 VIALS

1 % Sodium hyaluronate 200 kDa - 3 ml

JALUPRO



Injection technique:

Microdermal papules

Dermal papules

Needle 30-32-34G

Course:

1 procedure once per week №4-6

JALUPRO®

— SUPER HYDRO —



INNOVA
— AESTHETIC —

JALUPRO®
— SUPER HYDRO —



Thank You!



Dr. Shelemba



Evgeniya Shelemba



Evgeniya.shelemba@gmail.com

