Why Does My Milk Matter for My Premature Baby?

Premature babies have spent less time inside their mothers' bodies during pregnancy, so their body organs and systems are not as developed as those of full-term babies.

The immaturity in these organs and systems means that premature babies are more likely to develop health complications during and after the NICU hospitalization. Receiving your milk even for a short time lowers the chances of these complications. Receiving your milk all the way through to NICU discharge helps these immature body organs and systems develop in the healthiest way possible. **Neither formula nor donor milk does this.**

Your baby's intestines: Babies swallow large amounts of amniotic fluid during the last 2-3 months of pregnancy, and this swallowing is cut short with premature birth. Amniotic fluid contains substances that speed up the growth and development of your baby's intestine, but many of these same substances are in your milk! Colostrum, the milk you make in the first days after birth, is especially rich in substances that protect your baby's intestines. Receiving your milk lowers the chances of **necrotizing enterocolitis**, a serious intestinal disease in premature babies.

Your baby's lungs: Babies' lungs undergo rapid development all the way through to 39 completed weeks of pregnancy, so premature babies often have breathing problems. Your milk contains high amounts of substances that help reduce the negative effects of oxygen, called **antioxidants**, and that lessen irritation in the lungs, called **anti-inflammatories**. These substances help lower the chances of **chronic lung disease** or **bronchopulmonary dysplasia (BPD)**, a serious lung disease in premature babies.

Your baby's brain: Premature babies' brains are very underdeveloped compared to full term babies, especially the part that sends messages from one part of the brain to the other. This part of the brain, called *white matter*, grows more rapidly than other parts of the brain between 27 weeks of gestation and full-term birth. Your milk helps the *white matter* grow in the best way possible, as well as protecting it from irritation and infection while it is growing.



Your baby's body systems: Your milk helps develop many body systems in your baby. Two of the most important are the digestive system and the infection-fighting (immune) system.

- **Digestive system:** Your milk is the easiest for your baby to digest because it contains substances that help break down the milk fats, proteins and sugars so your baby can use them to grow. Your milk also helps important digestive juices in your baby's intestine to become active. These digestive juices stay with your baby throughout his or her life.
- Infection-fighting (immune) system: Premature babies are especially at risk for infections because they have had less time during pregnancy to store up antibodies from their mothers. Your milk helps your baby fight infections during and after the NICU hospitalization in many ways. For example, in the NICU, your body makes antibodies to germs in your baby's surroundings, and these specific antibodies pass into your milk, giving your baby personalized protection! Your milk also reduces the chances of infection in your baby long after milk provision ends because it teaches his or her immune system how to fight infections on its own.

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We look forward to your inquiry at: contact@lactahub.org



