

# BREASTMILK'S UNIQUE PROGRAMMING REVEALED

Submitted by: Bump PR

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New findings presented at the 14th International Breastfeeding and Lactation Symposium (<https://www.medela.com/breastfeeding-professionals/news-events/congress-2019>) 4-5 April, London will give clues to why breastfed babies are less likely to become obese in later life.

Prof Donna Geddes, Director of the Human Lactation Research Group at the University of Western Australia, will explain the latest research into how breastmilk regulates infant appetite and body composition.

It has been found that breastmilk contains appetite-controlling hormones, known as leptin and adiponectin. These hormones are also present in some of the infant formula milks but in lower doses which cannot adapt to the individual infant's diet or stage of development. Breastmilk though operates very differently, with its unique ability to tailor every feed to the infant's needs, providing a precise dose of required hormones.

Dr Geddes and her colleagues have been working on a project entitled 'The role of human milk in programming infant body composition' for the past five years. They have established for the first time how:

- Each mother's breastmilk regulates the precise dose of appetite-controlling hormones for that individual baby's stage of development. Babies who take in less over a 24-hour period may receive more concentrated milk than those who take in more.
- The volume of milk intake is governed by the baby's appetite and the concentration of appetite hormone is determined by the mother; and the two determine the dose of hormone. This suggests a two-way relationship between the mother and the baby to determine the exact hormone dose an infant requires.
- These hormones do more than determine growth rates. They signal precisely the ratio of fat to lean tissue the baby's body should be developing.
- Optimal development of body composition early in life is believed to reduce risk of both childhood and later obesity.
- Breastfeeding and breastmilk are dose dependent; the longer and infant can breastfeed and receive breastmilk the better the protective qualities, many of which are lifelong benefits.

"The concentration of components within breastmilk work together to ensure the development of the right amount of fat and muscle for each baby," says Dr Geddes. "We are establishing a new 'normal' for infant development, taking breastfed babies as the standard. This is extremely important because we know these babies are less likely to become obese and have less risk whole host of other conditions in later life.

The breastfed infant is clearly the gold standard and represents the norm when assessing infant growth. The mechanisms by which breastfeeding regulates this growth is complex and still incompletely understood

mainly because each mother and baby are unique when it comes to milk composition and milk intake.  
concludes Dr Donna Geddes.

ENDS

Press Conference:

When: 9-10.30am - Thursday 4th April 2019

Where: London Hilton on Park Lane.

To request an interview with Prof Geddes, or to register for the press conference or symposium itself,  
please contact PR Manager Lisa Bryant at bumpPR on 01462 613002|07737431511 or email on [lisa@bumppr.co.uk](mailto:lisa@bumppr.co.uk)