



Nylgold



T H E G O L D F I B E R



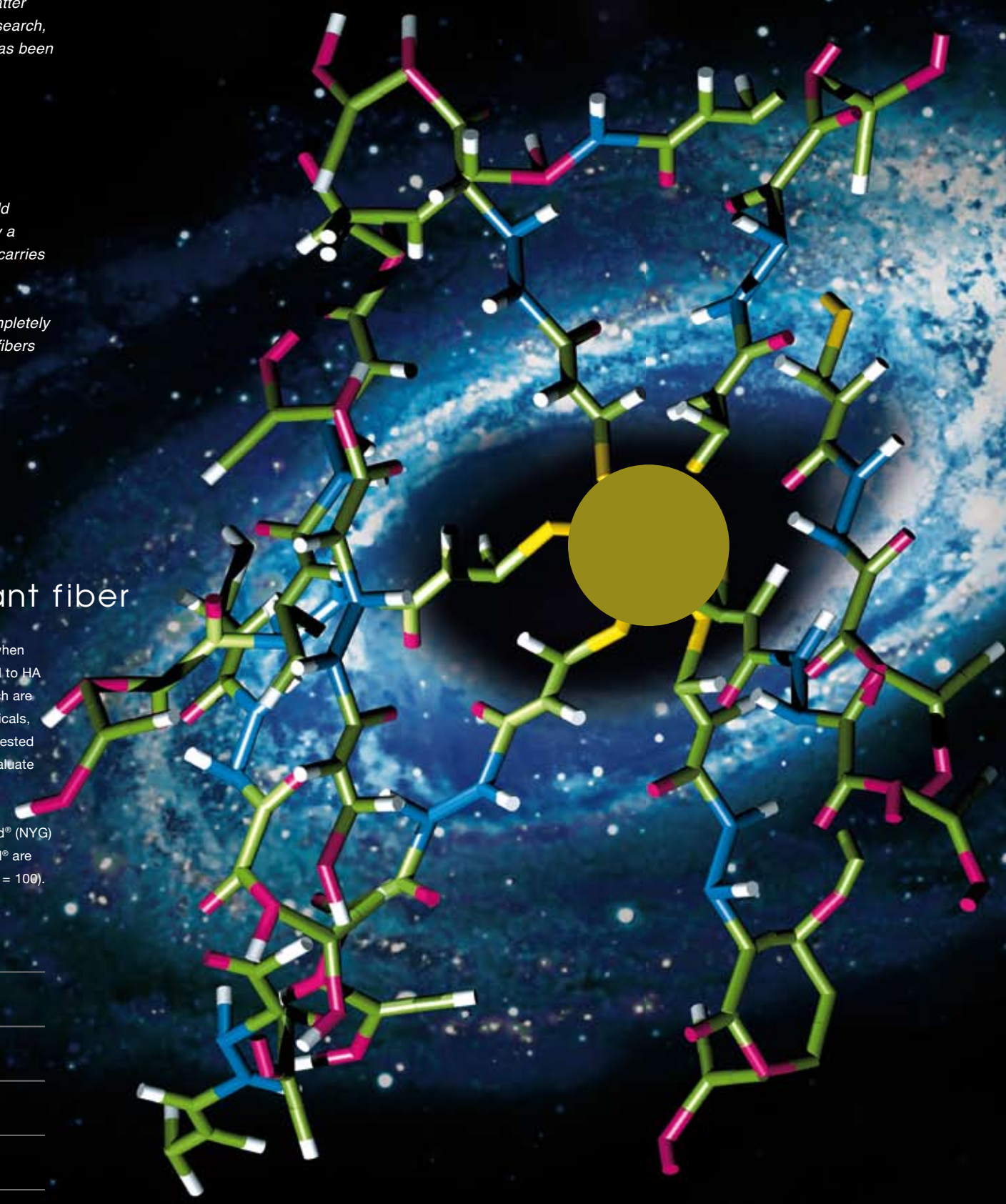
WELCOME TO THE CUTTING-EDGE IN DERMAWEAR

Nanotechnology is the science that allows us to control matter at atomic and molecular scale. After years of advanced research, a unique material based on this cutting-edge technology has been created: **NYG nanosystem**.

Hyaluronic Acid (HA) molecules are bound to 24 Karat Gold Nanoparticles in an innovative way to generate NYG, a nanosystem with revolutionary biological properties.

HA molecules are directly mounted on the surface of a Gold Nanoparticle, forming a novel nano-structure composed by a Gold core and a HA shell. Every single Gold Nanoparticle carries thousands of HA molecules.

NYG nanomaterial is integrated in nylon fibers using a completely new process, making possible a new generation of textile fibers with dermatological properties: Nylgold®



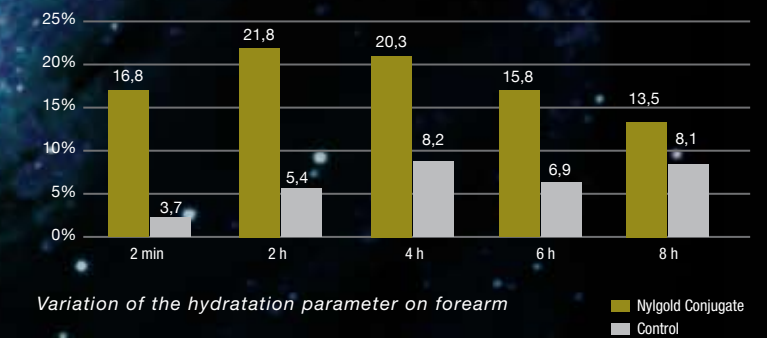
Nylgold® is a new fiber containing in its molecular structure the NYG nanosystem. Nylgold® contains more than 4 billion (4 x 10⁹) NYG nanoparticles per cm²

“Under the experimental conditions adopted, the product E-01/N-0153/01 (NYG nanoparticles) has a **very good skin compatibility**”. Evaluation in clinical trials with volunteers. Evic Hispania. Barcelona, 2009.

Nylgold®, the Moisturizing fiber

Once the textile fiber Nylgold® is in contact with the skin, NYG Nanoparticles leave the fiber and are delivered into the skin. Therefore Nylgold® is an efficient topical delivery system that releases the HA conjugated to Gold Nanoparticles directly to the skin. Release behaviour has been evaluated using ICP-M technique (Metal Analysis Unit, University of Barcelona) and demonstrates that 0.6% of the Nylgold® Nanoparticles is released into the skin every 48 h.

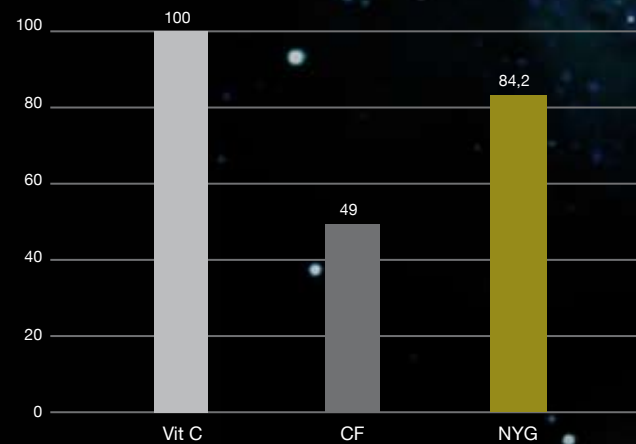
When NYG Nanoparticles are in contact with the skin, the HA shell causes a deep hydrating effect due to its capacity to absorb and retain water. In vivo efficacy tests in volunteers have been performed (SpinControl, France) in order to evaluate the hydrating effect. The study demonstrates that the NYG Nanoparticles have an intense hydrating effect on the skin surface.



Nylgold®, the Anti-oxidant fiber

The Anti-oxidant effect is conducted by the NYG Nanoparticles when are located inside the textile fiber. Gold Nanoparticles conjugated to HA protect the skin against free radicals present in atmosphere, which are responsible of skin aging. When conjugates contact with free radicals, deactivate its capacity to damage the skin. This effect has been tested with DPPH technique, the most accepted test in cosmetics to evaluate antioxidant effect, applied directly to Nylgold® fiber.

Obtained results show an increase of antioxidant effect of Nylgold® (NYG) comparing with common fibers (CF). Antioxidant levels of Nylgold® are even close to positive control used in the experiment (Vitamine C = 100).



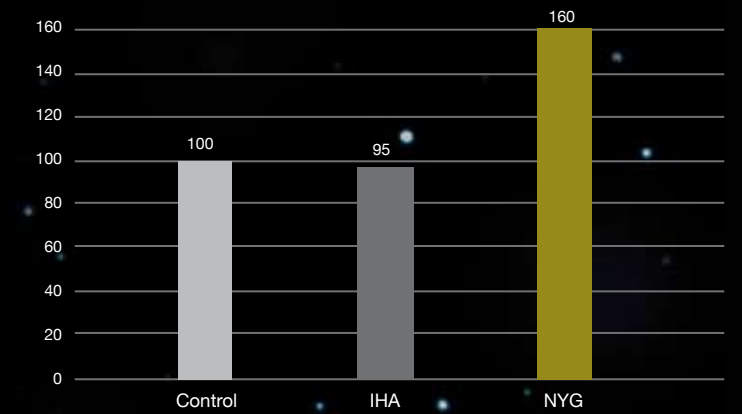
Antioxidant effect

Nylgold®, the Anti-aging fiber

NYG Nanoparticles have also demonstrated anti-aging effect. Skin cells produce endogenous Hyaluronic Acid which plays a decisive role in skin youth and health. As we age, the quantity of HA in the skin decreases, since the skin cells progressively lose their production capacity.

NYG Nanoparticles act directly on skin cells and leads an anti-aging effect at genetic level that makes the cells increase its capacity to generate natural HA. Due to this effect, skin recovers its youth and elasticity.

This effect has been demonstrated through the evaluation of the HAS gen (responsible of the natural HA production) levels. Cells treated with NYG Nanoparticles (NYG) increase 60% the production of HA comparing with non treated skin (Control) and a treatment using isolated Hyaluronic Acid (IHA).



HA production by cells



I'VE gold YOU ● UNDER MY SKIN



- UNDERWEAR
- ACTIVE WEAR
- T-SHIRTS
- STOCKINGS
- SOCKS
- THERAPEUTICAL WEAR
- WELLNESS WEAR
- SHAPEWEAR





THE GOLD FIBER

Nylstar applies a philosophy of ongoing innovation, generating new concepts in the field of textiles that are capable of significantly improving the quality of life.

With Nylgold®, a fiber created using the most advanced technology in the world, a new era in textiles begins: the era of "dermawear", featuring conjugated 24-carat gold nanostructures.

Gold symbolizes "luxury", "desire", and "beauty". It also means continuous and effective care of the skin.

Once again, Nylstar supports you in your advanced fabrics and garments!



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