

PRODUCT, DESCRIPTION AND EVIDENCE

LIFT

A rich cream containing a powerhouse of natural ingredients for the neck and décolletage area. Apple stem cell extract rejuvenates and promotes thicker and smoother skin while palmitoyl tripeptide-38 increases collagen and hyaluronic acid production to reduce the appearance of neck lines and improve skin firmness. Acetyl glucosamine enhances skin texture and barely seed extract provides antioxidant protection for more youthful-looking skin. Beta-Glucan soothes and calms, while vitamin B5 boosts moisture retention, leaving the skin hydrated and supple. The specific combination of these potent ingredients helps to restore the appearance of youthfulness to the neck and décolletage area with lifted and firmer looking skin.

KEY BENEFITS

- Skin appears up to 27% thicker
- Skin feels 6.9% smoother
- Increases collagen 1 production by 111%
- Increases hyaluronic acid production by 174%
- Improves the skin's moisture retention
- Reduces skin sensitivity
- Enhances skin barrier function
- Skin appears up to 28% plumper
- Improves skin texture
- Reduces appearance of wrinkles by up to 31%
- Reduces the appearance of crow's feet by 12.6%
- Helps protect the skin from oxidative damage
- Improves skin elasticity and firmness
- Promotes healing of scars and tissue regeneration

DIRECTIONS FOR USE

Apply daily onto cleansed, dry neck and décolletage area. Massage until fully absorbed.

WARNINGS

For external use only. Avoid contact with eyes. If this occurs wash affected area thoroughly with water. If irritation occurs, discontinue use. Store this product below 40°C.

INGREDIENTS

Aqua, Glycerin, Caprylic/Capric Triglyceride, Cetearyl Ethylhexanoate, C15-19 Alkane, Butyrospermum Parkii Butter, Acetyl Glucosamine, Arachidyl Alcohol, Cetearyl Alcohol, Panthenol, Malus Domestica Fruit Cell Culture Extract, Coco-Caprylate/Caprate, Behenyl Alcohol, Arachidyl Glucoside, Pentylene Glycol, Trehalose, Palmitoyl Tripeptide-38, Hordeum Vulgare Seed Extract, Beta-Glucan, Tocopherol, Sodium Hyaluronate, Helianthus Annuus Seed Oil, Glucose, Caprylyl Glycol, 1,2-Hexanediol, Hydroxypropyl Cyclodextrin, Pantolactone, Lecithin, Carbomer, Xanthan Gum, Phenoxyethanol, Sodium Benzoate, Sodium Gluconate, Sodium Hydroxide, Parfum.

ACTIVE INGREDIENTS

Malus Domestica Fruit Cell Culture Extract 0.18%
Palmitoyl Tripeptide-38 0.5mg
Acetyl Glucosamine 2%
Hordeum Vulgare Seed Extract 50mg
Beta-Glucan 50mg
Panthenol 0.75%
Butyrospermum Parkii Butter 2%
Tocopherol 0.35%
Sodium Hyaluronate 50mg
Glycerin 4.8%
Helianthus Annuus Seed Oil 0.15%
Lecithin 2.8mg

MALUS DOMESTICA FRUIT CELL CULTURE EXTRACT (APPLE STEM CELL EXTRACT)

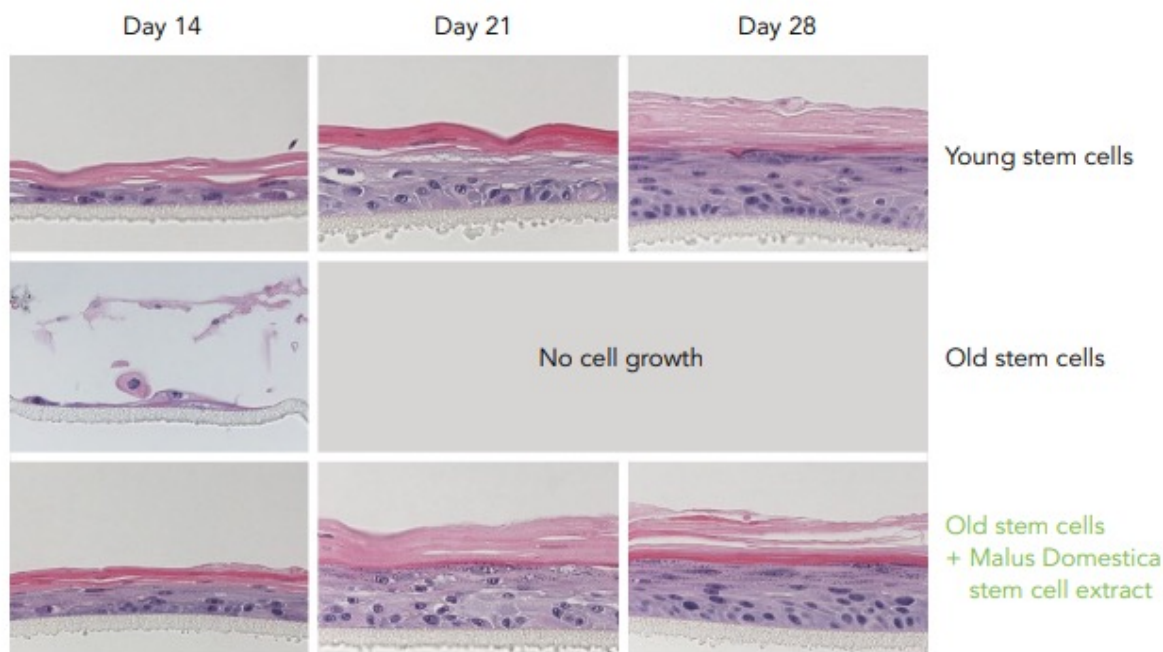
Ingredient Claims:

Skin feels up to 27% thicker	11.1% reduction in the appearance of crow's feet
Skin feels 6.9% smoother	

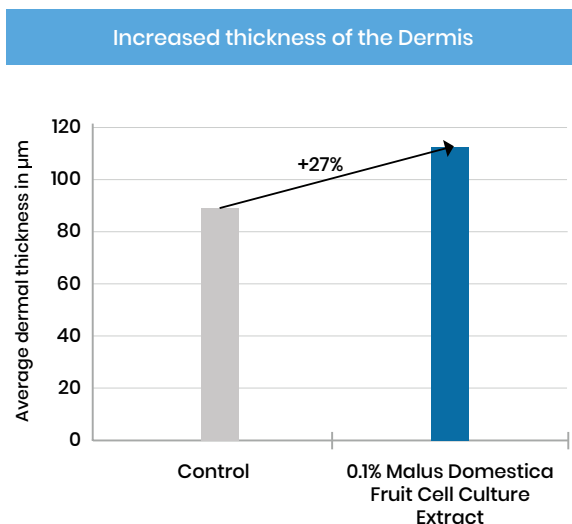
A revolutionary technology to protect skin stem cells - Malus Domestica (Apple Stem Cell Extract) is a liposomal preparation based on the stem cells of a rare Swiss apple. Uttwiler spätlauber is an endangered apple variety that was well-known for its excellent storability and thus its longevity potential. The protection of human stem cells by Malus Domestica has been shown by various experiments. Other studies demonstrated its age delaying and anti-wrinkle effects. It rejuvenates ageing skin by stimulating ageing skin stem cells. The plant extract has been shown to lessen the appearance of unsightly wrinkles. Clinical trials show that this unique formulation increases the longevity of skin cells, resulting in skin that has a more youthful and radiant appearance. Plant regeneration at the cellular and tissue level is a unique process. Similar to animals, the stem cells in plants have properties that help stimulate and regenerate plants after injury. The unique properties of plant stem cells have been a recent area of interest and focus both in developing new cosmetics and studying how these extracts/phytohormones will influence animal skin. Studies show that apple stem cells boost production of human stem cells, protect the cell from stress and decreases wrinkles. The internal fluid of these plant cells contains components that help to protect and maintain human stem cells. Apple stem cells contain metabolites to ensure longevity as the tree is known for the fact that its fruit keep well over long periods of time.

In the presence of the 0.1% Malus Domestica Fruit Cell Culture Extract, the study shows skin stem cells keep their ability to proliferate and undergo the complex process of stratification and differentiation for a longer period of time. Therefore, the Malus Domestica Fruit Cell Culture Extract helps the epidermal stem cells to retain their capacity to build new tissues.

Maintenance of the capacity to form a 3D epidermis

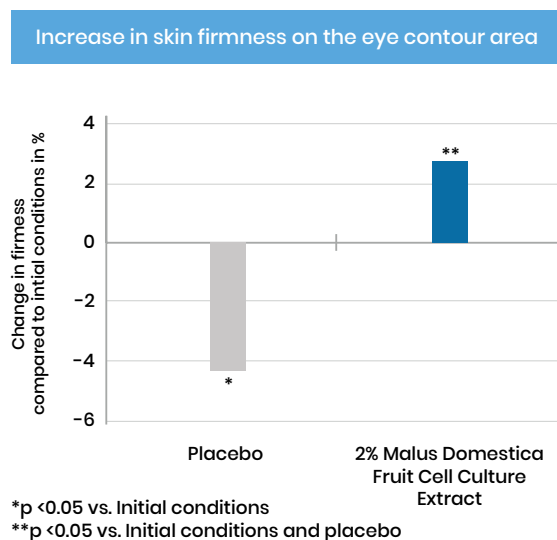


0.1% Malus Domestica Fruit Cell Culture Extract increased dermal thickness by 27% compared to the control. It also improved the structure and the regularity of the basal keratinocyte layer in direct contact with the basement membrane.

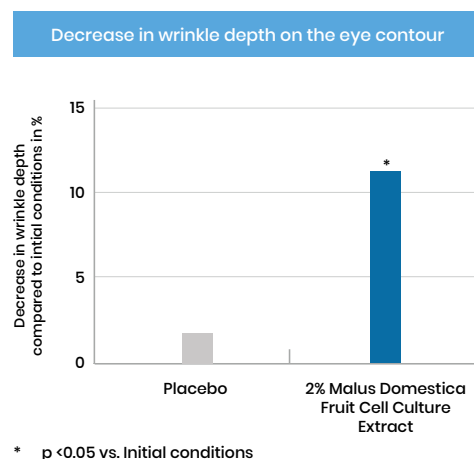


Clinical study involving twenty-one women aged from 35 to 56 years. Volunteers either applied a cream containing 2% Malus Domestica Fruit Cell Culture Extract or a placebo cream twice daily for 28 days to the 'crow's feet' area on one-half of their face each.

Results showed that the treatment with 2% Malus Domestica Fruit Cell Culture significantly increased skin firmness. Meanwhile, compared to the placebo treatment, skin firmness was increased by 6.9% after 28 days of treatment.



Study using 2% Malus Domestica Fruit Cell Culture was reduced the wrinkle depth of 'crow's feet' by 11.1% compared to initial conditions.



Links:

[Data on file](#)

<https://www.ncbi.nlm.nih.gov/pmc/articles/PMC5674215>

<https://pubs.rsc.org/en/content/articlelanding/2013/fo/c3fo60470e/unauth>

<https://www.hindawi.com/journals/amse/2022/2417766/>

PALMITOYL TRIPEPTIDE-38

Ingredient Claims:

Increases collagen 1 production by 111%	Increases collagen 3 production by 104%
Increases hyaluronic acid production by 174%	Increases production of collagen 4 by 42%
Reduces appearance of wrinkles by up to 31%	Reduces the appearance of crow's feet by 12.6%
Skin felt 13% smoother	Skin appeared 28% plumper

Palmitoyl tripeptide-38 is a highly sought after ingredient for anti-ageing products. As the name suggests, palmitoyl tripeptide-38 is a peptide that stimulates the production of macromolecules within the skin such as collagen and hyaluronic acid.

Particularly beneficial for mature skin, studies using palmitoyl tripeptide-38 have been shown to reduce the appearance of wrinkles, especially when applied around the eyes. Palmitoyl tripeptide-38 has also been shown to have a lifting effect on the skin, for the appearance of plumper, firmer looking skin.

Demonstrated cosmetic activity

In vitro (Tests performed with 5 ppm Pal-KMO₂K equiv. to 250mg Palmitoyl Tripeptide-38)

Increase in the synthesis of matrix molecules:	
HSP47	+123%; (p<0.01)
Collagen I	+111% on HDF; (p<0.01) +37% on explants; (p<0.01)
Collagen III	+104%; (p<0.01)
Fibronectin	+59%; (p<0.01)
Hyaluronic Acid	+174%; (p<0.01)

Boosting the effect of luminotherapy on UV-aged skins:	
Collagen	+12%; (p<0.01)

Increase in the synthesis of molecules at the dermal-epidermal junction:	
Collagen IV	+42%; (p<0.01)
Laminins	+75%; (p<0.01)

In vivo

Clinical study to assess the smoothing and filling of forehead lines and crow's feet. Panel: 25 women who applied 250mg Palmitoyl Tripeptide-38 cream twice a day for 2 months

Anti-wrinkle effect on the forehead determined by fringe projection (FOITS):	
Reduction in the volume of a main wrinkle	-31%; (p<0.05)
Reduction in visible cutaneous roughness (lifting effect)	-28%; (p<0.05)
Reduction in the maximum depth of a main wrinkle	-16.3%; (p<0.05)

Anti-wrinkle effect on crow's feet determined by fringe projection or imprinting:

Reduction in the surface occupied by deep wrinkles	-28.5%; (p<0.05)
Reduction in the volume of a main wrinkle	-21%; (p<0.05)
Reduction in the mean depth	-15%; (p<0.05)
Reduction in visible cutaneous roughness (lifting effect)	-12.6%; (p<0.05)
Opening of the wrinkle	+8.4%; (p<0.05)

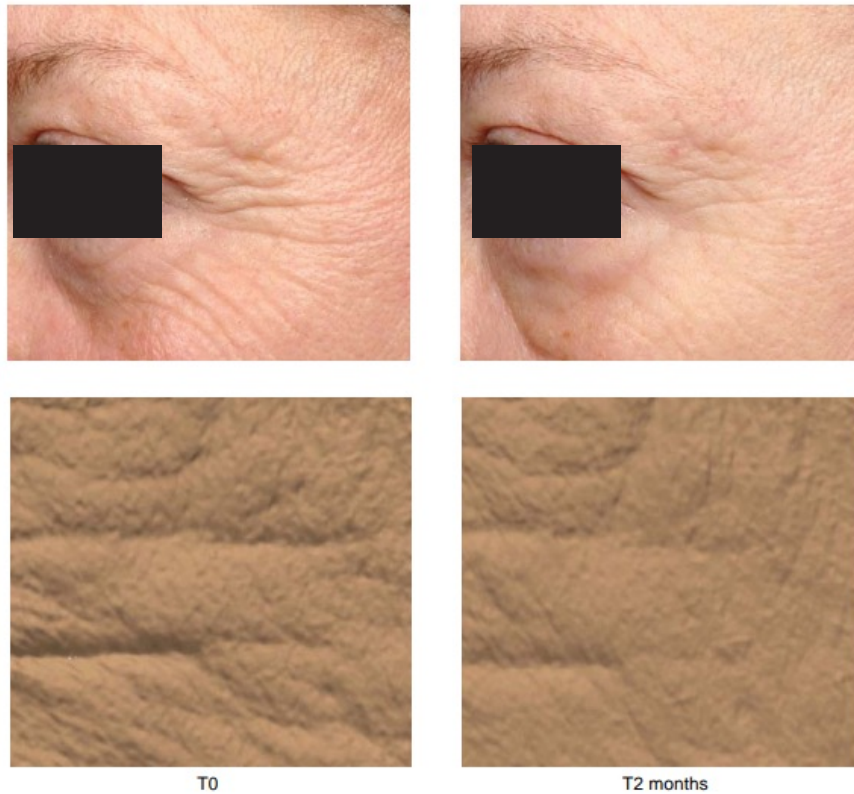
28.5% reduction in deep wrinkles

Variation in the topographic parameters of crow's feet after application of 250mg Palmitoyl Tripeptide-38 on 25 or 24* volunteers)

Surface occupied by deep wrinkles (%)	250mg Palmitoyl Tripeptide-38		Placebo	
*	T0	T 2 months	T0	T 2 months
Mean	5.28 ± 2.68	4.23 ± 2.00	4.48 ± 2.26	4.86 ± 2.91
% variation vs T0 significance Maximum	-20%; p<0.01 -71%		8.5%; ns	
Difference in variations; Significance	-28.5% p<0.05			

12.6% reduction in crow's feet

Complexity of the crow's feet; lifting effect	250mg Palmitoyl Tripeptide-38		Placebo	
	T0	T 2 months	T0	T 2 months
Mean	3.85 ± 1.04	3.54 ± 0.84	3.80 ± 1.00	3.97 ± 1.55
% variation vs T0 significance Maximum	-8.1%; p<0.05 -42%		4.5%; ns	
Difference in variations; Significance	-12.6% p<0.05			



During in vitro studies 250mg* palmitoyl tripeptide-38 strongly stimulated:

- The synthesis of matrix molecules (Collagen I: +111%, collagen III: +104%, fibronectin: +59% and HSP 47: +123%).
- The synthesis of molecules of the dermal-epidermal junction (Collagen IV: +42% and laminins: +75%).
- The synthesis of hyaluronic acid (+174%), which through its highly branched structure and moisture-retaining capabilities provides volume, and is found at all levels of the epidermis, dermal-epidermal junction and dermis.

A clinical study was conducted on 25 female volunteers, who applied a 250mg Palmitoyl Tripeptide-38 cream twice a day. The assessments specifically monitored the smoothing and filling effect on forehead lines and crow's feet.

The anti-ageing effect of palmitoyl tripeptide-38 was proven using predominant techniques.

On the forehead, measurement by fringe projection, also known as FOITS, demonstrated a visible, mean reduction in main wrinkle volume of 31%. This was complemented by a 28% reduction in cutaneous roughness, which can be associated with a lifting effect. Finally, the maximum depth of this main wrinkle decreased by a mean of 16.3%.

For the crow's feet, the anti-wrinkle effect was measured through a decrease in the surface occupied by deep wrinkles (-28.5%), a decrease in the volume of a major wrinkle (-21%), and a reduction in the mean depth (-15%). There was also a lifting effect, since there was an approximate -13% reduction in cutaneous roughness. The wrinkle further opened by 8.4%, which reduced the shadow effect.

Links:

<https://openreviewhub.org/sites/default/files/cte/2685/sgrzybinnovativecosmeticrawmaterials.pdf>
<https://www.mdpi.com/2079-9284/4/2/16/htm?crsi=6624969152>
<https://europepmc.org/article/med/15648442>

ACETYL GLUCOSAMINE

Ingredient Claims:

Increases hyaluronic acid production	Improves the skin's moisture retention
Improves skin texture	Reduces the appearance of dark spots and age spots
Inhibits the production of melanin	Stimulates the production of collagen and elastin
Reduces the appearance of fine lines and wrinkles	

Acetyl glucosamine is a natural compound derived from the amino sugar called glucosamine. Acetyl glucosamine has many biological functions such as its involvement in the production of hyaluronic acid. When acetyl glucosamine is combined with glucuronic acid, it forms hyaluronic acid. It is a popular ingredient in skincare products due to its ability to improve the skin's texture, reduce hyperpigmentation, and provide hydration. Acetyl glucosamine is similar in structure to hyaluronic acid and works by increasing the skin's production of hyaluronic acid, which in turn helps to keep the skin moisturised and plump.

Acetyl glucosamine has several benefits for the skin, including:

- **Hydration:** It is a precursor for the biosynthesis of hyaluronic acid. So, Acetyl Glucosamine itself is also an important skin-identical ingredient and NMF (Natural Moisturising Factor). Acetyl glucosamine helps to improve the skin's ability to retain moisture, which can help to prevent dryness and dehydration.
- **Exfoliation:** Acetyl glucosamine can help to gently exfoliate the skin, which can help to remove dead skin cells and improve skin texture.
- **Hyperpigmentation reduction:** Acetyl glucosamine has been shown to reduce the appearance of hyperpigmentation, such as dark spots and age spots. It works by inhibiting the production of melanin, which is responsible for skin colour.
- **Anti-ageing benefits:** Acetyl glucosamine has been shown to stimulate the production of collagen and elastin, which are essential for maintaining the skin's elasticity and firmness. This can help to reduce the signs of ageing such as fine lines and wrinkles.

Links:

<https://onlinelibrary.wiley.com/doi/abs/10.1111/j.1473-2165.2007.00295.x>
<https://pubmed.ncbi.nlm.nih.gov/20725554/>
<https://pubmed.ncbi.nlm.nih.gov/19691938/>

HORDEUM VULGARE SEED EXTRACT (BARLEY SEED EXTRACT)

Ingredient Claims:

Visibly reduces the appearance of wrinkles by 9%	Skin appears lifted and smoother
Reduces skin redness and irritation	Reduces trans epidermal water loss
Skin calming effect	Reduces appearance of dark spots and discolouration
Exhibits antimicrobial qualities to help maintain a clear complexion	Helps protect the skin from oxidative damage

Hordeum Vulgare Seed Extract, also known as barley seed extract, is a natural ingredient derived from the seeds of the barley plant (*Hordeum vulgare*). Barley is a cereal grain widely cultivated for various purposes, including food, beverages, and skincare.

When applied topically, barley seed extract has moisturising properties, which can help enhance the skin's hydration levels. Rich in polysaccharides, it forms a protective barrier on the skin, preventing moisture loss and promoting a smoother and more supple complexion. The extract contains antioxidants such as vitamin E and flavonoids that help protect the skin from damage caused by free radicals. Free radicals are unstable molecules that can lead to premature aging, such as fine lines, wrinkles, and dull skin. By neutralising these free radicals, barley seed extract helps reduce oxidative stress and promotes healthier-looking skin.

Hordeum vulgare seed extract also has soothing properties, making it beneficial for sensitive or irritated skin. It can help reduce redness, inflammation, and discomfort, providing a calming effect on the skin. Barley seed extract contains compounds such as ferulic acid that have skin brightening effects. This can help even out the skin tone and reduce the appearance of dark spots, hyperpigmentation, and discoloration, resulting in a more radiant complexion. The extract also offers anti-aging benefits by supporting collagen production and improving skin elasticity. This can help reduce the appearance of fine lines and wrinkles, giving the skin a more youthful and firm appearance.

Lastly, barley seed extract contains compounds such as benzoxazinoids which exhibit antimicrobial properties. This can help combat certain bacteria that contribute to skin issues such as acne. It may assist in maintaining a clearer and healthier complexion.

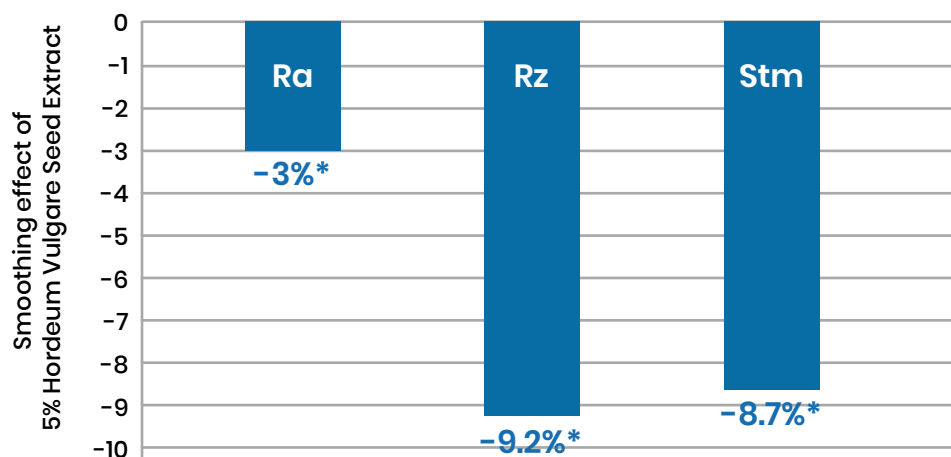
Anti-wrinkle effect on crow's feet area

Studied parameters:

- Ra: the average roughness (in μm): a decrease in this parameter characterises a smoothing effect.
- Rz: the average relief: average of all picks-to-valley heights.
- Stm: volume measurement: mean of the maximum surface height difference.

A decrease in one of these parameters (Stm & Rz) characterises an anti-wrinkle effect of the product

5 min after application



Significant & visible decrease of wrinkle appearance and skin roughness by 9% after 5 mins.

*Significant results ($p < 0.05$) in comparison to the same area before application.



Before application



5min after application

Links:

<https://pubmed.ncbi.nlm.nih.gov/28025509/>

<https://grasasyaceites.revistas.csic.es/index.php/grasasyaceites/article/view/995>

<https://www.sciencedirect.com/science/article/abs/pii/S2214785320385606>

<https://link.springer.com/article/10.1007/s10068-010-0110-2>

BETA GLUCAN

Ingredient Claims:

Boosts skin moisture content	Soothes irritated, red skin
Protects the skin from environmental stressors	Accelerates wound healing by promoting collagen formation
Improves skin elasticity and firmness	Reduces skin sensitivity

Beta glucan is a naturally occurring polysaccharide derived from sources such as yeast, oats, and mushrooms. It has gained attention for its potential benefits for the skin.

Key benefits:

- **Moisturisation:** Beta glucan is known for its excellent moisturising properties. It forms a film on the skin's surface, helping to prevent water loss and maintain hydration levels. This can be particularly beneficial for dry or dehydrated skin, as it helps to improve skin barrier function.
- **Soothing and anti-inflammatory effects:** Beta glucan has soothing properties that can help calm and reduce skin irritation and inflammation, reducing skin redness.
- **Wound healing:** Studies have shown that beta glucan can promote wound healing by stimulating collagen synthesis and accelerating the production of new skin cells. It also has immune-stimulating properties that aid in the healing process.
- **Antioxidant protection:** Beta glucan possesses antioxidant properties, which help protect the skin against oxidative stress caused by free radicals. This can contribute to the prevention of premature aging and damage caused by environmental factors, such as UV radiation.
- **Skin rejuvenation:** Beta glucan can enhance the skin's elasticity and firmness by promoting collagen production. It can help improve the appearance of fine lines, wrinkles, and sagging skin, giving the skin a more youthful and revitalised look.
- **Immune system support:** Beta glucan has immune-modulating properties, which means it can enhance the skin's immune response. This can help strengthen the skin's defence mechanisms and improve its ability to combat various skin issues, including infections.

Link:

<https://pubmed.ncbi.nlm.nih.gov/23494974/>

https://onlinelibrary.wiley.com/doi/abs/10.1111/j.1463-1318.2005.00268_3.x

PANTHENOL (VITAMIN B5)

Ingredient Claims:

Provides intense moisturisation	Improves skin elasticity
Promotes wound healing	Improves skin texture and skin tone
Soothes red, irritated skin	Enhances skin barrier function

Also known as pro-vitamin B5, Panthenol effectively penetrates the skin and provides a number of benefits:

- **Moisturising:** Panthenol is a humectant, which means that it helps to attract and retain moisture in the skin. This can help to improve the skin's hydration levels by decreasing trans epidermal water loss and reduces dryness and flakiness.
- **Soothing:** Panthenol has anti-inflammatory properties that can help to calm and soothe irritated or sensitive skin. This makes it useful for people with conditions like eczema, rosacea, or acne.
- **Healing:** Panthenol can help to support the skin's natural healing process by promoting cell regeneration and tissue repair. This can help to reduce the appearance of scars and improve overall skin health.
- **Anti-ageing:** Panthenol can help to improve the appearance of fine lines and wrinkles by increasing the skin's elasticity and suppleness. It can also help to improve skin texture and tone.
- **Enhances skin barrier:** Panthenol can help to strengthen the skin's natural barrier function, reducing moisture loss and protecting the skin from external stressors.

Links:

<https://pubmed.ncbi.nlm.nih.gov/21982351/>

<https://pubmed.ncbi.nlm.nih.gov/27545858/>

<https://www.scinapse.io/papers/3564442>

<https://www.tandfonline.com/doi/full/10.1080/09546634.2016.1214235>

[Data on file.](#)

BUTYROSPERMUM PARKII BUTTER (SHEA BUTTER)

Ingredient Claims:

Deeply moisturises the skin and reduces trans epidermal water loss	Rich in vitamins and fatty acids that nourish the skin and promote healthier-looking skin
Reduces signs of skin inflammation, irritation, and redness	Promotes healing of scars and tissue regeneration
Improves and softens skin texture	Promotes the production of collagen

A botanical ingredient derived from the seeds of the African Shea Tree. Also known as shea butter, it acts as a skin conditioning agent. Firstly, it helps the skin to retain moisture and lessen the loss of water by forming a barrier on the skin's surface, making it particularly beneficial for dry or sensitive skin types. Secondly, it works to reduce the appearance of rough patches and dry flakes on the skin and acts as a deep moisturiser because of its content of unsaponifiable fats- meaning that, unlike other fatty oils, it does not turn into soap when in the presence of a potent alkali, thus retaining its moisturising abilities.

Shea butter contains natural anti-inflammatory agents that can help reduce inflammation and irritation in the skin and also contains antioxidants, such as vitamins A and E, which can help protect the skin from free radicals and reduce the signs of aging, such as fine lines and wrinkles. Shea butter has been shown to help reduce the appearance of scars by promoting tissue regeneration and increasing collagen production. In addition, shea butter contains a natural SPF of around 6, which can help protect the skin from the damaging effects of UV radiation. Lastly, shea butter can help improve the texture and softness of the skin by promoting cell regeneration and reducing roughness.

Links:

<https://www.ncbi.nlm.nih.gov/pmc/articles/PMC5796020>

<https://pubmed.ncbi.nlm.nih.gov/33565186/>

<https://academic.oup.com/bjd/article-abstract/134/2/215/6681786>

<https://www.tandfonline.com/doi/abs/10.1080/10408398.2011.604142>

TOCOPHEROL (VITAMIN E)

Ingredient Claims:

Protects the skin from oxidative damage caused by environmental stressors	Promotes scar healing
Soothes dry, irritated skin	Helps to protect the skin from sun damage
Promotes skin cell turnover	Potent antioxidant that reduces the signs of ageing

Tocopherol or Vitamin E is an important fat-soluble antioxidant and has been in use for more than 50 years in dermatology. It is an important ingredient in many cosmetic products. It protects the skin from various deleterious effects due to solar radiation by acting as a free-radical scavenger.

Vitamin E is one of the most well-known and researched antioxidants for the body and for skin. Vitamin E occurs naturally in human skin but can become depleted due to constant environmental exposure in the absence of sun protection.

Vitamin E has been shown to help reduce the appearance of scars by promoting tissue regeneration and increasing collagen production. Vitamin E also has anti-inflammatory properties that can help soothe irritated skin and reduce redness and swelling. In addition, vitamin E exhibits brightening properties that help improve the appearance of dark spots and uneven skin tone by promoting cell turnover and reducing melanin production.

Experimental studies suggest that vitamin E has photoprotective properties and is a powerful antioxidant.

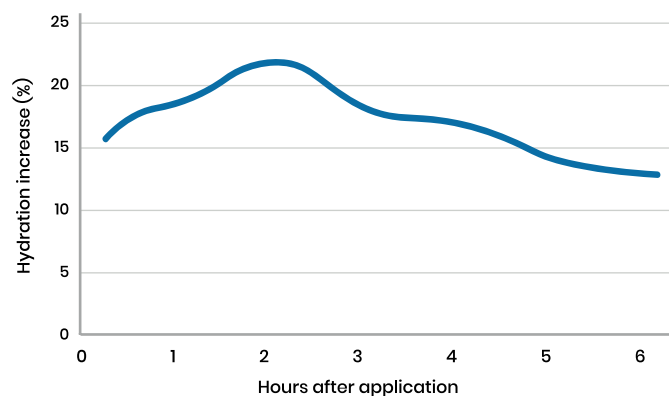
Link: <https://www.ncbi.nlm.nih.gov/pmc/articles/PMC4976416/>

SODIUM HYALURONATE

Ingredient Claims:

Boosts skin hydration	Supports the skin barrier
Promotes wound healing	Protects the skin from environmental damage
Skin feels smoother and tighter	Supports collagen and elastin formation

**Results: Up to 25% increase of skin hydration
2 hours after application**



In vitro

High-molecular-weight (up to 2000 kDa) Sodium Hyaluronate improves skin hydration and elasticity when compared to placebo.*

Study

0.025% Sodium Hyaluronate (1.4 MDa) in an emulsion vs placebo
8 Volunteers
Parameter: skin hydration (Corneometer CM 820 PC)

Sodium Hyaluronate is the salt form of Hyaluronic Acid, a water-binding ingredient that has the ability to fill the spaces between the connective fibres known as collagen and elastin. Hyaluronic Acid hydrates and separates the skin, allowing it to retain water and create a plumping effect. Sodium Hyaluronate has been used for moisturisation and wound healing since its discovery in the 1930s. It is comprised of small molecules that penetrate the skin easily and can hold up to 1000 their own weight in water. Because the skin naturally loses its water composition as it ages (going from 10% - 20% water to less than 10%).

Hyaluronic Acid and Sodium Hyaluronate can replace some of the water lost in the dermis, and potentially fight wrinkles and other signs of ageing. Because of its relatively high molecular weight it is not absorbed following application to the skin. Instead, it forms a thin, light, permeable, invisible, viscoelastic surface film. This fixes the moisture on the surface of the skin. The Hyaluronic Acid (HA) film supports the skin's natural protective mechanism. Since it is an excellent water reservoir leading to a perceptible and visible improvement in skin condition.

Links

<https://www.ncbi.nlm.nih.gov/pmc/articles/PMC3583886>

[Data on file](#)

GLYCERIN

Ingredient Claims:

Excellent moisturising properties	Enhances skin elasticity
Calms and soothes irritated skin	Promotes skin barrier function
Reduces trans epidermal water loss	Soothes hot or sunburned skin

Glycerin is a humectant which is present in all-natural lipids. Derived from natural substances by hydrolysis of fats and by fermentation of sugars. This palm-free vegetable Glycerin is widely used in cosmetic products and provides the following benefits:

- **Moisturising:** Glycerin has excellent moisturising properties. It attracts and retains moisture from the environment, helping to hydrate the skin and prevent dryness. It forms a protective layer on the skin, reducing water loss and maintaining its natural moisture balance.
- **Skin barrier repair:** Glycerin can support the skin's barrier function by strengthening the outermost layer of the skin, known as the stratum corneum. This can help improve the skin's ability to retain moisture and protect it from external irritants.
- **Soothing and calming:** Glycerin has soothing properties that can help alleviate skin irritation, itching, and inflammation. It can be beneficial for conditions such as eczema, psoriasis, or dry, sensitive skin.
- **Anti-ageing effects:** Glycerin has the ability to improve the appearance of fine lines and wrinkles. By maintaining skin hydration, it can enhance the skin's elasticity and firmness, giving it a smoother and more youthful appearance.
- **Compatibility with various skin types:** Glycerin is generally well-tolerated by different skin types, including sensitive and acne-prone skin. It is non-comedogenic, meaning it won't clog pores or contribute to breakouts.
- **Enhances product effectiveness:** Glycerin is often used as a key ingredient in skincare formulations because it helps other ingredients penetrate the skin more effectively. It can enhance the delivery of active ingredients, allowing them to work more efficiently.
- **Cooling effect:** Glycerin has a cooling effect on the skin, making it useful in products such as facial mists or soothing gels. It can provide relief for hot or sunburned skin.

Links:

[International Journal of Cosmetic Science, August 2016, ePublication](#)

[British Journal of Dermatology, July 2008, pages 23-34](#)

[Journal of Cosmetic Dermatology, June 2007, pages 75-82](#)

[Proceeding of the National Academy of Sciences, June 2003, pages 7,360-7,365](#)

<https://www.ncbi.nlm.nih.gov/pmc/articles/PMC8395744/>

HELIANTHUS ANNUUS SEED OIL (SUNFLOWER SEED OIL)

Ingredient Claims:

Protects the skin from oxidative damage	Moisturises the skin and strengthens the skin's natural barrier
Reduces the signs of ageing	Helps protect collagen and elastin content in the skin

Sunflower seed oil is a vegetable oil derived from the seeds of the sunflower plant (*Helianthus annuus*). It is a versatile and widely used oil in various industries, including skincare, culinary, and cosmetics. Sunflower seed oil has a light to medium consistency with a pale, yellow colour, and a mild, neutral aroma.

High in antioxidants such as vitamin E, it helps protect the skin from free radicals and environmental damage. These antioxidants help to neutralise oxidative stress and reduce the signs of ageing such as fine lines, wrinkles, and sun damage by protecting collagen and elastin content.

Sunflower seed oil is rich in fatty acids, particularly linoleic acid and so acts as an emollient, reducing trans epidermal water loss. The fatty acids present in sunflower seed oil also contribute and strengthen the skin's natural barrier. By reinforcing the skin's protective layer, it helps the skin to retain moisture, protect against external stressors and maintain overall skin health.

Sunflower seed oil is lightweight and has a low comedogenic rating, allowing for fast absorption into the skin. Rich in nutrients such as calcium, iron, magnesium, zinc and vitamins A, K and E, sunflower seed oil is an effective oil for use against inflammation and general irritations of the skin.

Links:

<https://pubmed.ncbi.nlm.nih.gov/22995032/>
<https://www.mdpi.com/1422-0067/19/1/70>

LECITHIN

Ingredient Claims:

Supports cell integrity	Softens and moisturises the skin
Reduces skin inflammation	Strengthen skin barrier function

Lecithin is a naturally occurring compound found in various foods, including egg yolks, soybeans, and sunflower seeds. Lecithin plays a vital role in biological systems, particularly in cell membranes. It acts as an essential building block for the phospholipid bilayer, which forms the structural framework of cell membranes. The amphiphilic nature of lecithin allows it to align and form a lipid barrier, regulating the passage of substances in and out of cells and maintaining cell integrity. Scientific research specifically focused on the skin benefits of lecithin, suggest its properties elicit several potential benefits:

- **Moisturisation:** Lecithin is an emollient, which means it helps to soften and soothe the skin. It can create a protective barrier that locks in moisture, preventing dryness and promoting hydration.
- **Enhances skin barrier function:** Lecithin contains phospholipids, such as phosphatidylcholine, which are similar in structure to the skin's natural lipids. These lipids help strengthen the skin's barrier function, improving its ability to retain moisture and protect against environmental irritants.
- **Anti-ageing effects:** Some studies suggest that lecithin may have anti-ageing properties. Phospholipids in lecithin can help maintain the integrity and fluidity of cell membranes, potentially reducing the signs of ageing, such as wrinkles and fine lines.
- **Enhances penetration of other ingredients:** Lecithin has emulsifying properties, making it useful in cosmetic formulations. It can help other active ingredients penetrate the skin more effectively, allowing them to exert their beneficial effects.
- **Anti-inflammatory properties:** Lecithin contains choline, a nutrient that has anti-inflammatory properties. By

reducing inflammation, lecithin may help calm irritated or inflamed skin conditions.

Links:

<https://pubmed.ncbi.nlm.nih.gov/24246994/>

<https://pubmed.ncbi.nlm.nih.gov/35500405/>

