

The Differences

Breast Milk and Formula



	BREAST MILK	FORMULA
Proteins	<p>Breast milk has special proteins designed for human babies including:</p> <ul style="list-style-type: none"> • Lactoferrin, which keeps the baby's tummy healthy. • Proteins needed for brain and body development. • Sleep inducing proteins. <p>The proteins are easy for the baby to digest and absorb.</p>	<p>Formula does not have many of the proteins found in breast milk. Formula commonly has cow's milk or soy protein, which some babies have sensitivities or allergies to. The proteins in formula are harder to digest and absorb.</p>
Enzymes	<p>Breast milk has enzymes, which break down elements in the milk and helps the baby to digest it. The proteins are easy for the baby to digest and absorb.</p>	<p>Formula does not have any enzymes to help with digestion.</p>
Antibodies	<p>Breast milk has antibodies, which are also called Immunoglobulins. These are cells that specifically target germs, which cause illnesses. The mother's body will make these immunoglobulins, which target germs in the environment. These are passed to the baby through breast milk. These cells help to protect the baby from germs and illnesses.</p>	<p>Formula has some immunoglobulins, but they do not target the germs in the baby's environment.</p>
Immune Protection	<p>Breast milk has many live cells, which work to protect the baby. There are high quantities of white blood cells, which work to kill germs. Just as the placenta nourished and protected your baby in the uterus, breast milk will continue to nourish and protect your baby.</p>	<p>Formula does not contain live cells or white blood cells due to the way it is made.</p>

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Growth Factors	Breast milk has human growth factors, which promote healthy cell growth and help your baby grow.	There are no human growth factors in formula.
Hormones	Breast milk has many hormones, such as prolactin and oxytocin. These hormones are important to the baby's growth and development.	There are no hormones in formula.
Vitamins	Breast milk has all the needed vitamins for your baby's growth and development. The vitamins in breast milk are well absorbed. Your doctor will recommend that you give your baby vitamin D. Vitamin D is produced by your skin based on sun exposure. Speak to your doctor about your baby's particular vitamin needs.	Formula has vitamins, but they are less well absorbed. The vitamin content may decrease over time and also from the time between when the formula is prepared to when it is fed to the baby.
Water	Water is the largest component of breastmilk. The water in breastmilk quenches baby's thirst even when it is hot outside.	Different types of formulas contain different amounts of water. It is important to follow the manufacturer's instructions carefully to ensure the right amount of water is used in formula. Using too much or too little water when preparing formula can put the baby's health at risk.
Carbo- hydrates	Breast milk has large amounts of carbohydrates such as lactose, the sugar found in milk, and oligosaccharides, which are important for a healthy digestive system. The carbohydrates in breast milk are also important for brain development.	Some formulas contain carbohydrates such as lactose. Others may have corn syrup or sucrose. These are used to replace some or all of the lactose.

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Fats	Breast milk has fats that adjust to the baby's needs. The amount of fat is controlled by the baby's feeding pattern, and age. The digestive enzymes in breast milk help digest fat for easy absorption. Breast milk is rich in cholesterol, which is needed for your baby's growth and development.	The fat in formula does not adjust to the baby's needs. The fat content remains consistent at every feed and over time. Formula does not contain enzymes to help digest fat. The fat in formula is more difficult to digest than the fat in breast milk. There is no cholesterol in formula.
DHA/AA	Breast milk contains docosahexaenoic acid (DHA), an omega-3 fatty acid, and arachidonic acid (AA), an omega-6 fatty acid. DHA and AA are naturally found in breast milk. These are important for your baby's brain growth and development.	Formula does not generally contain the fatty acids DHA or AA. Some specialty formulas have DHA or AA which come from non-human sources.
Minerals	Breast milk has all necessary minerals and some antioxidants. The minerals in breast milk are well absorbed. For example, iron absorption from breast milk is over 50%. Minerals are provided in the amount specifically needed to meet your baby's needs.	Formula has a higher amount of minerals, but they are not as easily absorbed. For example, Iron absorption from formula is around 10% or less.
Changes	Breast milk changes throughout the day and as your baby grows and develops. Mothers who have premature babies have different breast milk than mothers who have delivered term babies. The flavour food passed through breast milk may help the baby become familiar with the taste of food when solids are added to baby's diet at 6 months.	Formula is consistent from feed to feed.