

PRESS RELEASE

13th International Breastfeeding and Lactation Symposium

Mother's Milk in the first 1,000 days of life: Key to a lifetime of good health and the future of medicine

- Breastfeeding improves lifelong vascular (blood vessel) health, and reduces obesity, diabetes, allergies, and asthma later in life
- The mother-baby bond fostered by breastfeeding contact improves long-term psychological well-being
- Breastfeeding has been proven to offer cognitive benefits as late as 67 years of age
- The positive benefits of breastfeeding begin to show after three months of exclusive breastfeeding, and increase with longer breastfeeding

Baar, Switzerland/Paris, France – 9 April 2018.

“People think the genes are everything. Actually the environment in the first 1,000 days dramatically influences the way those genes act throughout your life,” said Prof Laurent Storme, and launched into an exposé on the lifelong impact of the mother-baby environment during those first 1,000 days, at the 13th International Breastfeeding and Lactation Symposium in Paris, March 22. From plastics, pesticides, candles, and cosmetics—things to avoid—to fish, fresh produce, and breastfeeding---things to include—the environment during pregnancy and the first two years largely steers the course of a person’s life. No intervention during the two years after birth has been proven to positively impact lifelong health as much as breastfeeding.

Noncommunicable disease is rising sharply in the young and old

10 times more adults now have Type II Diabetes, and 10 times more adults are obese. Fertility is decreasing dramatically, while the rates of chronic, noncommunicable diseases like Alzheimer’s, allergies, and asthma, among many others, is increasing constantly. These diseases have no cure, and symptom management demands long, expensive treatments.

Your environment may be more important than your genes

Genes have been all the rage in the past two decades, especially with the recent widespread popularity of genome sequencing. A growing body of evidence, however, points to epigenetics (the influence of the environment on genetic development) as the real key to identifying how diseases develop. The genes alone may offer one predictor of potential disease, but what people can influence is whether the environment triggers those genes or not.

Prof Laurent Storme, Head of the Department of Neonatology of Lille University Hospital and Vice-President of the French DOHaD Society, says, “Of course we all recognize that our environments impact our health, but what we fail to recognize is that the sooner in life you are exposed to an adverse environment, the greater the impact will be on your future health. That also means that the sooner you are exposed to a favourable environment, the more positive the impact will be on your later health.”

It is all downhill after the age of two?

According to Storme, “After the age of two, your health starts to deteriorate over time. If you have a really positive, favourable environment, this deterioration starts later in life. This concept has been validated through numerous studies. So, if we really want to help people, as healthcare professionals, this is where we have to act.”

Critical window of opportunity

“That is why I like to view the first 1,000 days in a positive light, as a critical window of opportunity,” says Storme. “It is the first and most important of three critical periods of development, the other being puberty and menopause.”

“We have to think in terms of perinatal programming of health. Those diseases we see later in life is programmed largely during those first 1,000 days,” says Storme. “The Developmental Origin of Health is a new paradigm. In another 10 or 20 years, we are going to be focusing on this confidently, on getting the beginning, the programming period, right, rather than trying to manage what cannot be fixed later on. This is the future of medicine. By improving the mother-baby environment, we can reduce all of those chronic afflictions in adulthood.”

Lifelong benefits of breastfeeding as an environmental factor

“Although we need to do more prospective, intervention-based studies to measure comprehensive outcomes, there is already robust scientific evidence for the benefits of breastfeeding beginning in infancy and continuing throughout life,” says Storme.

Research shows, for example, that breastfeeding prevents obesity in adults, and results in higher cognitive scores in children, adolescents, and young adults.ⁱ The first cognitive benefits are clear after three months of exclusive breastfeeding, and they increase with longer breastfeeding, especially beyond six months. One study ties positive cognitive scores in 67-year-olds to breastfeeding.ⁱⁱ Another study shows breastfed babies reap psychological benefits at the age of 30.ⁱⁱⁱ

“This is true for all babies, but of course, the more vulnerable the baby, like a premature, or low-birth-weight baby, the greater the impact of breastfeeding,” says Storme.

Breastfeeding is a powerful intervention

Prof Bruce German, Director of the Food for Health Institute, University of California, Davis, calls breastfeeding a mother “dissolving her body” to feed her baby. Storme adds that the individual components in mother’s milk, like the amount of Vitamin D, Omega-3 fatty acids, and other factors are not just the result of what a mother ate the day before, but rather of what she has eaten, how she has exercised, and the kinds of toxins and stress she has been exposed to for the many months before the baby is born.

That is why programmes like the IHAB (Baby Friendly Hospital Initiative) breastfeeding promotion programme in France offer pregnant and nursing mothers advice on everything from diet and exercise to cosmetics, to buying new furniture. (Hint: get a partner or friend to buy it at least three months before the baby is born to avoid mother-baby exposure to volatile, endocrine disruptors!)

Everyone has a role to play in making the mother-baby environment positive in the first 1,000 days

“Mothers and babies need to be protected. We all start as babies, this is about building a stronger, healthier society,” says Storme.

He continues, “Everybody should concern themselves with encouraging and protecting breastfeeding mothers and babies. In addition to the myriad benefits of the breast milk itself, the link between a mother and baby predicts lifelong mental and physical health.” Contact, especially during breastfeeding, triggers secretion of the love hormone, oxytocin, which improves the mother-baby bond, strengthens the lymph system, and decreases anger and agitation.

“It is not just about helping practically, it is also about empathy and well-being. The entire environment has an impact on the mother and baby.” In short, as many have said, it takes a village. Even breastfeeding is not just a mother’s job, but is something that requires support from our entire society.

About Medela

Founded in 1961 and headquartered in Switzerland, Medela invests in basic research in partnership with leading scientists, medical professionals and universities, to develop world-leading breastfeeding products, education, and solutions. Read more at [medela.com](https://www.medela.com).

More Information for Journalists:

- [Prof Laurent Storme biography and scientific abstract](#)
- [March 22 symposium press conference livestream recording](#)
- [2018 Symposium highlights and images](#)

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ⁱⁱ Psychological Medicine (2018), 48, 939–951. © Cambridge University Press 2017 doi:10.1017/S0033291717002331.

Association between breastfeeding and better preserved cognitive ability in an elderly cohort of Finnish men. V. Rantalainen^{1,2*}, J. Lahti^{1,2}, M. Henriksson^{3,4}, E. Kajantie^{5,6,7}, M. Mikkonen^{8,9}, J. G. Eriksson^{2,10,11} and K. Raikonen¹

ⁱⁱⁱ European Journal of Personality, Eur. J. Pers. 30: 484–491 (2016). Published online in Wiley Online Library (wileyonlinelibrary.com) DOI: 10.1002/per.2030. Breastfeeding and Adult Personality. Angelina R. Sutin^{1*}, Yannick Stephan² And Antonio Terracciano¹