

PHOTOAGING AND COLLAGEN FIBERS DEGRADATION:



When natural and intrinsic chronological aging process is added with skin UV radiation induced damage, it is called ***photo-aging***.

UV radiation produces reactive oxygen species in the skin, called free radicals. The consequences of the formation of these molecules are, among others:

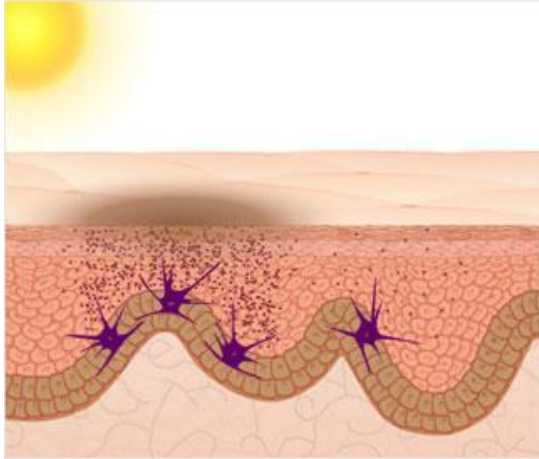
- ✓ Induction of formation of reactive oxygen species (ROS)
- ✓ DNA Damage
- ✓ Increased interleukins 1 and 6 in keratinocytes, which trigger an inflammatory process
- ✓ Induction of the formation of "sun-burn cells"
- ✓ Stimulation of the collagenases production
- ✓ Decreased formation of Antioxidants

Free radicals cause chain reactions causing the damage of the cellular structure of collagen and elastin, which affects the elasticity of the skin. More than 75% of young skin is made of collagen. With age, the ability to rebuild collagen decreases.

The density of collagen and elastin in the dermis decreases, and the skin elasticity is lost, becoming thinner and stiff, the gravity effects cause sagging, drooping eyelids, bags under the eyes and chin.

This collagen reduction also results in a loss of hyaluronic acid, reducing humidity, flexibility and skin elasticity. Decreased elasticity of the skin reduces its ability to retain its shape.

Exposure to ultraviolet light, represents 90% of the symptoms of premature skin aging.



Ultraviolet (UV) reduces production of type I procollagen, the main structural protein in human skin, causing fragmentation of collagen faster than the chronologically aging process itself.

Sunlight damages collagen fibers and causes an accumulation of abnormal elastin.

When this sun-induced elastin accumulates, metallo-proteinases enzymes get overactive, resulting in the formation of disorganized collagen fibers known as solar scars.

This process repeated again and again causes the development of wrinkles.

RADIANCE CREAM URBAN contains active ingredients that act synergistically on photoaging, because of their antiradical, antioxidant and stimulant collagen synthesis properties.

It is an anti-aging cream, with long-lasting effect for young or mature skin who prefers a refreshing gel cream texture. It combines the anti-aging and anti-photoaging action, with an anti-pigmentation action.

It contains Pycnogenol[®], a cosmetic active antioxidant, with anti-inflammatory, anti-photoaging properties, improving skin elasticity and microcirculation. Pycnogenol stimulates the enzyme responsible for hyaluronic acid synthesizing, thereby increasing skin hydration. Hyaluronic acid is a molecule that retains water giving it to the skin.

It also contains Argan oil, gold particles, Argatensyl, grapefruit oil, mandarin and orange essential oils.

The antioxidant properties of Pycnogenol reduce chain reactions, maintaining and protecting the structure of proteins and stimulating the synthesis of new collagen.

Antioxidant Protection:

Pycnogenol® is extracted from the bark of pine trees that grow only in the Lands of Gascogne, in the forests of southwestern France. The forest is virgin and natural, without pesticides or herbicides. Pycnogenol® has a patented extraction process, and the production process does not include any toxic solvent.

It is a natural combination of constant proportions of procyanidins, flavonoids and organic acids, which offer amazing natural properties. Pycnogenol® unique blend of active compounds, has four basic properties: it is a powerful antioxidant, acts as a natural anti-inflammatory, helps build collagen and hyaluronic acid, and contributes to the production of endothelial nitric oxide, which helps dilate vessels blood.

ACTIVE INGREDIENTS:



- **100 % Pure Argan Oil:** Ecocert Certificate, extracted from the Argan tree kernel fruit (*Argania Spinosa*) using only mechanical cold pressure, being therefore a pure active ingredient, ecological cosmetic, chemical-free and deodorized.

Argan oil is made up to 80% of essential fatty acids:

- **50% linoleic acid, 15% alpha-linolenic acid, 12% oleic acid:** Biological precursors of intracellular hormones such as prostaglandins (key regulators of different cellular systems, including all membranous exchanges). They stimulate intracellular oxygenation, improving the restoration of the hydro-lipidic film increasing the nutrient content of skin cells and ensuring the necessary skin moisture.
- **1% Arachidonic acid**
- **3% Linolenic acid**
- **5% Tocopherols (Vitamin E).** The main representatives of this class of compounds found in Argan oil are alpha-tocopherol or vitamin E (5%), gamma-tocopherol (83%) and delta-tocopherol (12%) which are natural antioxidants and vitamin precursors.
- **Ferulic acid:** It is the compound found in greater proportion. It promotes blood circulation, thereby increasing the arrival of nutrients. Stimulates intracellular oxygenation, neutralizes free radicals and protects the connective tissues.

- **Phytosterols:** Delta-7-sterols are inhibitors of the 5-alpha-reductase enzyme, which converts testosterone into dihydrotestosterone (DHT), largely responsible for acne and hair loss.
- **Squalene:** Present in 25% of human lipids, by binding to the cell membrane, helps to eliminate toxins and neutralize free radicals.
- **Lupeol:** has anticancer properties and enhances proliferation of keratinocytes which produce keratin in hair, nails and skin.

All these elements give it high antioxidants, anti-inflammatory, re-structuring, regenerating and anti-aging properties. Restores skin and protects it from oxidation caused by free radicals.

Mechanism of action:

Polyunsaturated fatty acids decrease with age causing the skin to become dry and to lose elasticity. These two causes are the major trigger of wrinkles.

Argan oil is composed by 80% of fatty acids, of which 8 are essential fatty acids, which cannot be synthesized by our body itself, including omega-6 fatty acid.

Omega 6 fatty is a polyunsaturated fatty acid (linoleic acid) found in high proportions in argan oil. The skin uses it as a nutrient, reconstituting the hydrolipid layer, increasing hydration and reducing the appearance of wrinkles.

Essential fatty acids fight dryness and lack in elasticity by stimulating intracellular oxygenation, and improving the restoration of the hydrolipidic film by increasing the

nutrient content of skin cells. The skin gains flexibility, hydration and firmness, becoming stronger and younger.

These beneficial effects are enhanced by its high vitamin E content, which thanks to its antioxidant activity, it protects cell membranes from oxidation and loss of its barrier function by neutralizing free radicals, thus slowing down the skin aging process.

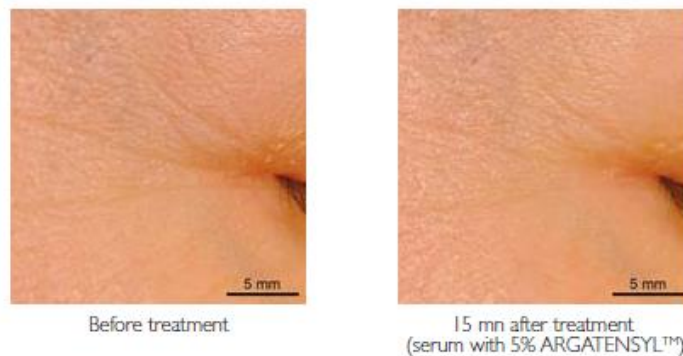
Argan Oil is an anti-free radical, preventing skin aging. It also has a sebum regulating action, suitable for oily skin, non-comedogenic, it is quickly absorbed, leaving no greasy aspect and leaving the skin free from shiny patches.

All these components, gives Argan Oil high **antioxidant, anti-inflammatory, restructuring, regenerating** and **anti-aging properties**. It restores the skin and protects it from free radicals induced oxidation.

- **Pycnogenol®**: Natural combination of constant proportions of procyanidins, flavonoids and organic acids, which offer amazing natural properties. Pycnogenol[®] unique blend of active compounds, has four basic properties: it is a powerful antioxidant, acts as a natural anti-inflammatory, helps build collagen and hyaluronic acid, and contributes to the production of endothelial nitric oxide, which helps dilate vessels blood.

- ✓ **Protects collagen and elastin**: It has a high affinity to rich in amino hydroxyl-proline proteins. These are predominantly the matrix proteins of the skin, collagen and elastin. [®] Pycnogenol binds tightly to the skin.
- ✓ **Increases skin's elasticity**: The pine bark extract is rich in polyphenols, increases plasma antioxidant capacity and alters the lipoprotein profile. Increases antioxidant activity and the inhibition of metallo-proteinases, thanks to the maritime pine bark extract metabolites.
- ✓ **Helps prevent UV rays and photoaging**: Exposing the skin to UV light generates oxygen radicals which in turn damages the skin cells. In an advanced stage the destructive processes can initiate an immune response as sunburn. Activated immune cells cause significant damage to the skin, degrading collagen and elastin.
- ✓ **improves Skin's microcirculation**: Improves the generation of endothelial cell nitric oxide (NO), which is the key mediator of arterial relaxation and therefore allows optimal blood flow.
- ✓ **It is a powerful antioxidant**: Recycles vitamin C and restores its activity. This supports the availability of vitamin C as a cofactor for the enzyme activity of prolyl hydroxylase, which synthesizes functional collagen and elastin.
- ✓ **Inhibits melanogenesis**: it inhibits melanogenesis (process of formation of melanin or pigment) acting on an enzyme that is responsible for producing the color of the skin, thus reducing the production of pigment and spots.

- **Argatensyl:** Argatensyl is a fraction rich in high molecular weight proteins (> 200,000 Daltons) isolated from Argan oil. When applied to the skin, these molecules form a network that has a high affinity with the skin surface. Developing an immediate and noticeable effect. This protein fraction has demonstrated a biological anti-wrinkle and long term tensor effect in In-vivo clinical studies, improving wrinkles in the eye area, as seen in the following pictures:



- **Grapefruit oil:** The main components of grapefruit are some volatile essences, carbohydrates, minerals, pectins and traces of some chemical elements and vitamins (B, C, A). The active ingredients present, such as carbohydrates, amino acids and alpha hydroxy acids, are responsible for its moisturizing effect and astringent action.

- ✓ For its vitamin C content, grapefruit has a high regenerative capacity, stimulating collagen synthesis activity. Vitamin C, (or L-ascorbic acid), acts as a cofactor for collagen synthesis. Vitamin C is essential for hydroxylation of proline therefore in the development and maintenance of collagen's integrity.

In addition, vitamin C acts decreasing the production of the extracellular matrix metalloproteinase enzyme, an enzyme which stimulates dermis collagen degradation.

Its stimulating activity on the collagen synthesis activity, provides vitamin C the property of healing wounds, cuts, burns, or surgery. Also it is suitable for the formation of new tissues.

- **Orange essential Oil:** Orange oil has a strong antimicrobial activity by its content in phenolic compounds, conferring purifying and anti-septic activity. Its aroma is energizing and invigorating.
- **Tangerine essential Oil:** Originating in China, the mandarin owes its name to the Chinese mandarins who received this fruit as a gift as part of their tradition. It is soothing, revitalizing and invigorating. Rich in vitamins and minerals. Its vitamin C protects from external aggressions thanks to its high antioxidant power.
- **24 carat gold (99.99% pure):** Gold revives and restores the epidermis, is an antioxidant by preventing the formation and accumulation of free radicals. Oxygenates and cleans the epidermis concealing enlarged pores, fine lines decreases, increases skin elasticity, minimizes spots, favors brightness, gives vitality and combats dehydration.

Gold micro particles eliminate biological contaminants generated by the body and are encapsulated in certified skin, or deposited in occluded pores, one of the causes of tired, prematurely aged and dull skin.

The skins that will most benefit are those with signs of skin aging, wrinkles, dryness and intense dull complexion. It penetrates the skin at the surface level and serves as a vehicle for other ingredients and antioxidants cosmetics.

ARGAN GOLD ANTIAGE:

- ✓ Diminishes fine lines and evens the appearance of the skin.
- ✓ Gold helps maintain perfect electrical balance to improve hydration, protection and reception of nutrients.
- ✓ Gold works in synergy with vitamins, antioxidants and firming agents for maximum performance.
- ✓ It is a potent antioxidant and anti-inflammatory
- ✓ Improves microcirculation
- ✓ Exerts anti photo-aging protection from the harmful effects of solar radiation
- ✓ Reduces excess skin pigmentation