



Study of Barrier Enhancement for Eczema Prevention



The University of
Nottingham

The BEEP Study



Skin care booklet

for parents and carers



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Welcome to the BEEP Study

We would like to take this opportunity to welcome you to the BEEP study and to thank you for taking part in this important NHS-funded research to look at preventing eczema.

This booklet gives you information you need to follow current best practice skin care. Please take the time to read it and keep it safe so you can refer back to it during your time in the study.

We would like you to follow the recommendations in this booklet wherever you can. If you are not able or don't wish to, it would be really helpful for our research if you could tell us why. We can then use this information to design any future studies in a way that best suits the needs of parents and carers.



If you would like to know more about the research that we do at the Centre of Evidence Based Dermatology, please contact Joanne Chalmers on 0115 8232435 or visit www.nottingham.ac.uk/dermatology

Thank you once again for helping with our study and for your important contribution to eczema research.



Professor Hywel C. Williams

*Professor of Dermato-
epidemiology and Consultant
Dermatologist*



Dr Joanne Chalmers

*Research Fellow
Centre of Evidence
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Choosing which emollient to use

Emollients have two roles; they moisturise the skin and act as a barrier to protect the skin from irritants such as dribble and dirt. Choosing which emollient to use is down to personal preference. Different types of skin accept different moisturisers and some parents have a preference for a particular type of emollient. The emollient will be supplied to you free of charge whilst you and your baby are in the study.

In this study you have a choice of **three** emollients with different textures:



Sunflower seed oil



Doublebase



White soft paraffin / liquid paraffin (50:50)

You can try out the different emollients to help you decide which one to use. Please avoid using other emollients and moisturizers on your baby, other than the one(s) you have chosen, whilst you are taking part in this study.

What if I don't like the emollient I have chosen?

If you find you don't like the emollient you have chosen or it doesn't suit your baby's skin, you are free to change to a different one whenever you wish. Just get in touch with your research nurse and they will arrange for you to receive a supply of a different emollient. It would be really helpful for us in designing future studies if you could share with us your reasons why you have changed.



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Applying the Emollients

How?

Apply the emollient to the skin. If you are using Doublebase or 50:50, dot the emollient over the skin as shown in the photograph:



Then smooth in using **gentle downward strokes** in the direction of the hair to coat the skin with a smooth film. Don't rub up and down the skin as this can block hair follicles and may cause a mild inflammation or infection of the hair follicles.





If you are applying 50:50 which comes in a tub, it is best practice to use a clean spoon to apply the emollient to avoid the risk of infection by repeatedly putting fingers into an open tub.



Please mark on your chart when you have applied the emollient.

When?

You should start applying the emollients as soon as possible after your baby is born. The latest you should start is 3 weeks after your baby is born.



You should apply the emollients **at least once a day** (you can apply more often if you wish). It might help you remember if you find a regular time to do this, i.e. part of your daily routine. If your baby has a bath every day, then after the bath is ideal. Otherwise, after a nappy change, perhaps the last one before bedtime, is a good idea as your baby is already partly undressed. The changing mat, with a towel or sheet on top, is a good place to apply the emollients.

Always apply emollient after your baby has a bath (even if you have already applied it that day) to compensate for the drying effects of the bath on your baby's skin.





Where?

You should apply the emollient **all over your baby**. But, if you prefer, it is ok to avoid the scalp as it will leave your baby's hair greasy.

A word of warning, bear in mind your baby's skin will be slippery after you have applied the emollient, so take extra care when lifting your baby. Also, be careful not to slip on any spilt emollient and make sure you clean up any spillages. Using a sheet or towel on the changing mat helps absorb any spillages.

What if I forget?

You should try to apply the emollient at least once a day but if you forget, don't worry, just apply it as soon as possible after you have remembered.



Washing and bathing your baby

Soap and bubble bath can irritate and dry out your baby's skin. Avoid using soap or adding bubble bath to your baby's bath. Instead, to wash or bath your baby, use a mild, fragrance free synthetic cleanser which has been designed specially for babies. These products are less likely to irritate the skin and are less drying than soap. Your research nurse will provide you with vouchers to cover the cost of buying these.

Remember, don't put your baby in a bath containing bubble bath which has been run for other children.

Bathing your baby two or three times a week is plenty, but you can bath your baby daily if you want to. Make sure the water isn't too hot.



Emollient (moisturising) bath oils and additives, such as Oilatum and E45 are not recommended for babies, unless they already have a skin problem. So avoid using these unless your doctor or nurse recommends it.

If you are using shampoo on your baby, make sure it is a mild, fragrance free shampoo designed specially for babies.

When you rinse the shampoo, avoid washing the suds over the baby's body – it might help to use a bath support.

Always remember to apply emollient to your baby after bathing, even if you have already applied it that day, to reduce the drying effects of the bath.

Try to avoid using wipes and lotions to clean your baby's hands and face as these areas are already exposed to more irritants during everyday life. If you are weaning your baby, it is a good idea to apply the emollient to your baby's hands and face before eating, then wipe them afterwards with a soft cotton





cloth flannel. This helps avoid the irritant effects of food and saliva on the face.

Changing your baby's nappy

Baby wipes are a convenient way of changing your baby's nappy, but they can irritate the skin, even the fragrance free wipes, so it is best to avoid using them on your newborn baby if you can. The best way to change your baby's nappy is to use cotton wool and a bowl of warm water (with a mild cleanser if needed) instead, which will be less irritating to the skin.



3 Top Tips ...

1

Try to find a regular time to apply the emollient so it becomes part of everyday life

2

When your baby has a bath, always apply the emollient afterwards, even if you have already applied it that day

3

Remember not to use soap on your baby – only use one of the recommended wash products



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Other Advice

Breastfeeding has many benefits, but current evidence suggests that it cannot prevent eczema from developing. This is also the case for hydrolysed formulas or changing the mothers diet during pregnancy or breastfeeding.

In line with current guidelines, you should not introduce solid foods until 6 months of age.

Please remember these are general guidelines and you should follow the advice from your GP or health visitor for your own child

There is some evidence that taking probiotics can have some preventative effect against the development of eczema. So we need to ask you to refrain from taking these supplements if you wish to take part in the BEEP study to allow us to properly assess the effects of this study.



Frequently Asked Questions

What should I do if I spot a problem with my baby's skin?

If your baby develops a rash or an itchy patch, or any other skin problem, don't try to treat anything yourself. Rather than go to your GP, you should contact your research nurse who will talk to you about the problem and advise you about the best action to take. They will arrange to see you and your baby if necessary. If your baby has other symptoms in addition to a rash, such as fever, fussiness, seems unwell or if you are worried about your baby at all, then you should seek other medical advice – don't wait until you can get hold of the research nurse.

How do the emollients work?

The emollients provide lipids (fats) to the skin to improve the barrier function of the skin. They have been studied in premature babies and shown to be safe and effective in keeping a healthy skin barrier.

What if my baby eats some of the emollient?

The emollients should be kept out of reach of children, but any small amounts ingested don't matter.

Can I take my baby swimming?

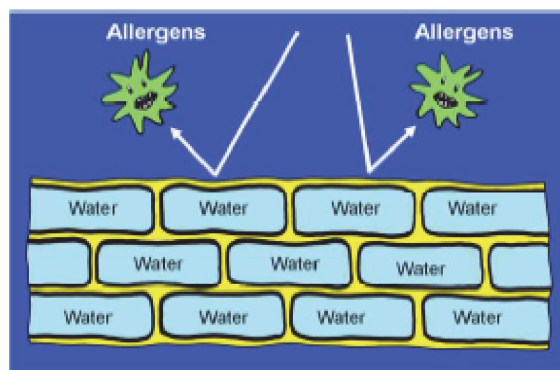
Yes, but wash your baby afterwards and apply emollient.

Should I apply sun-cream before or after the emollient?

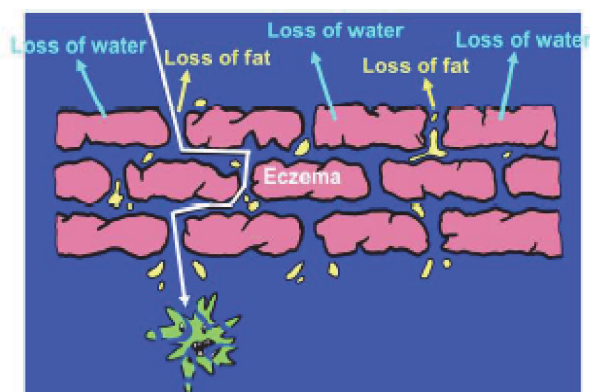
If you want to put the emollient on in the daytime, put the emollient on first, then the sun-cream about half an hour later. Or you could just apply the emollient before bedtime, when you are not applying sun-cream.



What is meant by a defective skin barrier?



Healthy skin is like a brick wall (see picture above). The bricks are the skin cells and the mortar is the fat (lipid) in between the bricks. The yellow fat acts like glue to stick the bricks together. The fat also helps keep water inside the skin cells. This makes the skin cells swell up, thereby closing any gaps between them. Healthy skin is like a strong brick wall that prevents allergens from the outside penetrating through the skin into the body.



In eczematous skin, there is not enough fat (mortar) in between the skin cells. As a result, water is lost from the skin cells and they shrink, opening up cracks in between them. The skin barrier is therefore abnormal in eczema. This allows penetration of allergens through the defective skin barrier. The skin reacts to the allergens, producing chemicals that trigger inflammation.

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