HAS2 Wrinkle Regulator vials

Conducted by:

Prof. Williams John

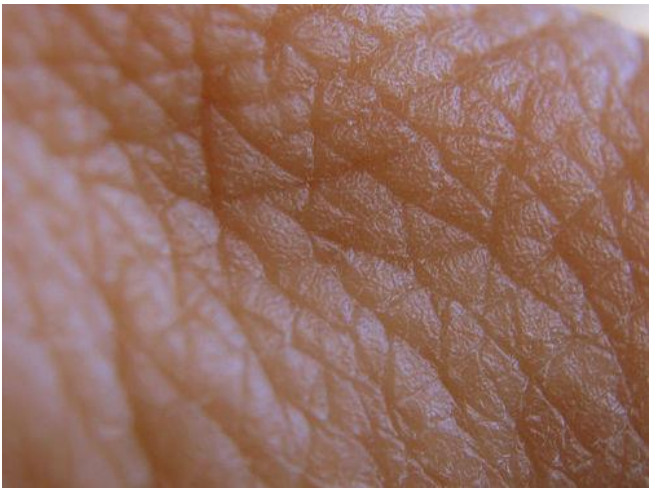
Cardiff University School of Medicine, Heath Park, Cardiff, UK.

Senior Researcher in Microbiology Genetics

Department of Medical Genetics,

Swiss Institute of Biomedical Research, Switzerland.

(Faculté de biologie et de médecine , Swiss)



A ***wrinkle*** is *"A furrow, fold, or crease in the skin, particularly of a type seen with increasing occurrence as a result of sun exposure or, in perioral skin, cigarette smoking; associated with degeneration of dermal elastic tissue."*

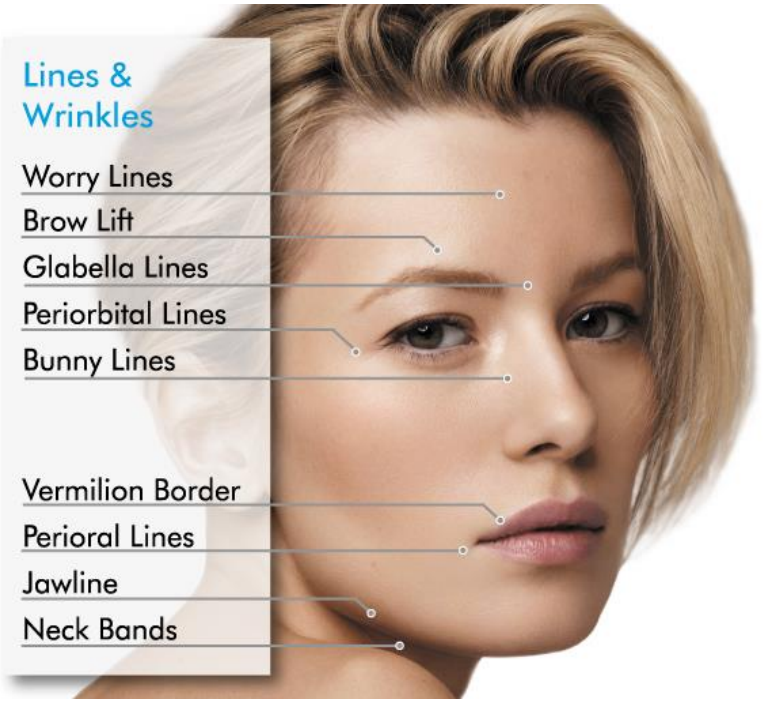
J. Biol. Chem. 2011, 286:19523-19532.
doi: 10.1074/jbc.M111.233916 originally published online February 25, 2011

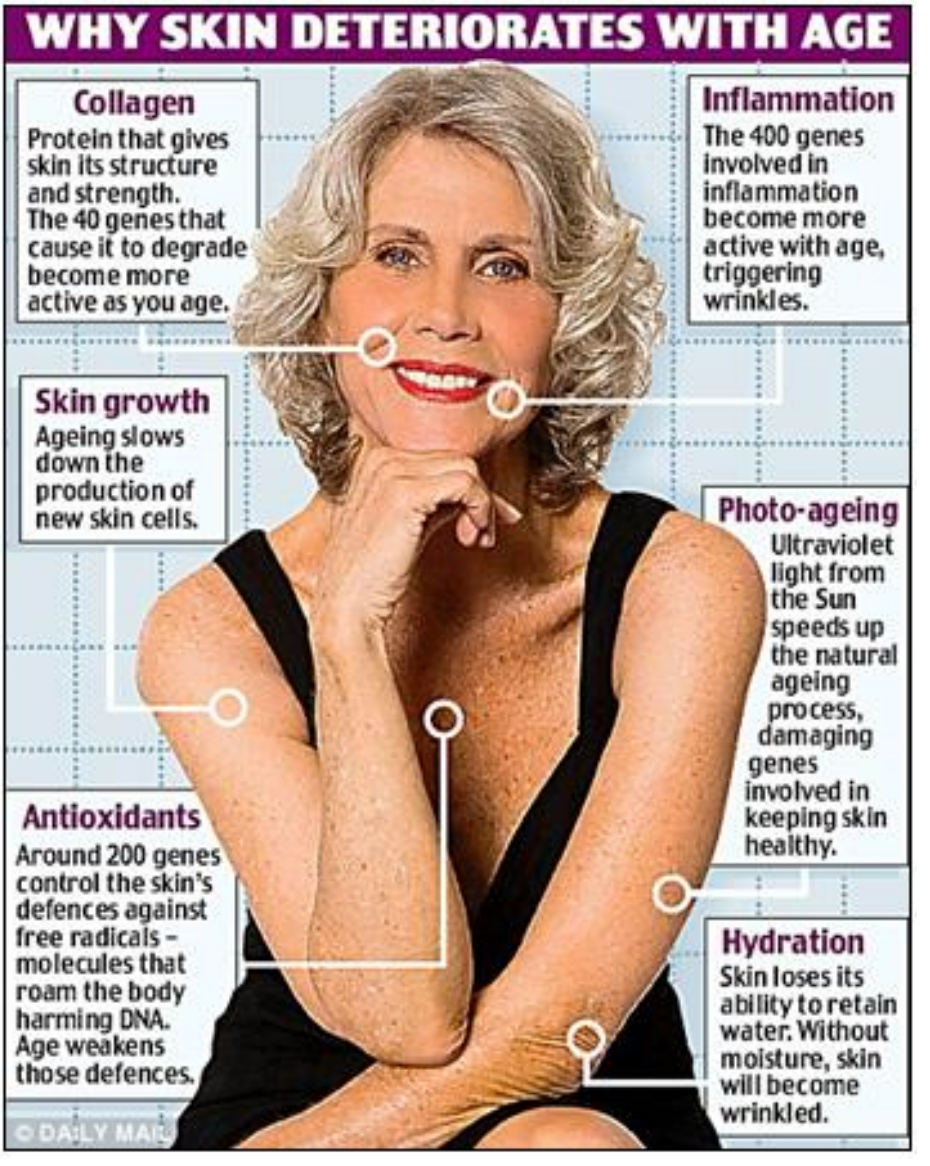
Most wrinkles tend to appear in the parts of the body which receive the most sun exposure, including the:

- Backs of hands
- Face
- Neck
- Tops of forearms

There are two main types of wrinkles:

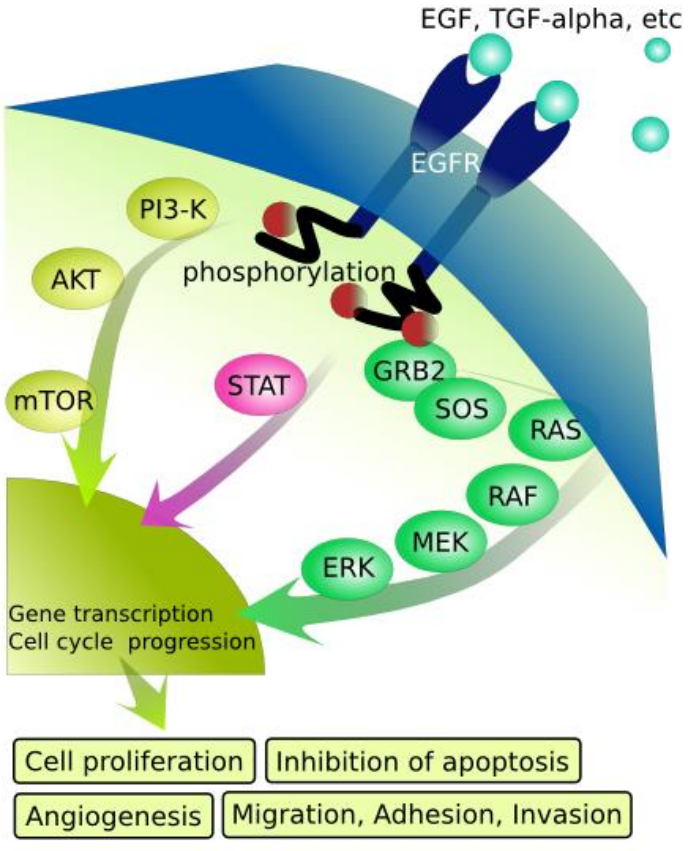
- Surface lines
- Deep furrows





HAS2 Wrinkle Regulatorin the nucleus of an ***Adansonia seed,*** all seems to have a positive amylase activity and high heat resistance.

This ***HAS2 Wrinkle Regulator***is one of the **Epidermal Growth Factor (EGF)** , which is a small polypeptide with 53 amino acids residues.



Epidermal growth factor receptor (EGFR) signaling pathway.

Epidermal growth factor receptor - Wikipedia, the free encyclopedia
en.wikipedia.org/wiki/**Epidermal_growth_factor_receptor**

EGFR (epidermal growth factor receptor) exists on the cell surface and is activated by binding of epidermal growth factor, i.e ***HAS2 Wrinkle Regulator.*** Upon activation by its growth factor ligands, EGFR undergoes a transition from an inactive monomeric form to an active homodimer , signaling proteins initiate several signal transduction cascades, principally the MAPK, Akt and JNK pathways, leading to DNA synthesis and cell proliferation.[6] Such proteins modulate phenotypes such as cell migration, adhesion, and proliferation. However, *HAS2 Wrinkle Regulator* never lead to EGFR over expression.

Biological synthesis

Natural Hyaluronan is synthesized by a class of integral membrane proteins called Hyaluronan synthases, of which vertebrates have three types: HAS1, HAS2, and HAS3.

J Biol Chem. 2011 Jun 3

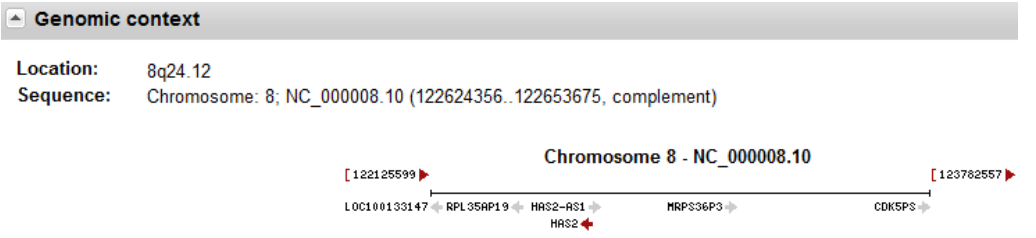
1) **HAS2** hyaluronan synthase 2 [Homo sapiens (human)]
www.ncbi.nlm.nih.gov/**gene**/3037

Identification and analysis of the promoter region of the human hyaluronan synthase 2 gene.
Monslow J, Williams JD, Guy CA, Price IK, Craig KJ, Williams HJ, Williams NM, Martin J, Coleman SL, Topley N, Spicer AP, Buckland PR, Davies M, Bowen T.
J Biol Chem. 2004 May 14;279(20):20576-81. Epub 2004 Feb 25.

The Gene Test

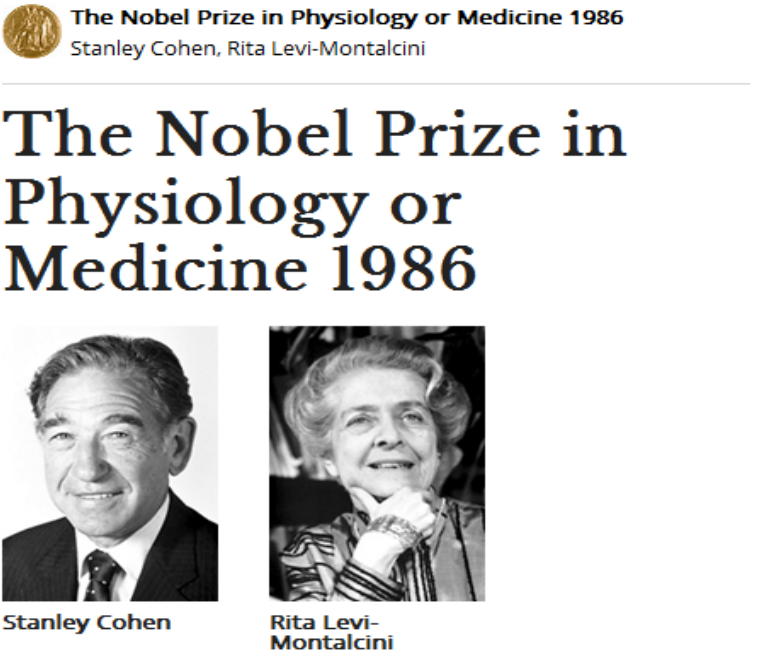
Analysing which version you have of a gene that controls how fast you break down collagen.
The mutations turned out to be in the **ribosome**, a massive molecular machine that makes proteins, as the factor that exerts this new control over gene expression.
HAS2 Wrinkle Regulator also able to regulate the HAS2 Gene ribosome, which is located at the 8th. chromosome , encodes an enzyme named **HAS2 hyaluronan synthase 2 [Human] .**

Gene ID: 3037, updated on 19-Oct-2013



Hyaluronan synthase 2 is an enzyme that in humans is encoded by the HAS2 gene. RefSeq DNA sequence: NC_000008.10 NC_018919.1 NT_008046.16

The Nobel Prize in Physiology or Medicine 1986



EGF discovery by Stanley Cohen & Rita Levi-Montalcini, an achievement subsequently honoured by the award of the 1986 Nobel prize in Medicine, all aspect of EGF biology have attracted intense research interest.
He was able to identify a receptor on the cell membrane that was responsive to this epidermal growth factor. This was of great significance, suggesting a mechanism by which cells are able to interact with chemical messengers such as hormones, which control their growth or normal functions.

Table 1: Important events in research on ***HAS2 Wrinkle Regulator***.

Time	Event
1880	Portes reported that mucin from the vitreous body differs from other mucoids in cornea and cartilage and named it hyalomucine [2].
1934	Meyer and Palmer isolated and identified the polysaccharide from the vitreous body and named it hyaluronic acid [3].
1930s–1950s	Hyaluronan from many different tissues of vertebrates was isolated, identified, and characterized. A few pathogenic bacteria were found that produce hyaluronan and use it to encapsulate their cells.
1950s	The chemical structure of hyaluronan was elucidated by Karl Meyer and his team. They used hyaluronidase to produce overlapping oligosaccharides that were structurally analyzed

	by conventional techniques [4]. Interest emerged to use hyaluronan in eye surgery as a substitute of the vitreous body.
1940s–1970s	Extraction processes from animal tissues were optimized to remove protein and to minimize hyaluronan degradation. First studies on hyaluronan production through bacterial fermentation and chemical synthesis were initiated.
1979	First patent on ultrapure hyaluronan isolated from rooster combs [5]. This was the starting of the industrial manufacturing of hyaluronan from animal sources for human applications. In 1980, using the methods of Balasz Pharmacia (Sweden) introduced Healon, a product used in cataract surgery.
1990s–2000s	Revival of studies on bacterial fermentation to produce hyaluronan of high molecular weight. Emphasis on controlling polymer size and polydispersity.
1993	The gene encoding for a single enzyme that polymerizes UDP-GlcNAc and UDP-GlcUA into hyaluronan is isolated by DeAngelis and coworkers from Streptococcus pyogenes. Hyaluronan synthases from other microorganisms were identified and characterized [6, 7].
1996	The largest hyaluronan fragment, an octamer, was chemically synthesized through controlled addition of disaccharide units [8].

2003 Research on the enzymatic synthesis of hyaluronan and monodisperse hyaluronan oligosaccharides with defined length [9, 10].

2011 Identified 3 types of Hyaluronan synthases – HAS1, HAS2, HAS3. Further molecular assay revealed *HAS2 Wrinkle Regulator* in the nucleusof a cell in seed of ***Adansonia***.

2011-
2012 Clinical Study was being conducted by Swiss scientists to ensure safe & human friendly product.

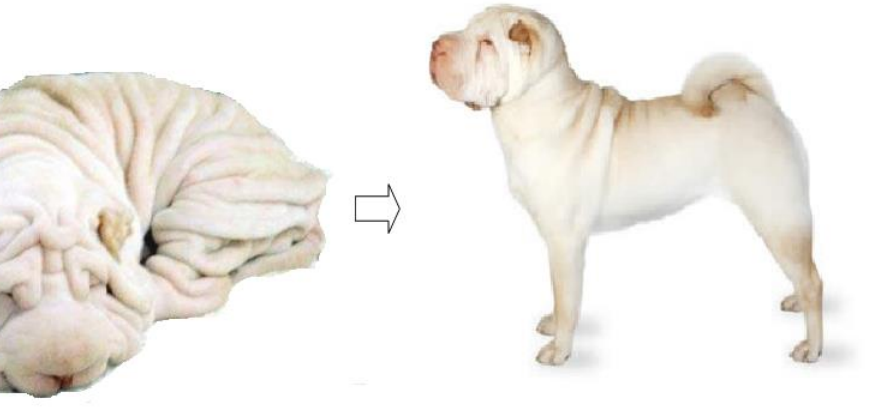
2013 *HAS2 Wrinkle Regulator* is being extracted out from the nucleus of ***Adansonia*** seed, made into cosmetic uses, patented and ready for marketing.

Genetics explains Shar-pei wrinkles
January 18, 2010 · by Astra Bryant

The BBC reports that scientists have identified the genetic forces that play a role in giving the Shar-pei its distinctive wrinkled appearance. In particular, researchers have identified four single nucleotide polymorphisms located on the **gene HAS2**, which encodes an enzyme (hyaluronic acid synthase 2) known to be important for skin production (it makes hyaluronic acid, one of the principle components in skin).

(***Genetics explains Shar-pei wrinkles*** *- Stanford Neuroblog*

neuroblog.stanford.edu/?p=112 Jan 18, 2010 - The search for the ***genetic*** *underpinnings of various phenotypes is a vast undertaking. As our knowledge of the relationships between* ***...*** **)**



Before

After HAS2 Wrinkle Regulator treatment.

In October, 2011, a group of Swiss researchers under the advises from Prof. Dr. Williams John conducted an experiment of treatment ***HAS2 Wrinkle Regulator*** 3000 mcg alternate day into Shar-Pei . After 6 months, the dog lost its wrinkles up to 60%. This proved that ***HAS2 Wrinkle Regulator*** can also regulate and stabilize the HAS2 Gene to prevent over expression of Hyaluronan.

In early 2012, Swiss Institute of Biomedical Research also conducted a clinical vivo test on 1000 subjects --- of which 500 subjects aged between 35-55 years old and another 500 subjects aged between 55-75 years old. All subjects were treated with 3000 mcg of ***HAS2 Wrinkle Regulator***. Subjects aged between 35-55 years old treated 3000mcg of ***HAS2 Wrinkle Regulator*** alternate day, while those of subjects aged between 55-75 years old were treated daily for a month. Changes of skin textures are recorded weekly throughout the period of clinical study, and continue to observe the subjects for 6 months after the completion of the study, to make sure there's no other side effects.

Results :

Despite of the age differences, these 1000 subjects become less wrinkles after the 10th treatments of ***HAS2 Wrinkle Regulator***. It is characterized as glowing of facial wrinkles, with improvement of 30-50% less wrinkles than before treatment.

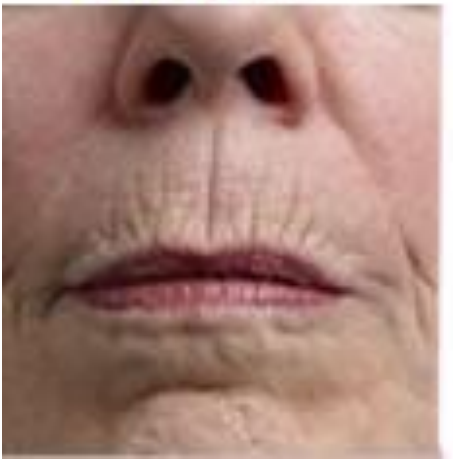
Conclusion:

HAS2 Wrinkle Regulator, which is retrieved from the nucleus of natural Baobab fruit seed, invented by Institution of Biomedical Sciences, Switzerland, actually worked safely and restore the youthful looks of all ages. It constantly activates & stabilises HAS2 gene ensures healthy & normal biological functions besides preventing overexpression of Gene HAS2 that may cause flabby wrinkle skin.

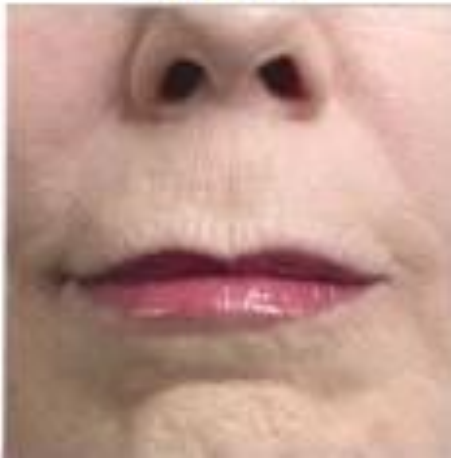

Before
After


Before
After
Previous

Before

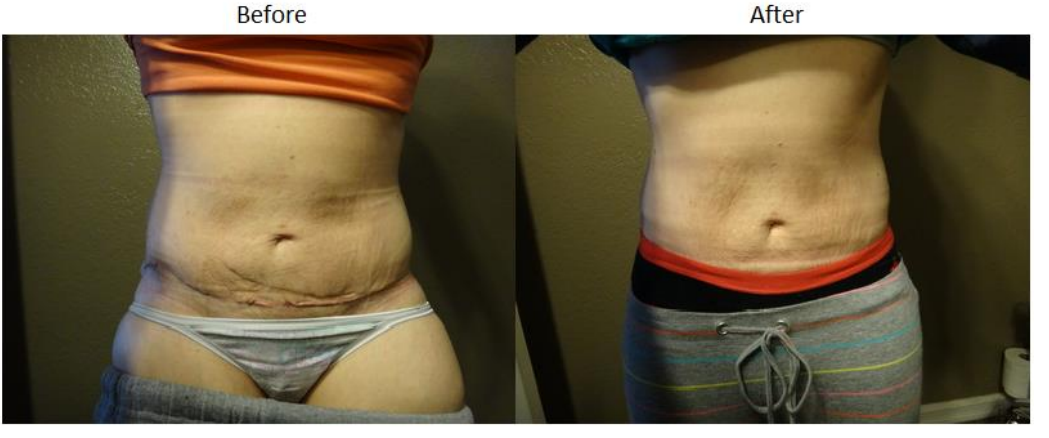


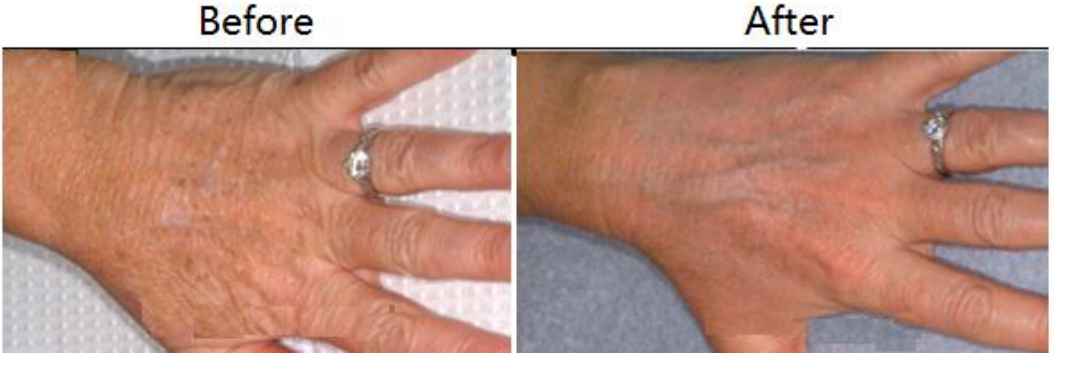
After



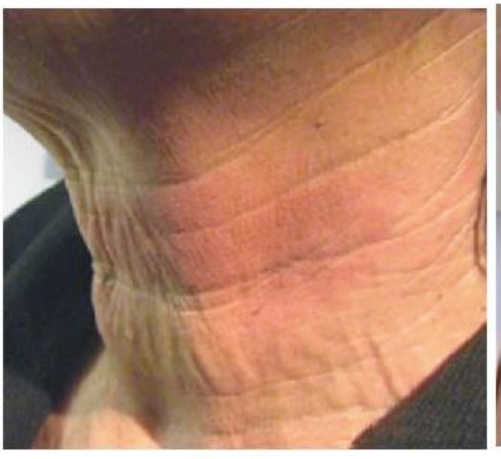
Before

After

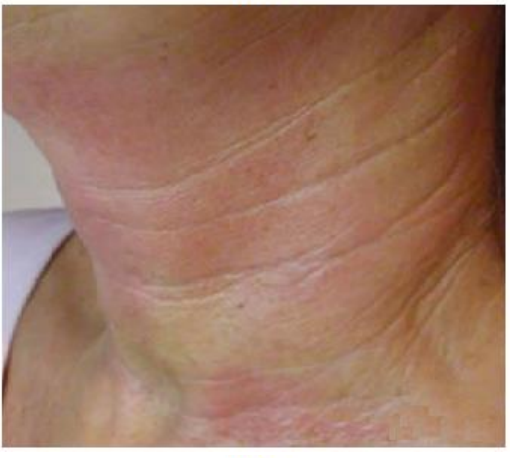




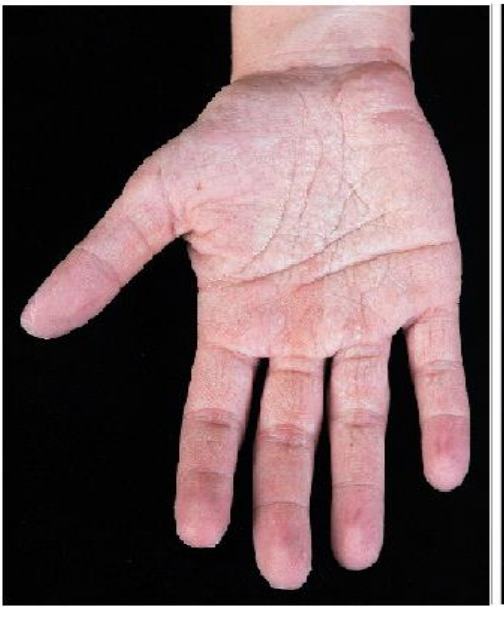
Before



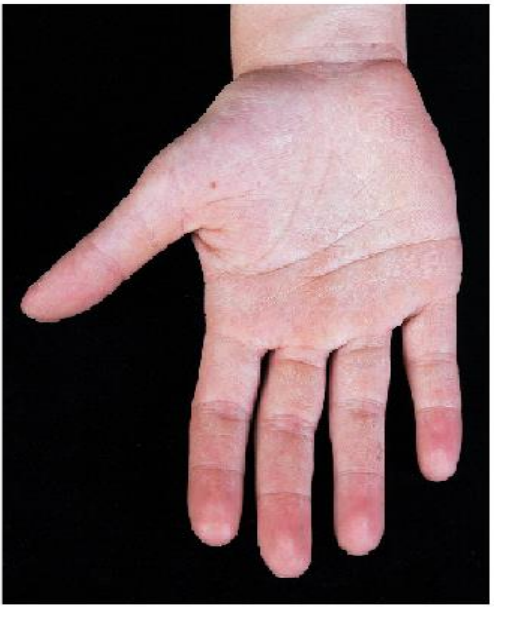
After



Before



After



References:

1) Study: If you've got wrinkles, thank Momwww.surgery.org/consumers/plastic.../study--wrinkles-mom-1052137CachedStudy: If you've got wrinkles, thank Mom. September 12, 2013. The genes you inherit from your mother have an impact on your skin quality. Have you ever ...

2)How Wrinkles Might Have Been Passed Down From Your Mom |www.drspiegel.com › blogCachedby Jeffrey Spiegel

3)The human hyaluronan synthase 2 (HAS2) gene and its natural ...www.ncbi.nlm.nih.gov/pubmed/21357421

4)HAS2 hyaluronan synthase 2 [Homo sapiens (human)]www.ncbi.nlm.nih.gov/gene/3037

5) International Journal of Carbohydrate Chemistry Volume 2013 (2013), Article ID 624967, 14 pages
http://dx.doi.org/10.1155/2013/624967

6) "Genus: *Adansonia* L.". *Germplasm Resources Information Network*. United State Department of Agriculture. 2008-11-12. Retrieved 2011-01-14."

7) Adansonia digitata - PlantZAfricawww.plantzafrica.com/plantab/adansondigit.htm

