

LABORATOIRES
FILORGA
PARIS



SCIENTIFIC BROCHURE
HYDRA-HYAL

HYDRA-HYAL


HYDRA-HYAL, FILORGA'S 1ST ANTI-AGEING
HYDRATING SERUM ^[1] INSPIRED BY OUR
EXPERTISE IN INJECTABLES ^[2]

Drawing on its track record of nearly **40 years**
expertise in injectables, FILORGA has incorporated
5 complementary forms of hyaluronic acid
in a skincare product.



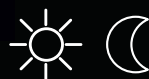
[1] Cosmetic efficacy. [2] From 1975 to 2015.

For distributors and partners of FILORGA only.



A UNIQUE COMPLEX THAT
DELIVERS THE POWER OF **5 FORMS**
OF **HYALURONIC ACID** INTO THE SKIN

HYDRA-HYAL
DIFFUSING FACTORS



LOW MOLECULAR
WEIGHT HYALURONIC ACID

Readily penetrates into the skin and durably **PLUMPS** the skin.



MEDIUM MOLECULAR
WEIGHT HYALURONIC ACID

REPLENISHES the skin's water reserves.



HIGH MOLECULAR
WEIGHT HYALURONIC ACID

HYDRATES on the surface and helps prevent water loss.



ENCAPSULATED HIGH MOLECULAR
WEIGHT HYALURONIC ACID

Enhances and sustains active delivery into the skin and help **SMOOTH** wrinkles.



CROSS-LINKED
HYALURONIC ACID

STRENGTHENS the skin barrier and **PROTECTS** the skin against external aggressors.

HYDRA-HYAL, A SERUM WITH MULTIPLE PROPERTIES

1 FORMULATED FOR AN
OPTIMAL PENETRATION^[1]

2 24 HOURS HYDRATATION^[2]

3 SMOOTHING AND
PLUMPING EFFECT^[3]

4 PROTECTION AGAINST
EXTERNAL AGGRESSORS^[4]

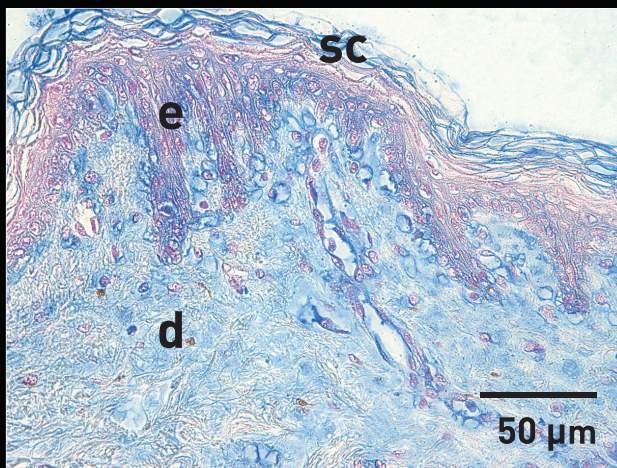


[1 & 4] Ex-vivo study on skin explants, results after four days of application. [2] Hydration study, moisture map, 20 volunteers, result after 1 application. [3] Clinical study, 30 volunteers, result after 1 application.

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HYDRA-HYAL SERUM SIGNIFICANTLY INCREASES HYALURONIC ACID LEVELS IN THE SKIN^[1]

PLACEBO



Control skin treated with placebo cream. **Hyaluronic acid** is visualized using a blue stain^[1].

LEGEND

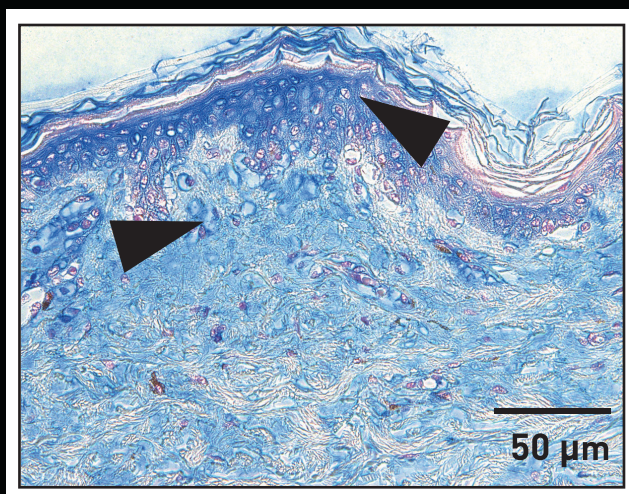
sc: stratum corneum

e: epidermis

d: dermis

Scale bar: 50μm

HYDRA-HYAL SERUM



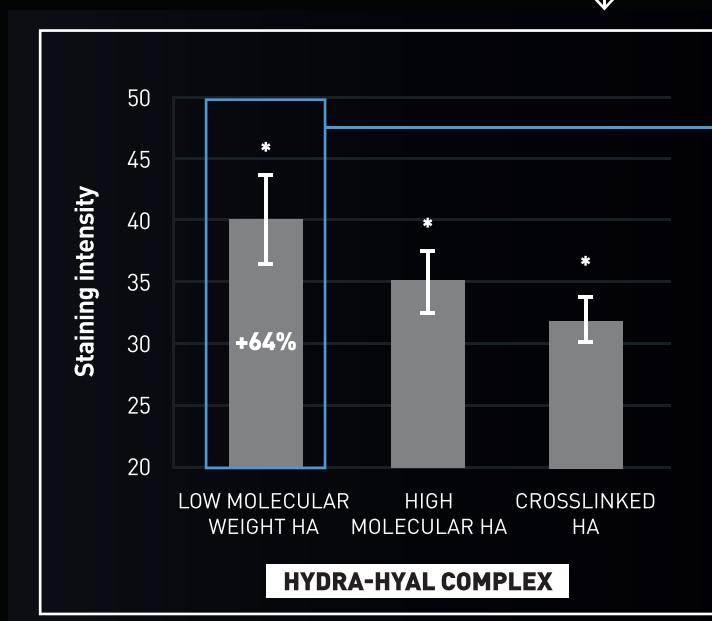
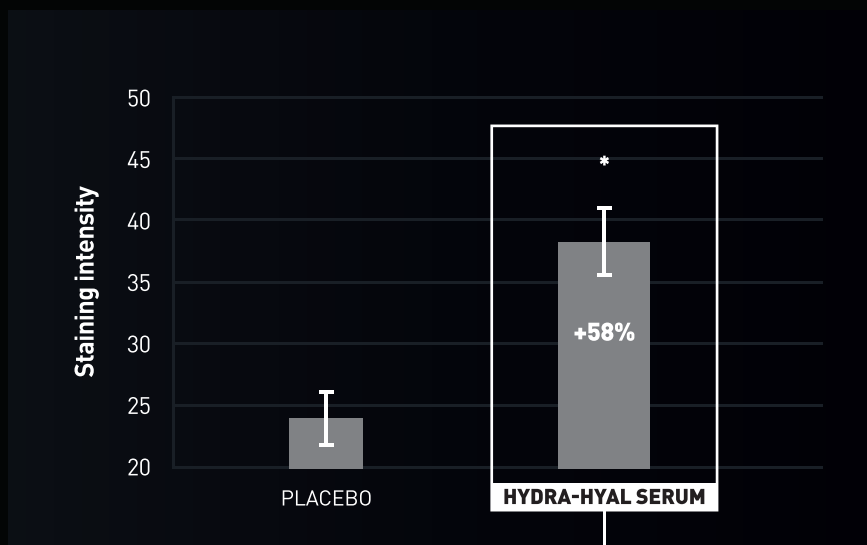
Skin treated with **HYDRA-HYAL SERUM**^[2]. After 4 days, the detected levels of **hyaluronic acid** are superior to that of the placebo.

+58%

**INCREASE IN
HYALURONIC ACID
LEVELS IN THE SKIN**

[1] Ex-vivo of study on skin explants, 6 samples, results after 4 days of application. [2] Quantification of hyaluronic acid on histologic tissue section by staining of hyaluronan binding protein (HABP) in blue, results of 12 images.

THE DIFFERENT FORMS OF **HYALURONIC ACID** EFFECTIVELY PENETRATE THE SKIN^[1]

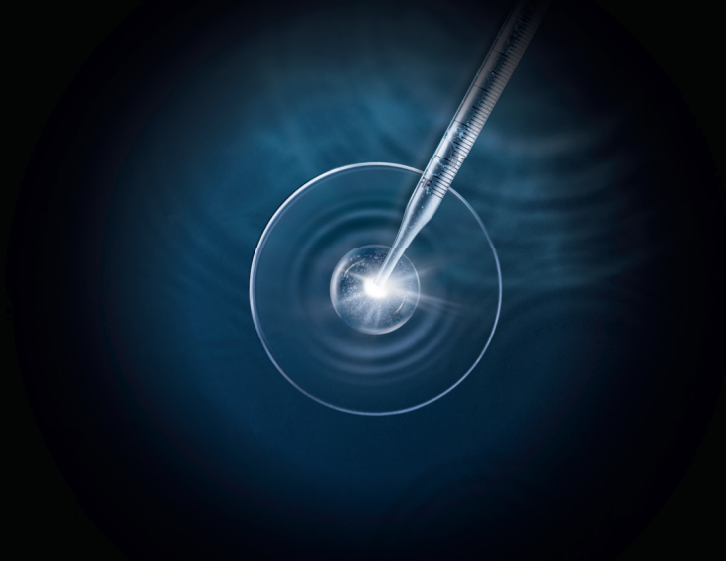


The **hyaluronic acid** of low molecular weight is the most abundant form found in skin tissues.

The results suggests that the cutaneous penetration of hyaluronic acid is facilitated with a low weight.

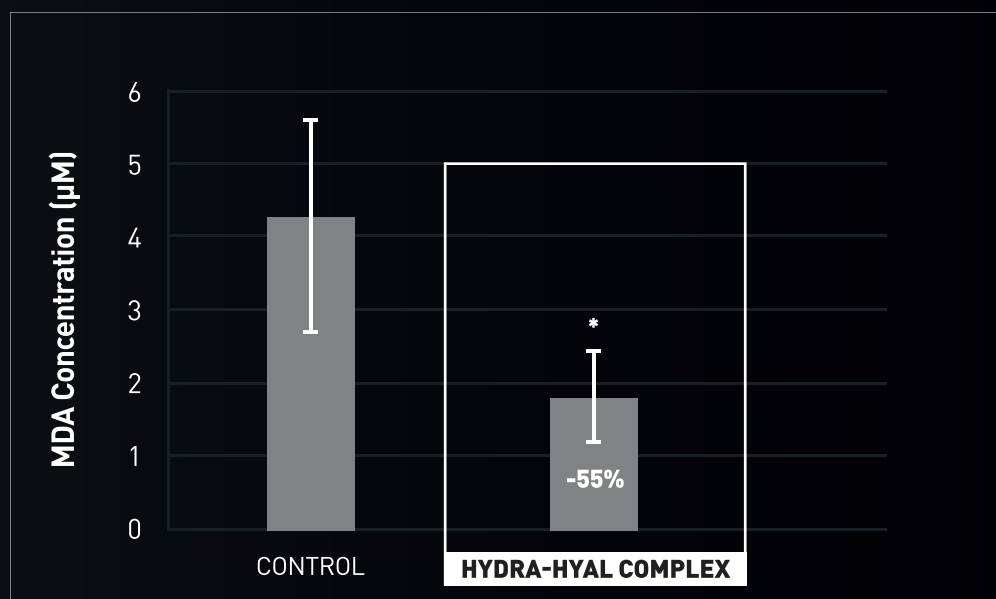
[1] Ex-vivo study on skin explants, 6 samples, results after 4 days of application. Quantification of hyaluronic acid by staining of hyaluronic acid binding protein (HABP). HA: hyaluronic acid. *p<0.05 compared to placebo

THE HYDRA-HYAL SERUM HELPS TO REDUCE OXYDATIVE STRESS CAUSED BY OZONE EXPOSURE ^[1]



The reduction of the MDA ^[2] concentration produced by the skin after ozone exposure indicates a decrease in oxidative stress.

The results suggest that the **HYDRA-HYAL's complex** provides a protection against ozone exposure.

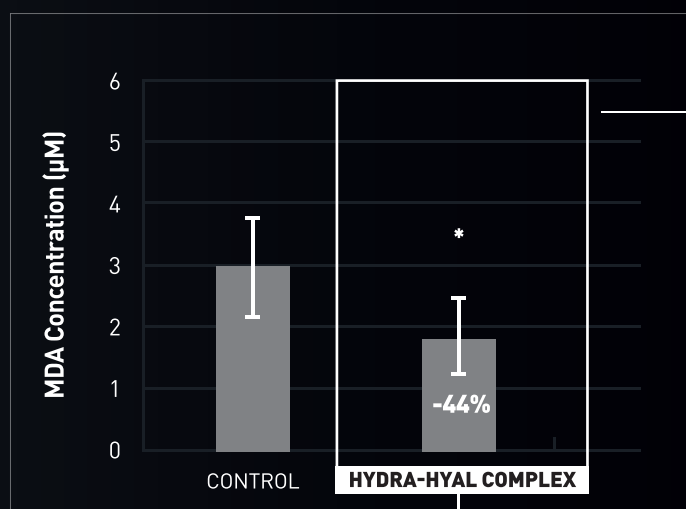


[1] Ex-vivo study on skin explants, 6 samples, results after application of serum and exposure to 110 ppb of ozone exposure during 1 hour.

[2] MDA: malondialdehyde, an end product of lipid peroxidation of cell membranes used as oxidative stress marker.

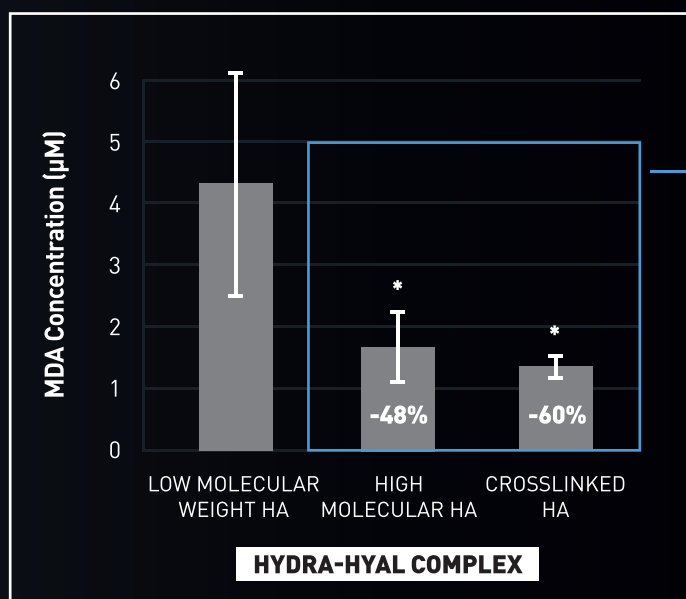
*p<0.05 compared to control.

THE HYDRA-HYAL SERUM HELPS REDUCE **OXIDATIVE STRESS** CAUSED BY UV-A EXPOSURE^[1]



The reduction of the **MDA**^[2] concentration produced by the skin after UV-A exposure indicates a **decrease in oxidative stress**.

The results suggest that the **HYDRA-HYAL's complex** provides a **protection against UV-A exposure**.



The decrease of oxidative stress is mainly driven by the **high molecular weight and crosslinked HA**.

[1] Ex-vivo study on skin explants, 6 samples, results after application of serum and exposure to 20 J/cm² of UV-A radiation.

[2] MDA: malondialdehyde, an end product of lipid peroxidation of cell membranes used as oxidative stress marker.

*p<0.05 compared to control.

The data were presented at The Aesthetic and Anti-Aging Medicine World Congress (AMWC) 2022, March 31 to April 02 2022, Monaco.
The adapted version of the original poster is available on the eSkin portal.