Skin is the largest organ in the human body and is the body’s primary defense against physical, chemical, and biological challenges.¹

Healthy, intact skin is an excellent physical barrier against irritants and pathogens

The stratum corneum, the outermost layer of skin, contains a mixture of dead skin cells (corneocytes) and lipids that are organized in a “brick and mortar” structural pattern to create a strong physical barrier that prevents penetration of irritants and pathogens.²³

Properly organized skin lipids prevent water loss from the body and help to maintain an intact barrier.⁴

The epidermis contains multiple sublayers, the outermost being the stratum corneum. The epidermis is constantly renewing and plays roles in physical and immune protection.¹²

Structural proteins such as collagen and elastin in the dermis provide support and elasticity to the skin to help protect from mechanical stress.

Healthy skin can provide protection against:

- UV light and pollution
- Cold and heat
- Urine and feces
- Chemical and physical damage
- Microorganism penetration
- Mechanical impact
- Prevents excessive dehydration
- Resorption of specific substances

Compared to full-term infant skin, preterm infant skin is thinner and has an underdeveloped skin barrier making preterm infants more susceptible to skin irritation and infection.
Characteristics of healthy infant skin

**Intact skin barrier**
A strong, intact physical skin barrier helps prevent damage from irritants and pathogens. ²

**Slightly acidic pH**
The skin surface is slightly acidic, with a pH around 5.5. This helps maintain a healthy skin microbial community and reduces the overgrowth of pathogenic microbes. ⁶,⁷

**Healthy microbiome**
Beneficial microbes living on the skin surface (commensal bacteria) signal to the body and help build a strong immune system to fight against infection.⁸

**Infection control**
Skin secretes infection control substances such as antimicrobial peptides or lipids through the hair canal or sweat glands, preventing pathogens from intruding the body.⁹,¹⁰

**Thermoregulation**
The deepest layer of human skin, the subcutaneous fat layer, insulates the body from extreme temperature changes outside, maintaining core body temperature consistently.¹

Huggies® is committed to making products that help keep baby skin healthy.

Infant skin in the diapered region is constantly exposed to excess moisture and irritants from urine and feces which can lead to skin barrier damage, increasing the susceptibility for irritation and infection. Huggies® Little Snugglers® diapers and Natural Care™ wipes play an important role in helping to keep skin clean and healthy.

References: