## **Germ fighting SUPERHERO!**

## What Is Vernix Caseosa?

Vernix caseosa, or vernix for short, is a white, cheesy-looking substance that coats the skin of your baby while in your uterus. Some babies are born with some of this protective coating still on the skin. The meaning of the name vernix caseosa is "varnish of a cheesy nature." Depending on who you ask, you either get "Eww, gross!" or "Wow, amazing!"

During your pregnancy, vernix plays an essential role, acting as a waterproof barrier to protect your baby's skin against the amniotic fluid that surrounds them until they are born. Vernix begins to form on your baby at about 20 weeks gestation, partially to prevent your baby's skin from getting too waterlogged after marinating in the amniotic fluid month after month. Unlike skin cells, vernix is more mobile and fluid. Even though it helps protect your baby's skin from amniotic fluid, the creamy vernix itself contains about 80% water. There are plenty of beneficial components to the vernix. Scientists have identified lipids, amino acids, proteins, antibacterial, and antimicrobial compounds and about 61% of the proteins found in this white substance, can only be found in vernix. And humans are the only ones that produce it, making it truly unique!

Babies born earlier tend to have more vernix than those born later. If your little one arrives a few weeks before his due date, he might still be well coated. If he's born on time, he might only have a little bit of vernix left in the folds of his skin or under his nails. If he's born late, he might not have any vernix left at all.

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One of the primary purposes of vernix is to protect your infant from unwanted pathogens,while in your uterus, and out of it. The mucus plug and amniotic sac both help protect your baby from harmful bacteria, but the vernix is truly the last line of defense!

It's a skin cleanser and antioxidant. It also offers a protective covering while going through your vagina. This allows your baby to pick up good bacteria as well as potentially avoid overgrowths of bad bacteria, viruses and fungi. For a long time, it was commonplace in hospitals that babies were taken away almost immediately after birth, weighed, cleaned and given back to mum clothed and presentable. We have since learned a lot and the World Health Organisation in fact recommends NOT cleaning babies after birth but leaving the vernix on and delaying that first bath for at least a few days ( a week if you can!).





Far from being gross or an unpleasant side-effect of pregnancy, the vernix coating your baby plays an important role and has immediate and long term benefits for your baby:

- It lubricates your baby making it easier to move through the vagina
- It moisturises baby's skin after birth (don't wash it off, rub it in!)
- It forms a protective barrier and is antimicrobial (a study showed that its properties are actually similar to breastmilk), inhibiting the growth of pathogens and promoting healing
- It facilitates the colonisation of the skin and gut with good bacteria to form a healthy microbiome
- Acts as an antimicrobial cover against any bacteria in the genital tract for your baby
- It prevents the loss of electrolytes and fluids and provides and protective layer to facilitate skin growth
- It contains high amounts of Vitamin E (remember that expensive moisturiser you bought?), which is an amazing antioxidant. Studies showed that babies who kept their vernix on had healthier skin (slowing down cell damage due to free radicals) and also a higher body temperature
- It helps newborns to maintain their body temperature, along with skin-to-skin that's all they need
- Vernix also smells of mama, which may provide comfort and help with bonding post birth. Not only is this magical substance awesome for baby, but it's good for mum too. Because it's antibacterial and antimicrobial in nature, it can help prevent infection of the vaginal canal as your baby passes through. It also has superior wound healing properties, and has even been shown to help perineal tears heal better.

## And it keeps protecting:

So what about post-term baby's? When your baby's lungs mature, they release a surfactant that mixes with the amniotic fluid which then emulsifies the vernix - causing it to shed from the skin. It is then ingested by the baby with the amniotic fluid so they do get all the goodness as well, building up an immune defense from the inside! Wow!

Although you might think it's a little icky and sticky to leave the vernix on, its beneficial properties are important for your baby, and it won't be long before you'll have your freshly washed baby skin. The majority of the vernix is absorbed within the first day, so anytime after the first 24 hours would be okay to give baby his first bath. But, vernix doesn't <u>fully absorb</u> until day 5 or 6, so it would be best to wait until then.

In the meantime, wrap your baby in a soft blanket and enjoy these unforgettable first few hours with your baby, safe in the knowledge that the coating of vernix is also working to protect your baby's delicate skin.



