



Date reviewed: July 2007
Briefing BF5/RD

Enquiries: 0300 33 00 770
Press Office: 0870 7703238
Email: policyresearch@nct.org.uk
Website: www.nct.org.uk

NCT Briefing: Breastfeeding brings benefits to all

This short briefing provides an overview of the health benefits of breastfeeding, with supporting references.

Breastfeeding is ideally suited for babies' health, growth and development. It means that they receive the vital immunity they need to protect them against illness. Breastmilk promotes the growth of babies' nerves, brains and gut with special factors that are not present in any other milk. The composition of breastmilk changes during a feed, between feeds and as the baby grows, to provide for all their needs.

There is good evidence from studies in developed countries where social and educational factors are controlled for that artificially fed babies are at greater risk of:

- gastro-intestinal infections¹ (diarrhoea and vomiting)
- respiratory infections²
- necrotising enterocolitis (life threatening bowel disease in premature babies)³
- urinary tract infections⁴
- ear infections⁵
- allergic disease (eczema, asthma and wheezing)^{5,6}
- insulin-dependent diabetes mellitus⁷

Other studies show breastfeeding is associated with:

- lower levels of obesity, blood pressure and cardiovascular disease in later life⁸
- a reduced risk of childhood cancer⁹
- and higher average scores on intelligence tests¹⁰

In later life, women who breastfeed are at lower risk of:

- breast cancer¹¹
- ovarian cancer¹²
- hip fractures and reduced bone density¹³
- diabetes¹⁴

Financial costs

It has been estimated that formula feeding costs at least £450 per year. In addition, the protection offered to babies through breastfeeding can lead to significant cost savings in the treatment of some illnesses, as well as reducing the indirect human costs to families which result from anxiety,

stress and the disruption caused by hospitalisation. It has been estimated that for each 1% increase in breastfeeding at 13 weeks, a saving of £500,000 in the treatment of gastro-enteritis would be achieved and that a 5% increase in breastfeeding rates could save British hospitals at least £2.5 million every year.¹⁵

Estimates prepared by the Birmingham's Public Health Network indicate that if breastfeeding rates in Birmingham were increased to 90% as in some Scandinavian countries, more than 250 hospital admissions per year, of children under the age of 4 years, and 18 deaths a year from breast cancer could be avoided.¹⁶

Environmental costs

Breastfeeding puts much less strain on the environment. Raising cows with sufficient food to maintain a high milk output, processing, sterilising, the production of bottles and other equipment for formula feeding, packaging and transport all increase energy consumption and pollution. Women who breastfeed have fewer periods, reducing the need for sanitary protection. All in all, everyone benefits.

References and other sources of information:

1. Howie PW, Forsyth JS, Ogston SA, et al. Protective effect of breast feeding against infection. *BMJ* 1990;300(6716):11-6.
2. Oddy WH, Sly PD, De Klerk NH, et al. Breast feeding and respiratory morbidity in infancy: a birth cohort study. *Arch.Dis.Child* 2003;88(3):224-8.
3. Lucas A, Cole TJ. Breast milk and neonatal necrotising enterocolitis. *Lancet* 1990;336(8730):1519-23.
4. Marild S, Hansson S, Jodal U, et al. Protective effect of breastfeeding against urinary tract infection. *Acta Paediatr* 2004;93(2):164-8.
5. Ip S, Chung M, Raman G et al. *Breastfeeding and maternal and infant health outcomes in developed countries. Evidence Report/Technology Assessment No 153.* Rockville, MD: Agency for Healthcare Research and Quality; 2007. Available from: <http://www.ahrq.gov/clinic/tp/brfouttp.htm>
6. Kramer MS, Matush L, Vanilovich I, et al. Effect of prolonged and exclusive breast feeding on risk of allergy and asthma: cluster randomised trial. *BMJ* 2007;335(7624):815-8.
7. Sadauskaite-Kuehne V, Ludvigsson J, Padaiga Z, et al. Longer breastfeeding is an independent protective factor against development of type 1 diabetes mellitus in childhood. *Diabetes/Metabolism Research and Reviews* 2004;20(2):150-7.
8. Martin RM, Ness AR, Gunnell D, et al. Does breast-feeding in infancy lower blood pressure in childhood? The Avon Longitudinal Study of Parents and Children (ALSPAC). *Circulation*. 2004;109:1259-66.
9. Shu XO, Linet MS, Steinbuch M, et al. Breast-feeding and risk of childhood acute leukemia. *J Natl Cancer Inst.* 1999;91(20):1765-72.
10. Anderson JW, Johnstone BM, Remley DT. Breast-feeding and cognitive development: a meta-analysis. *American Journal of Clinical Nutrition* 1999;70(4):525-35.
11. Collaborative Group on Hormonal Factors in Breast Cancer. Breast cancer and breastfeeding: collaborative reanalysis of individual data from 47 epidemiological studies in

30 countries, including 50302 women with breast cancer and 96973 women without the disease. *Lancet* 2002;360(9328):187-95.

12. Rosenblatt KA, Thomas DB. Lactation and the risk of epithelial ovarian cancer. The WHO Collaborative Study of Neoplasia and Steroid Contraceptives. *Int.J Epidemiol.* 1993;22(2):192-7.
13. Polatti F, Capuzzo E, Viazzo F, et al. Bone mineral changes during and after lactation. *Obstet Gynecol.* 1999;94(1):52-6.
14. Stuebe AM, Rich-Edwards JW, Willett WC, et al. Duration of lactation and incidence of type 2 diabetes. *JAMA* 2005;294(20):2601-10.
15. National Breastfeeding Working Group. *Breastfeeding: good practice guidance to the NHS. Prepared in consultation with the National Breastfeeding Working Group.* London: Department of Health; 1995.
16. Stewart T. *Children's nutrition - mothers who wish to breast-feed. A pilot health scrutiny review.* Birmingham: Birmingham City Council; 2003.

Date for review: July 2008

U:\Briefings\Baby feeding\BF5 BF benefits all.doc

The NCT wants all parents to have an experience of pregnancy, birth and early parenthood that enriches their lives and gives them confidence in being a parent.

Donations to support our work are welcome.

Registered No. 2370573 (England) • Registered Office: Alexandra House, Oldham Terrace, London W3 6NH • Registered Charity No. 801395