



AHE-ALPIN HEILMOOR EXTRACT™



ALPIN HEILMOOR EXTRACT, a multifunctional active ingredient offered by nature

The story of ALPIN HEILMOOR EXTRACT:

BACKGROUND:

Inspired by Traditional European medicine
Used for centuries for its multiple benefits



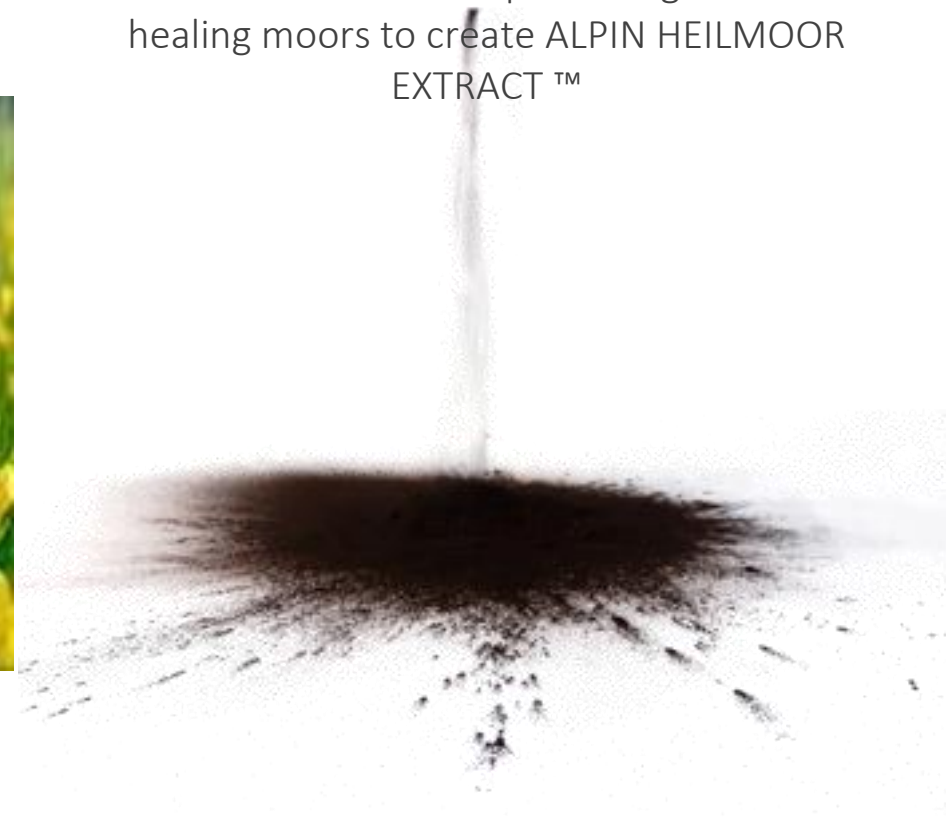
SOURCING:

Novel Sustainable quarrying
approach



INNOVATIVE SOLUTION

Premium Organic, thanks to its expertise:
Concentrates the most potent ingredients of
healing moors to create ALPIN HEILMOOR
EXTRACT TM





An ancient natural medicine. Long known, almost forgotten.
Thanks to AHE now reinterpreted.

- More than 2000 years ago the Romans and Celts valued it for its health- and strength-enhancing properties and immersed themselves in Moor baths.
- Already Paracelsus 500 years ago recognized the therapeutic possibilities of Heilmoor (therapeutic mud / medicinal moor) for joint pain and digestive problems.
- For thousands of years, flowers, herbs and other plants have been sinking and, under certain conditions and under exclusion of oxygen, formed the basis for the formation of moors.
- In order to be defined as Heilmoor, certain criteria must be met, such as the content of organic and inorganic components, the content of organic substances, the pH value and the heat retention capacity.
- Used for centuries primarily as a therapeutic bath, AHE now sets new standards and applications for this concentrated power of nature with its novel form and purity.



Understanding of ALPIN HEILMOOR EXTRACT

2.3

PELOID:

Worldwide Peloids have always been used for therapeutic, healing and cosmetic purposes. While Dead Sea Mud, Fango and Healing Earths are all inorganic, only Moor is an organic Peloid.

Only (Heil)Moor is an organic peloid

MOOR:

A special kind of these concentrated natural forces is created under conditions of high water content and low oxygen: The moor.

HEILMOOR:

If moor deposits meet certain parameters, they can be recognized as a Heilmoor (medicinal moor / healing moor / therapeutic mud). Due to its consistency, known mainly for its thermophysical properties, it is mostly used in the form of baths or packs.

Only 3-5% of all moor can be classified as

Heilmoor

ALPIN HEILMOOR EXTRACT™:

AHE concentrates the most potent ingredients of healing moors and provides them in micronized form and for new applications.

Only 10% of all Heilmoor is suitable for the extraction of AHE

2.4

THE PROCESSING OF AHE



THE PROCES:

Due to our innovative and patented process we extract only the best and most potent part that Heilmoor has to offer: ALPIN HEILMOOR EXTRACT™. This dark micronized powder is the result of a novel process, that we developed together with Austrian experts and universities. AHE is produced by partners in Germany and Austria- all specialists in their field.

Source of bioactive molecules: ULMIC ACID, FULVIC ACID, HUMIC ACID



SUSTAINABILITY

2.5

Our **sustainable resource management** in the quarrying and production of ALPIN HEILMOOR EXTRACT™ not only preserves the moor's CO₂ reservoir by keeping the topsoil intact, it also creates Moor-biotopes and thus increases the biodiversity and revitalizes the Moorland.

It is important to us not only to profit from this natural treasure - but also **to give something back to the region and nature**. The diversity of the landscape is strengthened by our sustainable extraction concept with subsequent **renaturation of the area**, as new plant and animal species will find a place in this natural refuge.

This long-term quarrying plan is developed and constantly monitored and implemented in **cooperation with external experts**.



WATCH OUR SUSTAINABLE QUARRYING VIDEO:

<https://www.premium-organic.com/sustainable-heilmoor-extracRon>



COMPREHENSIVE BENEFITS



1 - Pollution shield



2- Calming and soothing for challenged skin



3- Improves fibre elasticity



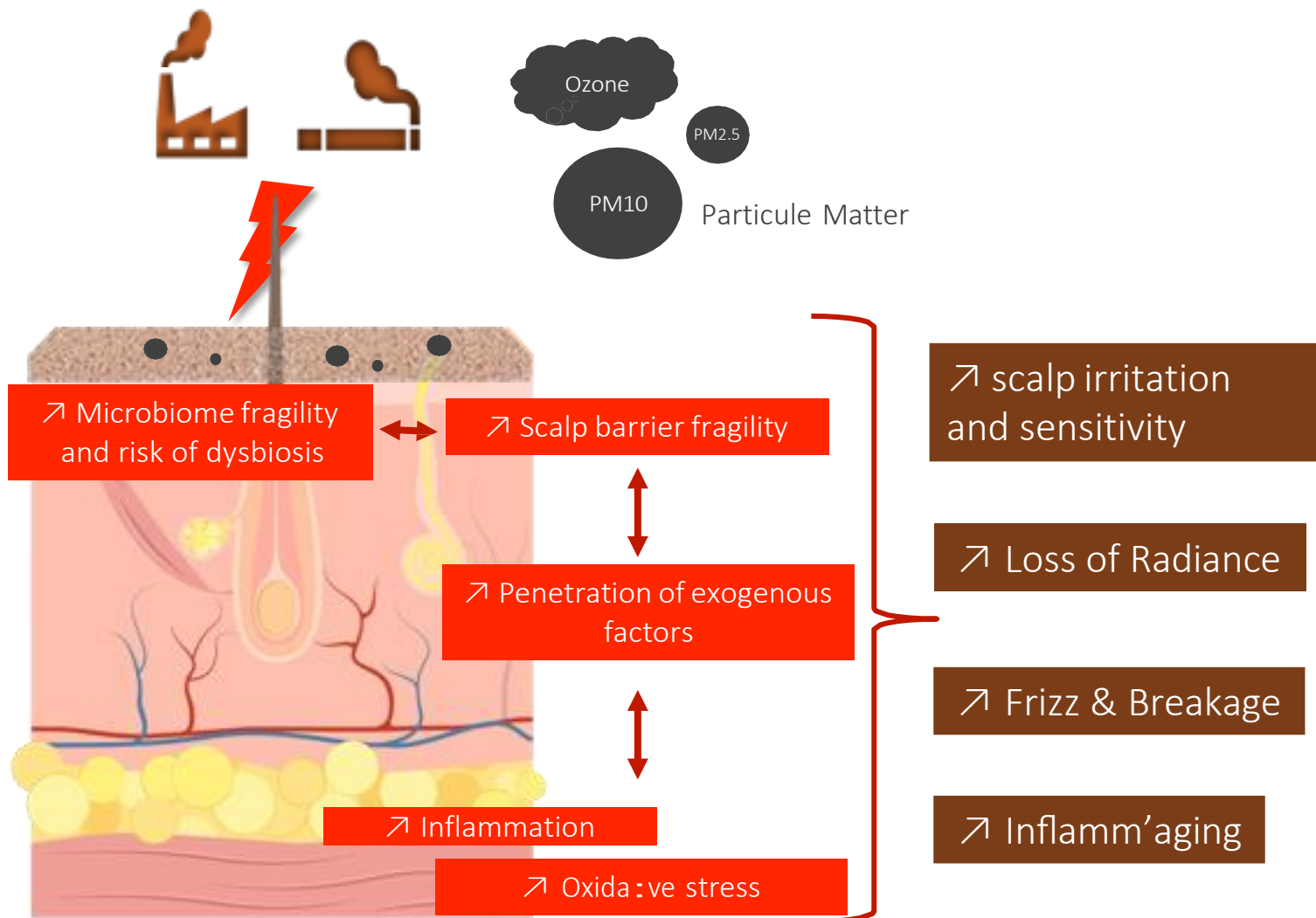
4- Improves hair and scalp structure



1- Pollution shield

AHE limits pollutants contact with the skin and scalp

- Cleansing effect / pollutant deposits

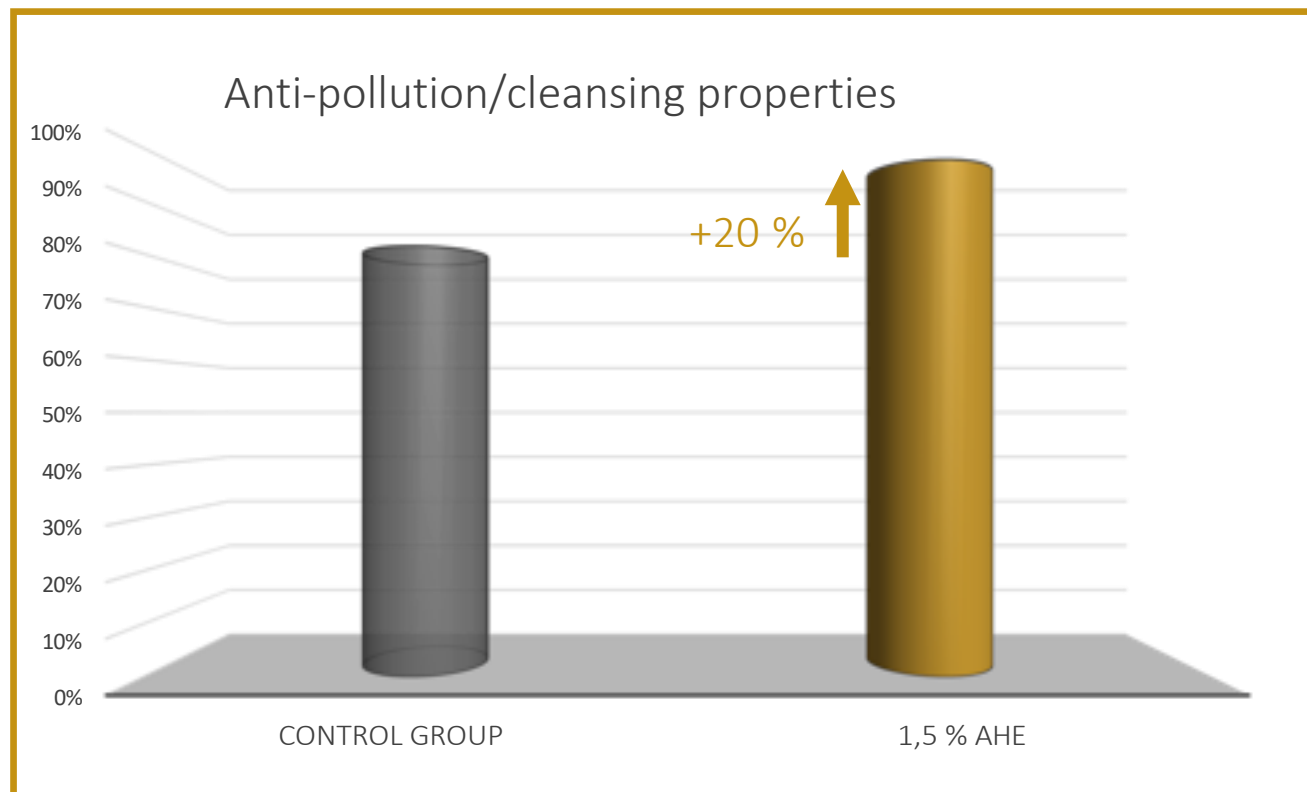


Polluted air affects 92% of global population
Atmospheric pollution, combined with ozone and UV-rays induce production and accumulation of ROS and inflammatory response.

Chronic exposure to pollutants leads to fragile skin, alteration of the cutaneous microbiome and development or worsening of cutaneous disorders: sensitivity, irritability, dehydration, pigmentation disorders, premature aging, dermatitis...

Shield the Skin and scalp from environmental damages

WHAT WE ANALYSE: we evaluated:
• Elimination of microparticules



CLINICAL DESIGN:

Number of volunteers: 11 subjects

Average age: median age of 49 years

Gender: female

Area of treatment: Forearm

Pre-Inclusion: 2mg/cm² of carbon microparticles

Application: Single

Product: cleansing product base 1.5% AHE

Type of measurements ELIMINATION INDEX 'IE' OF MICROPARTICLES

Significance: $p < 0.001$

AHE 1,5% significantly reduces pollution deposits on the skin, preventing the negative consequences of pollutants



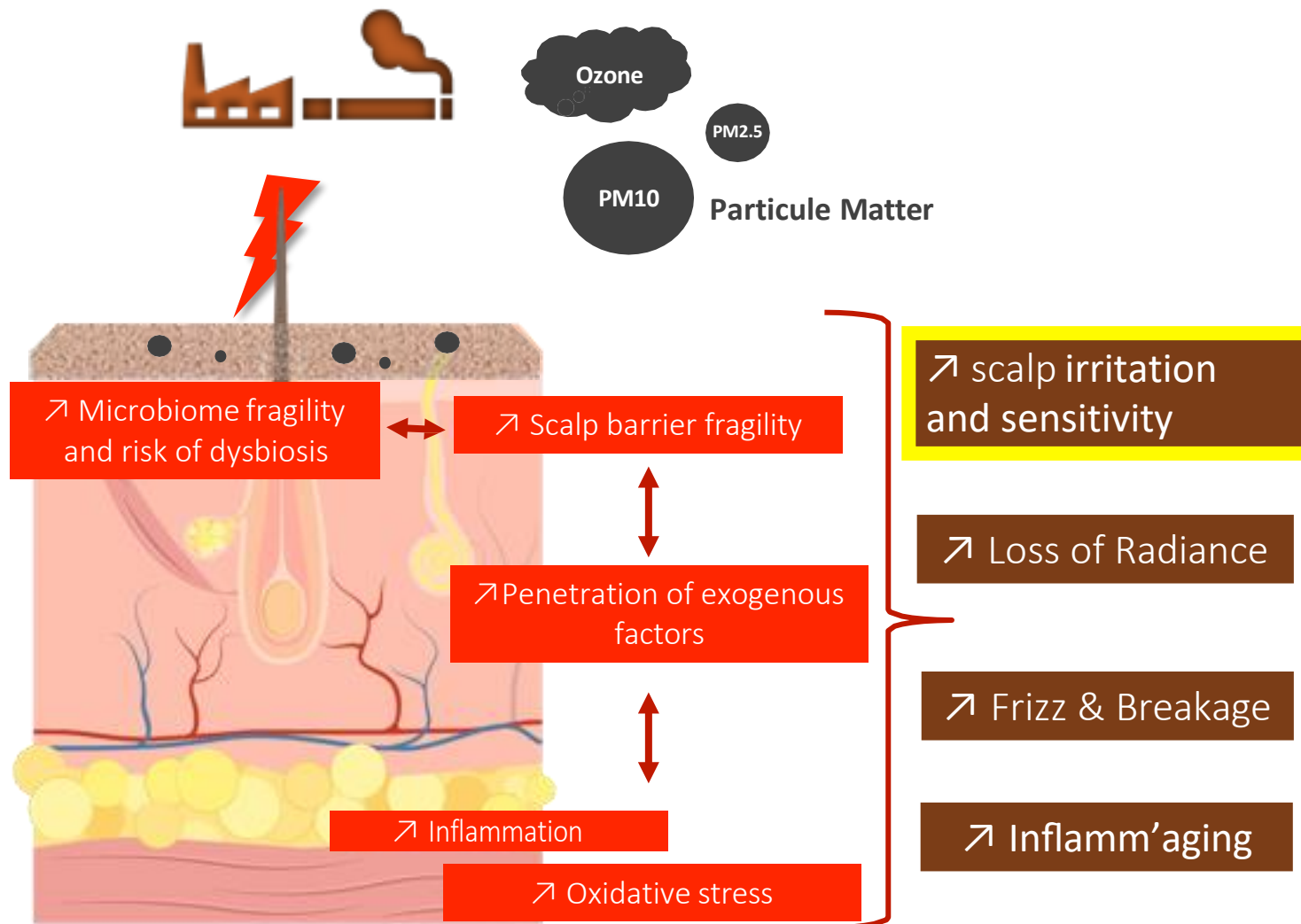
2- Calming and soothing for challenged skin

AHE has a soothing effect

- Capsaicin and stinging assay → activation of TRPV1



ALPIN HEILMOOR EXTRACT™ helps soothe sensitive scalp and skin



Overall, ~60–70% of women and 50–60% of men report having some degree of sensitive skin. Recently, a special interest group on sensitive skin in the International Forum for the Study of Itch (IFSI) has defined sensitive skin as follows. "A syndrome defined by the occurrence of unpleasant sensations (*stinging, burning, pain, pruritus, and stinging sensations*) in response to stimuli that normally should not provoke such sensations. These unpleasant sensations cannot be explained by lesions attributable to any skin disease. The skin can appear normal or be accompanied by erythema. Sensitive skin can affect all body locations, especially the face."

Soothe sensitive skin from unpleasant sensations to make it more comfortable

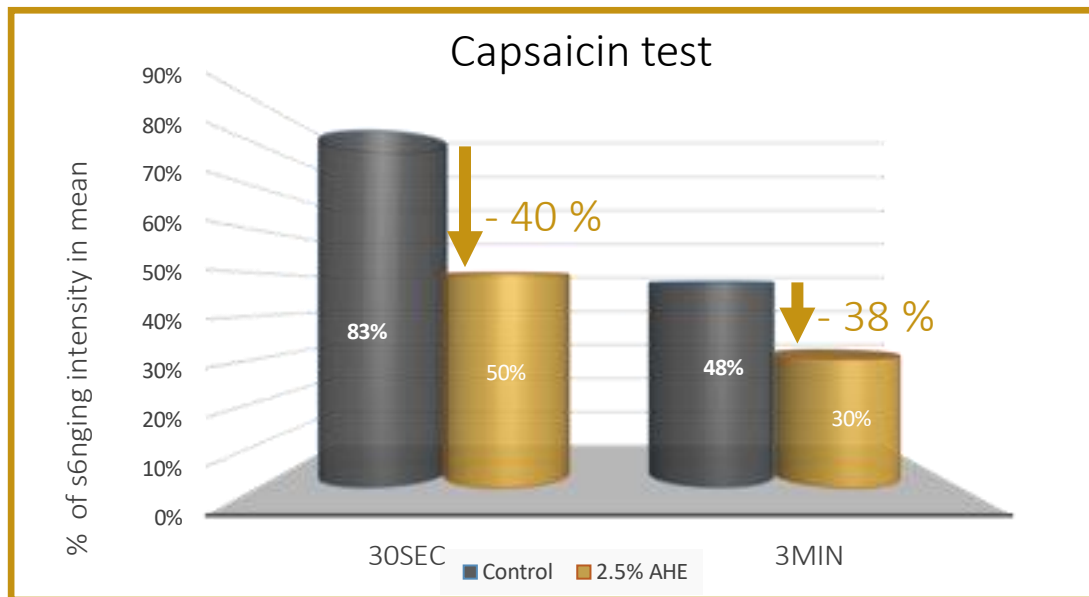
WHAT WE ANALYSE: we evaluated:

TRPV1 activation with :

- Capsaicin test
- Lactic acid stinging test



ALPIN HEILMOOR EXTRACT™ helps soothe sensitive scalp and skin



CLINICAL STUDY DESIGN:

Number of volunteers: 22 subjects

Average age: median age of 49 years

Gender: female

Area of treatment: nasolabial region

Pre-Inclusion: Capsaicin

Application: Single and Two times a day

Product: Base facial cream 2,5 AHE

Duration of study: 28 days

Type of measurements: AVERAGE REDUCTION OF THE INTENSITY OF THE STINGING and

AVERAGE IMPROVEMENT OF CUTANEOUS REACTIVITY

Analysis method: Visia

Significance: $p < 0.001$

Capsaicin stimulates the TRPV1 ion channel in the nerve endings, causing itching and erythema. Transient receptor potential vanilloid-1 (TRPV1) is a cation channel that responds to low pH (Lactic acid) or capsaicin and is related to nociception, neurogenic inflammation, and pruritus. TRPV1 is upregulated in subjects with sensitive skin, and it correlates with the intensity of the symptoms.

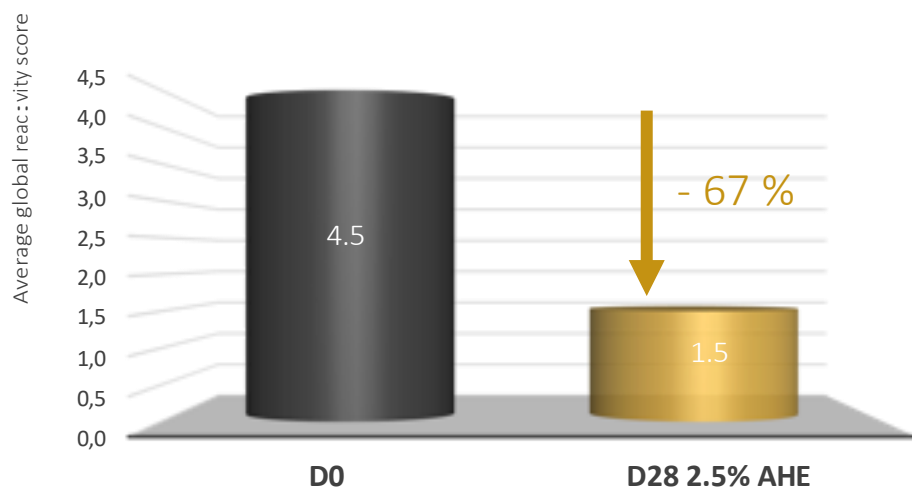
AHE 2,5% has an “IMMEDIATE SOOTHING” effect after only one application and already from 30 seconds after this application



ALPIN HEILMOOR EXTRACT™ helps soothe sensitive scalp and skin



LAST - Average reduction of global reactivity score with a cream base containing 2,5% AHE after 28 days



LAST (Lactic acid sting test) scores are associated with symptoms of stinging, itching, tautness and clinical sign of scaling in sensitive skin

CLINICAL STUDY DESIGN:

Number of volunteers: 22 subjects

Average age: median age of 49 years

Gender: female

Area of treatment: nasolabial region

Pre-Inclusion: 10 % LacOc Acid

Application: Single and Two Times a day

Product: Base facial cream 2,5 AHE

Duration of study: 28 days

Type of measurements: AVERAGE REDUCTION OF THE INTENSITY OF THE STINGING and

AVERAGE IMPROVEMENT OF CUTANEOUS REACTIVITY

Analysis method: Visia

Significance: $p < 0.001$

A significant decrease in the stinging intensity confirms that AHE presents a calming effect, “PREVENTIVE SOOTHING EFFECT” and is great for sensitive skin.



4.3



3 - Improves Fibre Elasticity

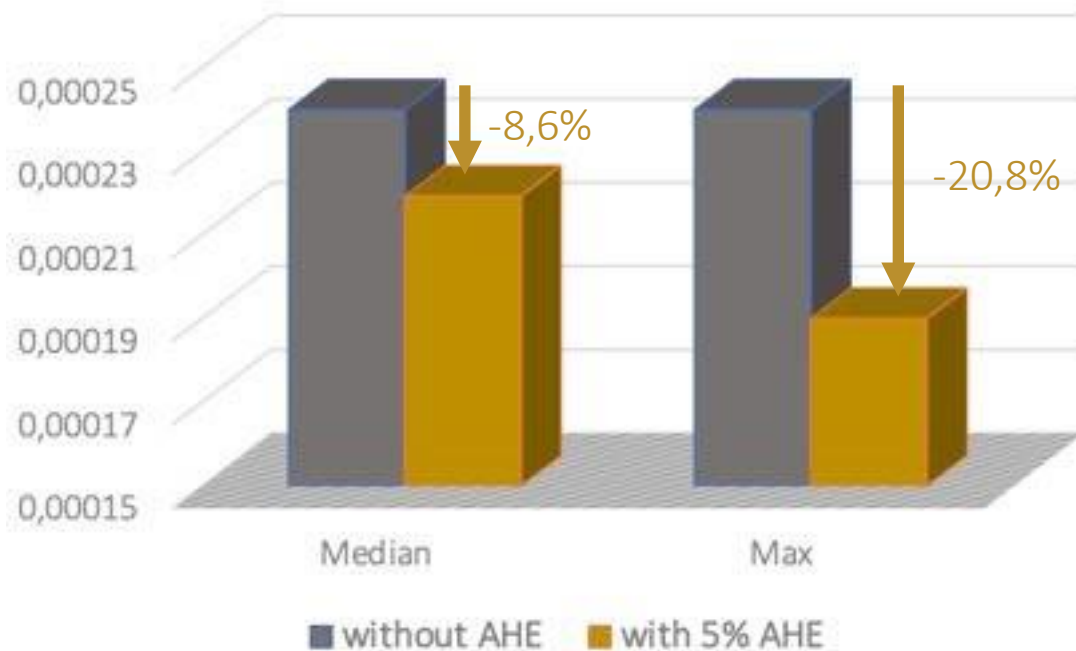
AHE improves FLEXIBILITY & ELASTICITY of bleached and white HAIR FIBERS



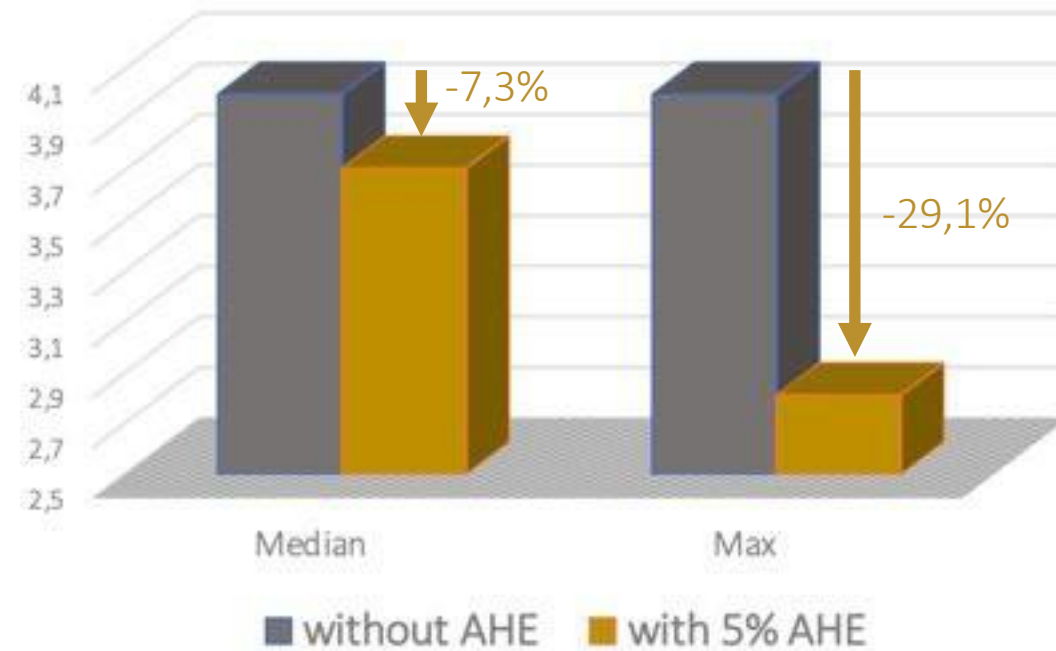
ALPIN HEILMOOR EXTRACT™ improves hair fibres flexibility and elasticity in bleached hair strains

Single application of a hair mask base with and without 5% AHE on hair fibres of 25 bleached hair strains

Tensile Strength 15% (N/μm²)



Young's modulus (N/μm²)



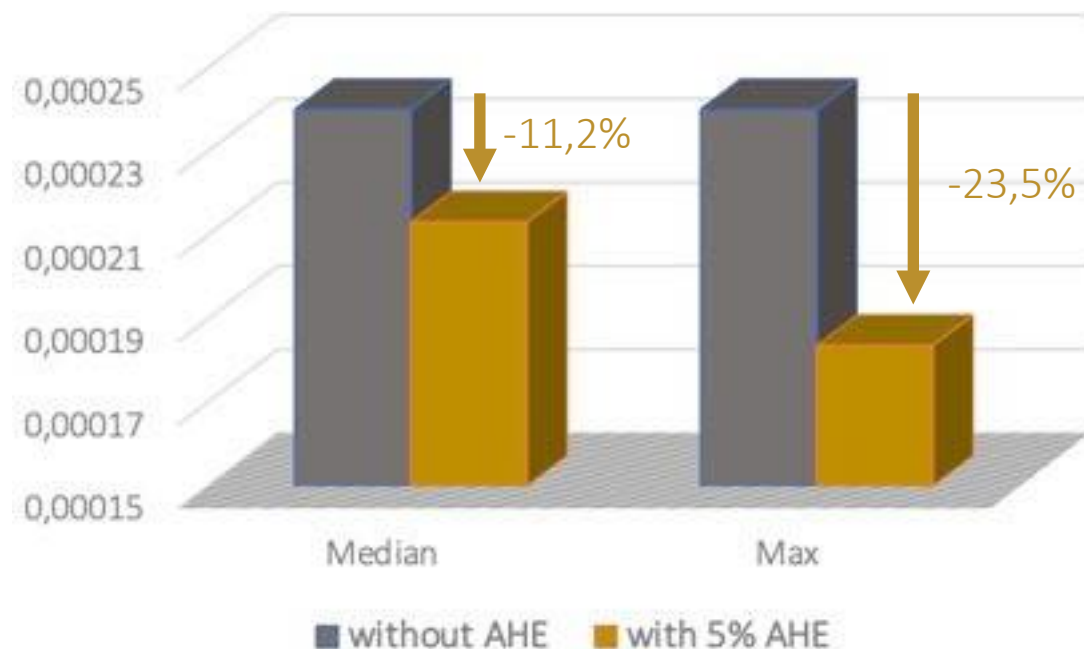
A significant decrease in the Tensile Strength and Young's modulus confirms that AHE improves hair fibres flexibility and elasticity in bleached hair strains.



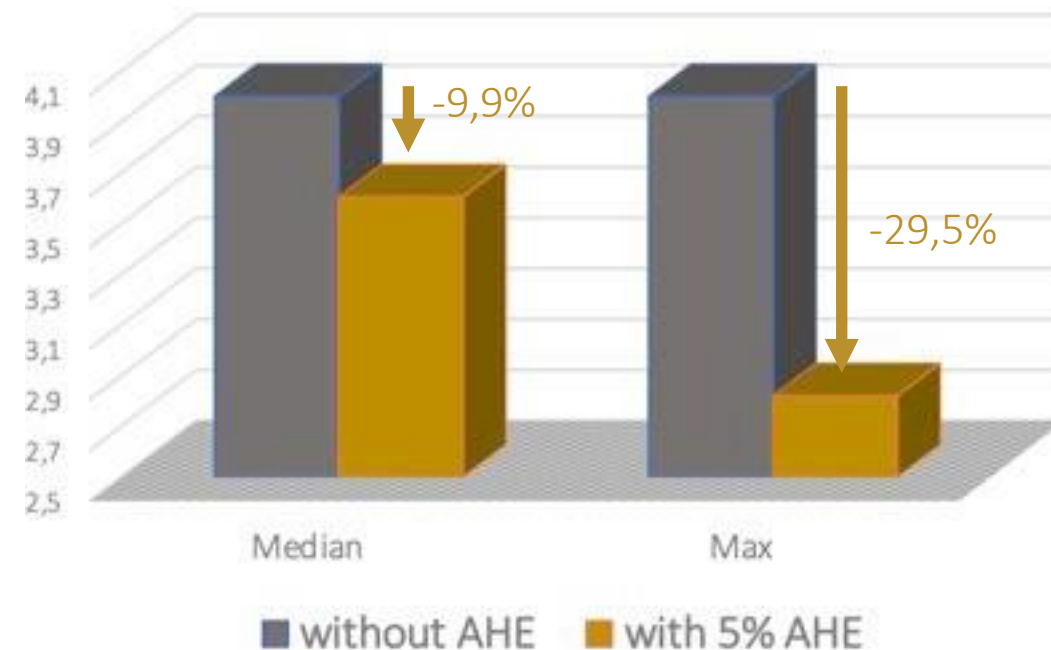
ALPIN HEILMOOR EXTRACT™ improves hair fibres flexibility and elasticity in white hair strains

Single application of a hair mask base with and without 5% AHE on hair fibres of 25 white hair strains

Tensile Strength 15% (N/μm²)



Young's modulus (N/μm²)



A significant decrease in the Tensile Strength and Young's modulus confirms that AHE improves hair fibers flexibility and elasticity in white hair strains.



4 - Improves hair and scalp structure



**In these studies, a marketed formulation was compared
with the same formulation plus 0.3% AHE**

SHAMPOO

Number of volunteers: 20 subjects
Age: 18+
Gender: female
Area of treatment: Head Application
Hair Type: dyed or colored hair
Application: regular use
Product: shampoo with 0,3 % AHE
Reference: shampoo without 0,3 % AHE
Duration of study: 28 days

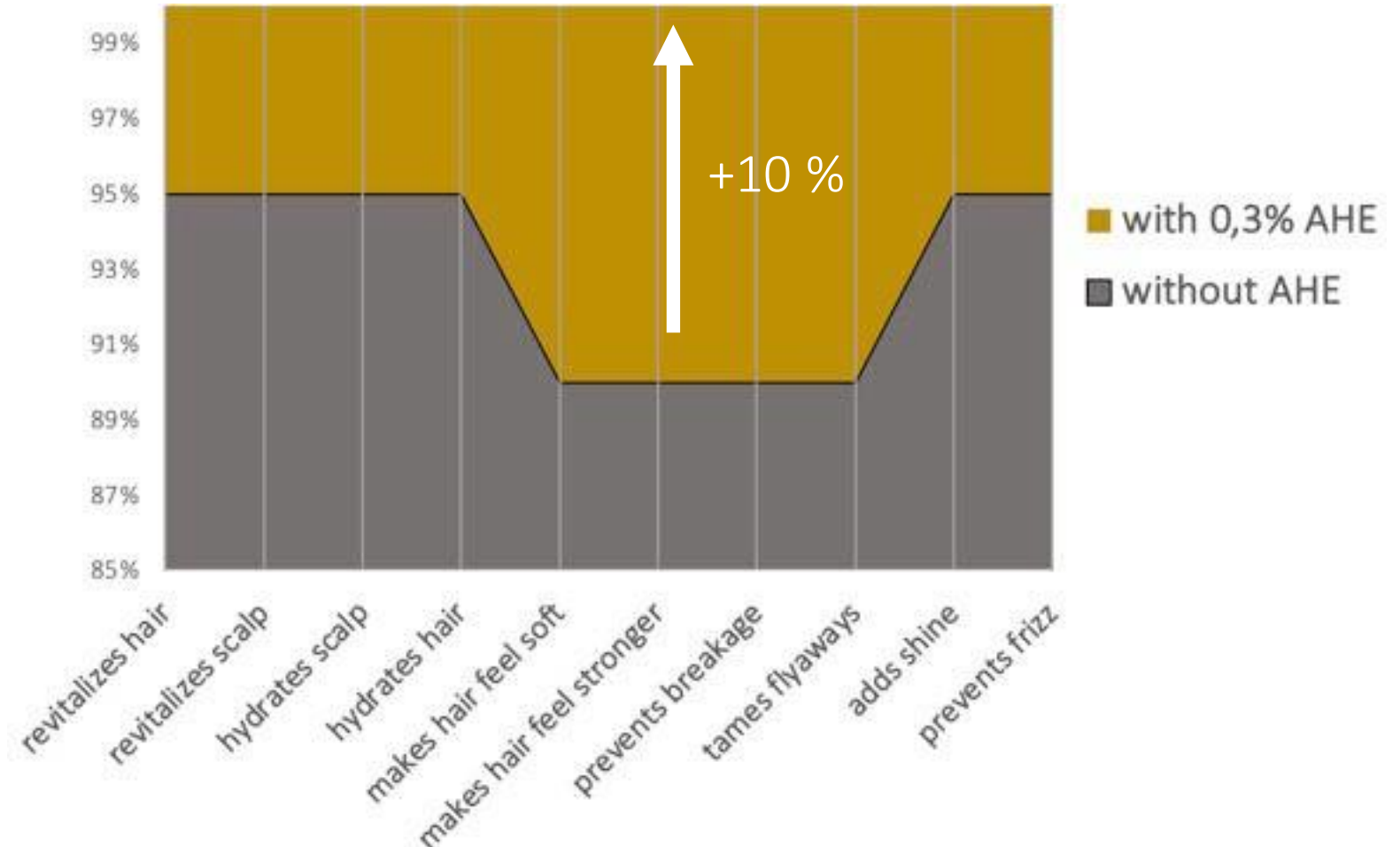
CONDITIONER

Number of volunteers: 20 subjects
Age: 18+
Gender: female
Area of treatment: Head Application
Hair Type: dyed or colored hair
Application: regular use
Product: conditioner with 0,3 % AHE
Reference: conditioner without 0,3 % AHE
Duration of study: 28 days



4.4

A study comparing a marketed shampoo formulation with the same formulation plus 0.3% AHE showed these effects:



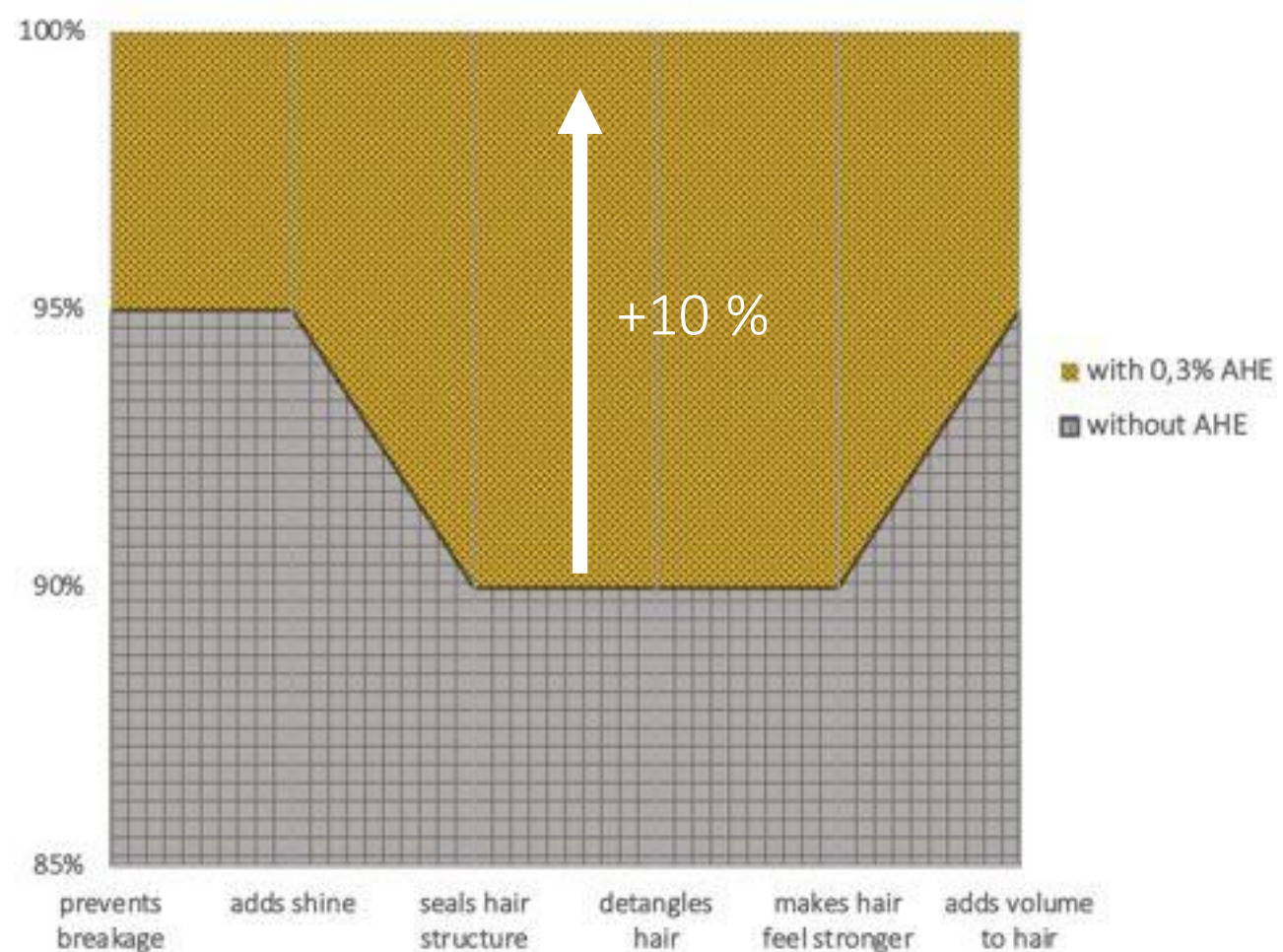
A significant increase in the hair softness, structure, complexion and scalp revitalizing was observed with 0,3% AHE added in a marketed shampoo.



ALPIN HEILMOOR EXTRACT™ improves hair and scalp



A study comparing a marketed conditioner formulation with the same formulation plus 0.3% AHE showed these effects:



A significant increase in the hair softness, structure and strength with 0,3% AHE in a marketed conditioner was observed.



ALPIN HEILMOOR EXTRACT™ a multifunctional active



Reduces scalp
sensitivity



Improves hair
flexibility and elasticity



Improves hair
structure,
radiance and
strength





ALPIN HEILMOOR EXTRACT™

CHEMICAL COMPOSITION	Organic: 90% - 97% Inorganic: 3% - 10%
INCI NAME	PEAT EXTRACT
APPEARANCE	Dark micronized powder
ODOUR	None to lightly earthy
PH (10% IN WATER)	5,5 - 7,5
SHELF LIFE	48 months
EFFICACY	Microbiome-friendly, Scalp barrier improvement, Anti-Irritation, Anti-Inflammation, Scalp revitalization, Improvement of softness, structure, strength hair
COUNTRY OF ORIGIN	Austria
CERTIFICATIONS	   COSMOS APPROVED



