

# Evidence for Breastfeeding Superiority

## Is breastfeeding really better than formula?

**YES!**

There is an enormous body of high quality research which demonstrates that breastfeeding is markedly superior to formula feeding in terms of infant and maternal health. There is also ample research which reveals that families and society reap significant financial benefits from breastfeeding. What follows is a tiny sample of the published data supporting breastfeeding.

- Multiple diseases:** In April 2007, the Agency for Healthcare Research and Quality within the US Department of Health and Human Services published "Breastfeeding and Maternal, & Infant Health Outcomes in Developed Countries," an outstanding review of high quality research. Following is a summary of their findings. The results are expressed as odds ratios and also as the number of breastfed infants who would be affected compared to the number of formula-fed infants affected. So 1:2 for example means for every one breastfed baby with the condition, two formula-fed babies would be affected. An odds ratio of "1" means that the chances that a breastfed baby would be affected are equal to the chances of a formula fed baby. The smaller the odds ratio is, the fewer breastfed babies would be affected by the condition compared to formula-fed babies.

<u>Infant Outcomes</u>	<u>Odds Ratio</u>	<u>#BF affected per # formula-fed affected</u>
GI Infection	.36	1:3
Asthma	.6	3:5
Obesity	.76	3:4
Type I diabetes	.9	9:10
Type II diabetes	.61	3:5
Leukemia	.8	4:5
SIDS	.64	3:5
NEC	.42	2:5
AOM	.50	1:2
Atopic Dz w/ Fam Hx	.58	1:2
Atopic Dz w/o Fam Hx	.84	8:9
Hospital for LRTI	.28	1:4

<u>Maternal Outcomes</u>	<u>Odds Ratio</u>	<u>#BF moms per # formula feeding moms</u>
Breast Cancer	.6 - .9	3:5 to 9:10
Ovarian Cancer	.6 - .9	3:5 to 9:10

For a copy of the report go to <http://www.ahrq.gov/clinic/tp/brfouttp.htm>.



### Breastfeeding matters

It is estimated that globally the adoption of breastfeeding would save 10,000,000 children's lives per year.



[www.ncbfc.org](http://www.ncbfc.org)

- **IQ:** Dr. Kramer et al. proved that breastfeeding has a small but definitive positive outcome on IQ. His is an outstanding study with a sample size of 13,889 infants. The results revealed those who were breastfed had the following increase in IQ using Wechsler Abbreviated Scales of Intelligence Measures:

Verbal IQ +7.5  
 Performance IQ +2.9  
 Full Scale IQ +5.9

*Breastfeeding and Child Cognitive Development. Kramer MS; Aboud F, et al. For the Promotion of Breastfeeding Intervention Trial (PROBIT) Study Group. Arch Gen Psychiatry. 2008; 65(5):578-584.*

- **Cancer:** There is a clear decrease in the risk of ovarian cancer with breastfeeding. The evidence for breast cancer reveals benefits for certain types of cancer and no difference for other types. There is less premenopausal breast cancer in women who have breastfed, but there is not much difference in postmenopausal breast cancer.

**Results:**

Women who have never breastfed have a 1.3-1.5 fold increase in their risk of ovarian cancer. A meta analysis found that for every year of breastfeeding, a woman's risk of invasive breast cancer was reduced by 4.3%.

*For a review of the recent literature on this topic, see The Risks of Not Breastfeeding for Mothers and Infants. Stuebe, A. Review Obstet Gynecol. 2009; 2(4): 222-31. <http://www.ncbi.nlm.nih.gov/pmc/articles/PMC2812877/?tool=pubmed>.*

- **Gastrointestinal & respiratory illnesses:** Breastfeeding is remarkably protective against gastrointestinal and respiratory illnesses as reported in the Breastfeeding and Hospitalization for Diarrheal and Respiratory Infection in the United Kingdom Millennium Cohort Study.

**Results:**

Study of 15, 890 infants up to age 8 months:

- 53% of diarrhea hospitalizations could be prevented each month by exclusive breastfeeding
- 31% of diarrhea hospitalizations could be prevented each month by partial breastfeeding
- 27% of lower respiratory tract infection hospitalizations could be prevented each month by exclusive breastfeeding
- 25% of lower respiratory tract infection hospitalizations could be prevented each month by exclusive breastfeeding

*Breastfeeding and Hospitalization for Diarrheal and Respiratory Infection in the United Kingdom Millennium Cohort Study. Quigley MA, Kelly YJ, Sacker A. Pediatrics. 2007; 119:e837-e842; <http://www.pediatrics.org/cgi/content/full/119/4/e837>.*

- **Infant mortality:** It is estimated that globally the adoption of breastfeeding would save 10,000,000 children's lives per year. (Jones, G et al How Many Child Deaths Can We Prevent This Year? The Lancet 2003; 362:65-71) This is largely in underdeveloped countries.

Mortality is also affected in developed countries as evidenced in this study.

**Results:**

Case control Study: 1204 cases, 7740 controls

- Ever breastfed children had 0.79 risk of dying in the postneonatal period
- Longer breastfeeding was associated with lower risk

## Infant mortality (cont.)

- Overall breastfeeding would eliminate 720 postneonatal deaths in the U.S. annually

*Breastfeeding and the Risk of Postneonatal Death in the United States. Chen A, Rogan WJ. Pediatrics. 2004;113:e435-e439; <http://www.pediatrics.org/cgi/content/full/113/5/e435>.*

- **SIDS:** Breastfeeding has an enormously positive effect on SIDS:

### Results:

Case Control Study: 333 Cases, 998 Controls

- 50% reduction in SIDS

*Does Breastfeeding Reduce the Risk of Sudden Infant Death Syndrome? Vennemann MM, Bajonowski T, Brinkmann B, Jorch G, Yücesan K, Sauerland C, Mitchell EA and the GeSID Study Group. Pediatrics. 2009; 123:e406-e410; <http://www.pediatrics.org/cgi/content/full/123/3/e406>.*

- **Skin to skin:** Skin to skin care is a critical part of breastfeeding, especially in the immediate post-partum period.

### Results:

- Skin to skin resulted in statistically significant better breastfeeding outcomes in multiple different arenas
- Newborn thermoregulation: massively increased likelihood of newborn being thermoneutral (meaning the newborn has the proper temperature)
- Glucose metabolism: major decrease in hypoglycemia
- Homeostasis: improvement in SCRP scores
- Distress: 10-30 times more likely to be comfortable rather than crying
- Maternal Bonding: Multiple arenas showing superior maternal-infant interaction

*Early Skin to Skin Contact for Mothers and their Healthy Newborn Infants. The Cochrane Collaboration, Moore ER, Anderson GC, Bergman N. The Cochrane Library 2008, (1); <http://thecochranelibrary.com>.*

- **Sagging breasts:** In our image-conscious world it is important to note: Breastfeeding does NOT cause sagging breasts.

### Results:

“...[P]lastic surgeons found that a history of breastfeeding, the number of children breastfed, the duration of each child’s breastfeeding, or the amount of weight gained during pregnancy were not significant predictors for losing breast shape. However, body mass index (BMI), the number of pregnancies, a larger pre-pregnancy bra size, smoking history, and age were significant risk factors for an increased degree of breast sagging...”

*The Effect of Breastfeeding on Breast Aesthetics. Rinker BD, Veneracion M, and Walsh CP. Aesthet Surg J. Sept-Oct 2008; 28 (5):534-537.*

- **Diabetes, hypertension, hyperlipidemia & cardiovascular disease:** Breastfeeding had a dose dependent effect on hypertension, diabetes, hyperlipidemia and cardiovascular disease in postmenopausal women.

### Results:

This is a tremendously powerful study which examined 139,681 postmenopausal women and compared those who breastfed their offspring to those who did not.

## Diabetes, hypertension, hyperlipidemia & cardiovascular disease (cont.)

For those who breastfed >12 months the following protective effect of breastfeeding is expressed as odds ratios:

Hypertension: 0.88  
Diabetes: 0.8  
Hyperlipidemia: 0.8  
Cardiovascular Disease: 0.9

*Duration of Lactation and Risk Factors for Maternal Cardiovascular Disease. Schwarz EB, Ray RM, Stuebe AM, Allison MA, Ness RB, Freiberg MS, Cauley JA. Obstet Gynecol. May 2009; 113(5):974-82.*

*For those who would like to do the research themselves, the International Society for Research in Human Milk and Lactation maintains an exhaustive list of articles published on these topics.*