

ASSISTANT LEARN & ADVISE

skin and eczema.

OBJECTIVES After studying this module, assistants will:

Be familiar with the basic structure of the skin
Know the causes and symptoms of dry skin and eczema

Understand the role of emollients in relieving dry

MODULE 11: MARCH 2016

Dry skin & eczema

Eczema affects one in five children and one in 12 adults in the UK, and many more people experience dry skin. In order to understand why these conditions occur, and how to manage symptoms, it helps to know a little about the structure of the skin.

Free nerve ending

Melanocyte

Basal cell

Sebaceous gland

Blood vessels

Hair follicle

Hypodermis

Muscle layer

The skin is the largest organ in the body and it has many roles, from helping to regulate body temperature to acting as a barrier against harmful bacteria and chemicals. The key to healthy skin is to maintain its moisture because if the skin is dry, its ability to function effectively is impaired.

Skin has three main layers. **The epidermis** is mostly comprised of keratinocytes – cells which are formed in the lowest layer and, as they mature, move towards the surface (the stratum corneum), where they are constantly shed and replaced with the layer underneath. In healthy skin, this process takes three to four weeks. The stratum corneum also acts as a barrier to prevent moisture loss and stop

allergens and irritants from damaging the skin and entering the body.

The dermis lies beneath the epidermis and is thicker. It contains many different structures, including blood vessels, nerves, proteins such as collagen, sebaceous glands and the base of hair follicles. The sebaceous glands secrete sebum – a mixture of oily fats that helps to keep the skin healthy.

The innermost layer, **the subcutaneous tissue** (comprised of the hypodermis and the muscle layer), is an important insulator as it helps to regulate the body's temperature and protect its vital internal organs.





This module is suitable for all members of the pharmacy team who wish to increase their knowledge of common conditions, treatment options and communication skills. This module has been endorsed with the NPA's Training Seal as suitable for use by pharmacy teams as part of their ongoing learning.

This module can also form part of your Team Tuesday training.

Dry skin conditions explained

Picture the skin as a brick wall: the 'bricks' are cells being held together by a 'mortar' made up of fats and oils. Cells attract and keep water inside, and the fats

and oils also help keep the water in. A lack of mortar means that the skin will not retain as much moisture, and gaps can open up in the wall. Moisture is then lost from the deeper layers of the skin, allowing irritants and bacteria to pass through more easily. If bacteria and irritants get through the cracks, the skin can become irritated and inflamed.



Eczema

Eczema affects people of all ages, but is most common in children, affecting five to 15 per cent of those younger than seven years old in the UK. According to the National Eczema Society, most children grow out of their symptoms, with around 65 per cent being symptom-free by the age of seven, and 74 per cent by age 16.



The exact cause of eczema is unknown, but it is thought to be a combination of genetic and environmental factors. Environmental factors are triggers that initiate symptoms in genetically predisposed individuals. Triggers can vary, but commonly include soap and detergents, house dust mites, animal fur and saliva, pollen, and wool or synthetic material. Hot weather, high or low humidity, cigarette smoke and excessive perspiration can also be factors. Some sufferers report stress as a trigger. However, how this contributes to the condition is unclear. Eczema is also occasionally linked to food allergens, particularly in infants.

Eczema is characterised by periods of symptom flare-ups, followed by times when symptoms ease or disappear. Common symptoms include dry, itchy skin and rashes. If the affected skin is scratched, this can lead to redness, swelling, cracking, weeping, crusting, scaling and eventual thickening of the skin. Skin may also be susceptible to secondary bacterial infections.

In infants, symptoms typically appear as a patchy rash on the cheeks or chin at six to 12 weeks of age. This can progress to red, scaling and oozing skin that is more prone to infection. Once the child starts crawling, the inner and outer parts of the arms and legs may also be affected. In older children, the rash tends to appear behind the knees, inside the elbows, on the sides of the neck, around the mouth and on the wrists, ankles and hands.

Dry skin

Dry skin can occur at any time, but is particularly common during winter when cold weather and blasting central heating create low humidity. Dry skin is also more common in older people as the skin becomes thinner and loses sweat and oil glands with age. Other possible causes include dehydration, lack of sun exposure, smoking and pre-existing health conditions such as diabetes.

Dry skin commonly affects the lower legs, arms, thighs and sides of the abdomen. Common symptoms include scaling, itching and cracking, which can lead to secondary bacterial infections.

When to refer

Refer customers presenting with any of the following symptoms to the pharmacist:

- First time symptoms of eczema
- Signs of secondary bacterial skin infection, e.g. open sores, crusting or weeping
- Symptoms that affect quality of life
- Large areas of scaling or peeling
- Ineffective use or unacceptable side effects of OTC treatments.

Symptom management

Unfortunately, there is no short-term cure for dry skin or eczema. Instead, it relies on long-term management, which has two aims:

1 To maintain healthy skin

2 To prevent flare-ups.

This can be achieved by 'complete emollient therapy'. This involves using emollients to restore moisture to dry skin, which helps to improve the skin's barrier function and relieves itching and damage caused by scratching.

• Emollient creams are a mixture of water and fat. They are non-greasy, easy to spread and appropriate

for daytime use. Due to their water content, they often contain preservatives, which some people may become sensitised to

- Lotions contain more water and less fat than creams. They spread easily but are less effective for very dry skin. Lotions are useful for hairy areas of skin or quick application
- Ointments have a thick, greasy consistency and are the most effective emollient at holding water in the skin. They are recommended for very dry and thick skin, and are best applied before bed. They are not suitable for weeping eczema and some users find their consistency unpleasant
- Bath oils coat the skin with a layer of oil that traps water. Oils can make surfaces slippery so should be used with caution, particularly when bathing young children
- Soap substitutes don't usually produce foam, but they are effective cleansers.

Finding the right regimen can be a matter of trial and error. Ideally, customers should choose a range of emollients for use at different times and for different purposes.

SIGNPOSTING

For more information, you can:

- Use your Counter Intelligence Plus training guide
- Visit the British Skin Foundation website: www.britishskinfoundation.org.uk
- Take a look at the Eczema Advice Programme: www.eczemaadvice.co.uk.

Topical corticosteroids

Corticosteroid creams and ointments reduce inflammation and are safe when used appropriately for eczema flare-ups. Topical corticosteroids are classed by their potency - mild, moderate, potent and very potent.

Only the mildest products are available OTC, such as hydrocortisone in strengths up to 1% (e.g. Hc45), clobetasone butyrate 0.05% (e.g. Eumovate), as well as products that combine a corticosteroid with an anti-itch ingredient (e.g. Eurax Hc).

OTC corticosteroids should only be used once or twice a day for a maximum of seven days and are not suitable for children (age restrictions vary depending on the product) or pregnant women. They should not be applied to the face, or to broken or infected skin.

Tips & advice

- Smooth emollients into the skin gently using downward strokes - do not rub continuously
- Apply frequently sufferers of very dry skin may need to apply an emollient every two to three hours on exposed areas
- average adult sufferer; children typically require 250g
- Allow emollients to absorb into the skin before applying any other treatments. If the emollient has not absorbed properly,
- After bathing, dry skin gently, leaving it slightly moist before

fingernails short. Wearing mittens at night can prevent children from scratching in their sleep

fragrance-free



TEST YOURSELFONLINE

GOOD PRACTICE KNOWLEDGE IS IMPORTANT WHEN ADVISING CUSTOMERS



Questions

1) Which of the following statements is FAL

- a) Human skin has four main layers
- Blood vessels, nerves, hair follicles and sebaceous glands are all found in the dermis layer of the skin
- Human skin helps to regulate body temperature
- Healthy skin is an effective barrier against chemicals and bacteria

2) Which of the following applies to dry skin?

- It is more common during winter
- Older people are more susceptible
- Symptoms can include scaling, itching, cracking and rough skin
- All of the above

3) Which of the following statements about eczema is TRUE?

- a) There is no evidence that children outgrow their symptoms
- b) Symptoms do not come and go
- c) In infants, eczema typically begins around six to 12 weeks of age, first appearing as a patchy rash on the cheeks or chin
- There is no evidence linking eczema to food allergies

4) Which of the following is NOT helpful in the long-term management of dry skin and eczema?

- Applying emollients daily
- Substituting fragranced bubble baths for emollient bath oils
- Applying an emollient soap substitute to wash hands
- Buying a specific formulation even if it is disliked and not used

5) Which of the following factors can trigger eczema?

- a) Stress
- Cigarette smoke
- Low humidity
- All of the above

6) How much emollient does the average adult sufferer require each week?

- Less than 250g
- Between 250g and 600g
- Between 25g and 60g
- More than 600g

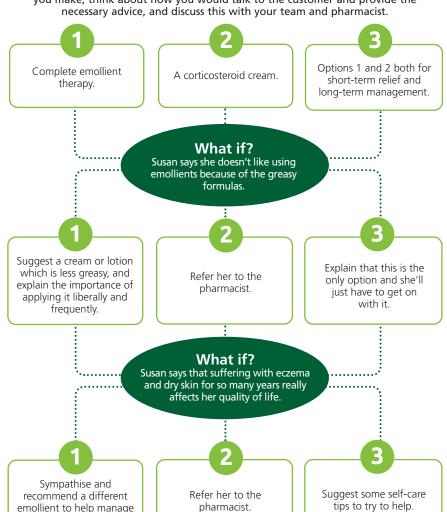
Scenario

Susan, 58, has suffered from occasional episodes of mild eczema since she was a child. She comes to the pharmacy to buy a treatment for a small patch of eczema on her wrist. The patch is red and itchy, but the skin is not broken. Susan also regularly suffers from dry skin.



What would you recommend?

For each part of this scenario, think about the decision you would make and, importantly, why you would choose that option. In addition, for each decision that you make, think about how you would talk to the customer and provide the





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emollient to help manage

her symptoms.