



Caring for baby skin

Scientific research for
healthcare professionals



Caring for delicate infant skin

A newborn's skin is vulnerable and delicate, with the infant skin barrier continuing to develop and strengthen during the first year of life.¹ Protection is a key function of the mature skin barrier, acting as a defence against allergens, infections and irritants.

Structural differences between baby and adult skin

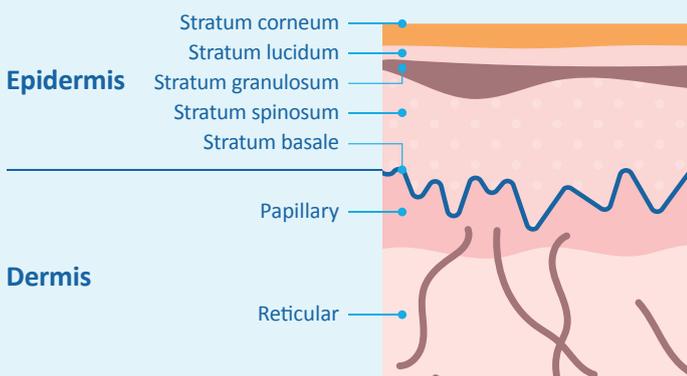
The skin of infants and young babies is unique compared with that of older children and adults. The epidermis in babies is 20% thinner and the stratum corneum is 30% thinner,² which increases susceptibility to permeability and dryness.³

Increased trans-epidermal water loss (TEWL)

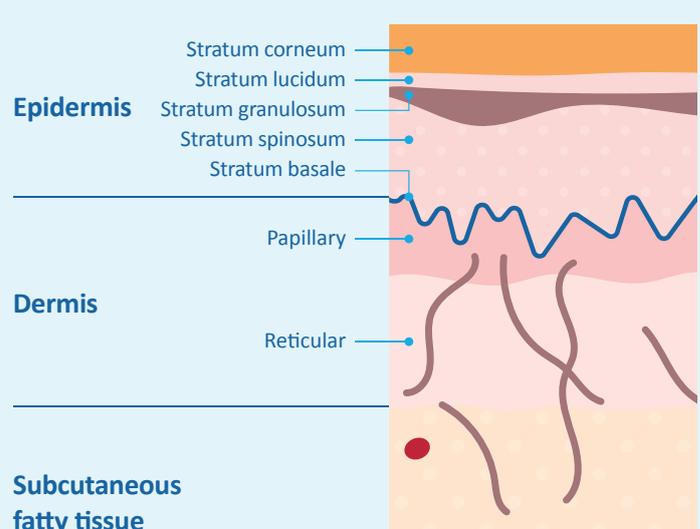
Baby skin is also less firmly attached than mature skin and has a higher propensity for increased TEWL and reduced stratum corneum hydration, reflecting a less effective skin barrier function.^{3,4,5} Also, because the ratio between baby body surface to baby body weight is higher, topical agents are more readily absorbed and can therefore have a more pronounced effect on baby skin.³

Comparison of baby skin to adult skin, showing thinner epidermis and stratum corneum

Newborn skin



Adult skin



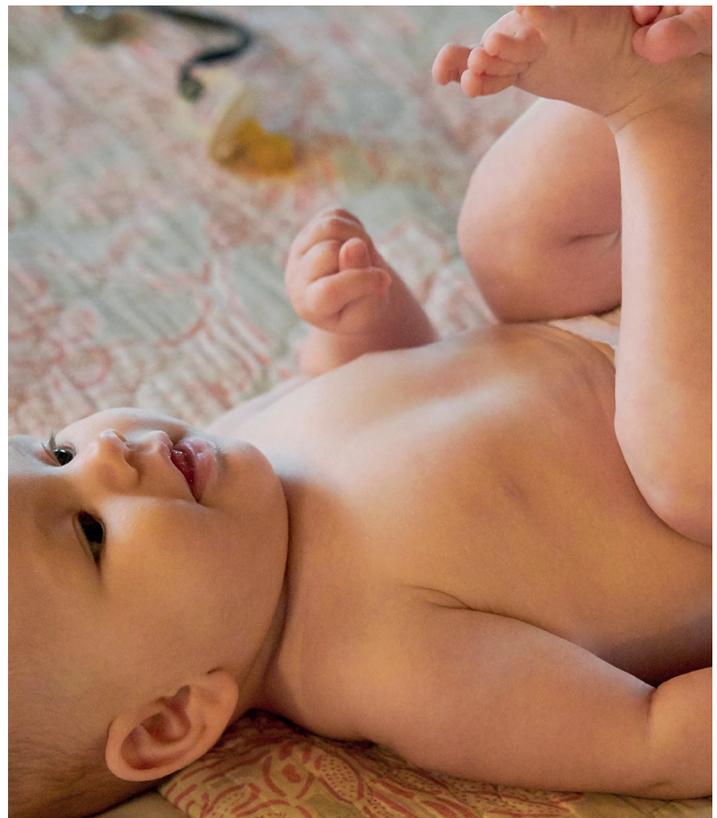
Trans-epidermal water loss (TEWL) is a normal process of the skin.

Babies thinner skin, increased TEWL and higher body surface to body weight ratio combine to make baby and infant skin a less effective barrier. As a result it is far more delicate and vulnerable, requiring special care and protection.

Understanding products for baby skin

It is recommended that any topical agents used for bathing and cleansing newborns and infants, should not adversely alter or affect the protective skin barrier.³

When considering products for use on neonate or infant skin, the aim should be to use those that help preserve the skin barrier function of the stratum corneum.³ Ideally, they should be



pH neutral (pH 5.5–7), fragrance free, alcohol free, contain only a mild preservative⁶ and have as few ingredients as possible.

There is no single irritant that causes nappy rash, although prolonged contact of the skin with urine and faeces in the nappy is considered the most common factor.⁷ It is therefore crucial that nappies are changed regularly and the area is thoroughly cleaned.

Helping parents select the correct types of products and ingredients for use on their baby's skin is important to help minimise skin conditions such as nappy rash and eczema, and preserve the skin barrier function.

WaterWipes® – the world's purest baby wipes

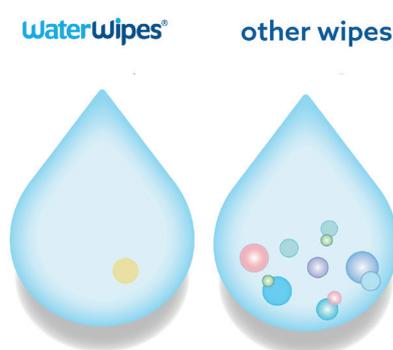
The WaterWipes® story

WaterWipes®, the world's purest baby wipes, were developed by Edward McCloskey. As a new father, Edward was searching for a safer alternative to standard baby wipes for his baby daughter, who suffered from sensitive skin and nappy rash. He wanted to create a product that was as mild and pure as using cotton wool and water, but as convenient as a wipe and suitable for the most delicate skin. Following many years of extensive scientific research and testing, WaterWipes® were launched in Europe in 2008 by Edward's company, Irish Breeze, a well-established skin care company.



We know that newborn and infant skin is different to that of older children and adults. It's constantly evolving and can take up to a year to fully mature and function in the same way as adult skin. Encouraging parents-to-be and new parents to choose a baby wipe with minimal ingredients will help preserve the skin barrier function and minimise skin conditions such as eczema.

**Robert Guaran, Neonatology Advisor,
NSW Perinatal Services.**



**Our wipes contain only 2 ingredients,
other wipes contain an average of 12 ingredients***

**Calculation based on the average number of ingredients in baby wipes products available globally.*

What makes WaterWipes® different?

- WaterWipes® have been found by the Skin Health Alliance to be purer than using cotton wool and water, helping maintain the important skin barrier function of the stratum corneum, while offering the convenience of a wipe
- WaterWipes® provide gentle cleansing for the most delicate newborn skin and can be used on babies from birth
- WaterWipes® are so gentle they can also be used on premature babies
- WaterWipes® are dermatologically tested and free from artificial fragrance to help maintain the integrity of the skin barrier and reduce the potential development of contact or allergic dermatitis⁸
- WaterWipes® are made using just two ingredients, 99.9% purified water and a drop of grapefruit seed extract (GSE), making them the purest baby wipes in the world. GSE contains naturally occurring polyphenol that have antioxidant properties, helping to protect the skin, as well as acting as a gentle skin cleanser and conditioner.
- WaterWipes® lower incidence and shorten duration of nappy rash in full-term and preterm babies ^{±11,12}

WaterWipes® are purer than cotton wool and water†

Based on a review of scientific literature by its independent team of experts, the Skin Health Alliance has validated that WaterWipes® baby wipes are purer than using cotton wool and water.



Cotton wool and water†

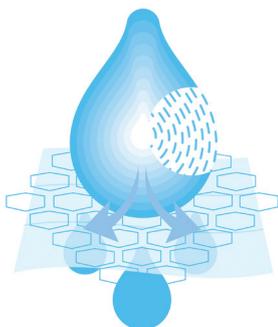
Water

Impurities and other minerals

Cotton wool

Detergents and impurities

†cooled boiled water



7-step purification process

Removes impurities, softens and purifies the water

Fruit extract

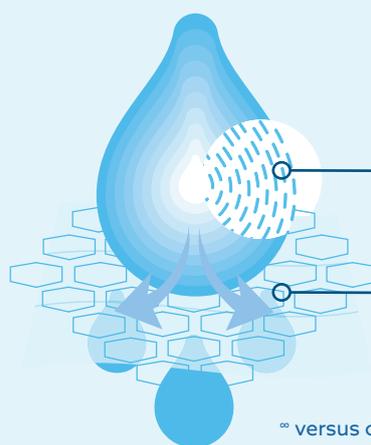
Has skin conditioning properties

Validated by



The WaterWipes® technology

The water used within WaterWipes® is what makes the product unique. WaterWipes® are manufactured under clean room conditions using a unique purifying technology. The water passes through a seven-step purification process that uses a series of filters to remove **impurities**, **soften** and **purify** the water. This purifying process makes the water significantly **purer than cooled boiled water** and produces a unique product that effectively cleanses the skin, without the need for several additional cleansing ingredients.



Our water technology

7-step water purification combined with fruit extract

A deeper & more effective clean[∞]

[∞] versus cotton wool / cloth & water

	AVERAGE NUMBER OF INGREDIENTS
	2
Pure wipes	9
Natural wipes	10
Sensitive wipes	10
Standard wipes	12

Minimal ingredients

Parents are increasingly looking for products with minimal ingredients. Even in wipes considered 'pure' or 'natural', the average number of ingredients start at nine. WaterWipes® contain just two, 99.9% purified water and a drop of GSE.

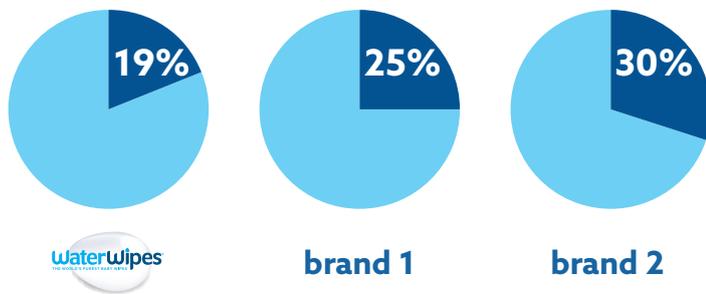


WaterWipes® lower incidence and shorten duration of nappy rash in full-term and preterm babies^{±,11,12}

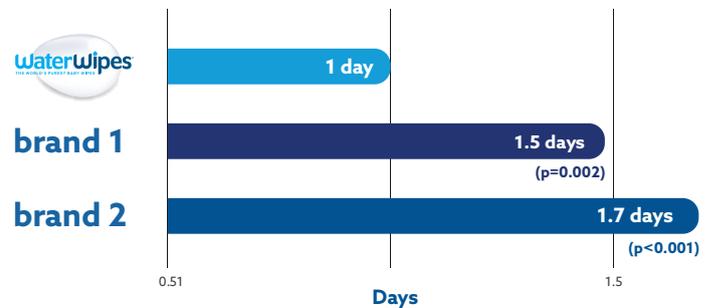
Full-term babies

A clinical study amongst 698 mothers, showed babies cleansed with WaterWipes® had a lower incidence and a shorter duration of moderate to severe nappy rash compared to other leading brands, marketed as mild and gentle enough for newborn skin.^{±, 11}

Lower incidence of nappy rash[±] when WaterWipes® formed part of their cleansing routine¹¹



Shorter duration of nappy rash[±] when WaterWipes® formed part of their cleansing routine¹¹



Preterm babies

An independent clinical study of over 1,000 premature babies in a NICU, showed use of WaterWipes®, along with perineal skin care guidelines lowered incidence and shortened duration of nappy rash.^{±,12}

A new perineal guideline which included a cleansing step showed:



Reduced overall nappy rash incidence in premature babies by 17%^{±, 12}



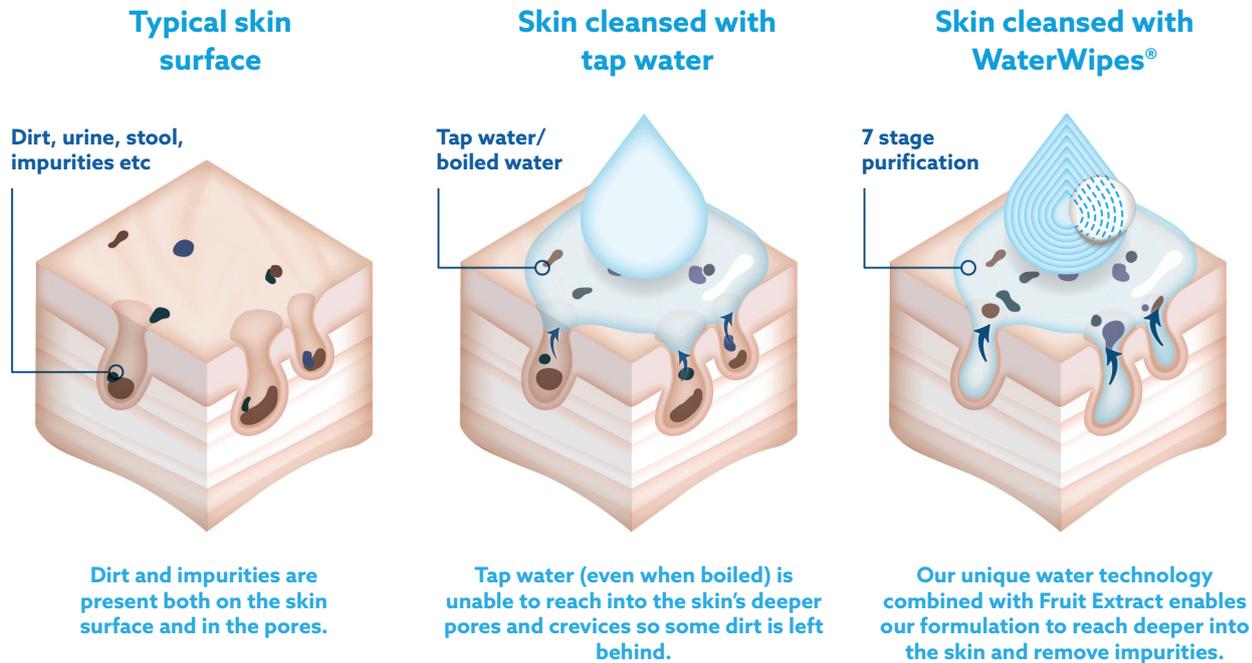
Reduced severe nappy rash incidence in premature babies by over a third^{±, 12}

Shortened duration of severe nappy rash in premature babies by more than half^{±, 12}

57%

WaterWipes® 7 step purification

WaterWipes® unique water purifying technology combined with fruit extract lowers surface tension, resulting in increased wettability and access to more dirt and impurities, therefore providing a deeper and more effective clean and with just two ingredients.



Recommended by healthcare professionals

- WaterWipes® are highly recommended by midwives and other healthcare professionals and have become the preferred wipe for some NICUs throughout the world¹³
- 97% of UK midwives and health visitors aware of the 'purity' credentials of WaterWipes® would recommend it¹⁴

Global accreditations

WaterWipes® has secured numerous accreditations, sponsorships and registrations from global skin and allergy associations including:



Baby's skin is so delicate, and it is just fantastic to have such a clean and pure product to help protect their skin from the very first day of their lives.

Barbara M Midwife, Dublin



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‡ WaterWipes® are a cosmetic product and do not treat, cure or prevent nappy rash.

For more information, email hcp@WaterWipes.com
or visit www.WaterWipes.com