

## Patient information from the BMJ Group

# Dermatitis

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## Dermatitis

Dermatitis means inflammation of the skin. The kind we talk about here is called seborrhoeic dermatitis. It affects parts of the skin where there are creases, such as around your mouth and nose, or where you have hair, such as your scalp and eyebrows. Seborrhoeic dermatitis that affects your scalp is sometimes a cause of dandruff.

We've brought together the best research about dermatitis and weighed up the evidence about how to treat it. You can use our information to talk to your doctor and decide which treatments are best for you.

## What is dermatitis?

If you have dermatitis, patches of your skin become red and flaky. There are several types of dermatitis, all caused by different things.

The type of dermatitis we talk about here is called **seborrhoeic dermatitis**. It usually affects parts of your body that have hair, or where there are folds or creases in your skin. These are the parts of your body with lots of **sebaceous glands**. These glands make oil to lubricate your skin. Sebaceous glands give seborrhoeic dermatitis its name.



Dermatitis can be a cause of dandruff.

Seborrhoeic dermatitis can cause your skin to flake, and is sometimes a cause of dandruff.

[1] It can also make patches of skin red and inflamed, a bit like sunburn.

Babies often get seborrhoeic dermatitis on their scalp. When this happens, it's called **cradle cap**. To read more, see [Cradle cap](#).

# Dermatitis

**Eczema** is another type of dermatitis. We've covered eczema separately. To read more, see [Eczema](#) .

## What causes dermatitis?

Doctors don't know exactly what causes seborrhoeic dermatitis. There are several theories. <sup>[1]</sup>

**Yeasts** that grow naturally on your body may play a part. Yeasts are a type of **fungus** , and can grow on oily parts of our bodies. Some doctors think that types of yeast called *Malassezia* could cause dermatitis. You've probably heard of other conditions caused by fungi growing on the body. [Athlete's foot](#) is one example.

However, lots of people have yeasts on their skin without getting dermatitis. So, it might be your body's reaction to these yeasts that causes symptoms, not the yeasts themselves. Some people might have an **immune system** that's more sensitive to yeasts. Your immune system is your body's defence against infection. If your immune system over-reacts to something, it can cause irritation.

It's also possible that your **hormones** are linked to dermatitis. Hormones are chemicals that help to tell parts of your body what to do. Some people get dermatitis as a baby, which goes away as they grow up, but comes back when they're a teenager. This could be because of how their hormones change as they grow older.

Some people find that their lifestyle can trigger dermatitis. You may be more likely to get dermatitis when you're under stress or not getting enough sleep. <sup>[1]</sup>

## Other skin conditions

There are several kinds of dermatitis, as well as other conditions that can cause flaky or irritated skin. Here are some examples.

- If you come into contact with something that irritates your skin, it can cause dermatitis. This is called **contact dermatitis**. It can affect people who work with strong chemicals, but you can also get it from everyday soaps and detergents.
- When dermatitis is caused by an **allergic reaction** , it's usually called eczema. You may hear eczema called **atopic dermatitis**. If a condition is described as atopic, it means that it's caused by an allergy. To read more, see [Eczema](#) .
- Raised patches of red skin with silvery scales can be caused by a condition called **psoriasis**. It can affect several parts of your body, including your scalp, knees, or elbows. To read more, see [Psoriasis](#) .

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## What are the symptoms of dermatitis?

Seborrhoeic dermatitis causes your skin to flake. These flakes tend to be a white or yellowish colour. They can sometimes be greasy. You may also get red patches of skin that look a bit like sunburn.

Seborrhoeic dermatitis usually affects parts of your body that have hair, or where there are folds or creases in your skin. These are the parts of your body with lots of **sebaceous glands**. These glands make oil to lubricate your skin. Sebaceous glands give seborrhoeic dermatitis its name.

You can get seborrhoeic dermatitis on:

- Your scalp (dermatitis can cause dandruff)
- Your eyebrows
- Your beard, if you're a man
- Your face and nose, especially between your nose and the corners of your mouth
- Your ears
- Your chest, especially under your breasts if you're a woman
- Your armpit
- Your groin.

Skin affected by dermatitis may be itchy. Itching can get worse if your skin becomes infected. Be careful about scratching patches of dermatitis. Scratching too hard can break your skin and make an infection more likely.

If dermatitis affects your scalp, it can cause bad dandruff. But not all dandruff is caused by dermatitis. Most people get a few flakes. This happens because your top layer of skin flakes away naturally, as it's replaced by new skin cells. Dandruff caused by dermatitis usually means you get bigger, oily flakes. Shampooing helps to get rid of flakes, and medicated shampoos also help to treat the cause of dermatitis. To read more, see [What treatments work for dandruff?](#)

Babies often get dermatitis on their scalp. This is called **cradle cap**. To read more, see [Cradle cap](#) .

## How common is dermatitis?

Seborrhoeic dermatitis is fairly common.

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Doctors think that between 1 in 100 and 3 in 100 people have seborrhoeic dermatitis. <sup>[3]</sup> But it's hard to know exactly how common it is. People who don't get many symptoms, or who just get dandruff, may never see a doctor about it.

Dermatitis is most common in teenagers and young adults. <sup>[3]</sup> It's also more common in adults over 50. Dermatitis affects men slightly more often than women. <sup>[3]</sup>

## What treatments work for dermatitis and dandruff?

There are lots of treatments that can help get rid of seborrhoeic dermatitis and dandruff.

However, dermatitis and dandruff often come back. You may need to use your treatment again from time to time.

## Key points about treating dermatitis and dandruff

- Medicated shampoos that kill or control fungi can help get rid of dandruff. You can buy many of them from pharmacies and supermarkets. Your doctor can prescribe stronger **antifungal shampoos** if you need them.
- An antifungal cream called **ketoconazole** can help clear dermatitis on your face or body. You need a prescription for ketoconazole when it's used for dermatitis.
- **Steroid creams, ointments, and shampoos** can help with more severe dermatitis or dandruff. Your doctor may suggest combining an antifungal treatment with a steroid.
- If your dermatitis is widespread and creams don't work, your doctor may prescribe **antifungal tablets**. These are usually prescribed by a specialist. They can have side effects and they're not suitable for everyone. Talk to your doctor about whether they're suitable for you.
- Babies often get dermatitis on their scalp. When this happens, it's called cradle cap. To read more, see [Cradle cap](#) .

## What treatments work?

We've looked separately at treatments for dandruff and treatments for dermatitis on your face or body.

- [What treatments work for dandruff?](#) Dandruff can be treated with medicated shampoos. Some are widely available from pharmacies and shops. There are also stronger treatments that your doctor can prescribe. [More...](#)
- [What treatments work for dermatitis on your face or body?](#) If you have dermatitis on your body or face, it's a good idea to see your doctor. He or she can prescribe treatments to help, such as creams to kill the fungi that may cause dermatitis. [More...](#)

## Treatment Group 1

### What treatments work for dandruff?

Most people get a few flakes of dandruff. This happens because your top layer of skin flakes away as it's replaced by new skin cells. But seborrhoeic dermatitis that affects your scalp can cause severe dandruff. The flakes are likely to be larger and oilier than other kinds of dandruff.

Lots of shampoos are available to help with dandruff. Just washing your hair will help to remove flakes, but anti-dandruff shampoos also contain chemicals to kill fungi or reduce the **inflammation** on your scalp.

### Key points about treating dandruff

- **Fungi** that grow on your scalp can play a part in causing flaky skin. **Medicated shampoos** that kill these fungi, or slow down how quickly they spread, can help clear up your dandruff.
- Most people start off by using an anti-dandruff shampoo containing **zinc** or **coal tar**. Brands include Head and Shoulders and T-Gel.
- For more severe dandruff, you can try shampoos containing **ketoconazole** or **selenium sulfide**. Research shows these treatments can help clear up dandruff.
- Your doctor may also prescribe a **steroid lotion or shampoo**, often along with an antifungal treatment. This is used to reduce inflammation on your scalp. There's not much research on this treatment, but doctors think that it works. To avoid side effects, doctors usually only prescribe steroids for a short period.
- You may need to get rid of crusts or scales on your scalp before treatment. Some doctors advise applying **warm olive oil**, or using a **salicylic acid shampoo**.
- Whatever treatment you use, dandruff can come back. You may need to use your anti-dandruff shampoo again from time to time.

We've looked closely at the research and ranked the treatments into categories, according to whether they work.

### Treatments for dandruff

#### Treatments that work

- [Ketoconazole shampoo](#)

#### Treatments that are likely to work

- [Tar shampoo](#)

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- [Steroid shampoos and lotions](#)
- [Selenium sulfide shampoo](#)

## Other treatments

We haven't looked at the research on these treatments in the same way we have for others in this article. For more information, see Our method. So we can't say for certain whether or not they work. But we've included them because you may be interested in them.

- [Zinc shampoo](#)
- [Salicylic acid shampoo](#)
- [Tea tree oil](#)

## Treatment Group 2

### What treatments work for dermatitis on your face or body?

Although seborrhoeic dermatitis isn't harmful, most people are unhappy about the way it looks. Fortunately, treatment can help to control the symptoms.

Dermatitis is usually treated with creams or ointments. But dermatitis often comes back, so you may need treatment again in the future.

### Key points about treating dermatitis on your face or body

- Your doctor will probably recommend an antifungal cream, such as **ketoconazole**, to help clear up your dermatitis. Fungi that grow in the oil on your skin may play a part in causing dermatitis. Everyone has these fungi on their skin, but in some people they seem to cause a reaction in the skin. Creams that kill fungi can help, and studies show that ketoconazole works.
- For more severe dermatitis, your doctor may suggest a **steroid cream or ointment**, usually as well as an antifungal treatment. Doctors think that steroids can help, but they can also have side effects, so you may only be able to use this treatment for a short time.
- Some people find that simple **moisturisers** can soothe dry or itchy skin. But there's no good-quality research on whether or not moisturisers help get rid of dermatitis.
- Creams that calm down your **immune system**, called **tacrolimus** and **pimecrolimus**, aim to reduce the inflammation in your skin. Doctors sometimes recommend these treatments for dermatitis, but only as a last resort, since they may have serious side effects.

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We've looked closely at the research and ranked the treatments into categories, according to whether they work.

## Treatments for dermatitis on your face or body

### Treatments that work

- [Ketoconazole cream](#)

### Treatments that are likely to work

- [Steroid creams](#)

### Treatments that need further study

- [Moisturisers](#)
- [Creams that affect your immune system](#)

## What will happen to me?

For many people, seborrhoeic dermatitis and dandruff come and go over time.

Treatment can help get rid of seborrhoeic dermatitis or dandruff, although they often come back.<sup>[3]</sup> You may need to have more treatment from time to time, or use your anti-dandruff shampoo again when your symptoms flare up. Some treatments can be used regularly, to help stop dermatitis or dandruff coming back. You can ask your doctor or pharmacist how often you should be using your treatment.

Some people find their dermatitis gets worse in winter, or when they're feeling stressed. It may start to clear up in the summer. This might be because getting more sunlight helps with dermatitis.<sup>[4]</sup>

When babies get dermatitis on their scalp (called **cradle cap**), it usually goes away before they reach 1 year of age. To read more, see [Cradle cap](#) .

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## Treatments:

### Ketoconazole shampoo

In this section

Ketoconazole is a drug that kills fungi. Ketoconazole shampoo can kill the fungi that play a part in causing dandruff.

One brand name for ketoconazole shampoo is Nizoral. You can buy it yourself from a pharmacist. You use it twice a week to get rid of dandruff, or once every two weeks to stop dandruff coming back.<sup>[5]</sup>

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Several fairly good-quality studies have found that ketoconazole shampoo helps get rid of dandruff.<sup>[6] [7] [8] [9] [10]</sup> After using the shampoo for between two and four weeks, people had less dandruff or flaky skin, and less itching and redness.

Most of the research found that people didn't get side effects from using ketoconazole. Occasionally, people find that it irritates their scalp.<sup>[10] [11]</sup>

There's a bigger risk of getting skin irritation with ketoconazole if you've recently used a steroid treatment on your skin.<sup>[11]</sup> If you've used a steroid treatment, you should wait at least two weeks before using ketoconazole.

Try not to get ketoconazole shampoo in your eyes. If you do, wash it out with plenty of water.

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## Selenium sulfide shampoo

In this section

Selenium sulfide is a chemical that helps to kill fungi. Selenium shampoos are used to clear up dandruff by killing the fungi that can cause it.

Brand names for selenium sulfide shampoo include Selsun, and another is Head and Shoulders Intensive Treatment Dandruff Shampoo. You can buy them yourself from a pharmacist.

You use the shampoo twice a week for two weeks, once a week for two further weeks, and then whenever you need it.

We found just one study looking at this treatment. It compared a selenium shampoo with an ordinary shampoo. People who used the selenium shampoo had less dandruff.<sup>[9]</sup>

Side effects don't seem to be common with selenium shampoos. In the study, a few people said the shampoo irritated their skin.<sup>[9]</sup> Some people also said the shampoo bleached their hair slightly or turned their scalp an orange colour.

Try not to get selenium shampoo in your eyes. If you do, wash it off with plenty of water.

If you colour, bleach, straighten, or curl your hair, try not to do these things around the same time as using a selenium shampoo.<sup>[5]</sup> Either do these things two days before or after using the shampoo, or rinse your hair very thoroughly with cold water before colouring or heat-styling your hair.

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## Tar shampoo

In this section

Coal tar shampoos can be used to treat dandruff. You can buy them yourself from a pharmacist. Brands include T-Gel and Polytar AF.



## Dermatitis

One study compared coal tar shampoo with an ordinary shampoo.<sup>[10]</sup> After four weeks, people using the tar shampoo had less dandruff.

The research didn't find any side effects from tar shampoo.<sup>[10]</sup> Polytar AF contains **peanut oil**, so it may not be suitable if you have a nut allergy. Some people don't like the smell of tar shampoos, but many products are perfumed to try to reduce this problem, or you can use a conditioner on your hair after the shampoo.

Avoid getting the shampoo in your eyes, and rinse with water if you do.

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## Steroid shampoos and lotions

In this section

If you have dandruff caused by severe dermatitis of the scalp, and other treatments haven't helped, your doctor may suggest using a steroid shampoo or lotion, often along with antifungal treatment. You may be given steroid treatment for a few days or weeks. Steroids are common treatments for skin conditions, and reduce redness and inflammation.

The full name for these medicines is **corticosteroids**. They're not the same as the anabolic steroids sometimes used by athletes or bodybuilders.

One steroid that comes as a scalp lotion or a shampoo is betamethasone (brand names include Bettamousse and Betnovate). You can only get steroid shampoos from your doctor. They aren't sold over the counter.

There hasn't been much good-quality research looking at whether steroid shampoos and lotions can help people with dandruff. But your doctor may recommend them for severe dandruff.

Steroids can have side effects, but using a steroid shampoo for a while shouldn't cause serious problems.<sup>[12]</sup> Possible side effects include thinning of your skin or slight changes of skin colour. Your doctor will probably recommend that you use steroids for a fairly short time, to cut the risk of side effects.

Avoid getting steroid lotions or shampoos near your eyes. If they get in your eyes accidentally, rinse with plenty of water.

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## Zinc shampoo

In this section

Shampoos containing **zinc pyrithione** aim to control the fungi on your scalp and get rid of dandruff. A well-known brand is Head and Shoulders, and many own-brand anti-dandruff shampoos contain zinc pyrithione too. These kind of shampoos are often the first treatments people try.

We've not looked in detail at the evidence for these shampoos.

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Avoid getting the shampoo in your eyes, and rinse with water if you do.

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### Salicylic acid shampoo

In this section

Salicylic acid helps break down hard or scaly skin. Salicylic acid shampoos are used to loosen the dry skin on your scalp and get rid of flakes. One brand name is Meted. It also contains sulphur, which is used to kill fungi on your scalp. You can also get a shampoo that combines salicylic acid with tar (brand name Capasal). You can buy these treatments yourself without a prescription.

Doctors sometimes recommend using a salicylic acid shampoo to get rid of a crust of dry skin before you use other treatments, such as a ketoconazole shampoo.

We've not looked in detail at the evidence for these shampoos.

You shouldn't use salicylic acid on broken or sore skin.<sup>[13]</sup> This treatment can irritate your skin, and some people find it makes their skin dry. Avoid getting the shampoo in your eyes, and rinse with water if you do.

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### Tea tree oil

In this section

Tea tree oil is a plant extract that's been used to treat dandruff. We haven't looked at the research on this treatment in detail yet, but one study found that a shampoo containing 5 percent tea tree oil helped with dandruff when used every day.<sup>[14]</sup>

Because we haven't looked in detail at the research on this treatment, we can't say whether it causes side effects, or how common they might be. Some people have had problems such as skin irritation or an allergic reaction when using this treatment.<sup>[15]</sup>

There have been rare reports of boys who haven't yet gone through puberty starting to grow breasts while using products containing tea tree oil and lavender oil.<sup>[16]</sup> But there have been so few cases, it's impossible to say whether these products really caused the problem.

Tea tree oil can irritate your eyes, so be careful when using the shampoo. Rinse with plenty of water if you do get it in your eyes.

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### Ketoconazole cream

In this section

Seborrhoeic dermatitis may be caused by a type of fungus growing on your skin. Antifungal creams that you put on your skin can kill the fungus and help clear up your symptoms.

## Dermatitis

One antifungal cream which you can get on prescription is called ketoconazole. The brand name is Nizoral. You can buy small tubes of ketoconazole cream from a pharmacy, but they're intended for treating athlete's foot, not dermatitis.

If you have dermatitis on your face, some doctors also recommend washing it daily with ketoconazole shampoo.

A few small studies have found that ketoconazole creams or gels are better at clearing up dermatitis than a dummy treatment (a placebo).<sup>[6] [17] [18]</sup> In one study, 6 in 10 people using ketoconazole found their dermatitis had cleared up after four weeks.<sup>[18]</sup> This compared with 3 in 10 people using a placebo cream.

Most of the research found that people didn't get side effects from using ketoconazole. Occasionally, people find that it irritates their skin.<sup>[18]</sup> Try not to get ketoconazole treatments in your eyes.

There's a bigger risk of getting skin irritation with ketoconazole creams if you've recently used a **steroid treatment** on your skin.<sup>[11]</sup> If you've used a steroid cream or gel, you should wait at least two weeks before using ketoconazole.

We didn't find any good-quality studies on other antifungal medicines. But another antifungal cream that doctors may prescribe is called miconazole. Miconazole can be prescribed in combination with a steroid cream for dermatitis. The brand name for this combination is Daktacort.

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## Steroid creams

In this section

If you have severe seborrhoeic dermatitis, your doctor may suggest using steroids that you put on your skin, usually along with an antifungal treatment such as miconazole. The steroids used for dermatitis are called **corticosteroids**. They aren't the same as the anabolic steroids that are sometimes used by athletes and bodybuilders.

Although you can get some weaker steroid creams over the counter from a pharmacist, these aren't intended for seborrhoeic dermatitis. It's best to talk to your doctor about steroid treatment, especially if you have dermatitis on your face. Your doctor may recommend using a steroid cream for a few days or weeks if your dermatitis gets bad.

One example of a steroid is hydrocortisone cream. Your doctor can prescribe this in combination with an antifungal treatment called miconazole. The brand name for this combination is Daktacort. Other steroid cream names include betamethasone (brand name Betnovate) and hydrocortisone plus urea (brand name Hydromol HC Intensive).

There hasn't been any good-quality research looking at whether steroid creams can help people with seborrhoeic dermatitis. But steroids are a common treatment for skin inflammation, and doctors think this treatment can help with dermatitis. Doctors usually

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prescribe creams to be used for a short time, then you have a break before using them again.

Steroids can have side effects, but using a steroid cream for a while shouldn't cause serious problems.<sup>[12]</sup> Possible side effects include thinning of your skin, slight changes of skin colour, and spots. Your doctor will probably recommend that you use steroids for a fairly short time, to cut the risk of side effects.

High doses of steroids carry a bigger risk of side effects.<sup>[12]</sup> Make sure you ask your doctor about the best way to use your treatment, and about how much to use. Steroid treatments should usually be used just once a day, or at most twice a day. You only need to put a thin layer of the cream on your skin.

If you're using a steroid cream on your face, make sure you keep it out of your eyes.<sup>[12]</sup>

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## Moisturisers

In this section

Moisturisers aim to help with dry skin. They come as creams or ointments, bath products, and soap substitutes. They're widely available, and you're probably familiar with common brands like Vaseline or E45. You may hear these products called **emollients**.

We didn't find any good-quality research on whether moisturisers can help get rid of dermatitis. However you may find them soothing if you use them on dry or itchy skin. If ordinary bath products such as soap dry or irritate your skin, you may find that moisturising alternatives are better.

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## Creams that affect your immune system

In this section

Tacrolimus ointment (brand name Protopic) and pimecrolimus cream (Elidel) are drugs that affect your immune system. They're sometimes used for dermatitis that's caused by an allergy (this is usually called **eczema**), but only when other treatments haven't worked.

In one small study of 96 older people (mostly men, with an average age of 60), treatment with a pimecrolimus cream was better than a similar cream that did not contain pimecrolimus.<sup>[19]</sup> The people in this study had moderate to severe seborrhoeic dermatitis, and the pimecrolimus cream began to work better after about two weeks.

However, these drugs could have serious side effects. So, if your doctor suggests them, it's likely to be as a last resort.

Tacrolimus and pimecrolimus affect your immune system. The idea is that this stops your body reacting to whatever's causing your dermatitis, such as fungi. This reduces the inflammation on your skin. But calming down your immune system may also stop it

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fighting illnesses properly. In the long term, it's possible that this could increase your risk of infections, or even skin cancer. <sup>[20]</sup> <sup>[21]</sup>

There's some research suggesting that tacrolimus and pimecrolimus don't increase people's risk of infections or cancer in the short term. <sup>[22]</sup> <sup>[23]</sup> <sup>[24]</sup> But we don't know much yet about the long-term side effects of these drugs. <sup>[25]</sup> Researchers are still looking at how safe these treatments are if you use them for a long time.

It's likely you'll only be prescribed tacrolimus and pimecrolimus by a specialist, if other treatments haven't worked. Advice for doctors says people should only use these treatments for a short time, at the lowest possible dose. <sup>[25]</sup>

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### Further informations:

#### **Cradle cap**

Young babies can get a kind of seborrhoeic dermatitis called **cradle cap**. It usually happens about a month after a baby is born. It affects the top of their scalp and causes thick, greasy flakes of skin. <sup>[1]</sup> These may be a white or yellowish colour. There may also be some redness in the creases around your child's neck or under their arms. The rash can sometimes spread to your baby's face or their nappy area.

Although you may be worried about your child, cradle cap isn't harmful, and it's not caused by poor hygiene. <sup>[2]</sup> It might look bad, but babies don't usually find it itchy or uncomfortable. <sup>[1]</sup>

Cradle cap usually goes away in time, but there are things you can do to help with flaking skin in the meantime. <sup>[2]</sup>

- Shampooing with a mild baby shampoo and brushing with a soft brush can help lift the scales of skin from your baby's scalp.
- Some parents try using baby oil to soften dry flakes of skin and make them easier to brush off. But don't use too much oil or let it build up, as it can make oily skin worse.
- Medicated shampoos may help cradle cap to clear up more quickly, but they can also irritate your baby's skin. It's best to avoid them unless your doctor recommends them.

If your baby doesn't improve, or the rash spreads from the scalp to the face or other areas, take him or her to see a doctor. You should also see a doctor if your baby seems distressed, or if you are worried for any reason. Your doctor can make sure there's nothing else wrong, and prescribe a cream to help with the rash.

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## Glossary:

### **gland**

A gland is any group of cells in the body that makes and releases something for use by another part of the body. For example, the thyroid gland makes a hormone called thyroxine. This acts on receptors within cells. By acting on the receptors it gives the cells a message to speed up their metabolism and work harder.

### **yeasts**

Yeasts are a type of fungus. They can cause infections in your body, such as thrush.

### **fungus**

A fungus is an organism that is sometimes considered to be a type of plant. A fungus lives by feeding on other organisms. The mushrooms we eat in salads are fungi, but so are candida and cryptococcus, which can cause infections in people's bodies.

### **immune system**

Your immune system is made up of the parts of your body that fight infection. When bacteria or viruses get into your body, it's your immune system that kills them. Antibodies and white blood cells are part of your immune system. They travel in your blood and attack bacteria, viruses and other things that could damage your body.

### **hormones**

Hormones are chemicals that are made in certain parts of the body. They travel through the bloodstream and have an effect on other parts of the body. For example, the female sex hormone oestrogen is made in a woman's ovaries. Oestrogen has many different effects on a woman's body. It makes the breasts grow at puberty and helps control periods. It is also needed to get pregnant.

### **allergic reaction**

You have an allergic reaction when your immune system overreacts to a substance that is normally harmless. You can be allergic to particles in the air you are breathing, like pollen (which causes hay fever) or to chemicals on your skin, like detergents (which can cause a rash). People can also have an allergic reaction to drugs, like penicillin.

### **inflammation**

Inflammation is when your skin or some other part of your body becomes red, swollen, hot, and sore. Inflammation happens because your body is trying to protect you from germs, from something that's in your body and could harm you (like a splinter) or from things that cause allergies (these things are called allergens). Inflammation is one of the ways in which your body heals an infection or an injury.

### **corticosteroids**

Corticosteroids are substances that your body makes naturally. But they can also be made in a laboratory to treat certain conditions. Corticosteroids have many different effects, including helping the body to use sugar and to control the amount of fluid it retains. They also reduce inflammation in the body, which is why they are sometimes used to treat diseases like asthma. (Asthma is caused by inflammation in the tubes that carry air in the lungs.)

### **placebo**

A placebo is a 'pretend' or dummy treatment that contains no active substances. A placebo is often given to half the people taking part in medical research trials, for comparison with the 'real' treatment. It is made to look and taste identical to the drug treatment being tested, so that people in the studies do not know if they are getting the placebo or the 'real' treatment. Researchers often talk about the 'placebo effect'. This is where patients feel better after having a placebo treatment because they expect to feel better. Tests may indicate that they actually are better. In the same way, people can also get side effects after having a placebo treatment. Drug treatments can also have a 'placebo effect'. This is why, to get a true picture of how well a drug works, it is important to compare it against a placebo treatment.

### **eczema**

Eczema is a very itchy rash. It may be dark and bumpy and release fluid. Scratching makes it worse. You can get eczema anywhere on your body, but it is most common on the wrists, the insides of the elbows and the backs of the knees. If you have asthma or allergies you are more likely to get eczema than someone who doesn't have these conditions.

## Sources for the information on this leaflet:

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