

Beneficial effects of Naticol[®], fish collagen peptides, on the skin ageing signs

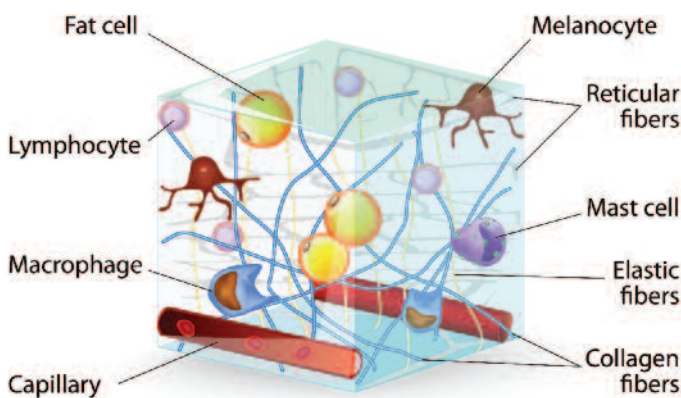
Ageing may be considered as the accumulation of diverse deleterious changes in cells and tissues. Skin ageing is one of the most important current dermatological concerns. Among various factors, clinical signs of dermal atrophy and skin ageing (including skin dryness, hypo/hyper-pigmentation, diminished skin elasticity and firmness) are associated with a *reduction and disorganisation of collagen*.

A double blinded, randomised, placebo controlled clinical study (Naticol[®] 5g/day)

The study here reported was intended to assess the anti-ageing potential of specific fish collagen hydrolysates, Naticol[®], on the ageing signs of the skin of mature women. This study also evaluated the effect of fish collagen peptides, Naticol[®] on several different skin locations including the abdomen skin. Assessments of this specific skin site may open new application areas, in particular, for women after giving birth or people after a heavy weight loss.



CONNECTIVE TISSUES



The study was conducted in accordance with the ethical principles originating from the Declaration of Helsinki and its amendments, the ICH guidelines for Good Clinical Practice (GCP) as currently in force and in compliance with local regulatory requirements. Informed consent was obtained from all subjects before the initiation of the study. The study was carried out as a mono-centric, double-blinded, randomised, placebo-controlled supplementation study on the effects of collagen peptides, Naticol[®], on skin elasticity, skin wrinkles and skin hydration after 8 weeks.

Healthy female subjects meeting specific criteria of inclusion/non-inclusion were included in the study. They were randomly assigned at the CPCAD (Centre of clinical Pharmacology applied to Dermatology), Nice University Hospital, France, to receive either one daily intake of 5 g specific fish collagen peptides, Naticol[®] (Weishardt France) or matching placebo, maltodextrin, for 8 weeks.

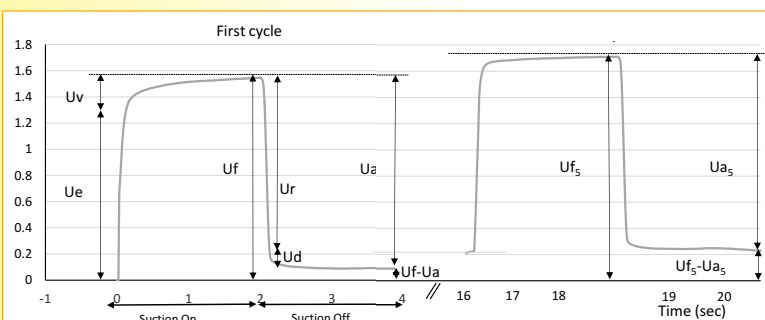


Figure 1- Skin deformation curve as a function of time.

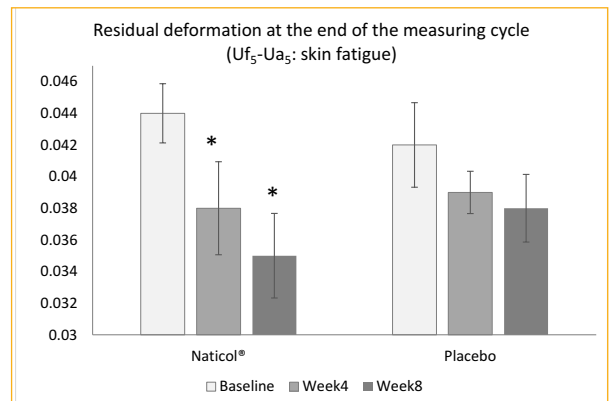


Figure 2 – Evolution of the residual deformation (Uf₅-Uf) on the face as a function of treatments (mean ± SEM, *, p<0.01).

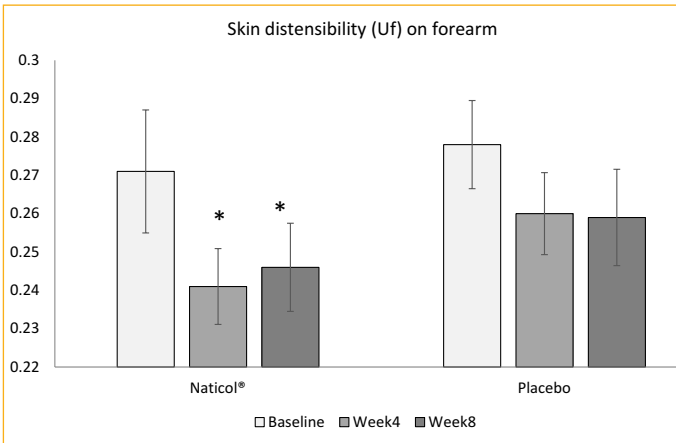


Figure 3 – Evolution of skin distensibility (Uf) on forearm as a function of treatments. Naticol® induced a significant decrease of Uf, indicating an increase of skin firmness (mean ± SEM, *: p<0.05).

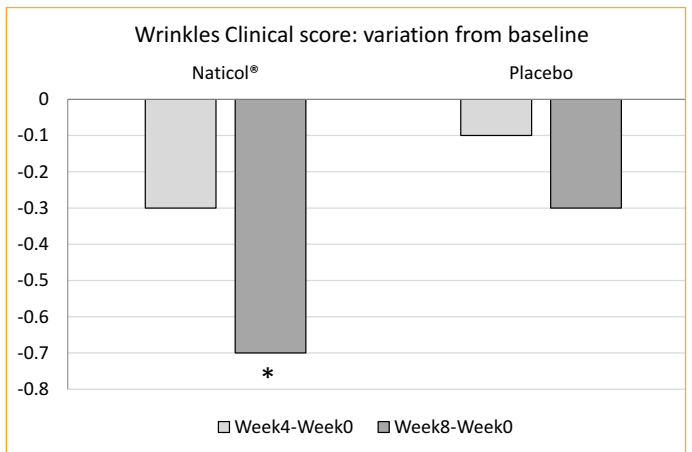


Figure 4- Variations from baseline of the clinical score of the peri-orbital wrinkles (*: p<0.05)

Improvement of skin firmness and reduction of the wrinkle appearance after Naticol® oral intake

Skin biometry results

Skin biometry measurements (figure 1) were performed by a cutometer on three body sites: on the face (bony part of the cheek), on the dominant forearm and on the abdomen (10 cm to one side of the navel).

Significant results concerning biomechanics parameters were observed at week 4 and week 8 for the Naticol® group and not for the Placebo group.

Residual deformation was decreased at the end of the measuring cycle (figure 2).

A decrease of the skin distensibility (Uf) on the forearm by 10% indicates firmer forearm skin (figure 3).

Clinical assessment

Clinical assessment of the peri-orbital wrinkles was conducted by the investigator using a 10-point photographic scale. Compared to baseline, the wrinkle score was significantly decreased at week 8 for Naticol® group (Figure 4).

In conclusion, this pilot 2-month treatment once daily study demonstrates that the collagen hydrolysate based products (Naticol®) have beneficial effects on skin quality in mature women.

Naticol®, the range of fish collagen peptides manufactured by Weishardt demonstrated great effects including improvement of skin biomechanics, decrease of wrinkles, good subject satisfaction. All results of the clinical study here reported are published in Journal of Ageing Clinical and Research practice JARCP, Duteil et al. 2016).

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About Weishardt

WEISHARDT is a French company with more than 170 years of experience in the field of the collagen. It is a world leader in the production and sale of collagen products.

Weishardt's innovative fish collagen peptide products are registered under the trademark Naticol® and are mainly directed to functional food & beverage applications, cosmetofoods, nutraceutical and well-being products.

WEISHARDT is supported by Europe and Region Midi- Pyrenees to invest more than US\$ 2 million grant for its Research about its fish collagen peptides. Innovation is the key force of the company that continuously looks for innovative and new health solutions to provide to its customers.