



Human Milk Banking

I am writing to you in hopes of finding a breastmilk bank to which I might be able to donate my frozen supply, and if needed, to which I would be willing to continue donating breast-milk. Please advise, so that I don't have to simply throw-away the "golden" milk!

- from one of the many letters received at INFACT Canada supporting milk banking

Human milk banking is a practice older and safer than blood banking. Wet-nursing, the ancient predecessor of milk banking, is a practice as old as our history. Wet nurses are depicted as far back as ancient Egyptian tomb paintings.

The modern milk bank relies on milk being donated by carefully screened lactating mothers. The milk is then pasteurized and stored according to strict guidelines. Once processed, the milk is distributed to high-risk infants and children whose own mothers are unable to provide them with breast-milk.

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 and children, receiving donated human milk is a matter of life and death.

While human milk banking is a practice that is growing world-wide, there is currently only one human milk bank

in Canada, located at the Children's and Women's Health Care Centre, Vancouver. This bank is unable to meet the rising demand for donor milk, either locally or nationally. The disappearance of Canadian milk banks (down from more than twenty banks in the 1980s) has been blamed on the perceived threat of HIV infection and the development of heavily marketed premature infant formulas. Ironically, there isn't a single recorded case of an infant being infected by donated breast milk.

By sharp contrast, human milk banking is well established in over 18 countries. Brazil currently has more than 150 banks, and milk banking is an integral part of the country's health care system, fostered by strong federal leadership and standards.

Donated mothers' milk is especially beneficial in protecting against necrotizing enterocolitis (NEC), a serious, often fatal disease for premature babies. Specialty formulas derived from cow's milk or soy beans attempt to emulate breast milk but they cannot compare in terms of infection-fighting and other natural attributes of human milk that help reduce NEC. The costs to Canada's health system of caring for just one infant with NEC would fund a milk bank for a year (\$50,000 to \$100,000). Extrapolating British estimates, every year approximately 250 cases of NEC and 50 deaths occur in Canada, primarily because of exclusive formula feeding. To put this into context, this approximately twice the number of deaths attributed to the Spring 2003 SARS epidemic in Canada.

At present, financial incentives and free products offered by formula manufacturers to Canadian hospitals and health professionals act as a serious impediment to both breastfeeding success and human milk banking. Not surprisingly, there isn't any instruction about human milk banking in Canadian health education.



Human Milk Banking: A part of Canada's history

While most Canadians are familiar with the story of the Dionne Quintuplets, few people know that they owe their early survival to donated breastmilk. When the five little girls were born on May 28th, 1934, no one expected them to survive. Herman Bundeson, a renowned Chicago physician and expert on premature infants, telephoned Dr. Dafoe, the Ontario doctor who had delivered the quint, and offered to provide an incubator and donated breastmilk - two things he believed critical to the babies' survival. Within 52 hours of the quint's birth, the first shipment of donated milk arrived.

In Toronto, members of the Junior League responded by collecting and delivering donated breastmilk daily to the Hospital for Sick Children. There the donated milk was pooled, boiled, bottled, refrigerated until evening, packed in ice, and shipped by overnight train to northern Ontario. Milk was eventually freighted from Montreal as well. In all, 120 shipments of human milk were sent, the first arriving on May 31st, when the infants were only four days old. When the quint, were switched to cow's milk in October, they had consumed more than 8,000 ounces. These shipments, unique in history, were credited with keeping them alive.

Ironically, it was the infant feeding industry that took credit for the early survival of the quint. According to Pierre Berton, author of *The Dionne Years*, "Perhaps the most famous was the Carnation milk advertisements, which implied that the babies 'practically bathed in the milk,' and boasted that in the first 18 months of life, the quintuplets had consumed 2500 cans of the milk. In fact, the quintuplets 'hated Carnation milk, and refused point blank to drink it."

Where do we go from here?

Clearly, milk banking offers life-savings benefits to the most vulnerable members of society. We need to follow the international example and lobby within our health care system. Here are a few recommendations:

- Canada needs more milk banks to meet the growing demand for donor milk.
- All hospitals need to meet the standards of the Baby Friendly Hospital Initiative that recognizes when mother's milk is not available, donor milk is the best alternative.
- Our health system needs more education about the benefits of milk banking.
- Health Canada needs to provide more funding for research about milk banking.
- Health professionals need to inform consumers about the existence of donor milk banking in order to promote greater awareness and encourage informed choice.

What you can do:

- Send a letter of support for the continuation of Canada's only Donor Milk Bank to the Honourable Colin Hansen, Minister of Health Services, 1515 Blanshard Street, Victoria, BC V8W 3L8.
Please send a copy to Elizabeth Whynot, MD, President, Children's and Women's Health Centre of British Columbia, 4500 Oak Street, Vancouver, BC, V6H 3N1.
- Write to Anne McLellan, Canada's Minister of Health, House of Commons, Ottawa, On K1A 0A6 (email: McLellan.A@parl.gc.ca) requesting that she initiate a consultative process to increase human milk banking for Canadian mothers and babies.
- Educate the media and your colleagues about the need for and the important life saving potential of donor human milk.

Watch for INFACT Canada's latest publication "The Milk of Human Kindness: The History of Milk Banking in Canada", INFACT Canada 2003