

VALENS®



SUNDOC CAPSULES

Dietary supplement for protection of skin
against UV damage and reduction of
visible signs of photoaging

AGING OF THE SKIN

- Skin aging is induced by **internal (intrinsic)** and **external (extrinsic)** factors.
- **Intrinsic aging** is an determined by **age** and **genetics** → it results in thin, dry skin, fine wrinkles, loss of elasticity etc.
- **Extrinsic aging** is caused by external environmental factors, that accelerate natural aging:
 - Stress
 - Diet
 - Lack of sleep
 - Smoking
 - Air pollution
 - **UV radiation**

These environmental factors cause **oxidative stress** → imbalance between production and accumulation of **oxygen reactive** species, which damage the cells, proteins and DNA and contribute to aging.

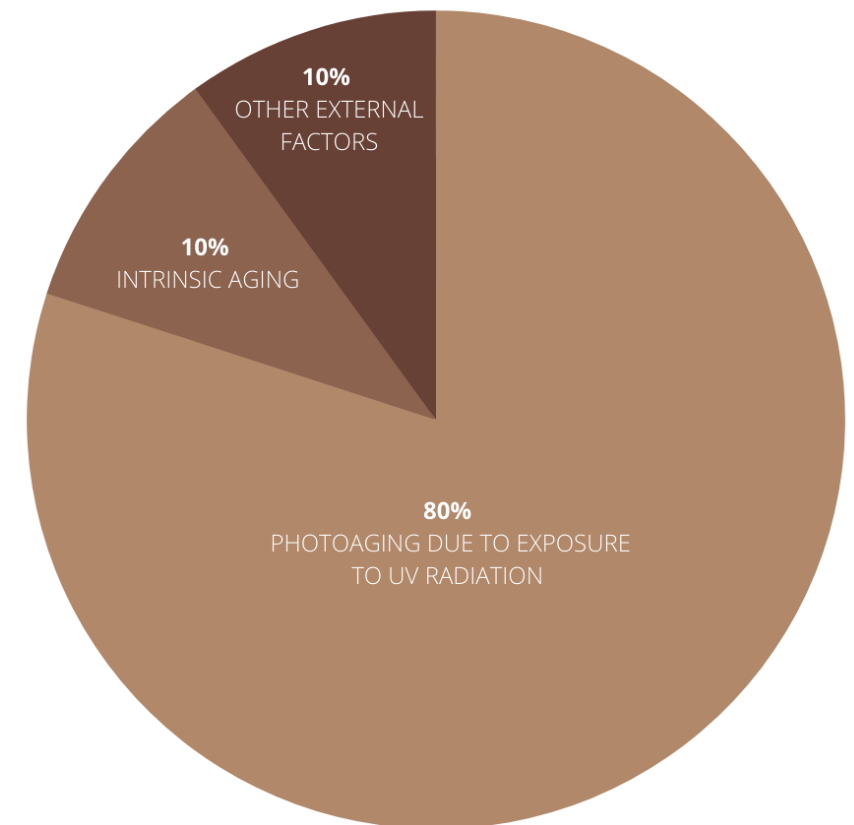
UV RADIATION

- Ultraviolet **UVA** and **UVB** radiation is present in sunlight and promotes formation of free radicals.
- **UVA** is less intense, but penetrates the skin more deeply (**dermis**):
 - Present all the time – it even passes through the windows and clouds.
 - Causes genetic damage to cells.
 - Leads to premature aging, long-term photodamage and skin cancer (melanoma).
 - Causes tanning.
- **UVB** penetrates the outermost layers of the skin (**epidermis**), causing acute damage:
 - Intensity fluctuates – UVB rays are strongest and pose the highest risk in the mid-day.
 - Causes sunburn, suntan and blistering.
 - Leads to skin cancer (non-melanoma).

UV RADIATION

- Premature skin aging is mainly (in 80%) caused by exposure to UV radiation → **photoaging**.
- Affects skin appearance:
 - Deeper wrinkles, saggy skin, dry, rough skin ...
 - Tan, pigmentation
- Affects skin health:
 - Sunburn, carcinoma, melanoma ...
 - Damage to the DNA
- Protection:
 - Sunscreens, sun protective clothing
 - Antioxidants to prevent cell damage

SKIN AGING



FREE RADICALS AND ANTIOXIDANTS

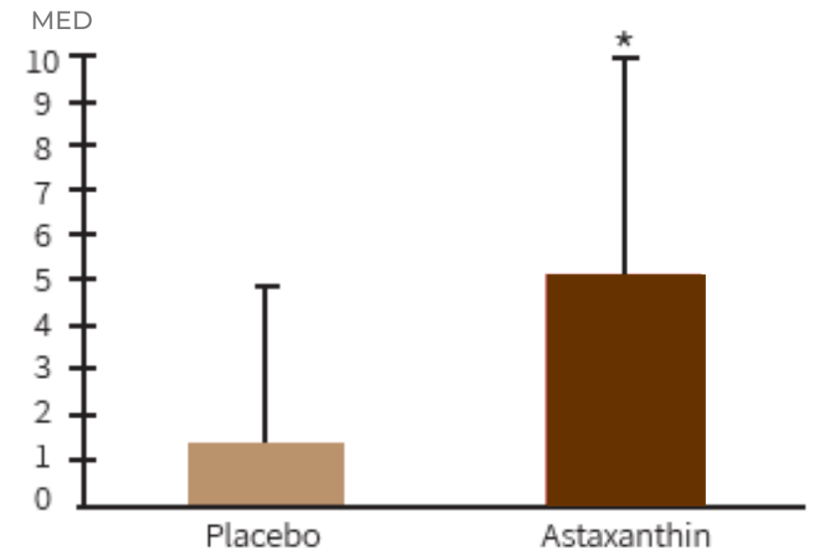
- **Free radical** is an unstable atom, oxygen molecule or ion with one unpaired electron → it easily reacts with the other molecules and causes damage to the human cells.
- Major cause of **skin damage** and premature **aging**.
- **Antioxidants** neutralize free radicals by giving up some of their own electrons – they protect the cells from oxidative stress.
- Oxidative stress occurs when free radicals and antioxidants are **out of balance**.
- Oxidative stress can cause damage to many of tissues, which can lead to a number of diseases over time.

ASTAXANTHIN

- One of the **most potent antioxidants** found in the nature.
- Red pigment that belongs to a group of **carotenoids**. It occurs in certain algae, animals and plants (gives salmon its distinctive pink color).
- The body alone cannot synthesize it – shrimp, crab and salmon can serve as **dietary sources**.
- Protects the cells from **oxidative stress**, alleviates inflammation in the body, boosts immune response, protects the **lipids** against peroxidation, helps prevent sun damage and reduces the signs of premature aging of the skin.
- **Subject to a number of clinical studies, proving its potency and efficacy.**

ASTAXANTHIN – UV PROTECTION

- The amount of UV radiation that will produce **minimal erythema** (MED – Minimal erythema dose) can be measured.
- Chart 1: Following 9 weeks of astaxanthin supplementation, MED levels increased significantly (more than **fourfold**), indicating that **astaxanthin protects the skin from UV radiation damage**.



ASTAXANTHIN – SKIN BEAUTY

- **Clinically proven**, supplementation with astaxanthin:
 - **Reduces the appearance of fine lines and wrinkles**
 - **Reduces water loss**
 - **Helps prevent sagging**
 - **Increases skin elasticity**
- In another study, astaxanthin was shown to **inhibit collagenase** that breaks down collagen.

BETA-CAROTEN

- The most studied carotenoid in terms of its potential effects on **human health**.
- **Antioxidant** and **provitamin A** – it can be converted in the body to vitamin A, which contributes to the maintenance of healthy skin.
- The body alone does not synthesize it – it can be found in plants and fruits (carrots, peaches, broccoli, spinach, tomatoes etc.) and is a part of human diet.
- **Protects the skin against UV-induced damage and premature aging of the skin.**

POLYPHENOLS

- Micronutrients, naturally occurring in plants – they protect the plants from infections and other external factors.
- Subject to many clinical studies and research about their effects on human health (due to their primary role in plants).
- Present in human diet (fruit and vegetables) - many health effects have been attributed to polyphenols in food.
- **Studies show that polyphenols are powerful antioxidants, preventing photodamage and protecting cells from oxidative stress.**

VALENS SunDoc

- **Dietary supplement in capsules for:**
 - **Protection of skin against sun damage**
 - **Preventing premature aging of the skin**
 - **Preventing photoaging**
 - **Reducing existing signs of premature aging**
 - **Improving skin appearance**
 - **Reducing fine lines and wrinkles**
- Compensates the limitations of topical sunscreen.
- Healthy addition to everyday skincare routine.



ACTIVE INGREDIENTS

- **Nutroxsun®** (rosemary and grapefruit extracts): 100 mg
 - **Astaxanthin Astapure®**: 4 mg
 - **Beta-caroten**: 10 mg (providing 1666 µg vitamin A - 208% NRV*)
 - **Vitamin C**: 180 mg (225% NRV*)
 - **Vitamin E**: 14 mg (117% NRV*)
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- **NRV – Nutrient reference value*

NUTROXSUN®

- Combination of **rosemary and grapefruit extracts**.
- Rich in **polyphenols, diterpenes and flavonoids**, working synergistically and complementary to counteract the **negative effects of UV radiation**.
- **Clinically proven, it protects the skin against sun damage and photoaging.**



NUTROXSUN® - MECHANISM

Clinically proven, Nutroxsun®:

- Protects human keratinocytes against cell death induced by UVB radiation.
- Inhibits ROS formations in keratinocytes exposed to UVB radiation.
- Reduces inflammatory response of keratinocytes to UVB radiation.
- Reduces DNA damage.
- Inhibits degradation of proteins such as collagen and elastin.

NUTROXSUN® - SHORT-TERM EFFECT

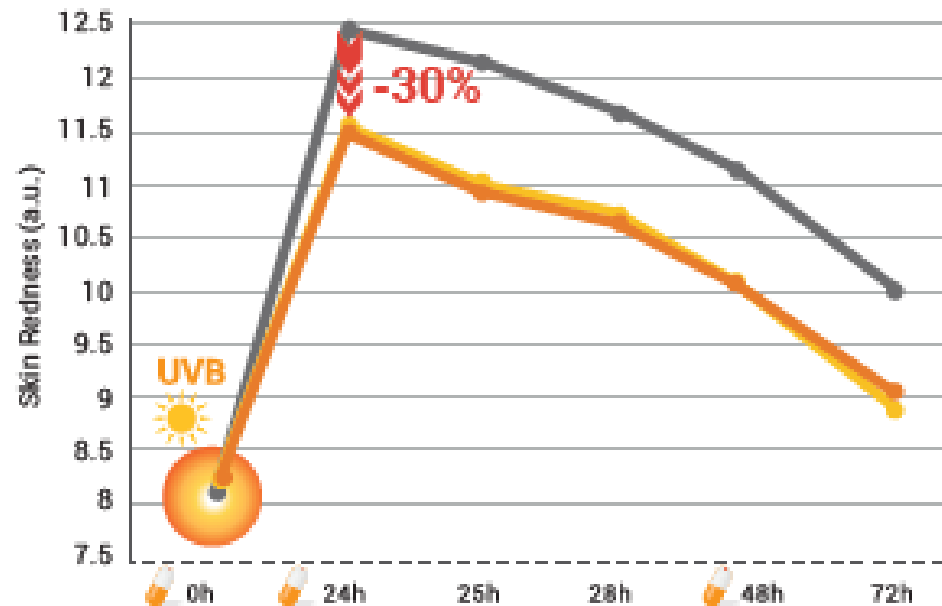


Chart 1: Nutroxsun® (at 100 and 250 mg dose), administered **1 h** prior to sun exposure was effective in diminishing skin redness (30%, measured after 24 h and compared to placebo).

NUTROXSUN® - LONG-TERM EFFECTS

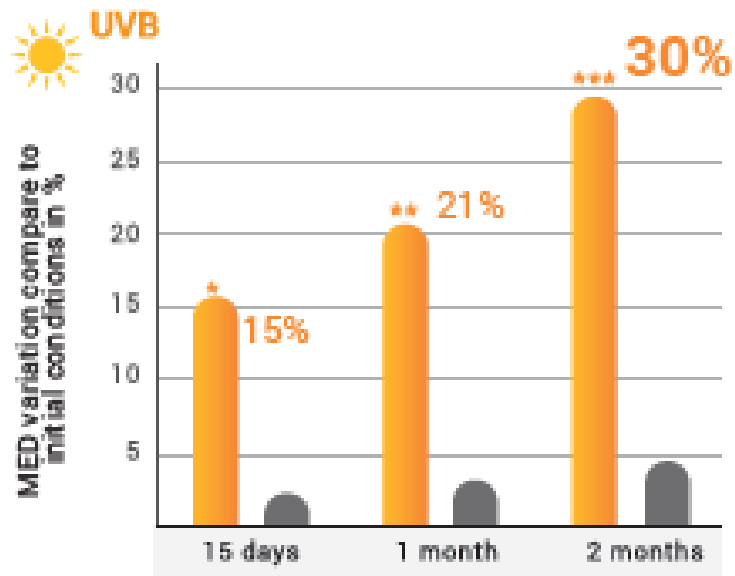


Chart 2: Nutroxsun® consumption significantly **increases MED** – the increase is accumulative and increases with time.

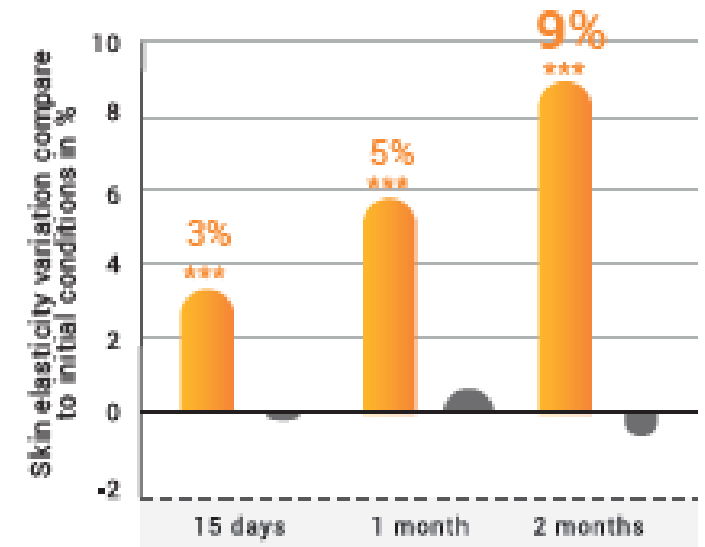
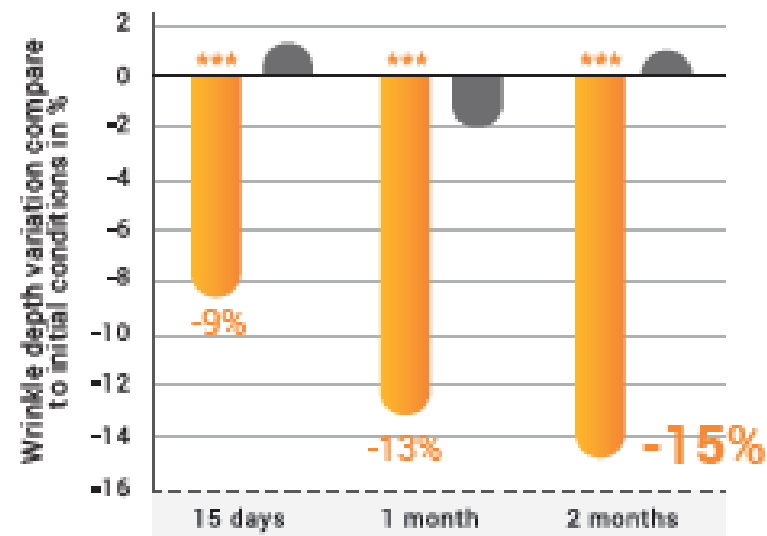


Chart 3 and 4: Nutroxsun® rapidly and significantly **reduces wrinkle depth** and **increases skin elasticity**.

ASTAPURE®

- **Natural astaxanthin** from microalgae *Haematococcus pluvialis*.
- Microalgae create astaxanthin to protect themselves from stressful environmental conditions (like **solar radiation and oxidative stress**).
- Potent antioxidant – 500-fold more powerful than vitamin E.
- Cultivated in a process that mimics astaxanthin accumulation in nature, resulting in **high purity**.

OTHER INGREDIENTS

- **Vitamins C and E** contribute to skin health and protect the cells from oxidative stress.
- **Beta-caroten**, antioxidant and precursor of vitamin A, which contributes to skin health.

VALENS SunDoc – at a glance

- **Selected ingredients with clinically proven efficacy and potent antioxidant activity**
- **Nutroxsun®**, rosemary and grapefruit extracts
- **Astaxanthin Astapure®**
- **Beta-caroten, vitamins E and C**
- **30 capsules packed in glass or PET bottle**
- **Suitable for vegans**
- **Made in Europe**
- **GMP-certified**



Recommended daily dose: 1 capsule

VALENS[®]



PROTECT YOUR
SKIN FROM
WITHIN! ❤️

Thank you for your
attention!