

ALPAFLOR® EDELWEISS

*Holistic alpine beauty
care for skin rejuvenation*



CB

April 2025

Naturals | The science of nature

dsm-firmenich 

ALPAFLOR® EDELWEISS CB

ID card 5037860

INCI NAME: Leontopodium Alpinum Flower/Leaf Extract (and glycerin, water, citric acid)

SUSTAINABILITY: Organic cultivation, ethical and traceable sourcing, supporting alpine biodiversity with low impact on the environment

TECHNOLOGY: Gentle ethanolic extraction of dried edelweiss plant (early blooming stage) following green chemistry principles
Standardization in phenolic acids (as chlorogenic acid)
100% of natural origin according to ISO16128– no preservative

TECHNICAL:	pH of use: 3.5– 5.5	Use level: 1–3%	Solubility: Water
	Form: Liquid	Preservative: Free	Biodegradable: main components readily biodegradable

BENEFITS:

- Helps slow down the premature aging of skin and protects the skin against glycation and oxidative stress**
- Helps reduce lines and wrinkles with anti-sagging effect on the V-shape and forehead**
- Supports skin’s crucial protective barrier*, maintaining the microbiome balance**, for healthy looking skin
- Helps reduce skin sensitivity and protect against pollution**

REGISTRATION CERTIFICATION



ALPAFLOR® EDELWEISS CB

Holistic alpine beauty for skin rejuvenation

Unique Product Features

- Unique Edelweiss variety ***Leontopodium alpinum* 'Helvetia'**, sustainably, fairly and organically cultivated
- **Antiglycation 3D facial color mapping** *in vivo* with reduction of AGEs.
- **Reduces the fine lines**, 3 times better than placebo on glabella
- **Prevents and reverses glycation: reduction of AGEs**, glycated collagen IV, **detoxifies and repairs after glycation stress***
- **Strongly and significantly boosts Collagen I and V***
- **Maintains healthy skin** by preserving **stem cells** against oxidative stress*
- **Protects the skin against urban dust particles** induced stress*
- stimulates key proteins responsible for an **optimal epidermal protection***

* *in vitro*

Benefits

- Protects the skin **against oxidative stress**, helps to slow down the **premature aging of skin**
- helps **reduce lines and wrinkles with anti-sagging effect on the V-shape and forehead** *in vivo*, for a rejuvenated skin
- Supports skin's crucial **protective barrier**, maintaining the **microbiome balance**, for **healthy looking skin**
- Perceptibly **reduces skin sensitivity** and **protects** the skin against **pollution**
- Provides a **multi-level of protection for better aging** with an **ultimate skin sensation**

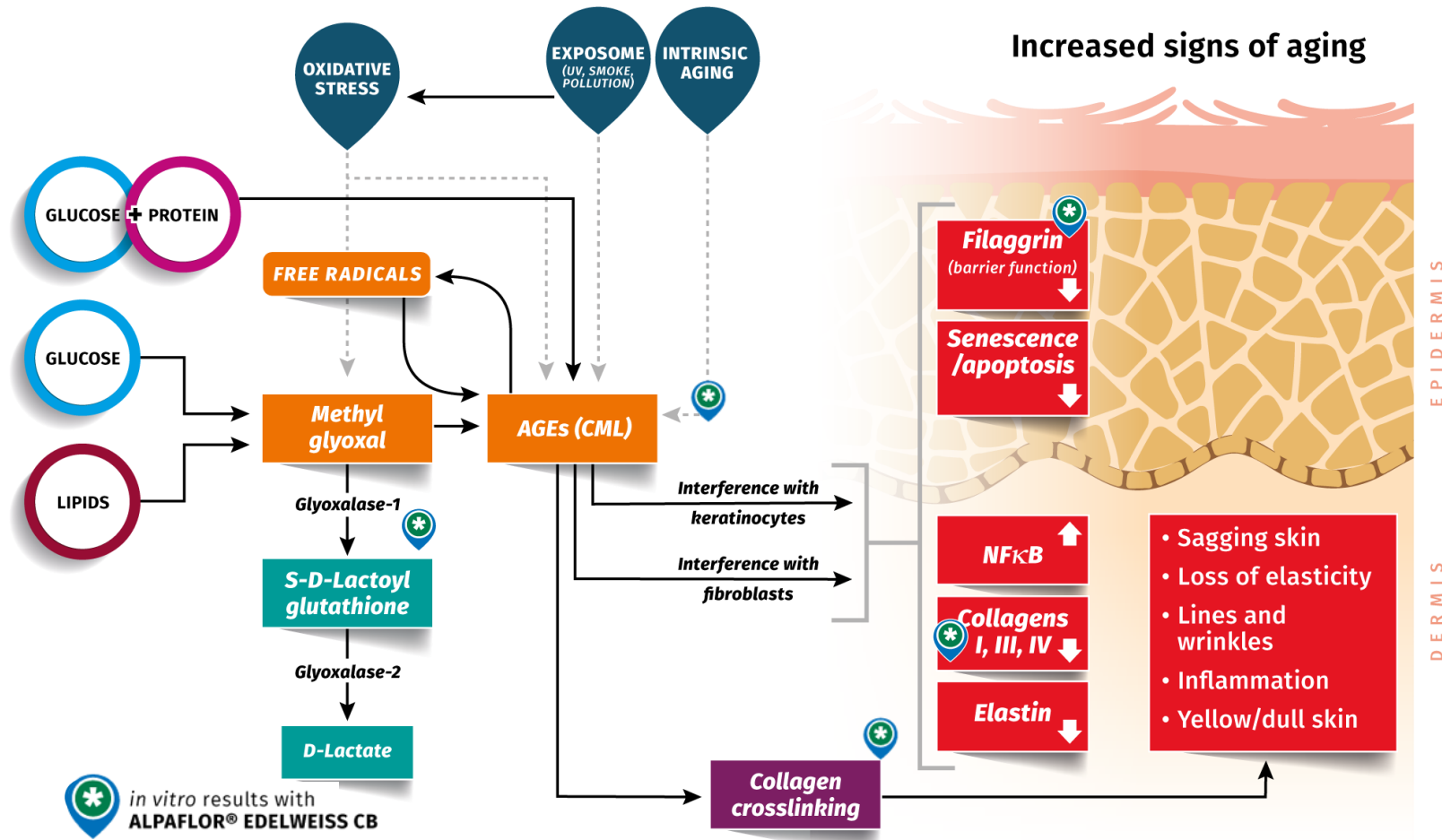
Cosmetic applications

- Anti-aging/sagging skin care products
- Day care protecting formulations for sensitive skin
- Sun and after-sun formulations
- Protective formulation against pollution and external stresses



Glycation increases signs of ageing

Vicious circle between free radicals and glycation



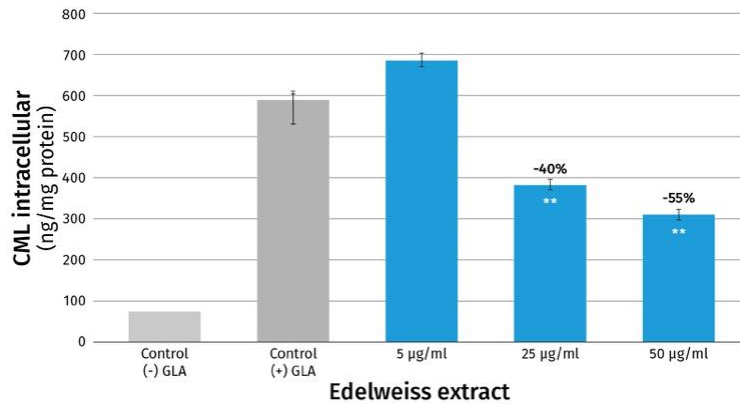
Glycation starts around 35yo and increases rapidly with intrinsic aging

- Glycation is a basic mechanism involved in aging in humans.
- It is a non-enzymatic reaction that occurs spontaneously between sugars and proteins, leading to the formation of Advanced Glycation End Products (AGEs).
- AGEs bind with collagen or elastin, decreasing skin elasticity, lead to sagging and appearance of lines.
- Accumulation of glycated proteins makes the skin dull and yellowish.
- In the epidermis, AGEs disrupt the proliferation of keratinocytes slow down the skin repairs processes, impairing the skin barrier

CML: N ϵ -(carboxymethyl) lysine

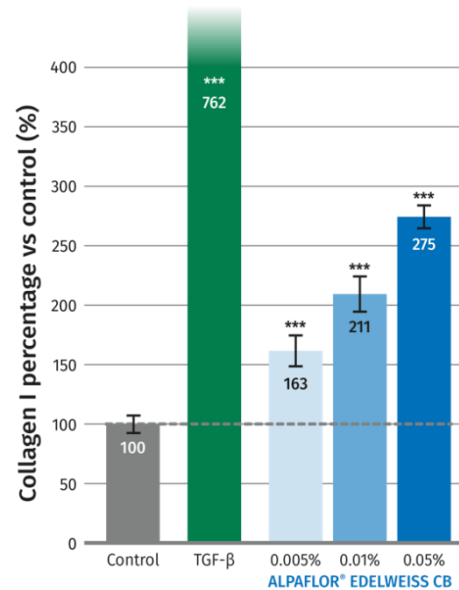
ALPAFLOR® EDELWEISS CB

Anti-glycation activity – *in vitro*



Anti-glycation activity:
AGEs formation*

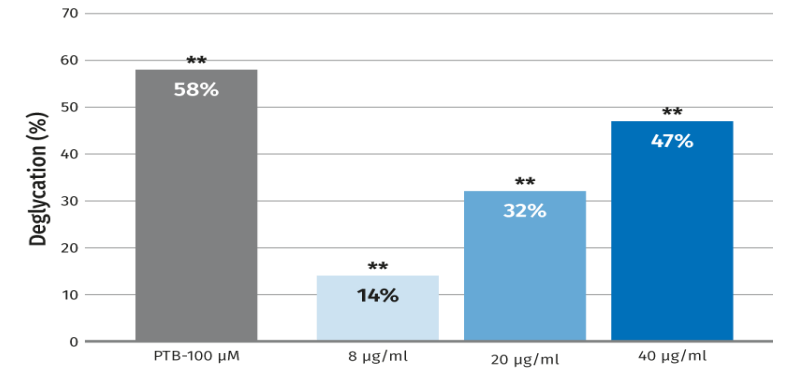
ALPAFLOR® EDELWEISS CB **strongly decreases the AGEs**, expressed as CML, **by 55%** at 0.005% dry extract



Collagen I booster*

Strongly restores skin barrier function and protects against glycated collagen

ALPAFLOR® EDELWEISS CB **boosts** dose dependently and significantly **Collagen I** by **111%** and **Collagen V** by **171%** at 0.01% dry extract in NHDF*

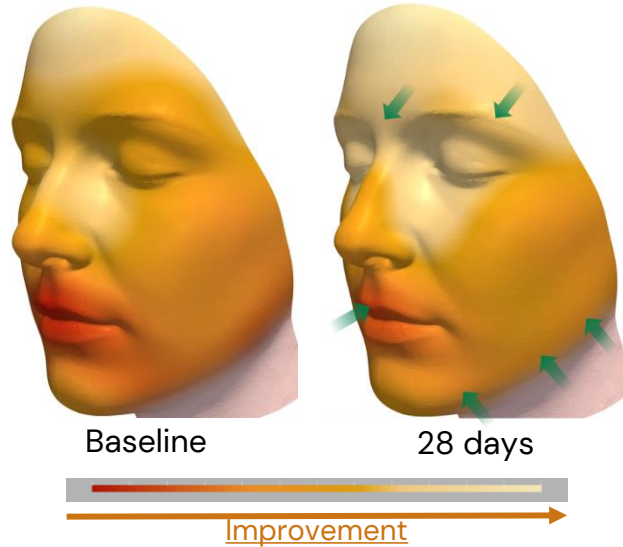


Repairs glycation:
Deglycation*

ALPAFLOR® EDELWEISS CB, introduced after induction by Glyoxal (200uM), **reverses the glycation by 47%** at 0.004% dry extract

ALPAFLOR® EDELWEISS CB

Anti-glycation activity – Confirmation *in vivo* that AGEs reduction leads to less fine lines

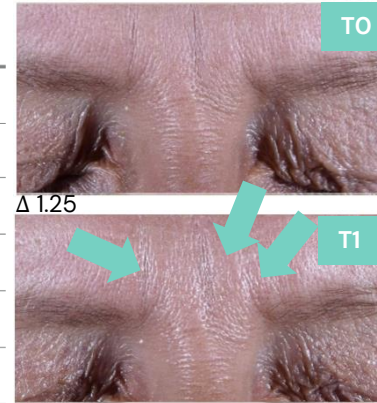
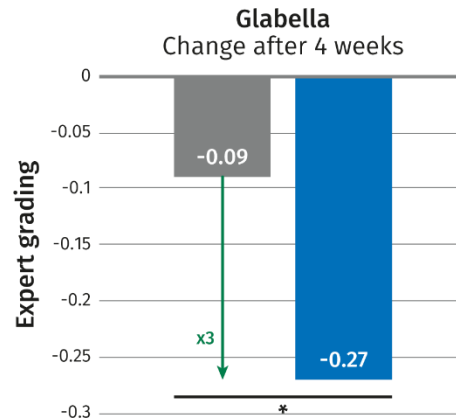


Facial antiglycation mapping: AGEs measurement*

Strong reduction of AGEs in all face areas with ALPAFLOR® EDELWEISS CB after 4 weeks compared to baseline (T0).

Significant reduction: 2.5 times on full face, 5 times on forehead, 3 times on jaw-line, all vs placebo

We can expect **clear improvement of sagging effect on jaw line and forehead**

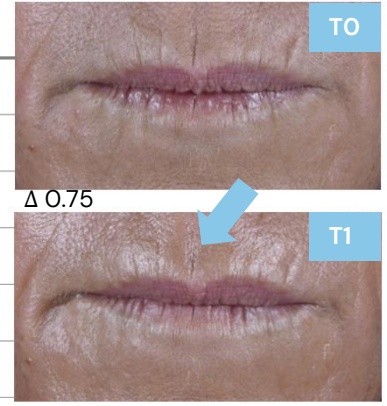
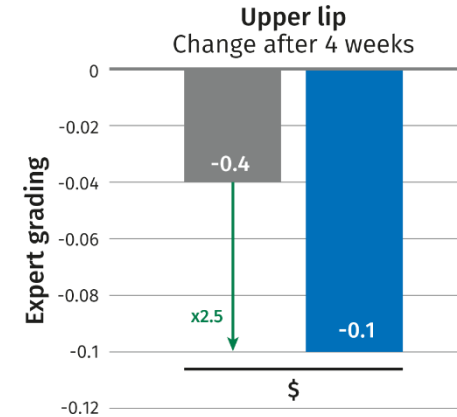


Volunteer 34 – 56 yo

Protects against glycation: Glycated Collagen IV*

Reduction of fine lines and wrinkles on forehead (glabella).

Reduction of wrinkles on glabella:
ALPAFLOR® EDELWEISS CB 3 times better than placebo ($p < 0.05$), -11% vs T0.



Volunteer 38 – 48 yo

Repairs glycation: Deglycation*

Reduction of fine lines and wrinkles on upper lip.

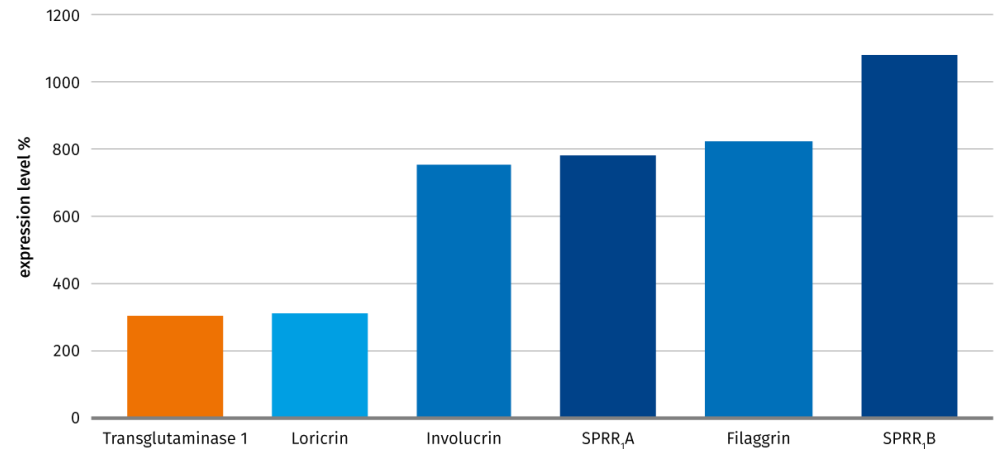
Reduction of wrinkle on upper lip:
ALPAFLOR® EDELWEISS CB 2.5 times better than placebo ($p < 0.10$).

ALPAFLOR® EDELWEISS CB provides better skin protection

Reduces UV-induced oxidative stress markers: skin natural defense mechanism

Stimulates key genes of the cornified envelope

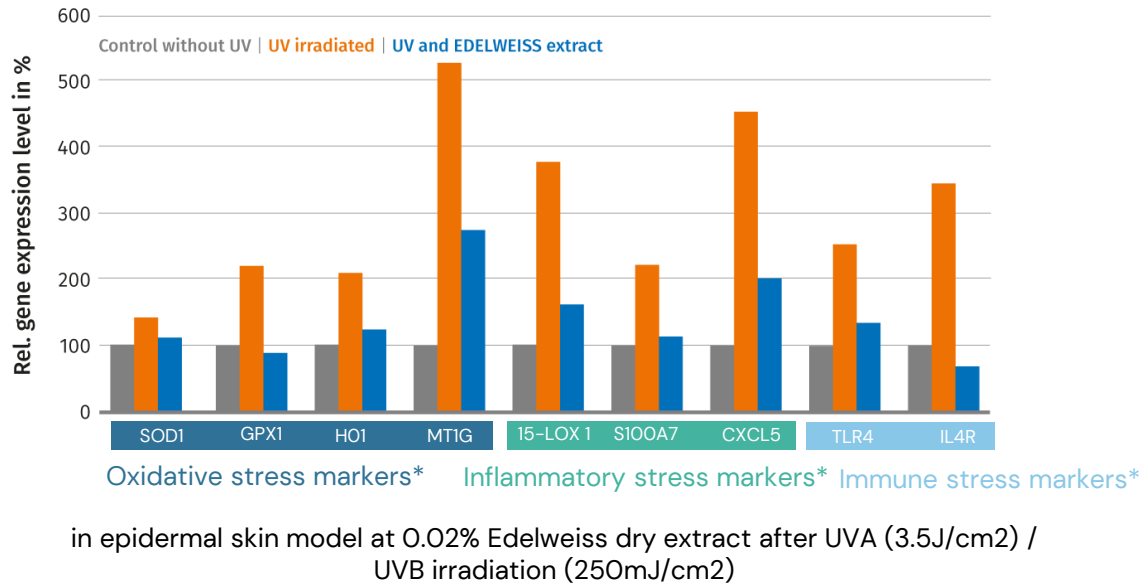
Induction of gene expression in human epidermal keratinocytes by 0.001% Edelweiss extract



Strong stimulation of key proteins:

- **Involucrin** (x8), **Loricrin** (x3) and **Keratins** (X41) give the strength of the skin against external stress factors
- **Filaggrin** (x8) improves the skin moisturization
- **Trans-glutaminase 1** (x3) links all these proteins to generate a protection shell

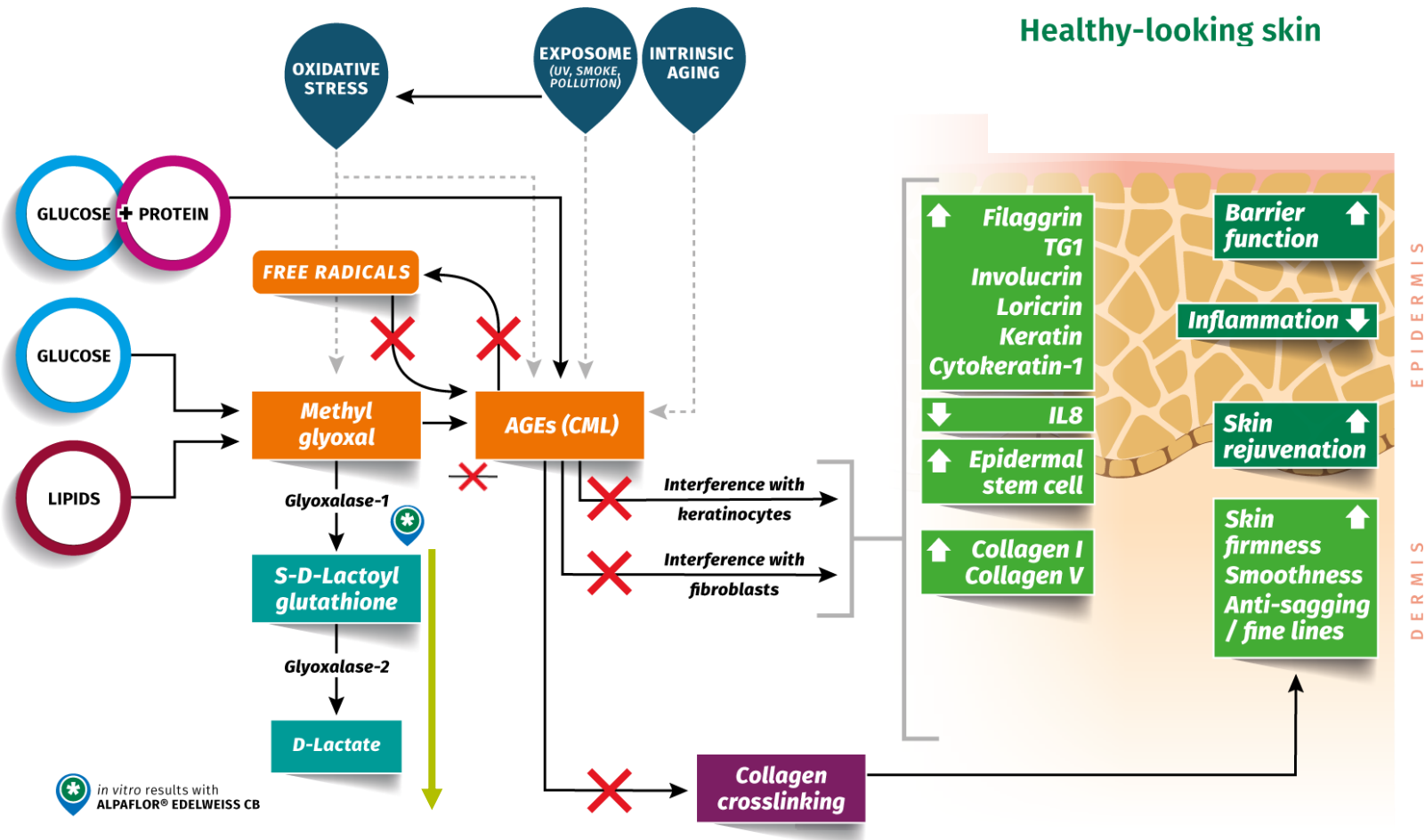
Reduces UV-induced stress markers: skin natural defense mechanism



EDELWEISS extract has a positive effect on all parameters (oxidative stress markers, inflammatory stress markers and immune stress markers), it rebalances the skin stress level comparable to a situation with no UV exposure

Benefits of ALPAFLOR® EDELWEISS CB

Holistic alpine beauty care for skin rejuvenation



- Anti-glycation
- Slows signs of aging
- Smooths wrinkles
- Sensitive skin
- Anti-pollution
- Skin comfort
- Healthy looking skin

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