SELF-DEFENCE FOR SKIN

Restore your skin’s protective barrier function with SBR.¹,²

Emollients for repair of skin barrier function in:

- DRY SKIN CONDITIONS
- CONTACT DERMATITIS
- PSORIASIS
- ECZEMA

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HEALTHY SKIN MATTERS

It helps you warm up when you’re cold and can cool you off when you’re hot, it lets you feel things by touch, it protects you.\textsuperscript{3b}

WHAT IS THIS WONDROUS STUFF?

Your skin, of course!

And what does your skin ask for in return for all the wonderful things it does?

Just a little care and consideration!

DID YOU KNOW?

YOUR SKIN IS YOUR BODY’S LARGEST ORGAN\textsuperscript{3b}

Just like the heart, stomach, and brain, your skin is an organ. In fact, it’s the largest organ in your body, but it’s still easy to take skin for granted.\textsuperscript{3b}

Unless there’s a problem, you may not think about your skin very much.

Your skin is constantly protecting you; it keeps infections out of your body and keeps you from getting sick. When you take care of your skin, you’re helping your skin do its job. Taking care of your skin today will help prevent future problems, like dry skin, wrinkles and even skin cancer.\textsuperscript{3a,c,d,4a}

THE AVERAGE PERSON’S SKIN COVERS AN AREA OF

$2$ SQUARE METERS\textsuperscript{5a}
Dry skin is a common problem, can occur at any age and for many reasons.  

**WHY IS IT A PROBLEM?**

Dry skin may not only be unsightly, but also itchy and cause more complex skin conditions. It is often a lifelong problem. Signs and symptoms of dry skin depend on your age, your health, where you live, time spent outdoors and the cause of the problem. Dry skin is likely to cause one or more of the following:

- A rough dry texture which sometimes flakes and may cause itching
- Calloused skin
- Cracked and fissured skin
- Redness
- Rawness and tightness
WHY DO YOU HAVE DRY SKIN?

TO BEGIN WITH, YOU NEED TO KNOW THE REASONS WHY YOU HAVE A DRY SKIN IN THE FIRST PLACE.

CAUSES FROM THE OUTSIDE:

Weather. Skin tends to be driest in winter, when temperatures and humidity levels plummet.

Heat. Central heating, wood-burning stoves, space heaters and fireplaces all reduce humidity and dry your skin.

Hot baths and showers. Taking long, hot showers or baths can dry your skin. So can frequent swimming, particularly in heavily chlorinated pools.

Harsh soaps and detergents. Many popular soaps, detergents and shampoos strip moisture from your skin as they are formulated to remove oil.

Some skin conditions such as eczema or psoriasis can also cause dry skin.
CAUSES FROM THE INSIDE:

A decrease in production of natural oils in the body can also cause dry skin conditions as this compromises the skin barrier.  

- In healthy skin, specialised glands release an oily substance called sebum which keeps the skin moist, supple and waterproof. As we get older, our bodies don’t produce these natural oils so effectively.  
- Our skin also loses its ability to maintain water as we get older, and therefore becomes drier.  
- Babies and young children are also often susceptible to dry skin because their oil producing glands haven’t developed properly.  

A person with a dry skin condition (e.g. atopic dermatitis) has a higher skin pH (less acidic), this may delay the repair of the skin barrier function.  

Restoring the pH to the normal acidity of the skin (pH 4.5-5) the lipids will be produced that are needed for normal barrier function.  

The acidity of the skin also helps the body against attack by foreign bodies.
Your skin has amazing healing abilities. Remember the last time you had a cut? What happened to it? Your skin completely healed or left only a small scar! See what we mean?\textsuperscript{10a}
The skin barrier is like a brick wall. The “bricks” (cells) contain proteins and are surrounded by “mortar” (lipids e.g. fats, oils and waxes). Together they form the outermost layer of the skin (stratum corneum).

This barrier helps to keep water within the body and prevent the entrance of other potential irritants.

SO, WHAT PROTECTS YOUR SKIN FROM BECOMING DRY?

IT HAS ITS OWN SKIN BARRIER!

THE IMPORTANCE OF YOUR SKIN’S NATURAL BARRIER

The skin barrier is like a brick wall. The “bricks” (cells) contain proteins and are surrounded by “mortar” (lipids e.g. fats, oils and waxes). Together they form the outermost layer of the skin (stratum corneum).

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NORMAL SKIN BARRIER

When the skin barrier is damaged or impaired, the “bricks” move away from each other, the “mortar” or lipid ratios are disturbed, water loss through the skin increases, the skin dries out and dry skin conditions develop, this is called Trans Epidermal Water Loss (TEWL).

IMPAIRED SKIN BARRIER

A damaged barrier can allow microbes, irritants and allergens to penetrate into the skin that can cause inflammation, infection, other skin disorders e.g. eczema, psoriasis and allergic reactions.

Though complications of a dry skin may not be obviously life-threatening, it can have tremendous consequences for a person’s physical and mental wellbeing.
**Did you know?**

Your skin contains 64% water.\(^{14a}\)

**Emollients keep your skin hydrated and healthy**\(^{6a,15a-c}\)

Emollients (moisturisers) are made up of a mixture of oil and water in varying proportions, with a wide variety of additional ingredients which aid hydration, contribute to skin barrier repair, and act as preservatives.\(^{15a,c,d,e}\)
EMOLLIENTS CAN ASSIST IN THE REPAIR OF THE SKIN BARRIER IN THREE PHASES\textsuperscript{9b}

**PHASE 1**
It forms an oily layer over the skin surface that acts as a barrier and can immediately (in less than 1 hour) reduce evaporation of water from the skin\textsuperscript{9b,15c}

**PHASE 2**
They can penetrate the stratum corneum and replace lost lipids which is important for barrier function (<6 hours)\textsuperscript{9b}

**PHASE 3**
They can penetrate to the epidermis below the stratum corneum, where, if the emollient contains them, lipids that are identical to those found in the skin can be incorporated into the skin.

Most emollients can only help with one or both of the first two phases, and they have to be reapplied every few hours.\textsuperscript{9b}

Some other emollients can prevent phase 3, thus reducing their overall effectiveness.\textsuperscript{9b}

The special formulation of SBR\textsuperscript{®} Repair is involved in all three phases to repair the skin barrier, in phase 3 it helps to heal the skin barrier faster.\textsuperscript{6a,d}
Emollients Repair and Protect Your Skin

- Use of emollients can help repair the damage by replacing lost lipids.\(^6a\)
- Studies have shown that emollients may reduce the need for topical steroids and enhance the therapeutic response to them.\(^{11c}\)
- Emollients also prevent allergens, irritants and bacteria from penetrating the skin and thereby reduce the development of dry skin conditions (e.g. eczema) or infection.\(^{15c}\)
- A good skin care routine using emollients can soothe, moisturise and protect the skin, so helping to reduce the dry skin conditions e.g. eczema flares.\(^{15a}\)

**DID YOU KNOW?**

The average atopic dermatitis patient often needs 1 kg of emollients\(^{16a}\)

Emollients should be used every day\(^{15f}\)

- Emollients make the skin feel more comfortable and less itchy.\(^{15f}\)
- They keep the skin moist and flexible, helping to prevent cracks.\(^{15f}\)
- You should be used an emollient every day to protect and repair your skin's barrier.\(^{15a,cf}\)
The following tips will help you to get the most out of your emollient therapy.\textsuperscript{15g}

- Use your emollient of choice frequently. Ideally, this will be every few hours, but should be at least twice a day, and every few hours if the eczema is flaring. It is recommended that an adult should use at least 500 g per week (at least 250 g for a child).

- Every time you wash or take a bath/shower, pat your skin dry afterwards with a soft towel and immediately re-apply your leave-on emollient.

- Apply emollient gently in the direction of hair growth. Never rub up and down vigorously as this could trigger itching, block hair follicles and create more heat in the skin. It is a good idea to dot blobs of emollient around your limbs and trunk first (you may need someone to help you with your back), as this helps to ensure that all areas of skin are moisturised.

Emollients may be used together with topical steroids, however on its own, it has been shown to reduce itching, redness and dryness of an eczema skin, it may reduce the amount of topical steroids needed to control eczema.\textsuperscript{2a,g,j,15a,e,g}

**IMPORTANT**

It is important to use the right emollient to make sure that the skin barrier stays healthy.

Emollient containing sodium lauryl sulphate (SLS) should not be used in any patient with dry skin, whether as a leave-on or washing product. It has been proven that SLS causes severe damage to the skin.\textsuperscript{17a}
RESTORE
REPLACE
REPAIR

BE SOFT ON THEIR SKIN!
Dry scaly skin is common in babies, but it can occur at any stage of development. Infant skin is different from adult skin in structure, function, and composition. During the late foetal period (20 weeks to birth), skin becomes functional and develops a protective barrier. Although full-term infants are born with a competent skin barrier, their skin is still developing through the first year of life. Ideally, products that are used on infants should not interfere with skin surface pH or perturb the skin barrier.

**INFANT SKIN HAS A HIGHER RATE OF WATER LOSS THAN ADULT SKIN AND IS AT HIGHER RISK OF DEHYDRATION**
MAINTAIN YOUR BABY’S SKIN BARRIER FUNCTION

Maintaining skin barrier function is essential for survival and critical to preventing organ dehydration.  

Emollients have been used for centuries to protect the integrity of the outer skin layer (stratum corneum) and to maintain skin barrier function. Appropriately formulated emollients can preserve, protect, and enhance the infant skin barrier by supplying the stratum corneum with water and lipids and by helping to inhibit water loss. Emollient products containing physiological balance of cholesterol, ceramides and fatty acids are optimal for barrier repair. On the other hand, inappropriately formulated emollients can harm and dehydrate the delicate skin of infants.  

Daily use of emollients that are appropriately formulated for use after birth may produce measurable benefits later in life.
SBR® Repair and SBR® Lipocream are medically designed emollients to restore and maintain your skin's protective barrier, to assist in treating and rehydrating dry skin conditions.\textsuperscript{6a,9c,19a,b}

SBR® has a clinically proven effect on the skin barrier.\textsuperscript{6a,19a}

SBR® is specifically designed for rapid, optimal and lasting barrier restoration.\textsuperscript{6a,d,19a,c}
SBR® REPAIR DEEP PENETRATION AND A LONGER-LASTING EFFECT$^{6a,d}$

- SBR® Repair contains nanoparticles which allows it to penetrate deeper into the skin and be more effective.$^{1j}$

- SBR® Repair contains the 3 most common lipids that are identical to your skin’s own lipids. These lipids inhibit water from escaping from the skin, and they include fats, oils and waxes (cholesterol, ceramides and fatty acids).$^{9c,11a}$

- SBR® Repair reaches the spaces between the cells in the stratum corneum to replace the lost natural lipids in the optimal proportions to restore and accelerate the skin’s protective barrier repair.$^{6a,d,9c}$

- SBR® Repair is an easy to apply cream base, it does not contain any colouring, perfume or preservatives, (all potential irritants) minimising the risk of allergic reactions.$^{6d,e,9g}$

- SBR® Repair also repairs the skin barrier after laser resurfacing, and has been shown to significantly reduce oozing during the first 2 days after the CO$_2$ laser treatment.$^{20a}$
SBR® Repair works effectively

SBR® Repair is a water-in-oil cream to rehydrate skin effectively and restore the barrier function quickly and actively with good cosmetic properties, making it particularly suitable for treating dry skin disorders of all kinds.6a,d,9c

- Ideal for chronic dry conditions and doesn’t irritate the skin.6e,9f,12d
- Can be used as prophylactic skin care to minimise damage to the skin barrier.6a,12d
- Increasing the time between flare-ups of atopic eczema (can be used at any stage for flare-ups of eczema).12d,15a
- Maintain pH of the skin at the right level for faster barrier repair and maintenance.1f,21a
- Last for up to twenty-four hours6a,g
- Patented nanoparticle technology which prolongs its efficacy and produce a cosmetically acceptable matt finish.1j

SBR® Lipo cream

SELF-DEFENSE FOR YOUR SKIN

Where SBR® Repair cream repairs and restores very dry skin, SBR® Lipo cream is an emollient intended for daily use to replenish, or to help repair and restore dry skin.9h,19c

It replaces two of the skin’s physiological skin lipids (free fatty acids and cholesterol). It is less fatty than SBR® Repair cream, and contains 38 % lipids compared to the 70 % of lipids contained in SBR® Repair cream. SBR® Lipo cream can be applied 3 to 4 times per day on the affected skin areas if necessary.9i,j,19d
SBR® IS AVAILABLE IN TWO CONVENIENT FORMULATIONS FOR DRY AND VERY DRY SKIN CONDITIONS. 9h

**DRY SKIN**

REPLACES TWO PHYSIOLOGICAL SKIN LIPIDS9i
- Free fatty acid
- Cholesterol

AIDS IN THE PREVENTION OF DRY SKIN 9h
Apply a thin layer 3 - 4 times daily19d

Contains:
White petrolatum, purified water, mineral oil, cetearyl alcohol, ceteareth-25, methylparaben, citric acid, sodium citrate. 22a

**VERY DRY SKIN**

REPLACES ALL THREE PHYSIOLOGICAL SKIN LIPIDS IN THE CORRECT MOLAR RATIO9i
- Free fatty acid
- Cholesterol
- Ceramides

AIDS IN THE PREVENTION AND TREATMENT OF VERY DRY SKIN9h
Apply a thin layer in the evening or more often if required6f

Contains:
Petrolatum, solid paraffin nanoparticles, liquid paraffin, glycerol, sorbitan-oleate, carnauba wax, cholesterol, ceramide, oleic acid (free fatty acid), palmitic acid (free fatty acid), carbopol-2020, tromethamin and water1a
• Atopic dermatitis: A chronic inflammatory skin disease of unknown origin that usually starts in early infancy, but also affects a substantial number of adults.

• Ceramide: A natural lipid molecule found in the outer layer of the skin.

• Eczema: Patches of skin become rough and inflamed with blisters which cause itching and bleeding.

• Emollients: A moisturiser that help keep the skin moist and supple by reducing water loss from the epidermis, the outer layer of skin. They provide a protective film. They are made up of mixture of oil and water in varying proportions, with a wide variety of additional ingredients which aid hydration.

• Hydrophobic: A substance that has little or no affinity for water.

• Nanoparticles: A microscopic particle with dimensions less that 100 nanometers.

• Psoriasis: A skin condition causes a thick, patchy, red rash with silvery, white scales.

• Sebum: An oily or waxy substance secreted by the skin’s glands to lubricate and waterproof the skin

• Stratum corneum: The outermost layer of the skin.

• Trans Epidermal Water Loss (TEWL): Water loss through the skin due to damage to the skin barrier.
References:
9. SBR® Patient Information Leaflet (SBRPat02/30 Jan 2014); May 2015. Astellas Pharma (Pty) Ltd.
22. www.facebook.com/SBRsouthafrica/