

For baby, a breast-milk cappuccino: Morning feed gives infants a natural pick-me-up

By Jenny Hope

Breast-fed babies receive a different milk drink depending on the time of day - the natural equivalent of cappuccino in the morning and Horlicks at night, say scientists. Breast milk delivered in the morning gives infants a pick-me-up because it contains natural stimulants. But the night-time version will help babies sleep thanks to calming chemical compounds, a report claims.

This means mums who express milk for feeding from a bottle should make sure it is given to baby at the same time it came from the breast - otherwise it could disrupt sleeping patterns. The report in the journal

Nutritional Neuroscience might explain why some babies sleep or become active at odd times of day or night when working mothers express milk for use later in the day. They could be giving morning milk in the evening and vice versa.

Spanish researchers discovered the chemical make-up of breast milk changes across a 24-hour period. A woman's body adapts the amount it produces of nucleotides - compounds used to regulate a baby's sleep or promote activity - Breast milk has three different nucleotides - adenosine, guanosine and uridine - and the combination between them decides whether a baby is restless or sleepy or normally active.

The scientists from the University of Extremadura looked at samples of breast milk taken at eight different points of the day from a group of new mothers. The nucleotide concentrations during the night were at their most sleep-inducing but less so during the day. Researcher Cristina Sanchez said 'You wouldn't give anyone a coffee at night, and the same is true of milk. It has day-specific ingredients that stimulate activity in the infant, and other nighttime components that help the baby to rest. It is a mistake for the mother to express the milk at a certain time and then store it and feed it to the baby at a different time.'

NHS experts say breastfeeding gives babies all the nutrients they need for the first six months of life. Research published earlier this year found women who breastfeed are less likely to have high blood pressure, diabetes and high cholesterol, and heart disease. Other studies have shown breastfeeding helps protect mothers against ovarian and breast cancer, and osteoporosis in later life.

<http://www.dailymail.co.uk/health/article-1217765/For-baby-breast-milk-cappuccino-Morning-feed-gives-infants-natural-pick-up.html#ixzzoT6qUgSKv>