

Good Routine Baby Skincare – Simple as **ABC**

Dr David Atherton leading and honorary senior lecturer in paediatric dermatology, Great Ormond Street Hospital for Children London, identifies **three simple steps** that parents can adopt to care for their baby's skin.



There is an increasing recognition that gentle cleansing (avoidance of soaps and detergents), good nappy practice and regular application of a protective barrier are all essential elements in care of the skin in the napkin area and therefore likely to have value in the prevention of Irritant Napkin Dermatitis (IND)¹

What is Irritant Napkin Dermatitis?

- Common condition with up to **50% of children affected at least once** with many experiencing recurrences.
- Characterised by reddening of the skin and if not adequately treated, can quickly progress to painful ulcerated lesions.
- Development can be associated with the change in diet, teething, or as a result of being on antibiotics.

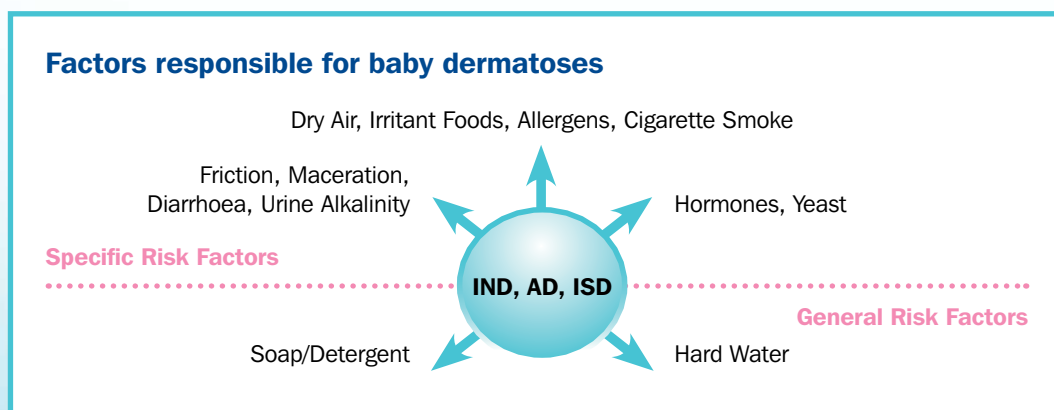


What causes IND?

IND is a direct consequence of a breakdown in the integrity of the skin barrier resulting in contact between irritants and the living cells of the epidermis.¹ Dr Atherton states:

“In practice, there are very few controlled trial data to support any particular practice; therefore the principles guiding good practice must be based mainly on basic rational principles”

“It is logical that the skin care routines are likely to be of value in preventing IND, and that the same routines will also help to prevent other forms of irritant dermatitis in infants, particularly atopic dermatitis”



Dr David Atherton addresses the issues of Irritant Napkin Dermatitis and identifies **three simple steps** that parents can adopt to revert its onset.

A Good bathing practice

Dr Atherton documents the harshness of most baby cleansing products which contain detergents and suggests they should be avoided as they remove skin lipids.

Following the 7 gold standards for barrier protection, similar principles can be established for baby bath products:

Ideally a baby bath product should have:	Bepanthen Baby Bath	A leading product*
1. Proven safety & efficacy	😊	😊
2. No unnecessary ingredients	😊	😞
3. No perfume	😊	😞
4. No preservatives	😊	😞
5. No soap / anionic surfactants	😊	😞
6. Mild cleansing agents	😊	😞
7. Supports skin barrier (skin lipids)	😊	😞
8. No toxic ingredients (including those with undocumented safety)	😊	?

* Contains: Anionic Surfactants (Sodium Laureth Sulfate), Preservatives, Perfume.



Bepanthen Baby Bath has been designed for the **mildest cleansing** of delicate baby skin. It does not contain anionic surfactants, perfume and really cares for the skin by providing skin lipids and dexpanthenol, ingredients which **support the skin barrier**. According to Bepanthen's philosophy, it focuses on key ingredients, leaving out unnecessary potentially allergenic excipients and fragrances.

B Good nappy practice

Use good quality super absorbent disposable nappies. Compared with washable cloth nappies, these have been shown to be associated with a reduced incidence and decreased severity of IND.^{2,3}

Nappies should be changed immediately when soiled to reduce the amount of time the skin is in contact with the urine/faeces. Also, depending on the age of the child, nappies should be changed frequently.

C Good use of barrier emollient

In general, water in oil formulations with a lipid content $\geq 50\%$ provide a superior moisture barrier than lighter oil in water products.⁴ Therefore ointments are generally more effective than creams and lotions.⁵ Emollients:



- ✔ **protect against skin disruption**¹
- ✔ are important for **maintaining skin moisture** but not all emollients support the skin barrier⁶
- ✔ Studies have shown that application of a barrier supportive emollient may aid in **protecting and repairing the skin barrier**^{7,8,9}

“Ideally, a barrier preparation should be clinically proven to be effective in babies and mimic the skin’s natural function by forming a long-lasting barrier to maintain optimum moisture levels. It should not contain any unnecessary ingredients, including antiseptic, preservatives or perfume (or other potential sensitisers), or any ingredients that are toxic or have undocumented safety.”

“Treatment of nappy rash should comprise essentially the same actions as its prevention. Application of a barrier ointment at every nappy change can help to both prevent and treat this condition.”

Dr Atherton

In conclusion, a number of criteria are identified for an ideal barrier preparation for the prevention and treatment of nappy rash. The chart below compares Bepanthen Ointment with a leading brand and Petrolatum, based on the criteria identified.

Bepanthen meets the **7 Gold Standards**¹⁰ for barrier preparation

	Bepanthen Ointment	Petrolatum	A leading brand**
1. No potentially toxic ingredients (including those with undocumented safety)	😊	😞	😊
2. Maintains optimum moisture levels	😊	😊	😊
3. No unnecessary ingredients	😊	😊	😞
4. No perfume (or other potential sensitisers)	😊	😊	😞
5. No preservatives	😊	😊	😞
6. No antiseptic	😊	😊	😞
7. Proven efficacy & safety in babies	😊*	😞	😊

**Containing zinc oxide, antiseptic, perfume and preservative. *¹¹Sub-population of twins.

References: **1.** Atherton D. Maintaining healthy skin in infancy using prevention of irritant napkin dermatitis as a model. *Community Practice* 2005; 78: 255-257. **2.** Jordan WE, Lawson KD, Berg RW, Franxman JJ, Marrer AM. Diaper dermatitis: frequency and severity among general infant population. *Pediatric Dermatology* 1986; 3: 198-207. **3.** Lane AT, Rehder PA, Helm K. Evaluation of diapers containing absorbent gelling material with conventional disposable diapers in new born infants. *American Journal of Disease in Childhood* 1990; 144: 315-318. **4.** Clarke C, Hoarc C. Making the most of emollients. *Pharmaceutical Journal* 2001; 266: 227-229. **5.** Siegfried EC. Neonatal skin care and toxicology. In: Eichenfield LF, Frieden IJ, Estery NB (eds). *Textbook of neonatal Dermatology*. Pennsylvania WB Saunders 2001; p62-71. **6.** Hachem J-P, De Paepe K, Kaufman L, Roigers V, Roseeuw D. The effect of two moisturizers on skin barrier damage in allergic contact dermatitis. *European Journal of Dermatology* 2002; 12: 136-1385. **7.** Goujon C, Alleaume B, de Bony and Girard P. Randomized single blinded pilot study of the efficacy and tolerability of Bepanthen Ointment in subjects with bilateral dryness of the hands. *Realites Therapeutiques en Dermato – Venerologie* 1997; 66: 37-4. **8.** Proksch E, Nissen HP. Dexpanthenol enhances the skin barrier repair and reduces inflammation after sodium lauryl sulphate induced exposure. *The Journal of Dermatological Treatment* 2002; 13: 173-178. **9.** Putet G, Guy B, Andres P, Sirvent A, de Bony R and Girard F. Effect of Bepanthen Ointment on the prevention and treatment of diaper rash on premature and full term babies 2001; 70: 33-38. **10.** Millis KM & Atherton DJ. What can be done to keep babies’ skin healthy RCM Midwives Journal 2007; 7(7): 288-290. **11.** Putet G, Guy B, et al. Effect of Bepanthen Ointment on the prevention and treatment of diaper rash on premature and full-term babies. *Réalités Pédiatriques*. 63: 33-38, 2001.