

# Formula manufacturers refuse to label products

A recent press release (August 2004) issued by the Ministry of Health and the New Zealand Food Safety Authority<sup>1</sup> following the death of a premature baby fed powdered formula found to be contaminated with the deadly bacteria *Enterobacter sakazakii*, reinforces the serious health risks when formula feeding special needs and newborn infants.



NICU, Waikato, New Zealand, where a six-week premature baby developed meningitis and died caused by *Enterobacter sakazakii* traced back to the powdered formula

A number of outbreaks in hospitals and neonatal care units have now been reported,<sup>2,3,4,5,6</sup> all in industrial countries where the laboratory capacity exists to trace the killer organisms back to its powdered formula origins. However, these cases are the tip of the iceberg and likely to be substantial.

Illness and deaths associated with contaminated formulas have little chance of being reported from developing countries. Globally the less costly powdered baby milks as compared to liquid milks, are marketed and promoted by the formula industry. As well in home settings, as in much of the world, there is no monitoring and tracing done to determine if the cause of the sepsis, the necrotizing enterocolitis, the meningitis or the death is in the powdered formula. Yet these baby milks are promoted as being "safe" and "pure."

According to the industry, powdered infant formulas represent over 80 percent of the infant formula used worldwide.

Earlier this year WHO and FAO<sup>7</sup> held a joint expert workshop to make recommendations on how to reduce the risk of intrinsic contamination of powdered baby milks. Much of the advice is focused on preparation, use and handling. This creates a serious dilemma for developing countries where expense and availability of fuel, ability to sterilize, refrigerate and handle the product according to label instructions is near impossible. (WHO estimates that 1.5 million babies die every year because they were not breastfed). Furthermore the recommendations stressed the need for "caregivers" i.e. parents to be regularly alerted that powdered baby milks are not sterile products.

And more recently (November 2004) a Working Group of the Codex Alimentarius Committee on Food Hygiene met in Ottawa to draft a code of hygienic practice for infant formulas. Undoubtedly this issue is of grave concern to the industry as bad publicity about their products is something they wish to avoid. The meeting was heavily attended by industry representatives from Nestlé, Mead Johnson, Abbott Laboratories and their trade organizations, outnumbering the Member States delegates.

Industry was adamant in its refusal to label and attempted to delete references in the proposed document that the product is not sterile and poses a risk. Denial and shifting of responsibility seemed to be their strategy by focussing on the preparation, handling and storage of their product rather than the removal of the potentially dangerous bacteria.

As well industry refused

to accept that risk reduction strategies should include reduction in the needless use of industrial baby milks and attempted to strike out phrases such as "in situations where mothers

**"This product is not sterile and may contain harmful microorganisms that can cause illness or death in your baby"**

In clear and conspicuous text this phrase should be present on the labels of all powdered baby milks.

cannot breastfeed or choose not to breastfeed for any reason, high risk infant care givers both in the home and in health care facilities should be warned that powdered infant formula is not a sterile product."

Interestingly most of the discussion on preparation focused on the health care system. Can this be because outbreaks occur in hospitals and are therefore investigated? When an illness or death occurs in the "home" environment they are not noted as outbreaks and are less likely to be traced to the product. Are the later situations less of a liability concern?



## In summary

- Full and accurate product labeling is needed to alert parents and all associated with infant and young child feeding that these products are contaminated with potentially lethal bacteria during the manufacturing process.
- The risks posed by the contamination of powdered feeding products used for high needs infants, newborns and infants makes a clear case for the availability of banked human milk. Studies have shown that when premature infants receive human milk, the mortality related to necrotizing enterocolitis decreases as well as sepsis.
- Increased practice of kangaroo care for premature, low birth weights and new born infants helps to create the perfect hormonal and breastfeeding environment. Studies have shown infants experiencing continuous skin to skin care do not run the health risks associated with those who receive artificial baby milks.
- The baby milk manufacturers must be held accountable for the hazards associated with the use of their products and liable for the illness and deaths caused by these products. ❖

## References

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2. Himelright I et al. Enterobacter sakazakii infections associated with the use of powdered infant formula---Tennessee 2001. *MMWR* 51: 298-300, 2002
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5. Bierling G et al. Three cases of neonatal meningitis caused by Enterobacter sakazakii in powdered milk. *J Clin Microbiol* 27: 2054-2056, 1989
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7. FAO/WHO, *Joint FAO/WHO Workshop on Enterobacter sakazakii and Other Microorganisms in Powdered Infant Formulas*. Geneva, 2-5, February 2004

# "Improving the Health of Canadians" report recommends breastfeeding

The Canadian Institute for Health Information's population health branch has just released its report *Improving the Health of Canadians*. Although the report notes the inequalities in health among children, Aboriginal Peoples and low-income Canadians, it also makes key recommendations for reducing these inequalities.

"This report highlights how long-term choices in social policy can also have profound implications for our health," according to Dr. Cameron Mustard, chair of the Population Health Council in a release.

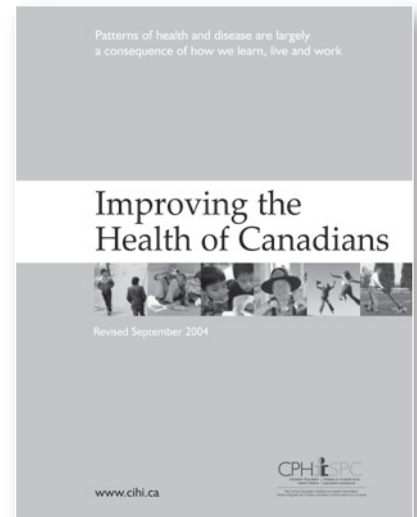
Among the health outcomes reported, obesity rates for Canadian children had skyrocketed over the last two decades but appear to be levelling off.

Whilst children in Atlantic Canada were at greater risk of being overweight, those in the Prairie provinces, British Columbia, and The Territories were also the most physically active and at lower risk, compared to the rest of the country.

INFACT Canada is pleased, (it should be of no surprise) to note that in addition to increasing physical activity the report recommends breastfeeding to prevent obesity as one of five recommendations.

**"Encourage breastfeeding because evidence suggests the longer a baby is nourished by breast milk alone, the lower the risk of developing obesity in childhood."**

- The full report in PDF format is available on the Canadian Institute for Health Information website at: [http://secure.cihi.ca/cihiweb/products/IHC2004rev\\_e.pdf](http://secure.cihi.ca/cihiweb/products/IHC2004rev_e.pdf) ❖



### ■ Port Carling, ON

Nestled in Ontario's scenic Muskoka cottage region, Port Carling gathered a team of nine nursing pairs for its first attempt at the Challenge.

# Co-sleeping, Bedsharing and Breastfeeding

## *Who is for and who is against*

**I**t is no surprise that the La Leche League Canada has come out with a statement noting that safe bedsharing facilitates breastfeeding as well as better sleep and rest for mother. The LLL statement was made in the wake of a new position statement released November 2004 by the Canadian Paediatric Society. The Society is squarely against mothers and babies sleeping together and has some strange advice.

*"The Canadian Paediatric Society recommends that babies under one year of age sleep on their backs in cribs that meet Canadian Government safety standards. Babies should not sleep in their parents' bed, which is called bedsharing. Adult beds are not safe for babies. Many large-scale studies have shown that bedsharing can put babies at greater risk for entrapment and suffocation.*

*If you want your baby to be near you*

*during the night, you can put a crib in your room, next to your bed. This is called cosleeping. Many mothers find that this makes night-time breastfeeding easier. This type of sleeping arrangement may also further reduce the risk of SIDS."*

*Do not leave a bottle of milk or juice in you baby's bed.*

*Allow infants to fall asleep on their own so that they can learn to comfort themselves.*

Do paediatricians just not understand that in the entire mammalian kingdom mothers and babies sleep and feed together? This has worked since time immemorial and as many a study has shown is also critical for emotional and psychological development — the warmth, the contact, the voice and heartbeat intimately woven into the interactions of the breastfeeding dyad.

La Leche League notes, "Why does

it matter? Breastfed babies need to nurse frequently, especially in the early weeks as the mother's milk supply is being established. That includes feeding during the night, and as a result many new parents find it challenging to get enough sleep.

"When mothers and babies are close to each other at night, breastfeeding is easier. Research shows that mothers who sleep close to their babies tend to breastfeed longer, and that's important for many reasons.

"One of the things I worry about with these recommendations is that mothers trying to avoid having baby in bed will instead get up in the night with their babies to nurse them on a couch or chair and then fall asleep — which is clearly a dangerous situation," adds Teresa Pitman, LLL Canada Executive Director. ❖

## Edmonton works to re-open Human Milk Bank

**T**he Breastfeeding Action Committee of Edmonton has set up a fund to re-establish a milk bank. Edmonton's milk bank, like most of the rest of the milk banks in North America, closed up shop in the 1980s, a victim of concern over transmission of HIV and an increasing reliance on infant formula. At present there are only seven milk banks in North America. Canada's only milk bank is located at the BC Women's & Children's Hospital in Vancouver.

According to the World Health Organization, pasteurized human milk from screened donors provides the next best alternative to mother's own breast milk. Most of the unique and valuable components of human milk remain intact after appropriate heat treatment and processing. For a small, critically ill population of infants, children, and even adults, receiving donated human milk is a matter of life and death.

The drive to re-open the Edmonton bank was initiated by Ron Graham and Jodine Chase after Ron was diagnosed

with a brain tumour. Jodine, a life-long breastfeeding activist, was aware that immune boosting and healing properties of human milk had been used for other adult cancer patients. Donated milk from Jodine and a number of women in their community was able to sustain Ron when nothing else could and it was also used to heal his surgical incision when it became infected.

Sadly, Ron Graham lost his battle with cancer on July 21, 2003, but the drive to re-establish Edmonton's milk bank lives on. ❖

### **Donations can be made to:**

Mothers' Milk Bank of Edmonton  
c/o Capital City Savings Credit Union  
Inglecroft Branch  
11245 – 124 St.  
Edmonton, AB T5M 0J9  
Tel: (780) 496-2179  
Fax: (780) 453-3860

**For more information contact Jodine Chase:**  
[jchase@mediaworkswest.com](mailto:jchase@mediaworkswest.com)

**To read about more about Ron Graham's journey visit:**  
[www.rongraham.blogspot.com](http://www.rongraham.blogspot.com)

## Chinese milk sellers go to jail

**T**wo men have been sentenced to prison after sub-standard milk formula killed at least 12 babies in the eastern Chinese province of Anhui. At least 47 people, including government officials, have been arrested in connection with the scandal.

Following the deaths of the infants, investigators found more than 100 factories producing fake formula, which consisted mostly of starch and water. Babies who were fed the formula starved to death because it contains no nutritional value.

In response to the crisis, it has been reported that the Chinese Ministry of Health intends to ban the promotion of breast-milk substitutes, and more carefully monitor its existing Law on Maternal and Infant Health Care. The aggressive marketing of breast-milk substitutes has been blamed for the decline in breastfeeding rates in China, which have dropped from 76 per cent in 1998 to 67 per cent. ❖

# From the Journals

## **Fewtrell M S. The long-term benefits of having been breastfed. *Current Paediatr* 14: 97-103, 2004**

The short-term importance of breastfeeding has been extensively researched and well documented. The association between breastfeeding and averting diarrheal disease and ear infections is particularly strong. This review article by Fewtrell explores the importance of early nutrition and what Fewtrell call its "programming stimulus" on later life.

Fewtrell has grouped the current findings into "compelling evidence," listing risk factors for later cardiovascular disease, obesity, cognitive development, atopy; and "more controversial evidence," insulin-dependent diabetes, inflammatory bowel disease, neoplastic disease and osteoporosis.

In summary, Fewtrell notes that further effects are likely, but research is needed to substantiate these and that breastfeeding should be promoted for its long-term effects as well as those in the short term.

## **Kuehne V S et al. Longer breastfeeding is an independent protective factor against the development of type 1 diabetes mellitus in childhood. *Diabetes/Metabolism Res Rev* 20: 150-157, 2004**

This joint Swedish and Lithuanian study collected infant feeding data from 803 children between 0 to 15 years newly diagnosed for type 1 diabetes mellitus.

The study found that longer exclusive breastfeeding and total breastfeeding had a protective effect against diabetes. Postponing the introduction of breastmilk substitutes and cow's milk was important in achieving this effect as cow's milk immunosensitizes the human immune system.

The results show that the use of formula is an important risk factor in the development of diabetes — this includes not only formula based on cow's milk but also those using wheat and soy (as shown in animal studies). Interestingly in Sweden where mothers use commercial breastmilk substitutes the incidence of type 1 diabetes was higher than in Lithuania where mothers used home-prepared cow's milk as a substitute. As well, twice as many children had problems at the time of introduction of formula as compared to the introduction of cow's milk. The authors note this could "reflect immune disturbances."

"Therefore our findings suggest that not only cow's milk and germs [*editor*: wheat and soy] but some other additives or a special way of preparation also puts formula into a higher risk for type 1 diabetes mellitus among children."

## **Vreugdenhill H J I et al. Prenatal exposure to polychlorinated biphenyls and breastfeeding: opposing effects on auditory P300 latencies in 9 year-old Dutch children. *Develop Med Child Neurol* 46: 398-405, 2004**

Dutch researchers compare high and low prenatal exposure to polychlorinated biphenyls (PCBs) on auditory latencies and amplitudes. Children with high exposures were found to have longer latencies than those with low prenatal exposure. When comparing formula fed to breastfed infants in these two categories, lactational exposure to PCBs was not related to latencies. However latencies were shorter for those who were breastfed than those who were formula fed. In effect this study demonstrates that prenatal exposure to PCBs delays mechanisms in the central nervous system that evaluate and process relevant stimuli. On the other hand breastfeeding accelerates these mechanisms.

The authors suggest the breastfeeding advantage to be the result of substances within breastmilk, such as long chain fatty acids [*editor*: there are over 100 found in breastmilk] that stimulate brain development. This may also explain that with longer breastfeeding duration, children receive more of these fatty acids.

*Congratulations to our  
global IBFAN network  
on our 25<sup>th</sup> Anniversary!*



## **Khedr E M H et al. Neural maturation of breastfed and formula-fed infants. *Acta Paediatr* 93: 734-738, 2004**

It is well known that human milk provides a unique and important complement of polyunsaturated fatty acids, including DHA (docosahexaenoic acid) and ARA (arachidonic acid). This study evaluated the effect of feeding — breastfeeding or formula feeding — on subsequent neurological development during infancy on 53 full-term healthy infants — 30 exclusively breastfed and 23 exclusively formula-fed. At the age of one year, each infant was given a series of neurological tests. Results showed that formula fed infants had slower responses and lower maturation in a number of areas tested for neurological development, leading the researchers to conclude the importance of breastfeeding for the normal maturation of an infant's neurological capacity. "The nervous systems of breastfed infants mature and reach near-adult values of central and peripheral conduction earlier than formula-fed infants."

## **Kac G et al. Breastfeeding and postpartum weight retention in a cohort of Brazilian women. *Am J Clin Nutr* 79: 487-493, 2004**

A Brazilian study followed 405 women at six and nine months postpartum to determine the association between weight retention and breastfeeding practices. When women who had 22 percent body fat and breastfed for 180 days were compared with those who had breastfed for only 30 days, each month of breastfeeding brought an average reduction of 0.44 kg in weight. In conclusion the authors confirm the association between breastfeeding and postpartum weight and that the promotion of longer duration can contribute to decreases in postpartum weight retention.

## **Karlson E W et al. Do breast-feeding and other reproductive factors influence future risk of rheumatoid arthritis? Results from the Nurses Health Study. *Arthritis & Rheumatism* 50: 3458-3467, 2004**

This study demonstrates yet again the importance of breastfeeding for women's health. Female reproductive and hormonal risk factors were studied in a cohort of 121,700 women enrolled in the Nurses' Health Study. Breastfeeding for more than 12 months was inversely related to the development of rheumatoid arthritis. The effect was found to be dose related. Those who breastfed longer had a lower risk. ❖



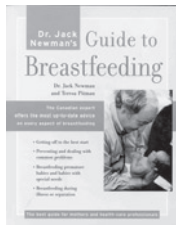
# Breastfeeding Information Resource Centre

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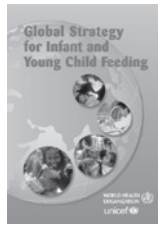
Resource orders: [orders@infactcanada.ca](mailto:orders@infactcanada.ca)

INFACT E-mail: [info@infactcanada.ca](mailto:info@infactcanada.ca)

## Books & Booklets



■ **Dr. Jack Newman's Guide to Breastfeeding** (revised)  
• **\$27.95**



■ **Global Strategy for Infant and Young Child Feeding.** Developed jointly by WHO and UNICEF.  
• **\$10**



■ **Becoming a Mother: From Birth to Six Months.** Everything you need to know about motherhood and the baby's early life! By Gro Nylander.  
• **\$23.95**

## World Breastfeeding Week Resources



■ **World Breastfeeding Week 2004 Action Kit.** Includes information sheets, eye-catching visuals, pin-ups, promotional tools, tried and true action ideas • **\$40**



■ **Fourteen Risks of Formula Feeding Pamphlet** (revised May 2004). A brief annotated bibliography of the major health risks associated with formula feeding. • **\$1**



■ **The High Cost of Formula Wheel.** Show mothers how much they can save by breastfeeding with this tool. • **\$2.50**



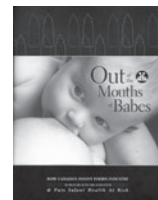
■ **Breastfeeding 101 Tear-Off Pad** 8½"x11" double-sided pad listing 101 benefits of breastfeeding with a beautiful breastfeeding baby image. 50 sheets per pad • **\$3**



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## Other

■ **Breast is Best Video** English **\$60** French **\$75** Spanish **\$60**



■ **Out of the Mouths of Babes** How Canada's infant food industry defies world health organization rules and puts infant health at risk. • **\$20**

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