



YEARNING FOR YOUTH

To some, the mythical fountain of youth has always been the holy grail. But now, thanks to a major scientific discovery, an age-defying revolution has dawned upon us.

We are all familiar with the harmful effects of stress on the skin; the environment, UV rays and an unhealthy lifestyle can cause damage all the way down to the heart of the cells, speeding up the ageing process. Up until now, all anti-ageing research has been focused on how to reduce the impact of these stress factors in order to maintain the skin's youthful appearance. The idea of exposing our skin to stress so that it may optimally 'resist' the effects of time may seem incomprehensible. Nonetheless, this is not a confounding idea.

This is the theory of Hormesis, a natural phenomenon in which regular exposure to micro-stress boosts our cells' resistance to future stress and generates favourable effects on extending cellular life. This self-evident theory will soon revolutionise the field of anti-ageing cosmetology.

The research that has been carried out for over 10 years by an expert in the field of Hormesis, eminent biogerontologist and world renowned researcher Professor Suresh Rattan, has led to a major scientific discovery that has grabbed the attention of Givenchy Research and Development.

Givenchy has drawn inspiration from Prof. Rattan's research on the role of Hormesis in maintaining youthful-looking skin, and has, for the first time ever, applied this scientific discovery to creating a revolutionary skincare treatment.

Today, this collaboration has led to an age-defying revolution. Like a vaccine that helps the body develop its defense mechanisms required for self-protection, the treatment uses a completely innovative approach to prevent the appearance of premature signs of ageing by stimulating its own prevention and repair functions.



Through his work, Prof. Rattan was able to document and quantify the various responses to the different hormetins, and in particular, the production of a specific protein called HSP70. A genuine age-defying protein, HSP70 plays a decisive role in stimulating the defense and repair mechanisms of cells exposed to future stress.

Increasingly well-protected, with its natural youth mechanisms optimally reinforced, the skin can put a 'stop' to the ageing process and remain more youthful-looking for longer. Young skin maintains its youthful appearance and allows more mature skin to slow down the ageing process.

A self-evident theory

In 1888, German pharmacologist Hugo Schulz showed that when exposed to low doses of toxic substances, the body is capable not only of protecting itself, but also of speeding up the cellular 'repair' process. He called this phenomenon 'Hormesis', which comes from the Greek word meaning 'to excite'.

For a long time, Hormesis was not part of advanced scientific research, due to the lack of resources required to explain the mechanisms behind the theory. New interest in this astounding phenomenon has arisen, thanks to molecular biology, which allows us to look into the heart of the cells and see how the body's self-repair mechanisms work.

Ten years of research has led Prof. Rattan to be the first person to apply the Hormesis theory to the fight against ageing. He has shown that when repeatedly exposed to micro-stress, cells more effectively push back the ageing process by using their own self-defense and self-repair mechanisms and thus increasing their longevity. He called these repeated micro-stresses, which induce hormetins. There are different categories of hormetins: physical hormetins, such as a high temperature or UV radiation; chemical or nutritional, such as certain spices or calorie restrictions; or psychological, such as reading.



HSP70 not only boosts our cells' prolonged resistance to ageing, it protects and repairs all of the skin's other proteins and thus has a highly positive effect on the duration of cellular life. In order to explain how Hormesis works, Prof. Rattan often uses a comparison to sports, saying, "Physical activity is a very good example of how Hormesis works. When we exercise, our body generates more free radicals, which leads to cellular damage; our

cells die and more acid is produced." However, everyone knows that moderate exercise is good for the body. Why? Because our cells produce new proteins that can repair previous damage and prevent new cellular damage from occurring. This phenomenon helps slow down the ageing process. Hormesis is thus a phenomenon that stimulates the cells, body and even the mind. This has beneficial results as the body reacts and adapts to this stimulation."

A major discovery

An important part of the cell's machinery, HSP70 is one of the body's predominant survival mechanisms and is present throughout the entire cell life cycle. A genuine shield for all of the other proteins, HSP70 plays a dual role, which is vital in protecting the skin from premature signs of ageing by:

- Protecting the existing or newly created proteins by physically wrapping itself around them, thus ensuring that they function at an optimal level.
- Repairing damaged proteins and triggers the elimination process of those proteins that cannot be repaired.

Thanks to HSP70's two-fold action, all of the skin's proteins are repaired and protected against future stress. Effectively reinforced, the skin's proteins can once again function at an optimal level for longer and carry out their tasks to protect the skin from premature signs of ageing.

However, over time, the production of HSP70 diminishes. The cells are effectively less able to defend themselves against future stress and the cellular ageing process thus accelerates.

Inspired by Prof. Rattan's research, the Givenchy Laboratories have created a partnership with his team to develop a unique complex of active ingredients that is capable of reproducing the Hormesis phenomenon without placing stress on the cells and thus fight against cutaneous ageing. Two powerful hormetins that promote the production of HSP70 are used in this age-defying serum, which has



cells in order to understand the precise effects of these hormetins. I was very happy to see the highly impressive results. Some of these active ingredients are powerful hormetins and will have numerous beneficial age-defying effects as well as help regulate the ageing process.”

Youth infusion serum

By generating microstimuli that encourage the skin cells to produce their own age-defying protein in doses that are proportionate to their daily requirements, the exclusive complex provides the skin with a totally unique age-defying protection.

After just 6 hours, the production of HSP70 increases by 24 per cent. The elimination process for the damaged proteins is reinstated and functions in the existing proteins are restored protecting them from future stress for longer.

As it is well-protected against premature signs of ageing, the skin becomes increasingly resilient and resistant to stress. The wrinkle formation process is inhibited and skin tone and elasticity are reinforced. The complexion is beautifully even and luminous.

With this cosmetic vaccine-like age-defying effect, the skin’s youthful appearance is preserved. Upon application, the skin is instantly velvety soft and feels replenished. Also, day after day, wrinkle formation is slowed down.

Measurement tests were conducted by comparing the two sides of the face of 18 volunteers, one of which was treated and the other untreated. After one month, it was noted that:

- in the untreated zone, the aspect of the skin was modified and wrinkles had formed
- in the treated zone, wrinkle formation had slowed down and the skin protection process had begun
- tone and elasticity are reinforced

Measurement test was carried out on 32 volunteers, using a cutometer, which is a device that measures skin elasticity, by calculating the resistance of the skin to suction and its ability to return to its original position. This measurement was

taken several times, with the volunteers’ skin showing greater resistance to fatigue and increased skin firmness. The skin is 31 per cent more effectively protected against harmful factors and the complexion is beautifully even and luminous.

This led to a unanimous result:

- 95 per cent of the women were satisfied with, Youth Infusion Serum
- 87 per cent of the women found their skin to be increasingly luminous
- After seven days of product use, 82 per cent of the women felt that their skin was more resilient and youthful-looking

After the first month of use, this serum visibly prevents premature signs of ageing from appearing and stimulates the skin’s functions. By encouraging the skin cells to produce their own age-defying protein, the serum, verily appears to present itself as the modern equivalent of that elusive fountain of youth.

THE PRODUCT

Apply Infusion Serum to thoroughly cleansed skin, morning and evening before your regular skincare ritual. In the Givenchy line, it is used based on the skin’s specific needs:

- Luminescent moisture replenishment and radiance: Hydra Sparkling
- Expert firmness: No Surgetics Plasti Sculpt
- Stubborn wrinkle correction: No Surgetics Wrinkle Defy
- Global anti-age care: Radically No Surgetics

Incredibly soft and smooth upon application, Youth Infusion Serum leaves the skin velvety soft to the touch, thanks to its highly sophisticated, delectably rich and airy light texture.

The luxurious glass pipette bottle embodies a ‘medical’ aspect with its metallic shell, through which we can see the serum. It also reflects the world of Givenchy with its pure and elegant lines and the beautifully engraved Givenchy logo.



Laurent Nogueira

opened up a new revolutionary path in neutralising ageing factors and increasing cellular longevity.

“The Givenchy researchers have discovered active ingredients with hormetic properties,” says Prof. Rattan. “They are hormetins in the sense that they stimulate the cells and force them to respond by activating their defense mechanisms. Their initial evaluations showed that the ingredients had hormetic results. They thus asked me for advice and assistance. I asked them to conduct highly meticulous and advanced clinical tests on human