

The Electric New Paper :

THE NEXT BIG THING AFTER BOTOX

STARS SAY GOODBYE TO WRINKLES... WITH A LITTLE HELP FROM THIS SWAB
New customised cream made using DNA analysis claims to banish wrinkles forever

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EXTREME makeovers involving painful surgery, injections and laser treatments used to be the only way to erase the effects of age from your face.

But a group of American geneticists believe they have come up with an anti-aging cream that works just as well.

Also, each bottle of the miracle cream can be tailored to suit your individual DNA.

It might sound like a marketing gimmick, but the treatment has reportedly taken Hollywood by storm.

A-list celebrities including Goldie Hawn, Meg Ryan and Teri Hatcher are raving about it.

The company behind this new craze is Dermagenetics, a division of New Jersey-based genetic research firm GeneLink.

Dr Scott Wise, a scientific adviser on the board of GeneLink, believes that DNA cosmetics are the future of the beauty industry.

'Everyone's DNA is different,' he told The Daily Mail. 'And with our technology, we've identified five different genes that are connected to ageing. We look at these genes to dictate how skin responds to different stressors, the sun and pollution.'

Dr Wise said that he has spent 12 years studying the relationship between our genes and our physical well-being and appearance.

According to his research, the anti-ageing creams currently being used by women could actually be bad for them.

His findings show that if the creams used on the face are not suited to the user's individual genetic requirements, they won't be able to break down the ingredients in the cream. The ingredients are then left to build up as unwanted toxins on the skin.

Here's how it works - customers are given a kit, which includes two cotton swabs and a return envelope.

Customers swab the inside of their cheeks 10 to 12 times to gather DNA, similar to the way CSI: Crime Scene Investigation detectives do it on TV.

The DNA sample is left to dry before it is sent to the Dermagenetics lab where the skin cells are extracted. Lab technicians then analyse the samples to measure the single nucleotide polymorphisms (SNP) in the DNA.

According to independent studies, SNPs are small but common natural variations in DNA, which are responsible for our physical and biochemical uniqueness.

By measuring SNPs, experts can learn how each person's skin reacts to collagen breakdown, wrinkling and skin ageing.

It also reveals information about their skin's ability to tolerate environmental pollutants.

Using this information, the company whips up its tailor-made DNA UltraCustome night cream made up of minerals, enzymes, herbal extracts and acids specifically balanced to suit the user.

The treatment is seen by some as a breakthrough just as Botox (injections that diminish wrinkles) was considered revolutionary a few years ago.

And like most miracle treatments, Dermagenetics' cream doesn't come cheap - the initial DNA test along with a two-month supply of the cream costs about US\$350 (\$550). Each refill will set you back another US\$160.

Dr Wise claims that 62 per cent of customers who use the cream notice 'substantial early change in firmness to their skin and a decrease in the appearance of wrinkles after just two weeks of treatment.'

Customers like Ms Lizanne Johnson, a 38-year-old casino executive from New Jersey, gush about the dramatic changes they've seen since they started using the cream.

'I've used more skincare products than I can remember, with mixed results, but this one has dramatically improved the texture and tone of my skin in just a few months,' goes her testimonial on Dermagenetics' website.

However, not all experts are convinced that it works.

Dr Elma Baron, a dermatologist at University Hospital in Cleveland, told WEWS-TV that she was sceptical about the cream's effectiveness.

'Individualised treatment is something we always aspire for because we have different genetic backgrounds, so in terms of the goal and the objective, it's pretty attractive,' Dr Baron said.

'My question is, is it really fulfilling what it claims to fulfil?'

She added that there is no hard evidence of research in the dermatology community about the DNA cream.

STEM CELLS FROM PREGNANT COWS

DERMAGENETICS is not the only beauty company that is using DNA technology to combat ageing skin.

Suracell, also based in New Jersey, offers a 'personal genetic health programme' that claims to identify deficiencies and damage in clients' DNA and matches them with products to promote cell repair.

Clients provide a urine sample and mouth swab, which Suracell uses to study the individual's DNA.

DNA Health Institute, which is based in Ventura, California, takes a different route with its CryoStem Skin Therapy System.

It makes a serum out of stem cells extracted from pregnant cows. When applied to the face, the bovine stem cells are said to react with the user's own skin cells to reduce the effects of ageing.

Despite the marketing hype, experts like Ms Nina Goad of the British Skin Foundation believe that some cheaper products can do an equally good job of keeping wrinkles at bay.

She told the Daily Mail: 'We shouldn't judge the efficacy of a product according to its price tag.'

'There are plenty of great products available at reasonable cost from supermarkets and chemists.'

She said that besides genetic factors, smoking and sun exposure are also responsible for changes in the skin.

GENES PLAY A ROLE BUT...

DOES it really work?

Doctors we spoke to agree that that it is true genes control the way in which the body metabolises substances.

Hence, it is not inconceivable that genes control the way in which the body metabolises the ingredients that go into skincare products, and that by identifying a specific gene, one can alter the combination of the ingredients, said Dr Karen Yap, a consultant breast surgeon at Mt Elizabeth Medical Centre.

But the 'gene cream' just targets free radical clearance, said another doctor, Dr Erik Ang, a consultant plastic surgeon at Mt Elizabeth Medical Centre.

'This assumes that free radicals from sun exposure or smoking or other harmful environmental agents are the ONLY reason for ageing skin,' he added.

A person's genetic make-up may control other things like:

- rate of loss of connective tissue (leading to rise in sagginess and, in the upper face, wrinkling);
- skin tone and texture; and
- propensity to scarring following acne in teens (some people are born with smooth baby skin, some people have rough skin).

Dr Ang pointed out that the scientific evidence presented in the Dermagenetics website is 'quite weak' - only 30 over patients studied for eight weeks, and the best result is 70 per cent firmness.

'Even then, results are based on subjective feeling,' he added.

The concept may be viable, but the company in question needs to provide more substantiating evidence.

As Dr Ang puts it: 'Having two or three celebrities swear by it is as scientific as some beautician ads.'

Both doctors have also not heard of it being available here.

'As far as the website goes, it is not available outside of the US yet, but within the US they can get it from spas in addition to doctors' clinics,' said Dr Ang.