



# Naticol

Peptidi ribljeg kolagena

## Lepota kože

Kolagen koji doprinosi pravilnom starenju kože

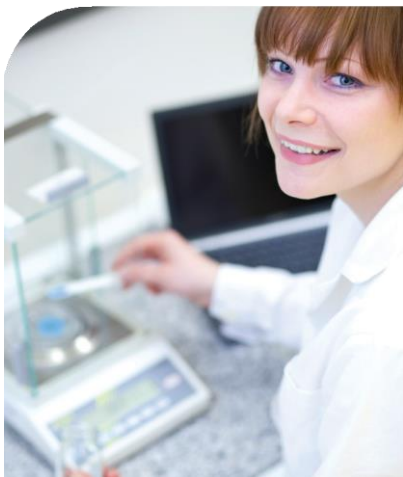
5g/dan

Do starenja kože dolazi kad se epidermis istanji, proces obnavljanja ćelija uspori, a kolagen nestane ili se ošteti, dovodeći do manje hidriranosti, manje elastičnosti i čvrstine kože. Među faktorima koji doprinose starenju kože jesu i geni, hormoni, UV zračenje, pušenje i zagađivači. Svi ovi faktori zajedno stvaraju reaktivne vrste kiseonika koje oštećuju antioksidacioni zaštitni mehanizam kože.

Peptidi kolagena *Naticol*<sup>®</sup> nude mogućnost pravilnog starenja kože u proizvodima dovoljno pristupačnim da se mogu svakodnevno koristiti.



**BLAGODET**



*Naticol*<sup>®</sup> je klinički dokazao svoju ulogu sastojka u preparatima koji doprinose pravilnom starenju kože.



**Weishardt**

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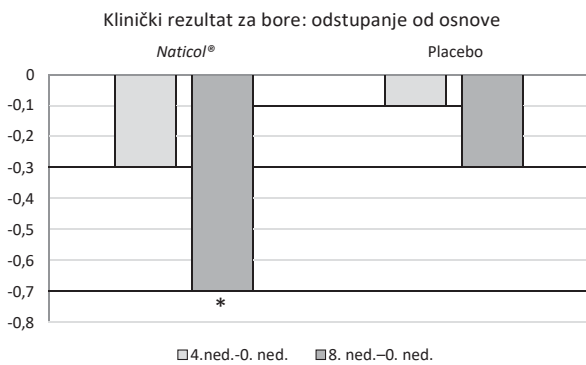
Predmet ovog kliničkog istraživanja bio je nepoznat i subjektima i realizatorima istraživanja, obavljeno je nasumičnim razvrstavanjem, u odnosu na placebo, i sprovedeno na 60 zdravih ženskih subjekata (prosek 56 g.s.). Cilj je bio da se proceni antiejdžing potencijal dnevne oralne upotrebe 5 g peptida ribljeg kolagena *Naticol*<sup>®</sup> na kožne mere i njenu toleranciju. 5 g preparata *Naticol*<sup>®</sup> bilo je pomešano s tečnošću i konzumirano tokom jutra. Istraživanje je sproveo CPCAD (klinički farmakološki centar specijalizovan za dermatologiju – Bolnica u Nici, u Francuskoj). Sva merenja (obuhvatajući i biometrijska merenja) kontrolisali su sertifikovani dermatolozi.

Ovo kliničko istraživanje je sprovedeno saglasno nadležnom francuskom regulatornom organu (ANSM) i odobreno od strane lokalnog Etičkog komiteta (CPP). Svaka od ispitanica je dala svoj pristanak za učešće u istraživanju.

### > Olakšanje kože – *Visia*<sup>®</sup> CR

Fotografije lica su načinjene korišćenjem standardizovanog uređaja, *VISIA*<sup>®</sup> CR.

Ovaj uređaj omogućava da se fotografije načine korišćenjem standardizovanog svetla: bela svetlost, unakrsno polarizovana svetlost, paralelno polarizovana svetlost i UVA svetlost. Replika je osvetljavana incidentnim svetlom pod uglom od 35° koje je stvaralo senku iza svake bore.



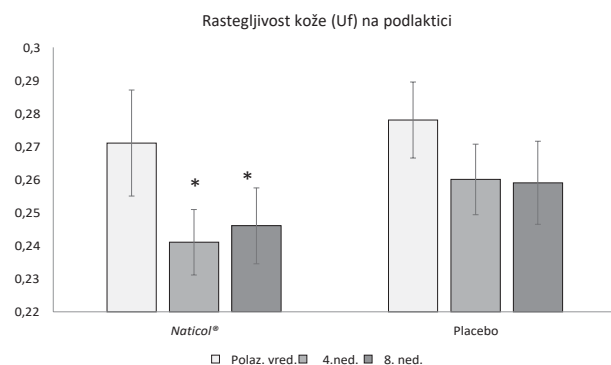
**Slika 1 – Klinička merenja periorbitalnih bora 56. dana, označavaju značajno smanjenje od -11% u poređenju s polaznom vrednošću za Naticol<sup>®</sup>**

### > Elastičnost - *Cutometer SEM 575*

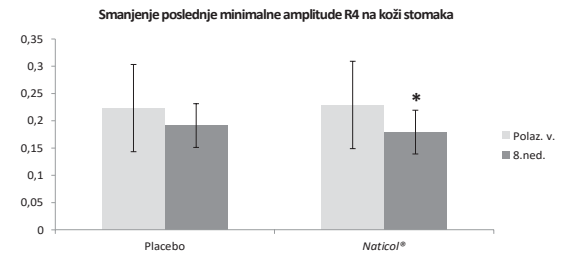
Metod *Cutometer*<sup>®</sup> SEM 575 čiji su autori *COURAGE & KHAZAKA* je korišćen za merenje deformacije po vertikali kože u periodu od 2 sekunde, nakon čega je usledio period od 2 sekunde relaksacije.

Ovim postupkom se meri stepen deformacije i vreme potrebno koži da se vrati u svoje prvobitno stanje. Deformacija koja je izazvana na koži je merena optičkim sistemom.

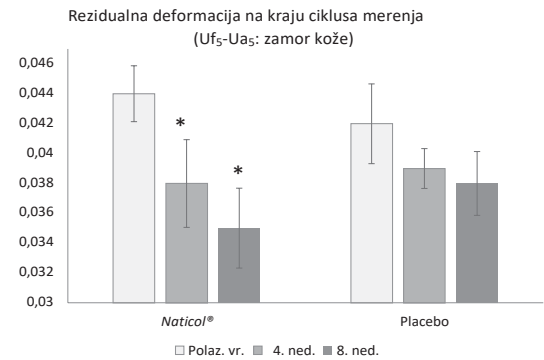
Izmereni su parametri: Ue, elastična deformacija; Ur, elastična povratna deformacija; Uf ukupna rastegljivost kože; Ua, ukupan oporavak od deformacije; Ur/Ue čista elastičnost.



**Slika 2 – Naticol<sup>®</sup> je doveo do značajnog smanjenja Uf vrednosti, donoseći porast čvrstine kože (prosek ± SEM, \*: p<0,05).**



**Slika 3 – Smanjenje poslednje minimalne amplitude R4 na koži stomaka tumači se kao poboljšanje čvrstine kože stomaka u grupi Naticol<sup>®</sup>.**



**Slika 4 – Rezidualna defromacija na koži lica smanjila se na kraju ciklusa merenja na licu za Naticol<sup>®</sup>.**

### > Tolerancija

Procenjena kroz kliničko ispitivanje i ankete dobrovoljaca. Prema preparatu *Naticol*<sup>®</sup> globalno je ispoljena dobra tolerantnost.

### > Zaključak

Oralnim uzimanjem 5 g preparata *Naticol*<sup>®</sup> / dnevno, u periodu od 8 nedelja, u kliničkom istraživanju su uočene pogodnosti u pogledu čvrstine kože i smanjenje pojave bora. Ovi rezultati mogu, takođe, da posvedoče korisnom dejstvu peptida ribljeg kolagena *Naticol*<sup>®</sup> na proces dehidracije kože uslovljen hladnim spoljnim vremenskim uslovima.

**Ovi rezultati su objavljeni u Časopisu o starenju Istraživačke kliničke prakse, (Duteil et al., 2016)\*.**

\* Duteil L., Queille-Roussel C., Maubert Y., Esdaile J., Bruno-Bonnet C., Lacour J-P. (2016). Specific natural bioactive type 1 collagen peptides oral intake reverse skin aging signs in mature women. *J. aging Res. clin. Practice*; 5(2):84- 92.

**\*\*Ove izjave nisu procenjene od strane Agencije za hranu i lekove. Ovaj proizvod nije namenjen dijagnosticiranju, lečenju ili sprečavanju bilo koje bolesti.**



# Skin beauty

Well-aging benefits of collagen

**5g/day**

Aging of the skin occurs when the epidermis thins, cell renewal slows and collagen is lost or damaged, leading to less moisture, less elasticity and firmness. Contributing factors to skin aging include genes, hormones, UV irradiation, smoking and pollution. All of these factors generate reactive oxygen species that damage the anti-oxidative defense mechanisms of the skin.

**Naticol® collagen peptides offer well-aging solutions in products affordable enough for daily use.**



**WELL-BEING**



**Naticol® has clinically demonstrated its role as an ingredient in well-aging applications.**



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**CLINICAL STUDY CSR3463 – METHODS AND RESULTS**

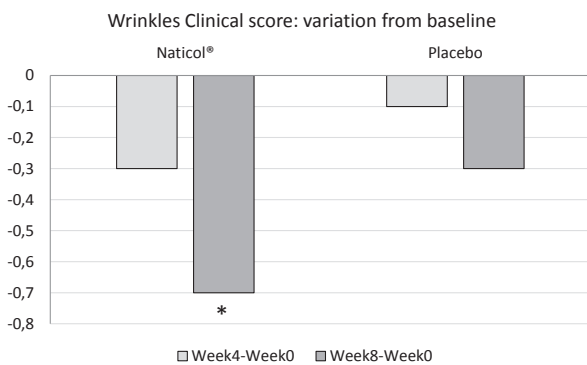
This clinical study was double-blind, randomized, against placebo and carried on 60 healthy female subjects (mean 56 y.o.). The objective was to evaluate the anti-aging potential of daily oral intake of 5g of Naticol® fish collagen peptides on cutaneous measures and its tolerance. 5g of Naticol® was mixed with liquid and ingested in the morning. This study was conducted by CPCAD (clinical pharmacology center specialized in dermatology - Hospital of Nice, France). All measurements (including biometry measurements) were controlled by certified dermatologists.

This clinical study was performed according to French regulatory competent authority (ANSM) and approved by the local Ethical Committee (CPP). Consent was obtained from each subject before entry in the study.

› **Skin relief – Visia® CR**

Photographies of the face were taken using a standardized device, the VISIA® CR.

This device allows to take pictures using standardized lighting: white light, cross polarized light, parallel polarized light and UVA light. The replica was lit with incident light at 35° which produced shadowing behind each wrinkle.



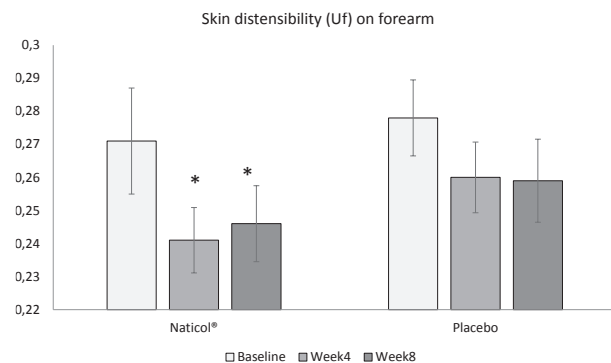
**Figure 1 - The clinical assessment of the peri-orbital wrinkles at day 56, indicated a significant decrease of -11% compared to baseline for Naticol®**

› **Elasticity - Cutometer SEM 575**

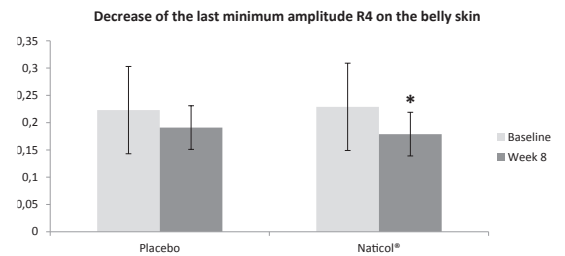
Cutometer® SEM 575 by COURAGE & KHAZAKA was used to measure a deformation perpendicular to the skin during 2 seconds, followed by a relaxation period of 2 seconds.

This method measures the degree of deformation and the time required for the skin to return to its original state. The deformation induced on the skin is measured by an optical system.

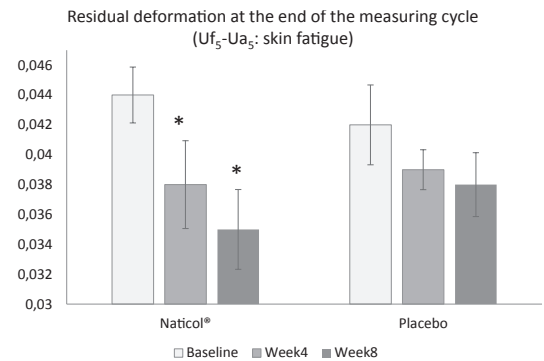
The measured parameters are: Ue, the elastic deformation; Ur, the elastic back deformation; Uf the total extensibility of the skin; Ua, the total deformation recovery; Ur/Ue the pure elasticity.



**Figure 2 - Naticol® induced a significant decrease of Uf, indicating an increase of skin firmness (mean ± SEM, \*: p<0.05).**



**Figure 3 - The decrease of the last minimum amplitude R4 on the belly skin translates a belly skin firmness improvement in Naticol® group.**



**Figure 4 - The residual deformation on the face skin decreased at the end of the measuring cycle on the face for Naticol®.**

› **Tolerance**

It was evaluated through a clinical examination and volunteer's questionnaire. Naticol® presents globally a good tolerance.

› **Conclusion**

In this clinical study, oral intake of 5g Naticol®/day, for 8 weeks, showed benefits on skin firmness and a reduction of wrinkle appearance. These results may also indicate a beneficial effect of Naticol®, fish collagen peptides, on the skin dehydration due to cold outside conditions.

**These results are published in Journal of aging Research clinical Practice, (Duteil et al., 2016)\*.**

\* Duteil L., Queille-Roussel C., Maubert Y., Esdaile J., Bruno-Bonnet C., Lacour J-P. (2016). Specific natural bioactive type 1 collagen peptides oral intake reverse skin aging signs in mature women. J. aging Res. clin. Practice; 5(2):84- 92.

\*\*These statements have not been evaluated by the Food and Drug Administration. This product is not intended to diagnose, treat, cure, or prevent any disease.