



Healthy Scalp for Healthy Hair

June 10, 2021
Southwest SCC

Alban Muller is now part of Croda International expanding Croda's portfolio of sustainable active ingredients for customers in personal care markets.



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Head of Botanicals, Personal Care - Croda Inc.

- Over 25 years of global experience in the life sciences industries
- Doctorate in pharmacy from the Pharmacy University, Paris
- Executive MBA from Rutgers university, NJ.
- Member of the Society of Cosmetic Chemists, NY Chapter

BOTANICALS

CRODAROM



Alban Muller
L'expert du naturel

Agenda

- 1 → Why Scalp Care?
- 2 → Scalp Biology
- 3 → Scalp Exposome
- 4 → Scalp Care
- 5 → Scalp Care as the New Skin Care
- 6 → Formulating Scalp Care with Botanicals
- 7 → Conclusion



Psychology behind a *good hair day*



“Skinification” of the scalp/hair



Scalp care falls at the intersection of skin and hair care

Consumers are more and more conscious of their *hair & scalp* health

SCALP & HAIR CARE MARKET

\$102.5B Expected global hair and scalp care market by 2024¹

5% Expected market growth for scalp care products through 2024²

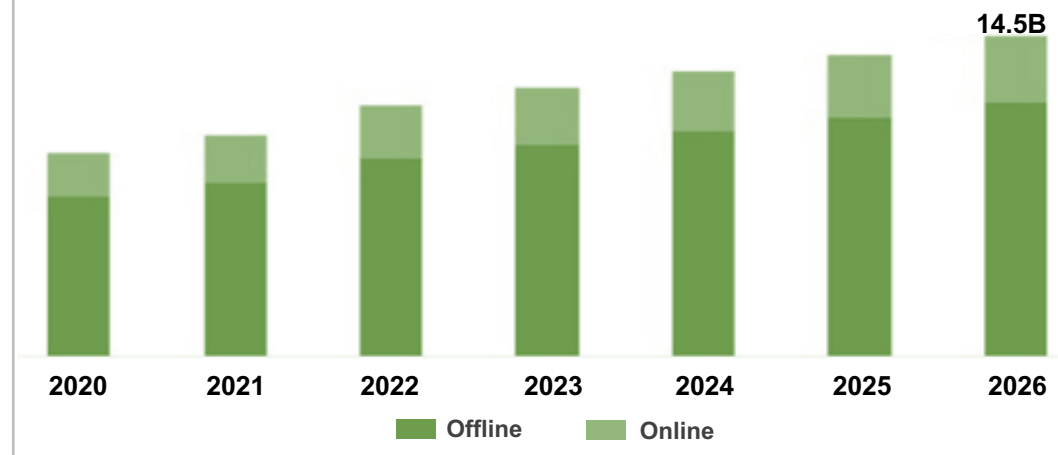
2021 Trends:

- Natural & organic
- Clean & sustainable
- Protection
- Waterless formulas
- Scalp balancing (microbiome & pH balancing)

\$14.5B Estimated global natural hair care market size by 2026³

7.8% Expected market growth for natural hair care products through 2026³

Natural Hair Care Market Size, By Distribution Channel, 2020-2026



Scalp Skin Requires Specific Attention



FACE

- Contains tough connective tissue, hair follicles, and sweat glands
- Higher barrier function



SCALP

- Rich in blood vessels
- High density of hair follicles
- Numerous sweat and sebaceous glands
- Abundant nerve network
- Lower barrier function
- Scalp has a pH of 4.5+/- 0.5

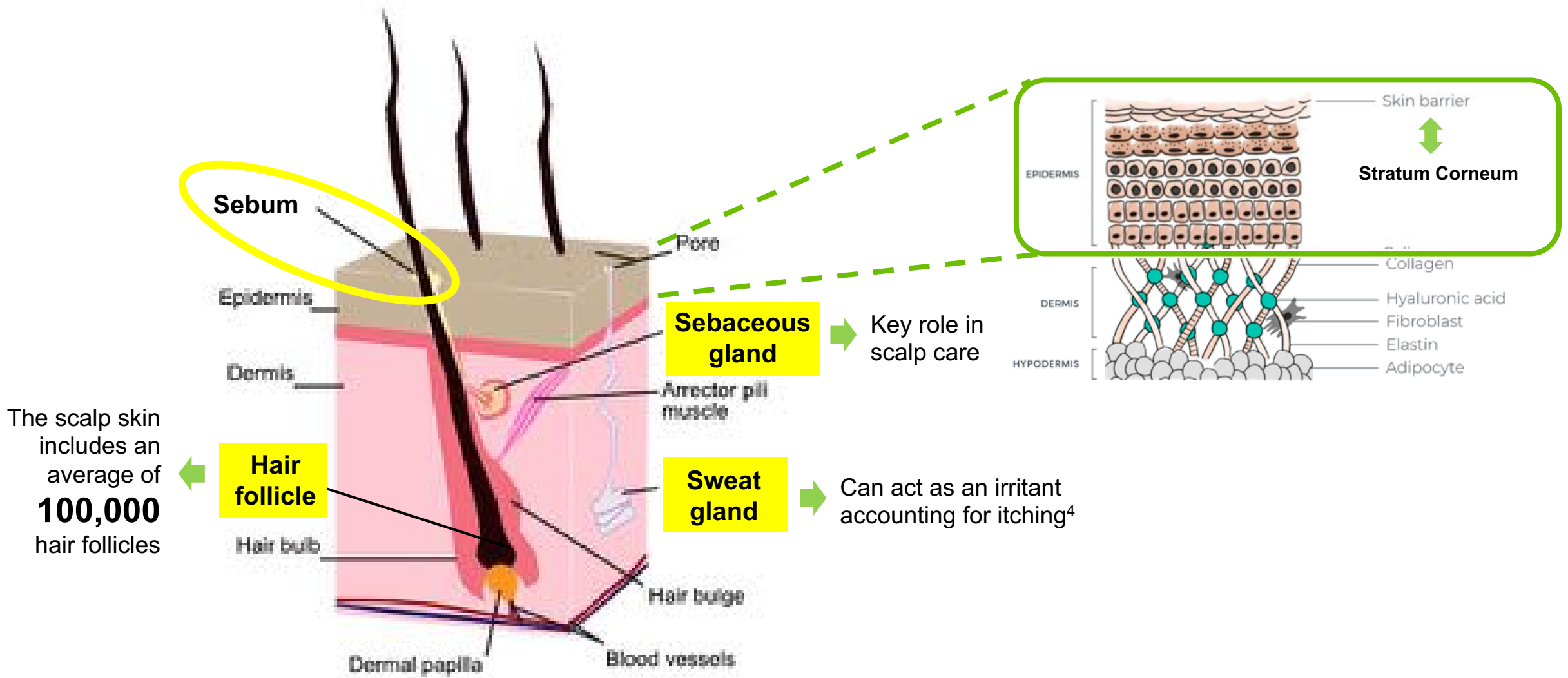


HAIR

- Transforms into pure DEAD cells as soon as it reaches the skin's surface and can be seen (hair shaft).

Healthy Scalp for Healthy Hair

Scalp Biology





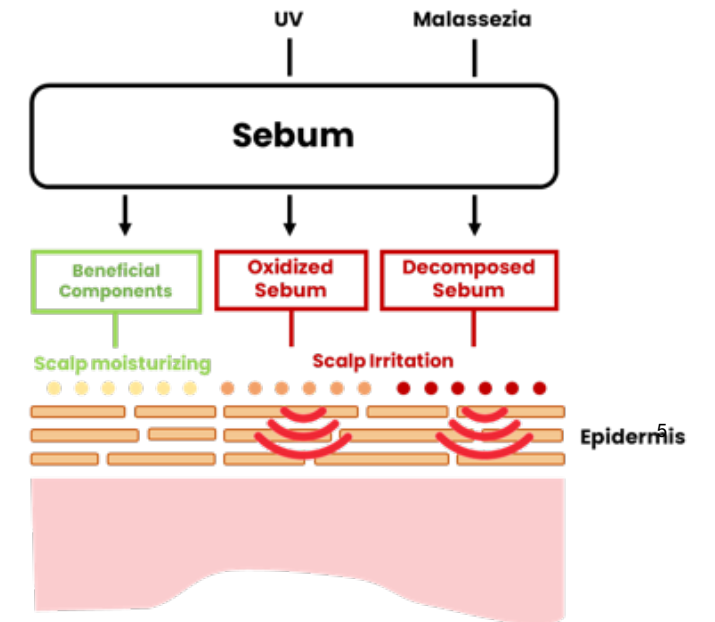
Importance of the sebaceous glands:

Produce large amount of sebum that is released to the skin surface: 1-2 g/day

Important for:

- Body's natural moisturizing oil
- Maintenance of epidermal barrier integrity
- Carries antioxidants to the skin surface
- Survival of skin microbiota
- Antimicrobial properties
- Protection against solar irradiation
- **Its alteration may lead to the occurrence of a sensitive scalp**

Lipid	Percentage in Sebum
Glycerides	30% to 50%
Fatty Acids	15% to 30%
Wax Esters	26% to 30%
Squalene	12% to 20%
Cholesterol Esters	3% to 6%
Cholesterol	1.5% to 2.5%





Importance of the sweat gland:

Controls body temperature

What causes sweat?

- Hot temperatures
- Physical exercise
- Emotional stress
- Hormones

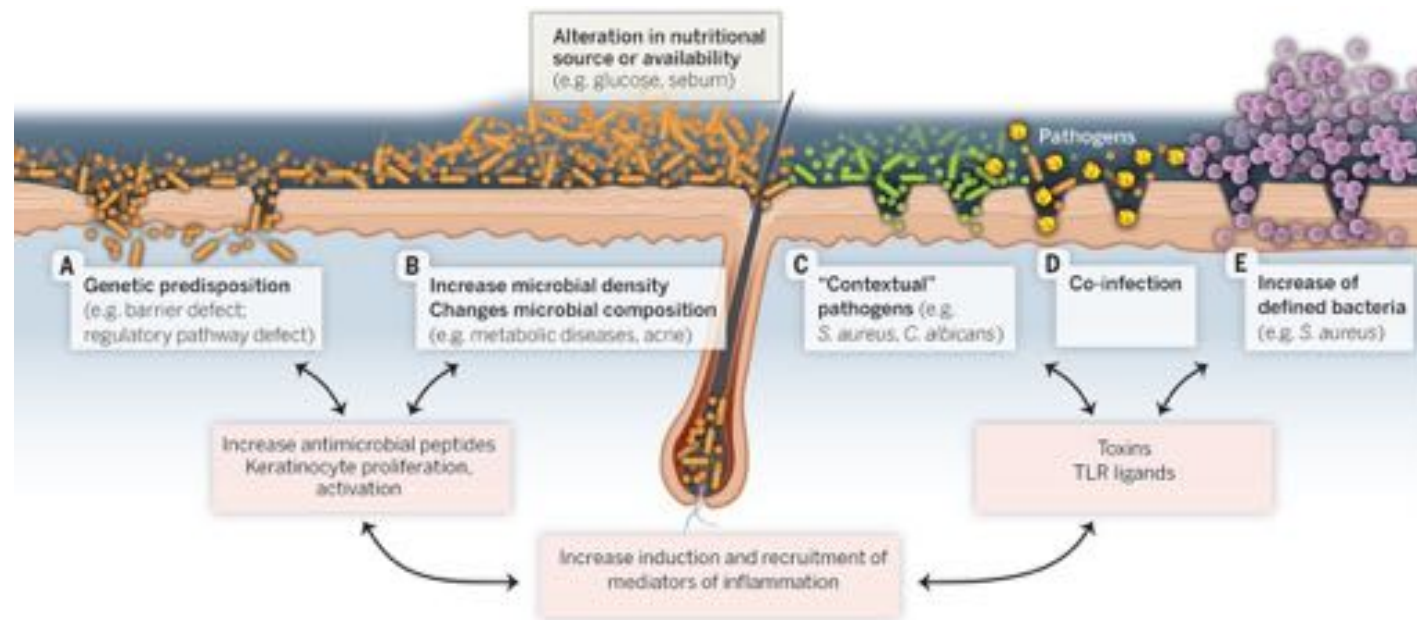
Negative effects of excessive sweat⁷:

- Sweat builds up on scalp and may clog the hair follicles
 - May result in an itchy scalp
- Sweat tends to dry out your scalp and impede the growth of new hair



Healthy scalp harbors a balanced microbiota

The scalp is rich in microorganisms composed of both bacterial and fungal communities
Malassezia spp, Cutibacterium spp, Staphylococcus spp



Potential mechanisms by which the skin microbiota may initiate or amplify skin disorders⁶

Compromised scalp homeostasis triggers sensitive scalp associated with redness, flakes, itch, psychological stress

Healthy Scalp for Healthy Hair

Scalp Exposome

External & internal factors

provoking

A somatic response related to the hair health



Healthy Scalp for Healthy Hair Scalp Care



Scalp condition: **oily scalp from excess sebum**

What causes too much sebum on the scalp?

- Genetics
- Overactive oil glands
- Hormonal changes
- Climate
- Over-Washing
- Hair type

Negative effects:

- Excess oil can clog the hair follicles preventing new hair from growing
- Oil buildup can trap other pore-clogging substances like dirt, buildup of hair products, and dandruff flaking



Scalp care: **products that support sebum control**

Scalp condition: **sensitive scalp**

What causes sensitive scalp?

- Bacteria
- Yeast
- Stress
- Hormonal changes
- Climate

Negative effects:

- Scalp irritation/itching
- Dandruff
- Permanent discomfort
- May evolve into eczema

Scalp care: **delicate, hydrating cleansers**



Skin care brands are using their knowledge of skin concerns and ingredient formulation to address scalp/hair needs

POPSUGAR. BEAUTY

PopSugar > Beauty > Beauty Trends > Skin-Care Brands Are Now Launching Hair Products

Have You Noticed More Skin-Care Brands Are Launching Hair Products?

When it comes to beauty, many brands strategically pick where to aim their focus, whether that's skin, hair, makeup, nails, or fragrance. In most cases, the company spends years honing in how to make the best product for each need — an effective zit cream, a moisturizing conditioner, lip-plumping gloss, the works — putting time and effort into making its products stand out in that respected area. Recently, however, that notion has been turned on its head as more skin-care brands have decided to dabble in the hair space.

But the big question is, do we as consumers trust skin-care brands in another area of expertise?



In many ways, the expansion into this space makes sense. More consumers are understanding that every inch of your skin deserves the same attention and high-quality ingredients that your face does, even if it is the skin on the top of your head. While your scalp oftentimes takes a back seat when it comes to skin care, experts agree it should be treated in a similar manner. Dust, dirt, grime, and product build-up on the scalp can have a negative

effect on the health of your hair in the same way it would your skin, meaning it needs the same kind of attention. If not cared for properly, scalp problems like flaking and itching, as well as blocked follicles and the formation of pimples, can occur just as they would on the face.

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The Inkey List Salicylic Acid Exfoliating Scalp Treatment



Drunk Elephant T.L.C. Happi Scalp™ Scrub

Healthy Scalp for Healthy Hair

Scalp Care as the New Skin Care

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REACT

The Haircare Products Borrowing Your Favorite Skincare Ingredients

By Joanne Amey
04.14.22



Taking care of your skin no longer stops at your face. Haircare companies are now taking skincare's lead by focusing on ingredients in their lineups that might usually be associated with the skin, like hyaluronic acid, salicylic acid, collagen, and niacinamide. While the needs of the skin and hair are different, the same treatment concepts can be applied to both areas—after all, the secret to beautiful hair is a healthy scalp, which is an extension of your skin. While traditional haircare targets therapeutic hair and scalp concerns separately, the latest haircare-skincare hybrids approach it in a more comprehensive manner, by providing solutions to protect and strengthen strands while maintaining a healthy scalp environment.

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**Aveda Rinseless Refresh
Micellar Hair & Scalp
Refresher**



**Sunday Riley Clean Rinse
Clarifying Scalp Serum**

Healthy Scalp for Healthy Hair

Scalp Care as the New Skin Care

Trend Watch: Neutrogena enters scalp care category

By Deanna Utroske

23-Jul-2020 - Last updated on 23-Jul-2020 at 16:13 GMT



This week the Johnson & Johnson - owned brand launched a collection of 4 Neutrogena Healthy Scalp products, exclusively available at Walmart through the end of 2020.

Facial skin care has been the leading beauty category for sometime now; and as a result, skin care is showing up everywhere. There are more and more makeup and self-tanning products with skin care benefits; there is skin care for the body, skin care for hands, [skin care for nails](#), and of course skin care for the scalp as well.

And this is where the newly launched Neutrogena Healthy Scalp collection fits in: "The idea behind the new collection was driven by the growing 'skinification' of haircare and a shifting consumer desire to approach haircare with more than just strand health," explains this week's media release about the new scalp care line.

Scalp care is amping up consumer hair care routines

"We know 78% of consumers believe haircare is just as important as skincare," Hanan Wajih, Senior Marketing Director North America for Vogue International, tells the press. Vogue International is a hair care and personal care manufacturing business owned since 2016 by Johnson & Johnson. ([Read about J&J's acquisition of Vogue International here on Cosmetics Design.](#))

"The team at Vogue, in partnership with Neutrogena," says Wajih, "has been working on this line for two years to bring coveted skincare ingredients such as Hyaluronic Acid, Micellar water, and tea tree oil to scalp and haircare - ultimately delivering healthy scalp and haircare gentle enough for everyday use."

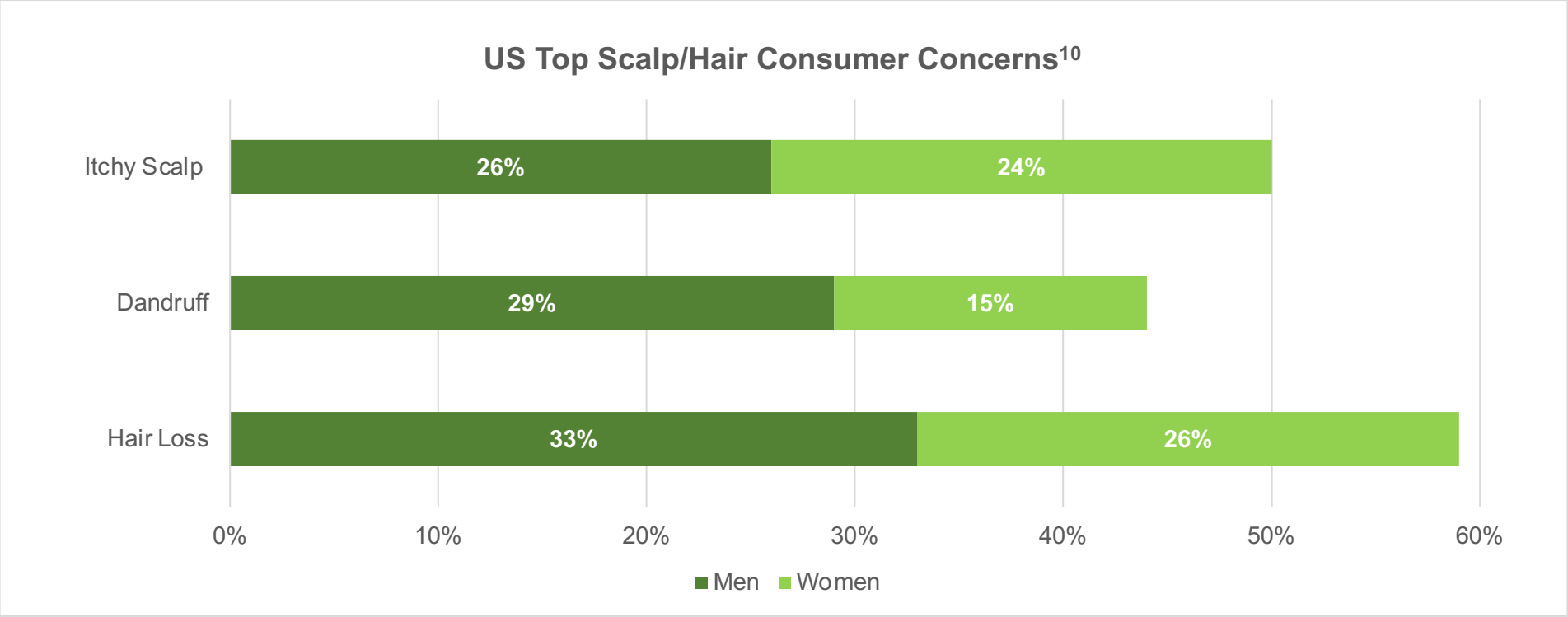
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Healthy Scalp for Healthy Hair

Scalp Care as the New Skin Care



Mintel, 2019

Healthy Scalp for Healthy Hair Formulating Scalp Care

Products that provide relief to dandruff related issues and fight to eliminate and control flaking

**Anti
Dandruff**

**Scalp
Wellness**

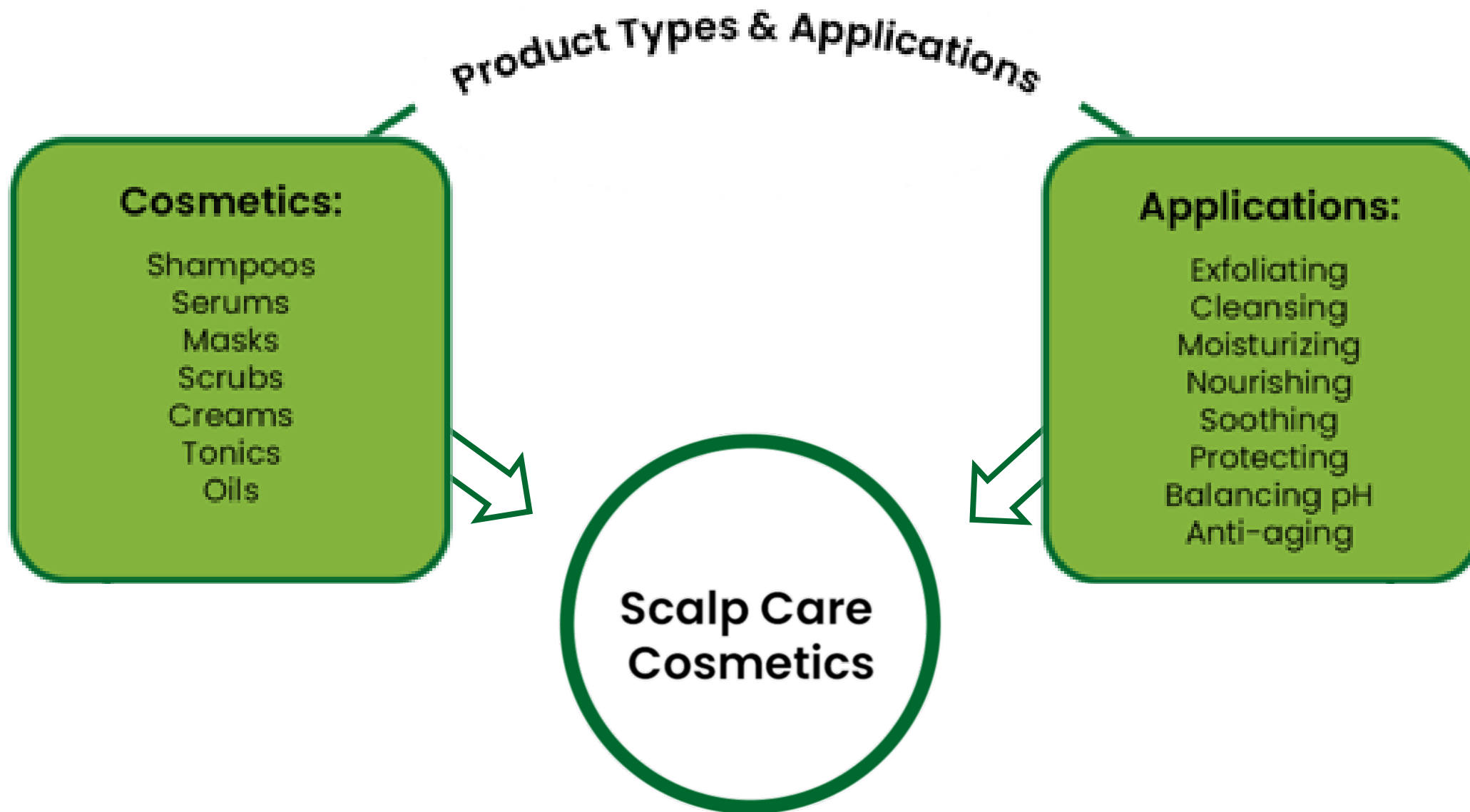
Products that rejuvenate and calm the scalp, stimulate roots for a healthy hair, often soothing itchy, irritated and sensitive scalps

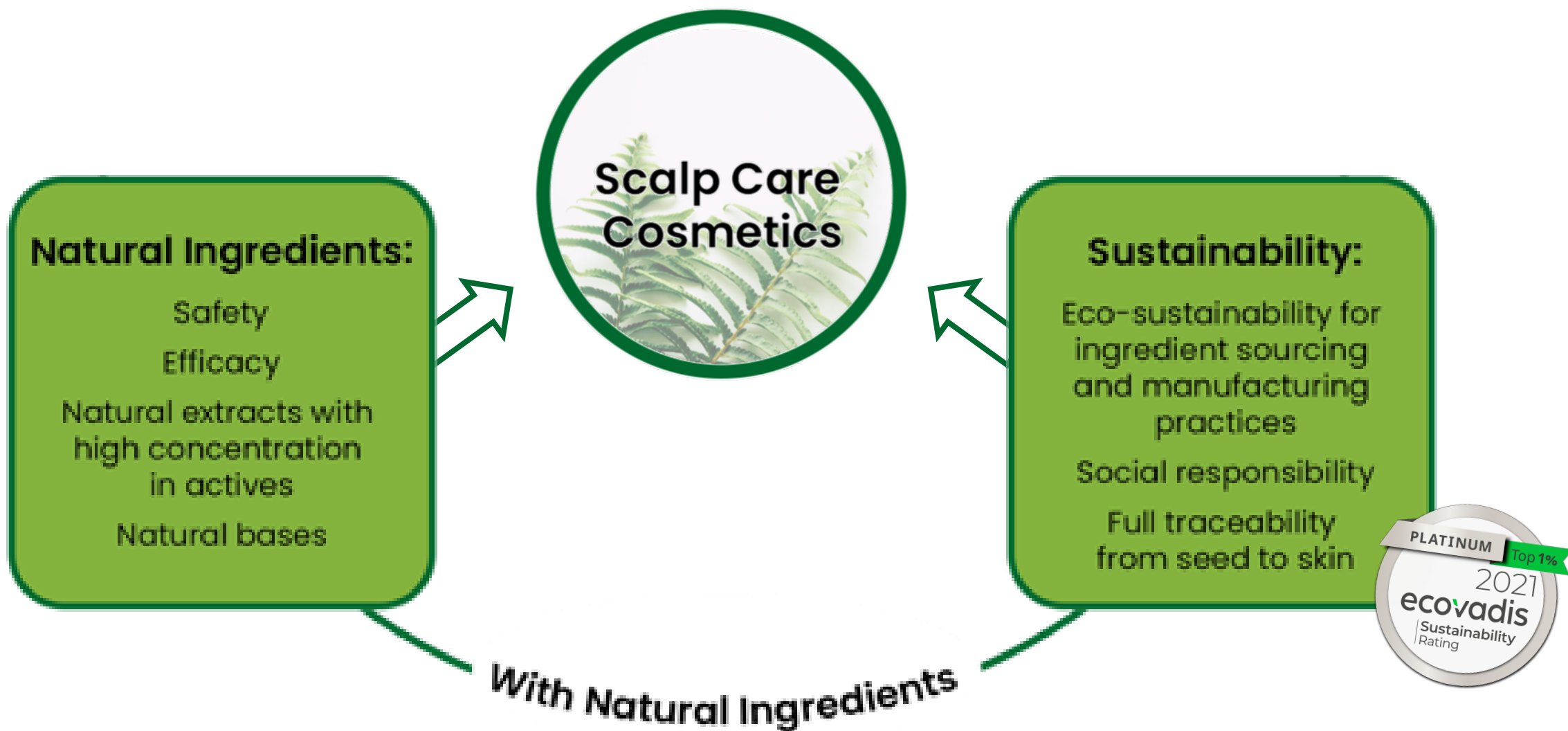
Products that maintain the scalp healthy, stimulate the hair follicle matrix cells, and support hair's natural growth cycle

**Anti Hair
Loss**

**Sebum
Control**

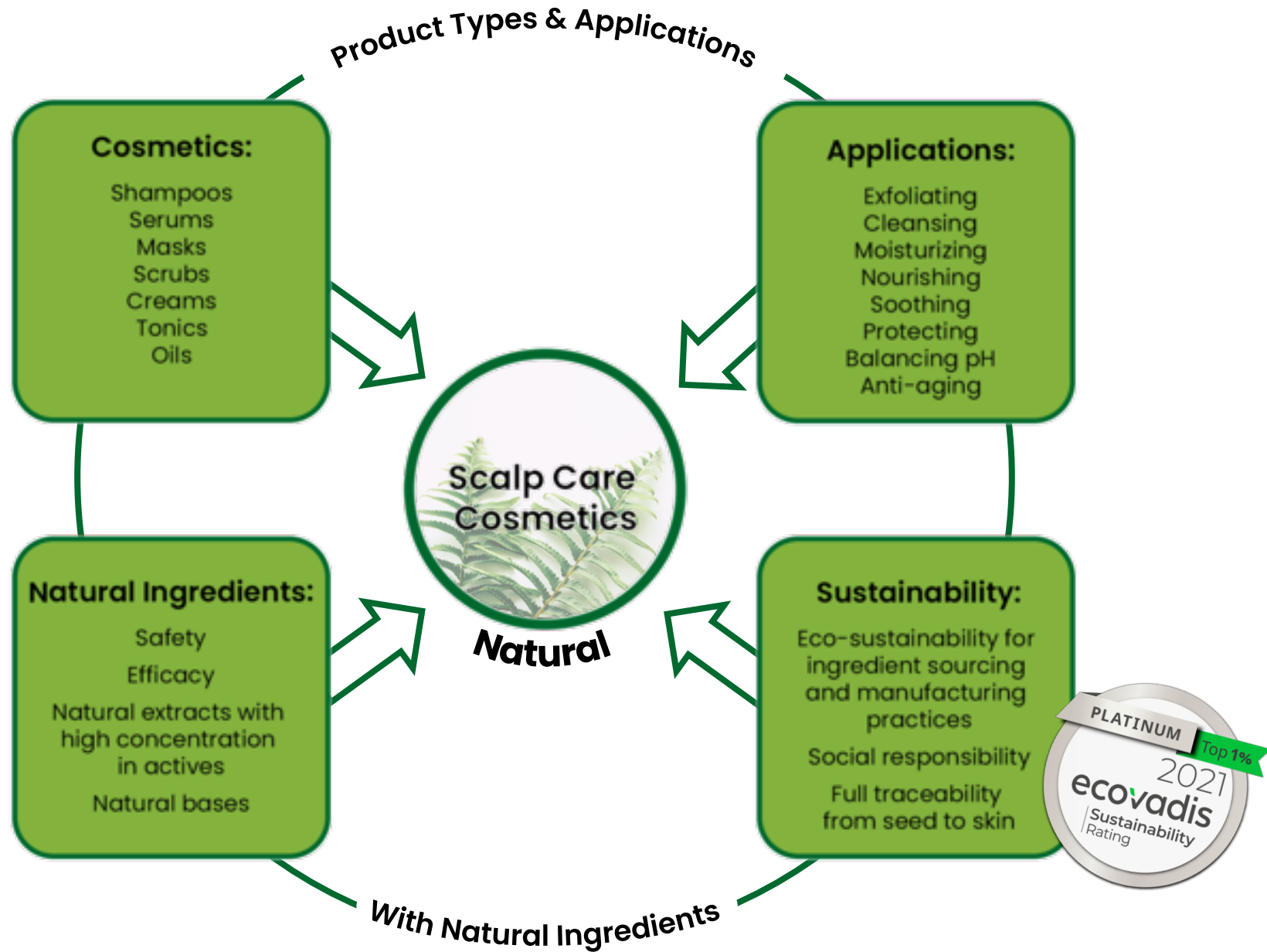
Products that balance and reduce oiliness of the scalp with sticky, lifeless and limp hair preventing from quickly becoming greasy again





Healthy Scalp for Healthy Hair

Formulating Scalp Care



Healthy Scalp for Healthy Hair Formulating Scalp Care *with Natural Actives*

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Not all products are created equal, and the ingredient list is a key element in consumer choice



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Not all products are created equal, and the ingredient list is a key element in consumer choice



French Oak Fruit

Helps reduce the harmful effects of oxidative stress involved in skin and scalp aging with its astringent, **anti-inflammatory, toning and strengthening** properties.



Grapefruit

Activates cell renewal, **removes irregularities & dead cells**, and improves skin regeneration for a healthier scalp. Contains **regenerating, revitalizing, and keratolytic** properties.



Purple Ginseng

Helps **regulate excess sebum**. Combats skin and scalp imperfections thanks to its catechic and gallic tannins. Its powerful agents provide it with antioxidant, soothing, astringent and antibacterial properties.



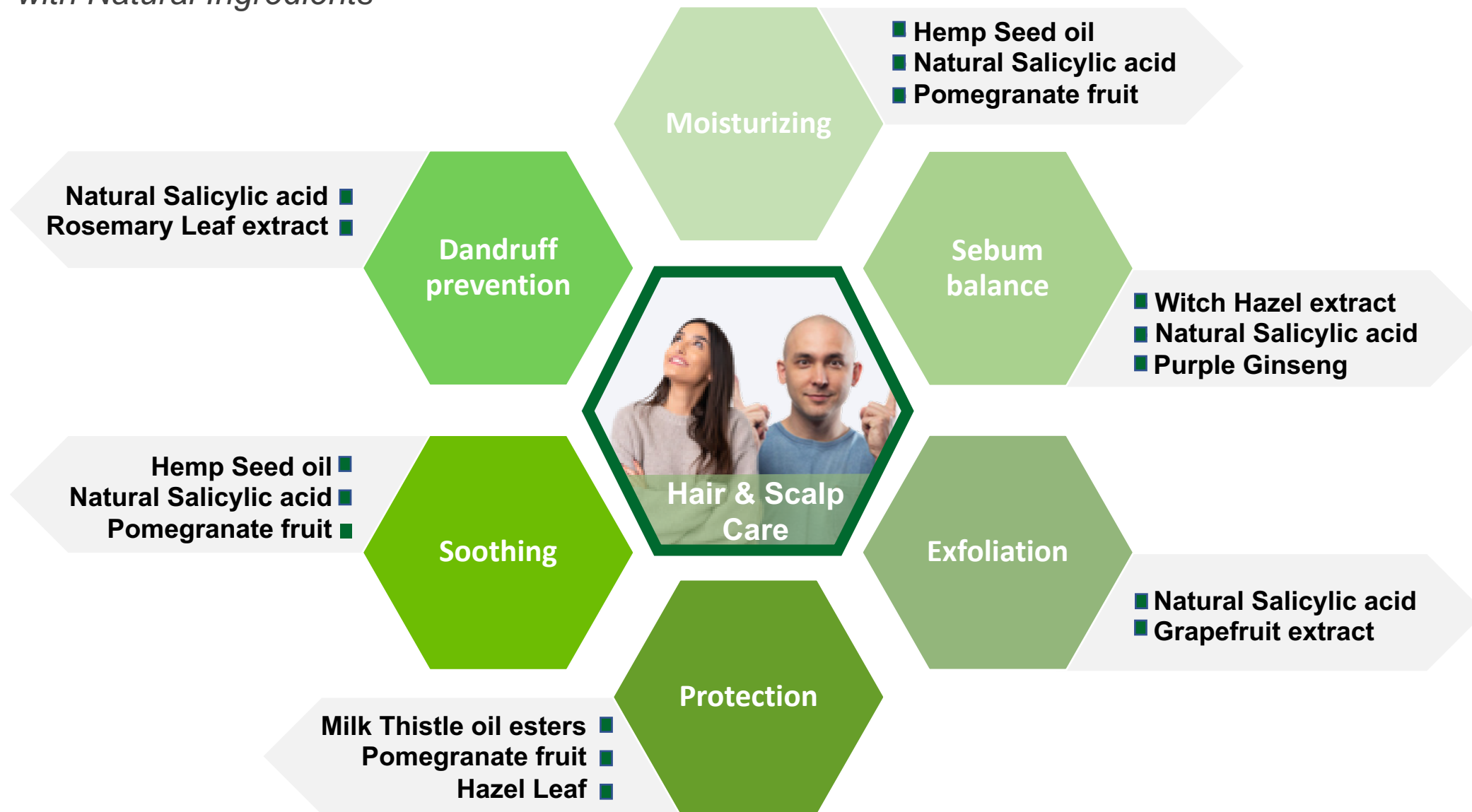
Hazel Leaf

Brings **vitality and energy to the scalp** by boosting ATP synthesis and demonstrates a firming effect by increasing the expression of collagen VII within the cells. **Antioxidant and soothing** properties.

Healthy Scalp for Healthy Hair

Formulating Scalp Care

with Natural Ingredients



Scalp Soothing Serum

Hemp Seed Oil

Moisturizes and soothes the scalp
Balances the lipids in scalp skin to prevent
water loss

Pomegranate fruit

Helps to protect the epidermis
Fosters skin moisturization
Soothes the scalp skin thanks to its anti-
inflammatory activity

INCI	% w/w
Water (Aqua)	81.5500
Erythritol	5.0000
Dicaprylyl Carbonate	3.9988
Distarch Phosphate	2.0000
Arachidyl Alcohol	1.1000
Cannabis Sativa Seed Oil	1.0000
Sodium Stearoyl Glutamate	0.7500
Behenyl Alcohol	0.6000
Lauroyl Lysine	0.6000
Distearylethyl Dimonium Chloride	0.4875
Citric Acid	0.4500
Acacia Senegal Gum	0.4125
Xanthan Gum	0.3750
Sodium Benzoate	0.3500
Arachidyl Glucoside	0.3000
Cetearyl Alcohol	0.2625
Potassium Sorbate	0.2500
Maltitol	0.2250
Microcrystalline Cellulose	0.2125
Phytic Acid	0.0500
Punica Granatum Extract	0.0250
Tocopherol	0.0012
	100.0000

*Formula developed by Alban Muller International R&D

Anti-Dandruff Shampoo

Natural Salicylic Acid

Helps promote skin exfoliation and soothing
Unblock clogged pores and eliminates
excess serum

INCI	% w/w
Water (Aqua)	84.21942
Coco-Glucoside	10.85000
Coco-Betaine	2.70000
Xanthan Gum	0.60000
Gaultheria Procumbens Leaf Extract	0.50000
Glyceryl Oleate	0.45000
Sodium Benzoate	0.25000
Potassium Sorbate	0.15000
Sodium Hydroxide	0.15000
Citric Acid	0.07500
Aloe Barbadensis Leaf Juice Powder	0.05500
Tocopherol	0.00030
Hydrogenated Palm Glycerides Citrate	0.00015
Lecithin	0.00008
Ascorbyl Palmitate	0.00005
	100.00000

**Formula developed by Alban Muller International R&D*

If you want healthy hair, you need a healthy scalp!



Scalp Care 101: Biology, Conditions & Formulating Answers

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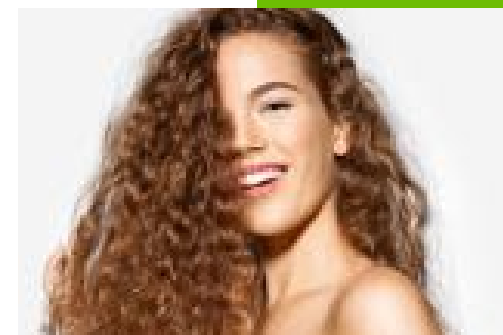
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CRODA



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