



ALL YOU NEED TO KNOW ABOUT DANDRUFF & SCALP SEBORRHEIC DERMATITIS

In this booklet you will find all the scientific expertise
and dermatological advice you need
to manage dandruff and scalp seborrheic dermatitis



DANDRUFF & SCALP SEBORRHEIC DERMATITIS ARE COMMON CONDITIONS.

Almost 50% of the adult population worldwide complains about dandruff and 5% suffers from scalp seborrheic dermatitis.

Beauty track Women 12 countries (2016) & Beauty track Men (2013),
IPSOS for l'Oréal Research. Focus Europe and USA: over 20 000 women 15 to 75 years of age.

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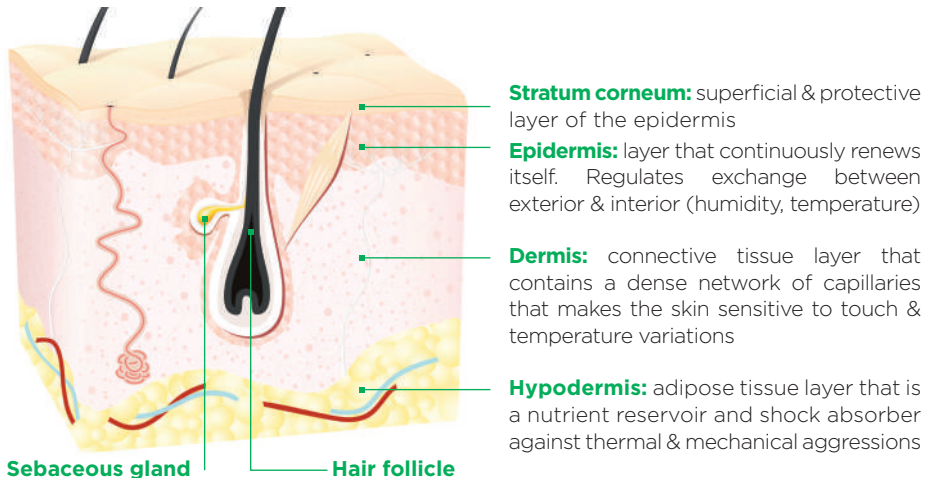
9 DERCOS SOLUTIONS

THE SCALP BIOLOGY IN FEW WORDS

The scalp, or the cradle of the hair spreads out on a large surface of 600 to 700 cm², representing 3% of the total skin surface.

Scalp temperature is around **34°C** and its pH close to **5**.

As for the rest of the skin, it is composed of 3 parts: **the epidermis, the dermis, and hypodermis**. The main difference with the rest of the skin is the high number of hair follicles.

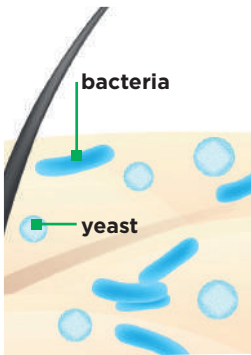


KEY FACTS ABOUT SCALP

- Exhibit large hair follicle's density (200 to 300 per cm² vs 10 to 15 cm² for forearm)
- Scalp sebum production is more abundant than anywhere else on the body
- Scalp has a very dense amount of nerves, totaling in average 230 receptors/cm²
- Scalp surface is largely colonized by yeast like *Malassezia* and bacteria
- Scalp hydration: twice the water content of the other parts of skin on the body

WHAT IS A HEALTHY SCALP?

Healthy scalp is the balance between 3 actors: **microbiome, sebum composition & scalp barrier**

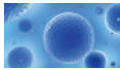


1 THE MICROBIOME

Each square centimeter hosts anywhere from 10,000 to 100 million inhabitants. The resident flora is made of 2 bacterial populations:



Cutibacterium acnes and Staphylococci



Yeast (Malassezia)

DID YOU KNOW ?

The scalp surface is largely colonized by yeast **Malassezia**



2 THE SEBUM COMPOSITION

Sebum is an oily substance produced by the **sebaceous glands**. It accumulates in the follicular canal before being discharged onto the scalp.

Like a sponge, the stratum corneum of the **scalp absorbs a significant amount of sebum**.

Flakes covering dandruff scalps are true '**sebum traps**'.

DID YOU KNOW ?

Dandruff often appears after puberty, once the sebaceous function reaches maturity.



3 THE SCALP BARRIER

The stratum corneum is the **most superficial layer of the skin**. It forms a barrier that

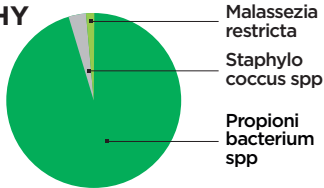
- **protects the scalp against aggressions**
- **contributes to maintain the scalp's level of hydration**. When the barrier function is altered, **dandruff and SSD will appear**.

FROM A HEALTHY SCALP TO A DANDRUFF CONDITION

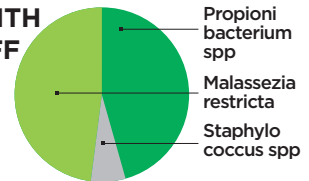
When these
3 actors are
unbalanced,
dandruff
will appear.

MICRO-ORGANISMS POPULATION UNBALANCE

HEALTHY SCALP



SCALP WITH DANDRUFF



EVOLUTION OF THE 3 MAIN MICRO-ORGANISMS IN THE DANDRUFF PHENOMENON

MICRO-ORGANISMS POPULATION UNBALANCE



FIRST, WHAT IS SEBUM?

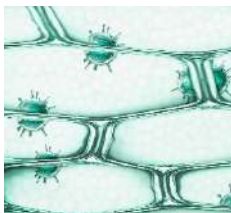
A mix of squalene, triglycerides and wax esters.

This nutrient is eaten by yeast and bacteria.

Most *Malassezia* yeasts are in vital need of lipids to develop themselves, which is why they feed on the triglycerides present on scalp.

Once absorbed, they secrete enzymes that **transform triglycerides into fatty acids**. This phenomenon is called **squalene peroxidation**, and it induces inflammation.

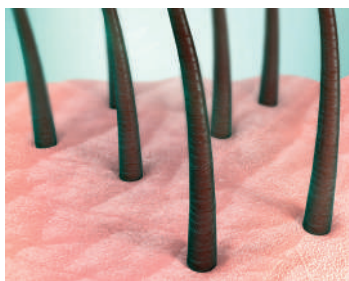
ALTERED BARRIER



The barrier function is composed of **corneocytes**, locked together by an **intercellular matrix composed of lipids**. When the barrier function is altered, this **intercellular cement is disorganized and the corneocytes detachment process is disrupted**.

The altered barrier becomes more permeable to **microbial agents, external agents and other irritating components**. It induces **inflammation** which further disrupts the skin barrier. This then creates a vicious circle of continuous **scalp inflammation**.

WHAT IS DANDRUFF?



HEALTHY SCALP

Dandruff is characterized by **an anomaly of epithelial desquamation** resulting in a visible accumulation of **flakes and cell debris**.

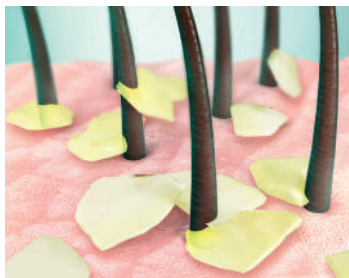
Normally, epithelial cells renew **every 28 days**. When the scalp balance is stressed, however, the renewal process accelerates & only takes **between 13 to 15 days**.



DRY DANDRUFF

The most frequent form is **dry dandruff**. **The flakes are fine and whitish**, visible on the scalp's surface and around hair's edges. **The flakes do not adhere to the scalp**.

They fall easily and can be seen on dark hair and clothing.



OILY DANDRUFF

The oily form of dandruff displays large, **yellowish flakes, which adhere to the scalp**. It is always associated with an excess of sebum. The scalp displays irritation due to scratching.

Most of the time, both conditions are often accompanied by an **itchy scalp**.

HOW TO TREAT DANDRUFF & SSD?

**FOR EACH LEVEL OF DANDRUFF SEVERITY,
CONSULT YOUR DERMATOLOGIST TO OBTAIN
THE MOST ADAPTED TREATMENT.**

1/ SIMPLE DANDRUFF CONDITION

FLARES - 4 WEEKS TREATMENT

Anti-dandruff shampoo 2-3 times/week

MAINTENANCE - WEEKLY USAGE

Anti-dandruff shampoo once a week
Mild shampoo for the rest of the week

2/ FROM MILD TO MODERATE SCALP SEBORRHEIC DERMATITIS

FLARES - 4 WEEKS TREATMENT

Kétoconazole, Cyclopirox, Olamine or
Lithium shampoo, 2-3 times/week. Always
follow the prescription recommended by
your dermatologist.

MAINTENANCE - WEEKLY USAGE

Anti-dandruff shampoo 3 times/week

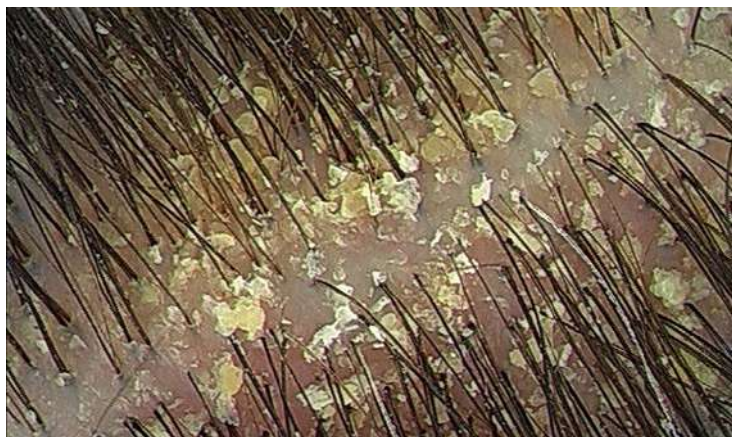
3/ FROM MODERATE TO SEVERE SCALP SEBORRHEIC DERMATITIS

FLARES - 4 WEEKS TREATMENT

Kétoconazole, Cyclopirox Olamine, Lithium
shampoo +/- topical steroids based treatments
(gels, lotions, shampoos). Always follow the
prescription recommended by your dermatologist.

MAINTENANCE - WEEKLY USAGE

Anti-dandruff shampoo 3 times/week



LEVEL OF SEVERITY

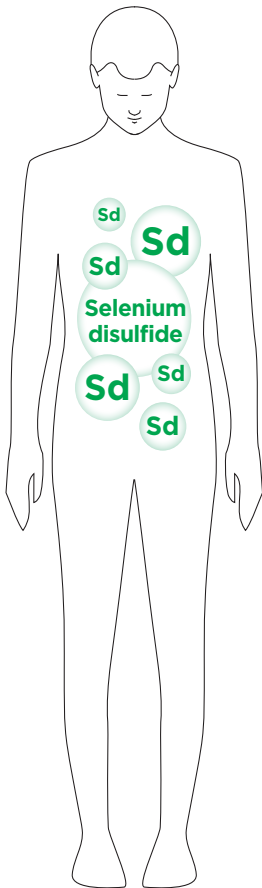


ANTI DANDRUFF & SSD

ACTIVE INGREDIENT

THE MAIN ANTI-FUNGAL ACTIVE

Anti-fungal active ingredients are used to treat fungal infections, which most commonly affect skin, hair and nails.



SELENIUM DISULFIDE

Dandruff & SSD are not fungal infections but a condition where there is an unbalanced microbiome, an increased presence of *Malassezia*, and a very reactive immune system on your scalp. Selenium disulfide combines **Sulphur known for its purifying benefits & Selenium for its anti-fungal properties.**

Selenium is also present in our body, as part of the **oligo elements, essential for its metabolism.**

Like some vitamins, it **has anti-oxidant properties** such as protecting cell membranes and proteins against degradation by free radicals.

This active ingredient is **well-known to treat dandruff & SSD.**

DID YOU KNOW ?

It has multiple industrial applications. It is used as an anti-oxidant in vegetable oils, as pigments to tint glass, or in medicine as photo-conductor for X-rays.

HAIR & SCALP CARE ADVICE



Even if dandruff is a common condition, taking care of your scalp is key to manage dandruff relapse or scalp seborrheic dermatitis.

ADVICE N°1

WASH YOUR HAIR REGULARLY WITH GENTLE PRODUCTS

Do not use harsh shampoos that will alter the protective scalp barrier. Use soft & regular shampoos adapted to the dryness or oiliness of your scalp. The shampoo should be applied and massaged on the scalp and hair follicles.

ADVICE N°2

DO NOT SCRATCH YOUR SCALP

When you suffer from itching, avoid scratching the scalp. Use some soothing anti-dandruff shampoo with a soft scalp massage to relieve it. The risk of scratching is that it could trigger scalp infection, irritation and increase dandruff. In case of scalp itchiness, consult your dermatologist.

ADVICE N°3

USE LUKEWARM WATER

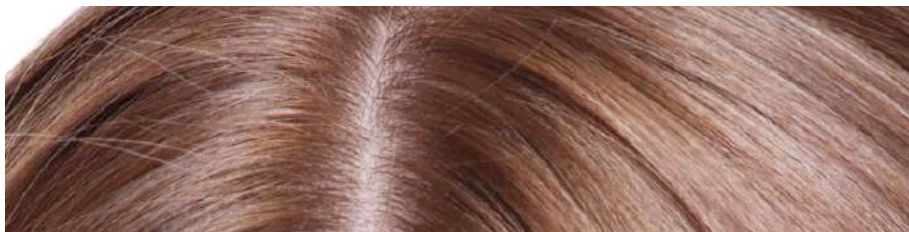
When you wash your hair, rinse hair thoroughly with lukewarm or fresh water to soothe & calm scalp itching and irritation.

ADVICE N°4

MASSAGE YOUR SCALP

A scalp massage is as good as a body massage. Your scalp can benefit from a massage if it's plagued with dandruff.

Apply natural oils like coconut, almond, or jojoba with a dropper or hair color applicator directly to the scalp and lightly massage the oils on your scalp. The application will help break up flakes and soothe your scalp. Do not to scratch your head or rub too hard.



HAIR & SCALP CARE ADVICE



ADVICE N°5

SHAVE YOUR BEARD

For men, shave your beard and moustache every day if this part is diagnosed with dandruff to avoid their proliferation and moisturize your skin.

ADVICE N°6

BRUSH YOUR HAIR REGULARLY BUT NOT IN EXCESS

Brush your hair regularly as it reduces the risk of dandruff by helping with normal shedding of the scalp skin.

ADVICE N°7

APPLY MEDIUM HEAT ON YOUR HAIR

Use the hair-dryer on a medium setting rather than the highest heat setting.

ADVICE N°8

AVOID MECHANICAL AGGRESSIONS

Avoid aggressive hair care such as frequent blow-drying and vigorous brushing or flat-ironing.

ADVICE N°9

LIMIT STYLING PRODUCTS USE

Avoid using too many styling products on your scalp. It can create scalp stress linked to dandruff appearance.

ADVICE N°10

DO NOT COVER YOUR HAIR WITH ACCESSORIES

Hats, headbands, headscarves warm the scalp, making it sweat and stimulating the sebaceous glands that creates sebum and lead to dandruff appearance.





LIFESTYLE ADVICE

Stress, lack of sleep, pollution and temperature change can have an impact on dandruff condition. You will find in this part of the guide, expert advice to adapt your lifestyle to manage dandruff condition.

ADVICE N°1

ADOPT A GLOBAL BALANCED LIFESTYLE

Adopting a healthy & balanced lifestyle is key during dandruff treatment. Practicing a sport or outside activity regularly, relaxing, having a balanced diet, sleeping well, and avoiding stress, smoking, and alcohol are all daily initiatives that can have positive impact.

ADVICE N°2

AVOID STRESSFUL PERIOD

Stress is one of the most common causes of dandruff. According to the American Academy of Dermatology, being in a negative mental space can worsen skin conditions, including those that appear on the scalp. Enlist exercise, a proven stress-buster, to keep calm. It'll have a dramatic effect on your mood, and as a result your dandruff & SD.

ADVICE N°3

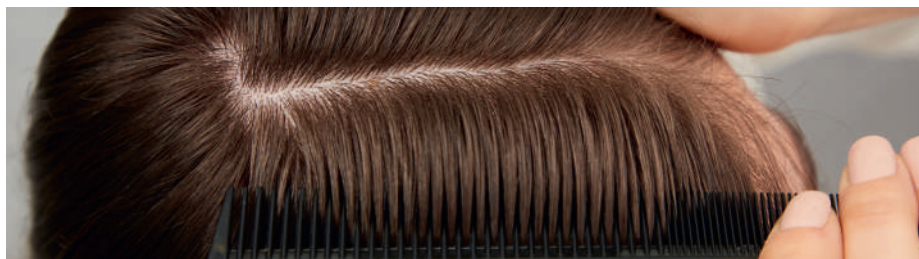
TRY NOT EXPOSE YOUR HAIR TO EXCESSIVE TEMPERATURE CHANGES

Don't go out with wet hair or expose yourself to extreme temperatures. Temperature changes influence scalp health, that's why it is necessary to avoid any drastic changes. When you finish your shower, dry your hair delicately with a towel, wait for your hair to dry before brushing.

ADVICE N°4

WEAR BRIGHT CLOTHES

To avoid visible dandruff on your clothes and more especially on your shoulders, avoid dark clothes. Instead, wear bright clothes.



THE MOST COMMON QUESTIONS

DERCOS
VICHY

ABOUT DANDRUFF

IS DANDRUFF A GENETIC PREDISPOSITION?

YES.

Dandruff is linked to your own susceptibility that you can have inherited from your parents although we don't know the genes involved yet.

DO STRESS INDUCE DANDRUFF?

YES.

Patients prone to dandruff often relate their flares to stressful events. This is also true for seborrheic dermatitis and other inflammatory skin diseases such as psoriasis or atopic dermatitis.

DO SEASONS OR CLIMATE HAVE IMPACT ON DANDRUFF?

YES.

Climatic variations and seasonality influence dandruff appearance and severity.

Why? Because some factors linked to winter amplify dandruff appearance. First, wearing a hat in winter can accelerate the phenomenon as the scalp micro organisms spread with the heat. Also because your scalp is drier in winter because of the hot indoor environment.

ANTI-DANDRUFF SHAMPOOS ARE LESS EFFICIENT OVER TIME?

NO.

Anti-dandruff shampoos are efficient as each use as they are especially developed to fight against dandruff and scalp seborrheic dermatitis in the long term.

DO MEN SUFFER MORE FROM DANDRUFF THAN WOMEN?

YES.

There are more men who have claimed to have dandruff than women.

CAN I HAVE DANDRUFF IN MY BEARD?

YES.

Dandruff in one's beard has the same origin as dandruff on the scalp. They are also due to an increase of Malassezia and susceptibility which induce increased skin renewal and skin desquamation. As for the scalp, you can use an anti-dandruff shampoo for the beard to eliminate dandruff.

CAN I HAVE DANDRUFF IN EYEBROWS?

YES.

Dandruff is a chronic condition that sometimes happens in other parts than the scalp. When situated in the eyebrows, it is a seborrheic dermatitis. Eyebrows seborrheic dermatitis symptoms are similar to general dandruff symptoms: white or yellow flakes, itchings, rednesses, irritations.

ARE DANDRUFF FROM HORMONAL ORIGIN?

YES.

There is a link between hormones and dandruff, that's why dandruff appears during the puberty period. One key factor of dandruff appearance is the increase of sebum production. Hormones are controlling its production. Everything begins when the sebum is degraded in several irritating substances as oleic acid particularly by the Malassezia Globosa.

DERCOS

VICHY

WHICH ANTI-DANDRUFF TREATMENT IS THE ONE FOR YOU?

DANDRUFF NORMAL TO OILY HAIR



ANTI-DANDRUFF DS DERMATOLOGICAL SHAMPOO - DANDRUFF & ITCHY SCALP - NORMAL TO OILY HAIR

A shampoo that acts against dandruff in a deep cleansing formula for normal to oily hair. It acts on visible dandruff from the first use while having 6-week anti-relapse action for long-lasting dandruff control and comfort. No paraben.

CLINICALLY PROVEN EFFICACY UNDER DERMATOLOGICAL CONTROL*

Eliminates up to 100% visible flakes*.

Clinically proven 6-week anti-relapse action**.

*Selenium Disulfide

**Clinical test

HAIR TYPE	Normal to oily hair
HAIR SYMPTOMS	Dandruff and sensitive scalp
WHEN	Several times a week
BENEFITS	Helps maintain the microbiome & eliminates dandruff.

DANDRUFF DRY HAIR



ANTI-DANDRUFF DS DERMATOLOGICAL SHAMPOO - DANDRUFF & ITCHY SCALP - DRY HAIR

A shampoo that acts against dandruff while providing care to dry hair. It acts on visible dandruff from the first use while having 6-week anti-relapse action for long-lasting dandruff control and comfort. No paraben.

CLINICALLY PROVEN EFFICACY UNDER DERMATOLOGICAL CONTROL*

Eliminates up to 100% visible flakes*.

Clinically proven 6-week anti-relapse action**.

*Selenium Disulfide

**Clinical test

HAIR TYPE	Dry hair
HAIR SYMPTOMS	Dandruff and sensitive scalp
WHEN	Several times a week
BENEFITS	Helps maintain the microbiome & eliminates dandruff.

DERCOS

VICHY

WHICH ANTI-DANDRUFF TREATMENT IS THE ONE FOR YOU?

DANDRUFF SENSITIVE SCALP



ANTI-DANDRUFF - SENSITIVE SCALP SHAMPOO

Dandruff symptoms can be accompanied by scalp discomfort, including itching and overheating sensations. Dercos designed a sulfate-free technology that soothes the scalp while acting on eliminating dandruff from first use with 6-week anti-relapse action for long lasting dandruff control.

DERMATOLOGICAL PROVEN EFFICACY

Eliminates up to 100% visible flakes*.

Clinically proven 6-week anti-relapse action**.

*Selenium Disulfide

**Clinical test

HAIR TYPE	Sensitive hair/scalp
HAIR SYMPTOMS	Dandruff and sensitive scalp
WHEN	Several times a week
BENEFITS	Eliminates dandruff and soothes the scalp. Acts on dandruff at the first use.

ADHERENT DANDRUFF, ALL TYPES OF SCALP



ANTI DANDRUFF K DEEP PURIFYING SHAMPOO

An exfoliating shampoo with a combination of powerful active ingredients that eliminates dandruff and deeply purifies hair and scalp for dandruff control that lasts. No paraben. No silicone.

DERMATOLOGICAL PROVEN EFFICACY

97% immediate visible anti dandruff efficacy

91% of the consumers feel a healthy scalp condition*

*Consumer test - 2 weeks - 240 subjects.

HAIR TYPE	All hair types
HAIR SYMPTOMS	Adherent dandruff
WHEN	Several times a week
BENEFITS	Eliminates dandruff, soothes scalp & provides an anti-oiliness effect.