

# THE PROTECTIVE ROLE OF THE VERNIX CASEOSA

**In utero**, the naturally occurring vernix caseosa protects the fragile and immature skin barrier during the critical period of development.<sup>1</sup>



## This ceramide-rich fetal coating<sup>1</sup>:

- **Increases hydration, suppleness, and plasticity** of the stratum corneum (SC)
- **Decreases skin surface pH** to prevent pathological bacterial growth and support protective bacterial growth

The vernix caseosa is composed of lipids with a specific ratio of cholesterol (52%), free fatty acids (28%), and ceramides (20%).<sup>1</sup>

**After birth**, an improper ratio of ceramides can disrupt homeostasis, resulting in skin barrier impairment and leading to dryness, irritation, erythema, and itching.<sup>1</sup>

**Atopic dermatitis has been associated with a lower ceramide/cholesterol free ratio.<sup>2</sup>**

**Pediatric skincare with ceramides supports natural homeostasis<sup>1</sup>**