Understanding the unique properties of baby and infant skin

The skin is the body’s largest organ and has three primary functions: protection, regulation and sensation.

It consists of three main layers:

1. **Epidermis**
   - Top layer of epidermis

2. **Dermis**
   - Uppermost layer of the dermis
   - Lowest layer of the dermis

3. **Subcutaneous fatty tissue**

Scientific research shows the importance of the top layer of the epidermis and its barrier function for babies, especially newborns.1

Research suggests alkaline products such as soaps and most cleansers found in conventional wipes can change the pH of baby’s skin disturbing the natural barrier.

Baby skin is structurally unique

Baby skin is less firmly attached than mature skin and has a higher natural tendency to increase loss of water from inside the body through the epidermis, and reduce hydration of the top layer of the epidermis, reflecting a less effective skin barrier function.1,2 The epidermis in babies is 20% thinner and the top layer of the epidermis is 30% thinner.4 As the ratio between baby body surface to baby body weight is higher,4 topical agents are more readily absorbed and can therefore have a more pronounced effect on baby skin.

These factors combine to make baby and infant skin a less effective barrier. As a result it is far more delicate and vulnerable, and requires special care and protection. It is important to select the correct types of product to use on baby skin to:

- Prevent nappy rash
- Preserve the barrier function
What makes WaterWipes different?

WaterWipes are the purest baby wipes in the world. They are made using 99.9% purified water and a drop of Grapefruit Seed Extract (GSE). GSE contains naturally occurring polyphenols which act as antimicrobials and antioxidants with the ability to protect the body from bacteria. It helps to keep the wipes fresh once opened, as well as acting as a gentle skin cleanser and conditioner. They are alcohol and fragrance free to help reduce the risk of drying out the skin and the potential development of contact or allergic dermatitis.

They are the only baby wipe to have secured numerous accreditations and endorsements from global skin and allergy associations including:

- Allergy UK
- The National Eczema Association of America (NEA)
- The French Association for the Prevention of Allergies (Association Française pour la Prévention des Allergies - AFPRAL)
- The Eczema Association of Australasia (EAA)

WaterWipes are suitable for use on even the most sensitive skin and can be used on babies from birth.

Recommended by professionals

WaterWipes are highly recommended by midwives and other healthcare professionals.

"We know that newborn and infant skin is different to that of older children and adults. It is constantly evolving and can take up to a year to fully mature and function in the same way as adult skin. WaterWipes offer a simple and convenient alternative to cotton wool and water, to help ensure the essential barrier function of the skin is preserved during the first year."

– Robert Guaran, Neonatology Advisor, NSW Perinatal Services

If you’d like more information on WaterWipes, please email us at info@waterwipes.com

REFERENCES