



The Newborn Discovering Mother's Milk

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Biography

PhD in neuroscience, L.M. is a researcher for scientific research in Straßbourg (France). His special interests are in sensorial and cognitive development in children, especially during the fetal and neonatal period

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Abstract

If you put a newborn on the abdomen of his mother he will find spontaneously his way to the breast for his first feed. How can he be able to orientate himself towards the source of his milk?

By now it is known that all comes together, the fetus is able to perceive smells in the amniotic fluid and can remember them: the olfactory receptors are mature from the end of the first trimester, the sense of smell does work even in liquid medium and the infantile brain is able to encode sensorial information.

This is why newborns born to mothers who consumed spicy food at the end of their pregnancy are heavily attracted by these smells. They display vigorous sucking movements. Research in preterm babies confirms that olfactory information can be encoded well before the normal due date. The term baby is born with a well equipped amniotic memory.

On way to find out whether the newborn is able to use olfactory information already encoded in utero to orientate himself towards the breast of his mother, uses the comparison of his reaction to the smell of amniotic fluid and colostrums. Which smell the newborn will try to actively follow? There are observations showing that the reaction of a newborn to amniotic fluid or colostrums is alike. This indifferent reaction does not surprise as both fluids have numerous flavors in common.

From the fourth day of life a preference for breastmilk will develop.

If you repeat this test with children fed artificial formula they will not show the same preference.

From the fourth day of life they will rather follow the smell of the amniotic fluid than that of artificial formula. Even so the formula has satisfied their needs five to six times per day from birth on.

In this case the in utero got to know and saved smell remains more attractive than new smells experienced after birth. These same children show equally a preference for breastmilk (not from the own mother) in comparison to artificial formula.

The preference for the first milk is therefore based on solid prenatal experience.