

# Quintessence Foundation

November 2003

## October 4th, 2003: "Latch On" for Health Promotion a Big Success!

On October 4, 2003, over 2,244 babies latched on and made history in North America. They took part in the 2003 Quintessence Challenge for the most babies breastfeeding at 11 am in a province, state or territory as a percentage rating of the birth rate. It was fun to see the numbers rolling in and the list growing on our website. There are still a few sites whose numbers have not been reported at the time of writing this newsletter so we may have a few more participants. From all reports it was fun for both participants and organizers.

The results in the "winner's circle" – 134 sites in twenty provinces/states/territories. The top three with the greatest percentage of babies/birth rate were Yukon, Nunavut and Newfoundland/Labrador. The site with the greatest number of participants was Victoria BC with 112 participants with Vancouver (110) and Honolulu, Hawaii (83) close behind. The region with the largest number of participants was British Columbia (777 children) followed by Ontario (426) and Hawaii (186). The most northern site was Grise Fiord, Nunavut (5 babies with a population of 163) most southern was Bradenton, Florida, most western was Lihue, Lanai and the furthest east were the sites in St John's Newfoundland. Honourable mention goes to the New Mexico site who had a participant from Mexico!

Many of the sites wrote to us about their experiences. Here is a brief summary of some of that information and comments (and please send us more!)

**Sites:** public libraries, cinemas, health units, outside gazebo, coffee shops, public malls, public market and hospitals.

Door prizes: food, house cleaning, paint, closet organizer, candy, baby clothes, baby blankets, personal care items, manicures, pedicures, toys, books, breast pumps, and infant massage.

### Good ideas:

☛ Certificate of participation done up on 8 x 10 sheet of paper with a close up of a baby at the breast (a black and white production) – the baby's face covers the page. The pertinent information is printed on the bottom right (not over the baby's face) and the health unit and contact information are included. This same unit also used this picture as their flyer for the Challenge with the slogan "Let's celebrate breastfeeding together" including the pertinent information. They also took out a newspaper ad for World Breastfeeding Week and used the same picture. The slogan in the paper said "Your baby's best protection from illness.... Is your breast." The copy stated "Imagine the world had invented a 'new dream product' to feed and immunize everyone born on earth. Imagine also that it would be available everywhere, require no storage or delivery - helped mothers plan their families and reduce the risk of cancer. This dream product is human breastmilk, available to all of us at birth. For information on breastfeeding, contact (number given). Awesome job Kingston! So let all of us know how you came up with the money for newspaper ad and picture. (If you let Quintessence know we'll share in the next newsletter.)

- ☛ Added additional columns to the sign in sheet to collect information on breastfeeding goals, introduction of solids and use of breastfeeding support services.
- ☛ Site was held on maternity unit, special care unit and community centre simultaneously.
- ☛ A poster for World Breastfeeding Week was made featuring a participant tandem nursing her children (with a beautiful smile) from a previous Challenge.
- ☛ Displays on benefits of breastfeeding fitting the World Breastfeeding Week theme- Breastfeeding in a Globalized World.
- ☛ Lovely live music from Pancho and Sal (want to know more about them? - check their website)
- ☛ Beautiful colour poster – promoting the Challenge and the LLL Walk for Breastfeeding.
- ☛ Buttons with a picture of a breastfeeding baby with the slogan "Breastfeeding. It means the world to me." Made locally by volunteers and given to the participants.
- ☛ Participation certificate listed donors of food and door prizes.
- ☛ Raffle of two hand made quilts with all proceeds going to Canada's only milk bank at BC Women's Hospital.

### Media coverage:

Radio, TV, newspaper. Some sites reported that every newspaper and radio station in their community covered the event with articles about breastfeeding.

Check out our Quintessence Foundation Website: [www.babyfriendly.ca](http://www.babyfriendly.ca)

## **Samples of newspaper headlines**

(please send in any additional ones)

- ◆ Breastfeeding good for mom and baby. (The Examiner).
- ◆ Photo opportunities have changed. (The Mississauga News)
- ◆ Donner le sein c'est sain. (La Voix De L'est)
- ◆ Women's Hospital wants moms, babies for breast-in. (Vancouver Sun)
- ◆ Breastfeeding moms to challenge misconceptions. (The Kingston paper)
- ◆ Moms encouraged to make breast challenge. (The Ottawa Sun)
- ◆ Breastfeeders set to go global. (Newsleader.)
- ◆ Parents' sale latches onto breastfeeding challenge. (Cowichan Valley)
- ◆ Dinner is served. (Cowichan Valley)
- ◆ Breastfeeding challenge. (News Leader)
- ◆ Mothers gather for breastfeeding event. (Alaska Mirror)
- ◆ Ultimate free gift. (The Okanagan)
- ◆ Breastfeeding focus of the event. (The Chronicle-Journal)
- ◆ Moms and hungry tots. (California)
- ◆ Mother knows breast. (North Shore Times).
- ◆ Yukon women latch on to breastfeeding title. (National Post)
- ◆ Nurse promotes breastfeeding (the Trial Times)
- ◆ Time to celebrate breastfeeding week (Kamloops Daily News)
- ◆ Is this town breastfeeding friendly? (Grand Forks Gazette)
- ◆ Breast is still best. (Kamloops Daily News)
- ◆ Making the Challenge. (Yukon Star)
- ◆ Nursing moms go after record. (The West Island Chronicle, Montreal)

## **Witnesses:**

Parents, CEO of the hospital, radio personality, hospital nurses, member of parliament, midwife, pediatrician, public health nurses.

## **Activities**

- ◆ Food, food and more food!
- ◆ Draws at many sites (reports of wonderful support from local businesses)
- ◆ Best muffin contest (done in the spirit of good food and friendship)
- ◆ La Leche League displays
- ◆ 50/50 draw
- ◆ Brief video of local breastfeeding women made by a local mother shown
- ◆ Challenge done as part of a day event "Early Years Community Festival."
- ◆ Speakers including professors, councilors, Waba representative, and hospital/public health nurses.
- ◆ Music!

## **Comments from Sites:**

*From Peterborough, Ontario:* Galaxy Cinemas was a very active partner in promoting this year's Challenge and provided breastfeeding families with a free movie following latch on. We promoted the event for the family and highlight the father's role for successful breastfeeding... This year we had a father, Paul Blake on our planning committee. Paul who is also a teacher

arranged for students at St Peter's High School to volunteer at the event. We developed three messages for the event: "I breastfeed everywhere", "I'm proud to see my partner breastfeed," "Let's celebrate breastfeeding." Beth Goodge.

*From Nelson, BC:* One of the public health nurses, Gwen Kalyniuk, made up small business cards with a picture of a baby on one side and this message on the other – "Thank you for nursing your baby in public. You are not only nourishing your child but the hearts and minds of everyone here. When nursing in Canada is more common and understood, the credit will go to women like you. I thank you on behalf on my grandmother, who had never heard of breastfeeding. I thank you on behalf of my mother, who hadn't a soul to support her and on behalf of my daughters and granddaughters – I hope they will never have to search for a secluded corner of a bathroom to nurse their babies. I thank you on behalf of every woman who ever was or will be. Have a beautiful day." Some of these cards were given out at the Challenge.

*From Kauai, Hawaii:* (We) had a great time...hula and sunny skies down at the beach...great giveaways and way too much food, we'll have more moms next year...so watch out Canada! Samme Albano.

*From Saskatchewan:* The moms and babies all seemed to be happy to be involved and we will do it next year. Liana Rubidge.

*From Austin, Texas:* We really enjoyed the Challenge, we advertised it as helping "Keep Austin Weird" – a local motto. We learned a lot this year and are already planning next year's event. ...I think it's a great way to bring breastfeeding into public view and increase support for breastfeeding moms. Janet Rourke.

*From Victoria, B.C.:* in a letter written to 'As It Happens' at CBC the day after in describing the Challenge... (we) had a lot of fun, got lots of media coverage and created an opportunity to spread up-to-date information about breastfeeding... Mothers with new babies are often very isolated in our society. The Breastfeeding Challenge has taken off as an event across the country (and now the continent) because it gives mothers a sense of community. The mothers participating in the Challenge here in Victoria are so grateful for the opportunity to come together and provide each other with support and companionship. To know that women across the continent are "latching on" to the Breastfeeding Challenge is very moving.

Here in Victoria, it was a foggy morning. Our venue was at a local community market, the Moss Street Market. It was chilly and damp and we hesitated. Should we move the Challenge indoors? We wanted so much to hold it in the heart of our community. And then we decided

We can breastfeed on a log  
We can breastfeed in the fog  
We can breastfeed here and there  
We can breastfeed ANYWHERE.

(This chant was made up on the spot. We were informed that it is one stanza of a poem written by Laurie Cocker of Austin – a great example of great minds think alike!)

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### **Comments from sites cont'd...**

*From Powell River, BC:* Although our numbers were small, several women said they'd never been amongst so many breastfeeding mothers before and they thought it was great. Suzanne McBride

*From Prince George, BC:* I took a delightful photo of a child wearing a T shirt designed by his dad saying "got some milk" Between the words some and milk there was an arrow pointing upwards breast so it actually read "got some breastmilk". It was a busy morning and we all had a great time. Jeanne Hagreen.

*From Honolulu, Hawaii:* Our 5 sites all had a wonderful time. We got lots great media, business sponsorship and immense bonding that occurred between everyone at the moment of latch was unforgettable. Eiko Cusiuk

*From St. John's Newfoundland:* Several politicians attended. Took the opportunity to point out to all in the room the value of having supportive, informed politicians, legislative changes need to improve our ability to promote, protect and support breastfeeding and value of breastfeeding is not just personal but global - moms need to be valued for their contribution to community and global health. Brenda Drover

*From Montreal, Quebec:* It's 11hrs pm in Montreal. I'm still finishing writing a press release for the media and can't find the words (French or English) to describe, on personal point of view, what I felt like this morning at 11hrs am. This silence, this feeling of peace, quietness in a room full of 60 plus people...how can we describe that? Just hope my six year old boy will remember that for a long time. Maryse Lafontaine.

*From Vancouver, BC:* one of the first participants arrived with a cute baby wearing a hat which read "boob man" an expression I usually dislike but it seemed rather appropriate!

The BOD of Quintessence Foundation was delighted with the participation in the 2003 Breastfeeding Challenge. We wish to extend a special welcome to all our first time sites, particularly our American neighbours who joined us - Alaska, California, Florida, Hawaii, New York, North Carolina, Pennsylvania and Texas. We are finishing up the last paperwork for 2003, working on getting as many pictures posted on our webpage as soon as possible and then will get started on organization for next year. We also plan to have all data posted on our website so sites can Challenge themselves. All the organizing and work for Quintessence on the Challenge this year was done by unpaid volunteers. Next year we will hire some help in order to streamline the process. Please send us your stories, comments and suggestions. To all our site organizers and participants, good job and thank you for taking part!! We couldn't have done it without you! We extend an invitation to all of you to get involved by spreading the word about the 2004 Breastfeeding Challenge - and register for 2004 Quintessence Breastfeeding Challenge taking place October 2, 2004!

## **Money Raised for the BC Women's Milk Bank**

The quilt raffle held in conjunction with the Challenge in Vancouver, BC raised \$1278 ( tickets were sold over a two week period) - this money will be donated to the BC Women's Hospital Milk Bank. The winners of the quilts were Diane McGillvray, Kelowna, BC and Susan Patterson, Vancouver, BC. Thank you to all who supported the raffle by selling and buying tickets. We plan to raffle two quilts next year and sell tickets online! The Victoria BC site also raised money - \$140 - for the BC Women's Milk Bank.

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## **World Breastfeeding Week 2003**

This year's theme was Breastfeeding in a Globalized World. WABA promotional materials describe globalization as, "the intensification of worldwide social relations which link distant localities in such a way that local happenings are shaped by events many miles away and vice versa". The challenge with breastfeeding is to ensure that globalization enhances the breastfeeding experience of mothers and babies rather than diminishes it. As WABA points out, one of the tools towards this end is the Global Strategy for Infant and Young Child Feeding. Unanimously endorsed in 2002 at the World Health Assembly and by the Executive Board of UNICEF, this strategy provides a universal framework for action to support breastfeeding. It reminds governments that trade agreements and World Trade Organization priorities should not override the needs of mothers and children. Additionally, governments need to continue towards implementation of the International Code of Marketing of Breastmilk Substitutes. Contact WABA for more information: WABA Secretariat, WABA, PO Box 1200, 10850 Penang, Malaysia. Tel: 604-658-4816 Fax: 604-6572655 E mail: [secr@waba.po.my](mailto:secr@waba.po.my) Also check out [www.bcbabyfriendly.ca](http://www.bcbabyfriendly.ca) for information on WBF Week.

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## **Catch the Spirit: A Workshop on the Canadian Baby-Friendly Initiative Practice Outcome Indicators.**

On June 13<sup>th</sup>, the Quintessence Foundation sponsored a one-day workshop in Vancouver, BC bringing together 45 participants from 25 hospitals and community agencies already working on or interested in working on becoming Baby-Friendly. After a presentation (see next article on the BFI) on how the outcome indicators for Baby-Friendly apply in Canada, participants worked together in small groups to apply the indicators to practice situations. For many participants highlights of the day included the opportunity to share ideas and see how others have overcome some of the institutional changes. "A wonderful day with many inspiring ideas and wonderful sharing of successes and challenges." "I found this to be a wonderful introduction to the breastfeeding professional. I was surprised to see the enthusiasm and practical attitudes." "Before coming today many friends and family members commented on how over the top people could be without seeing how the 'real world is. I loved how you mentioned how this is a journey and to focus on the positive points."

# The Baby-Friendly™ Initiative (BFI)

The Baby-Friendly™ Initiative is an international program to improve breastfeeding outcomes for mothers and babies by improving the quality of their care. The Breastfeeding Committee for Canada (BCC), recognizing the need for a seamless continuum of care between Hospitals and CHS, has published Practice Outcomes Indicators (BFI Indicators) for Hospitals (The Ten Steps) and Community Health Services (The Seven Points), to make expected outcomes explicit, and to support the need for collaboration between care providers.

The following table summarizes how the 10 Steps and 7 Points dovetail to ensure evidence-based best practice across the continuum of care. The BFI is a single Initiative, supported by care providers across the continuum to ensure positive breastfeeding outcomes.

## BFI in Hospitals and CHS Continuum of Care:

<b>10 Steps (Hospitals)</b>	<b>7 Points (CHS)</b>
Steps 1, 2, 3	Point 1, 2, 3
Step 4, 5, 6, 7, 8, 9	Point 4
~	Point 5
Step 6, 9	Point 6
Step 10	Point 7

## BFI in Hospitals and CHS Continuum of Care:

<p>The WHO/ UNICEF BFHI</p> <p>The 10 Steps to Successful Breastfeeding</p> <p>Protecting, promoting and supporting breastfeeding: the special role of maternity services. A joint WHO/ UNICEF statement, WHO, Geneva, 1989.</p>	<p>The 7 Point Plan for the Protection, Promotion and Support of Breastfeeding in Community Health Services.</p> <p>Breastfeeding Committee for Canada, 2002, adapted from UNICEF UK BFI, 1999.</p>
<p>Every facility providing maternity services and care for newborn infants should:</p> <ol style="list-style-type: none"> <li>1. Have a written breastfeeding policy that is routinely communicated to all health care staff.</li> <li>2. Train all health care staff in skills necessary to implement this policy.</li> <li>3. Inform all pregnant women about the benefits and management of breastfeeding.</li> <li>4. Help mothers initiate breastfeeding within a half-hour of birth.</li> <li>5. Show mothers how to breastfeed, and how to maintain lactation even if they should be separated from their infants.</li> <li>6. Give newborn infants no food or drink other than breastmilk, unless medically indicated.</li> <li>7. Practice rooming-in: allow mothers and infants to remain together 24 hours a day.</li> <li>8. Encourage breastfeeding on demand.</li> <li>9. Give no artificial teats or pacifiers (also called dummies or soothers) to breastfeeding infants.</li> <li>10. Foster the establishment of breastfeeding support groups and refer mothers to them on discharge from the hospital or clinic.</li> </ol>	<p>All Community Health Care Services providing direct care to pre- and postnatal women and families should:</p> <ol style="list-style-type: none"> <li>1. Have a written breastfeeding policy that is routinely communicated to all staff and volunteers.</li> <li>2. Train all health professionals in the knowledge and skills necessary to implement the breastfeeding policy.</li> <li>3. Inform pregnant women and their families about the benefits and management of breastfeeding.</li> <li>4. Support mothers to establish and maintain exclusive breastfeeding for six months.</li> <li>5. Encourage sustained breastfeeding beyond six months with appropriate introduction of complementary foods.</li> <li>6. Provide a welcoming atmosphere for breastfeeding families.</li> <li>7. Promote collaboration between health care providers, breastfeeding support groups and the local community.</li> </ol>

## The BFI Indicators reflect the Principles of Population Health (Health Canada 2001).

- Focus on improving the health of an entire population or sub-population.
- Invest upstream in order to address root causes of problems.
- Base decisions on evidence.
- Apply multiple strategies to act on the determinants of health.
- Collaborate across levels and sectors.
- Employ mechanisms to engage citizens.
- Increase accountability for health outcomes.

In addition, and complimentary to the principles of population health, the Indicators include

- Informed and shared decision making.
- Promoting and sharing evidence-based and best practice.
- Supporting breastfeeding across the continuum of service through collaboration.
- Working towards empowerment and public participation.

The BFI Indicators are soon to be posted on the BCC website.

## Research on Donor Milk

Presentation by Kim Michaelsen, M.D. from the Department of Human Nutrition, Royal Veterinary and Agricultural University in Denmark, at the HMBANA Conference in San Jose, October 9<sup>th</sup>, 2003 Kim Fleischer Michaelsen, the author of several articles on human milk including the use of donor milk presented information on some of his research on breast and donor milk. He outlined the use of infrared analysis of donor milk and the implications for milk banking programs. Among his findings he showed a wide variation in protein content produced by mothers over time. Though appropriate for mothers' own babies donor milk may not provide sufficient calories for very low birth weight preterm infants. He described collection protocols for donor milk to provide higher protein levels appropriate for premature infants when mothers own milk is not available. His institution was able to provide "high-protein" milk with sufficient protein [about 12g/l (true protein)] and an energy content of about 725kcal/l to cover the needs of preterm infants with very low birth weights.

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## Breastfeeding Promotion

Concerned about the rates of long-term breastfeeding in your community? Looking for breastfeeding promotional ideas? Trying to come up with an innovative student project in population health? Consider an idea from Saskatchewan: hold an "Everyday Breastfeeding" Photo contest.

This is just what the *Moms for Milk Breastfeeding Network* did in March, 2003.

Founder, Janice Reynolds, stated, "We want to make breastfeeding more socially normal, so that mothers feel comfortable to nurse their children at any time, wherever they happen to be." This contest encouraged mothers to document the beautiful experience of breastfeeding for themselves and to share that experience with others. A contest like this also provides participating communities the opportunity to honor the women in their area. The provincial Office of the Status of Women provided a grant to help make the event possible. Entries and winners can be viewed at: <http://hyperphoto.photo.photoloft.com/view/allalbums.asp?s=cano&u=1760911>

## The History of Infant Feeding Part III

*The last two editions (Fall 2002, Winter 2003) of the newsletter includes "The History on Infant Feeding Part I and II covering up to the 1930's.*

### **The Evolution of Milk Banking**

Pressures changing the history of infant feeding in the early 20<sup>th</sup> century included the marketing of infant formula and the change in perception of mothering to one of "scientific motherhood" (Apple, 1987, p. 97). Women were thought to require expert scientific and medical advice to raise healthy children. Although initially mothers were encouraged to seek out the best information, evaluate it and be involved in making decisions regarding their family health, the ongoing changing attitudes resulted in a further shift to relying on experts (Apple, 1987). For example, a government pamphlet from the 1930s states, "The care of a baby is a great responsibility but it can be carried successfully if the parents regularly seek the advice of a physician trained in the care of infants" (Apple, 1997, p. 56). Guidance on infant feeding passed from the domestic to the scientific sphere.

Scientific knowledge held a privileged status and physicians stressed the close relationship between science and medicine (MacHaffie, 1927). They emphasized that they were experts who held knowledge only available to those within the profession (Apple, 1987; Ward, 2000). Mothers looked to experts for guidance on feeding their babies rather than traditional knowledge from family and friends. These experts, health professionals, received both marketing information and professional education focusing on artificial feeding to the detriment of breastfeeding and the use of donor milk. As the 20<sup>th</sup> century progressed, the concern for providing human milk faded and the focus moved to improving formulas, particularly for high-risk infants. The technology of artificial feeding and improvements to infant formulas continue to the present day.

Formula marketing became a significant focus of the early 20<sup>th</sup> century. The successful themes used in formula marketing materials including of physician endorsement, best nutrition and physician control of feeding have remained the same over the last 100 years (Apple, 1987). For example, the 2002 website for Mead Johnson states, "These products...have been the results of the company's commitment to bring moms, dads, babies and doctors the best innovations in science, technology and infant nutrition." Ross Laboratory's 2002 website states:

*If you decide to feed your infant formula, choosing the right one is among the most important decisions you'll face as a parent. You want **excellent nutrition** for your baby. That's why a **doctor's recommendation** is so important. So it's good to know that Similac with iron is the **first choice of doctors** (emphasis added).*

While effective and aggressive marketing encouraged use of formulas, social and cultural changes such as increasing numbers of women working outside the home, increased sexualization of the human breast and availability of artificial feeding products contributed to artificial feeding being perceived as normal (Ward, 2000; Palmer 1988). Although the benefits of human milk are acknowledged, many people (including health professionals) view artificial feeding products as "a truly healthy substitute for mother's milk" (Ward, 2000, p. 34). And yet there is a

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dichotomy. "On one hand there is an eagerness to claim that artificially-fed babies are just as healthy as breastfed ones; on the other hand, there is an obsessive desire to imitate human milk, and use it as the 'gold standard' to sell the commercial product" (Palmer & Kemp, 1996, p. 121).

## **Donor Milk Banking**

The history of donor milk banks is difficult to trace, as very little information is available in the literature. In the early 20<sup>th</sup> century, as wet nursing fell out of favor, lactating women were asked to express their extra milk to feed premature and ill children (Barret & Hiscox, 1939). As this process became more formalized to meet the needs of increasing numbers of children donor milk banks were born. Milk banking was more common in Europe and grew quickly in many countries (Siimes & Hallman, 1979).

Interestingly, in North America a hundred years ago, support for the concept of milk banking was evident in an editorial of the *Journal of the American Medical (JAMA)* expressing concern over infant morbidity and mortality. The author comments that "so long as there is any good breast milk let it be utilized" (editorial, 1902, p. 2). In the same edition, an author promotes the use of human milk and takes exception with "the pseudo-scientific statements... responsible for the growing belief, especially among the laity, that artificial feeding is just as safe as breast" (McAlister, 1902, p. 253). The discussion that follows indicated diverse opinions. One physician commented, "...the pendulum, which has gone to one extreme, is now swinging back. It is very hard to supplant anything that nature has provided for us by artificial means and methods" (Discussion, 1902, p. 253). Another physician wrote, "Breast milk that is going to waste should be utilized and an industry created by systematic registration bureau work" (Discussion, 1902, p. 255).

Further support for donor milk banking is evident in Hoobler's article (1914), describing an experiment in the collection of human milk. It noted that ill children "do very much better if they are fed wholly or in part on human milk" (p. 171). This experiment took place in the Bellevue Hospital, New York and resulted in the collection of 1750 ounces. The cost, including all services, was 10 cents an ounce. In one month a further 1,054 ounces were collected and cost 5 cents an ounce. Each mother was paid 12 cents a visit and pumped at home an average 10 ounces per visit (Hoobler).

In the early 1900s with the technological developments and hygienic improvements, collection of human milk evolved to the operation of banks. The first donor milk bank began in Vienna in 1909 with a second and third officially established in Boston and Germany in 1919 (Springer, 1997; Williams, 1997). In the early years donors to milk banks were often referred to as wet nurses although they had no direct contact with the recipients. The Boston Wet Nurse Directory began in 1910 and within two years, the five to eight wet nurses in residence were nursing babies directly as well as supplying milk to be sent to homes for infants (Editorial, *The New England Journal of Medicine*, 1928). The residential hall was found to be too costly so the Directory sold the residence and changed its name to "An Organization for Supplying Human Milk." The name change occurred as the terms wet nurse and breastfeeding were found by some to be "too suggestive of physical, though natural human physiology" (editorial, p. 640).

Donors were referred to the Boston Bank by hospitals, obstetricians and community health centres. Each donor was screened with a medical physical examination, a Wassermann blood test for syphilis, a social and personal history and examination of the woman's baby for overall health. Instruction on milk expression, diet and hygiene was provided and milk was picked up from mothers' homes daily. The average monthly wage earned by each mother was \$28. The milk of each donor was "examined chemically and bacteriologically for dilution of impurities once a month and the pooled milk once a week" (Talbot, 1928, p. 611). The average amount expressed daily by the 40 recorded donors was 15 ounces ranging up to 54 to 72 ounces. (Talbot, 1928). Milk was sold to hospitals for 12 to 30 cents an ounce or given away in large quantities. In 1927, 174,466 ounces were collected (Talbot, 1928). Milk was shipped to all parts of New England and used for premature infants, normal newborns whose mothers' milk was insufficient at the time, surgical cases, and for ill children.

By the 1920s, the Boston Floating Hospital staff collected expressed milk from mothers' homes daily, carrying ice to keep the milk chilled and dropping it off at a "convenient drug store" as they made their rounds (Emerson, 1922, p. 642; Talbot, 1928). Similar in operation to the Directory, the donors were screened (Emerson, 1922). In 1917, Hoobler presented a paper to the American Medical Association stating:

*It has always seemed to me that, taking into consideration the breasts that fail or perform their function normally or abundantly, if some system could be evolved, simple in its application, whereby these mothers with abundance could supplement those who have a scant supply, it would be a great favour in reducing infant mortality as well as preventing a great economic waste. (p. 421).*

Hoobler (1917) described the system used at the Detroit Woman's Hospital and Infant's Home, where 23,000 ounces of human milk was collected and distributed over a 6 month period. He provided operational details for the service. For 3 months postpartum, young unmarried women stayed at the hospital and expressed extra milk that was fed to babies whose mothers had insufficient milk in hospital. Of these donors, a small group produced a large amount of milk. These mothers were tested for syphilis and their milk was also given to infants outside of the hospital. If at 3 months postpartum, the mother was expressing between 16 and 24 ounces beyond what her baby consumed, she was invited to stay at the hospital or return home and come to the hospital two or three times a day to express milk under the supervision of a nurse. The mothers were paid for their milk and the milk sold for 10 to 25 cents on physician order. On occasion, donor mothers directly nursed ill babies in the child's home. Parents signed consents releasing the wet nurse from any responsibility if the baby acquired an infection. Hoobler suggests this type of system reduced the incidence of infection, as the ill children were not exposed to the wet nurse but only the milk.

Rich discussion followed the presentation of Hoobler's 1917 paper. One physician described the importance of providing human milk and the difficulty for hospitals in finding wet nurses.

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Another physician described New York as having a “neighborly feeling” (Sedgewick, Abt, & Hoobler, 1917, p. 426) with women commonly providing expressed milk for a neighbor’s child whose mother had insufficient milk. A physician from San Francisco stated, “It is most difficult to get medical men to take up the use of breast milk” (Sedgewick et al., p. 427). Concerns were expressed about the cost of the milk and black women’s inability to be wet nurses. Almost 100 hundred years later many of these issues – cost, availability, lack of physician interest and concern about the type of women who might donate - are all issues that are still being discussed.

Early milk banks faced the challenge of preservation of the milk. In 1909, two German physicians attempted preservation adding hydrogen peroxide and found that milk could be kept up to 32 days. Although the babies fed this mixture gained weight, they vomited a great deal (Arnold, 1992). The next attempt involved drying human milk after adding calcium peroxide. Although by the 1920s the dairy industry was drying cow’s milk, human milk was not available in large enough quantities to use commercial methods (Arnold). Additional methods using heat, rollers and spraying were all attempted with limited success (Emerson, 1922). Advances in refrigeration, freezing and pasteurization became effective means of preserving human milk (Arnold). Initially, in the 1930s the Boston Directory developed a quick freezing method in the Borden laboratory in New York that involved pouring pasteurized human milk onto wafer molds placed on dry ice. The wafers of frozen milk were placed in sterile Mason jars and frozen for storage (Asquith, 1988).

Another issue affecting the shelf life of donor milk was the variation in methods of pasteurization. In 1936, a method was developed which kept milk sterile for two years (Asquith, 1988). The complicated process involved heating the milk 3 times on 3 consecutive days to a temperature of 69 degrees for 30 minutes and using a series of corks and seals. The chemical analysis of the time claimed the milk had little change in fat, protein or carbohydrates. In many places the milk was heat treated by either autoclaving or boiling (Asquith).

Methodological and technical improvements included published standards in 1934 in German and, in 1939, in English for operating milk banks (Asquith, 1988; Springer, 1997). These were expanded and adopted by the American Academy of Pediatrics in 1943 (American Academy of Pediatrics, 1943; Williams, 1997). Although donors and milk were screened, the milk was often dispensed raw. Medical advisors guided the operation of each bank and the standards varied from bank to bank (Asquith; Williams).

During the 1930s milk banking progressed in several countries. Demand for donor milk increased during this period as children with more complex problems survived and needed donor milk. Appeals were sent out through the media. As banks were established, milk was stockpiled (Arnold & Asquith, 1991) and personal appeals for individual children decreased. By 1931, the Boston Directory for Mothers was collecting 4,400 quarts of milk annually and distributing it to 22 hospitals (Williams, 1997, p. 148). Meanwhile the first Finish milk bank opened in 1935 at the Helsinki University Hospital (Groslien, 2001).

Cambridgeshire (Williams, 1997). Although it is unclear whether the Dionne case resulted in an increased demand, a 1939 paper published in the Canadian Nurse outlines the operation of milk banks in Canada (Barret & Hiscox, 1939).

Talbot’s Directory in Boston developed a miniature dairy for preserving breast milk by quick freezing. Twelve other facilities were set up including two in Canada – the Hospital for Sick Children in Canada and the Royal Victoria Montreal Maternity Hospital. Like Boston, the expressed milk was collected from the donors daily. All donors were screened and tested for syphilis. They were taught basic hygiene and how to use a water pump supplied by the hospital. Sterile containers were brought each day and the donors were paid 5 cents an ounce for their milk. In the hospital milk room, the milk was pooled, boiled for 3 minutes, put in individual bottles that were labeled with the infant’s name. Surplus above the daily requirements was frozen using the quick freezing method of molds on dry ice. The milk was stored in sterile Mason jars, 8 ounces per jar, in a freezer at 15 degrees below zero (Barret & Hiscox, 1939). Periodic sampling was done for each new client and on pooled and frozen milk. A reserve of 1,000 ounces was kept available (Barret & Hilcox).

In Britain the quadruplets’ survival resulted in the establishment of a milk bank at Queen Charlotte Hospital in 1939 (Williams, 1997). Funded by a benefactor who had visited the Boston Directory, a nurse was sent to Boston for training and the first British milk bank was established and continues to function today (Williams). In the early days, milk was collected, tested and pasteurized the milk by heating to 65 degrees for 30 minutes (Williams). Any excess milk was frozen into small cakes at the end of the day. The milk bank was open 24 hours a day and shipped milk throughout the British Isles (Williams). During this time the first milk bank opened in Brazil (Gutierrez & de Almeida, 1998).

By the 1940s the Queen Charlotte milk bank in Britain supplied 25 hospitals (Williams, 1997). In addition, milk banks were established in Sweden, Denmark, France and the United States (Groslien, 2001; Arnold & Asquith, 1991; Tully, 1991). In 1947, the Mother’s Milk Bank in Wilmington, Delaware was established and it ran continuously for 54 years and is currently scheduled to re-open (Langerak & Arnold, 1991; M.R. Tully, personal communication, June 5, 2002).

In the 1950s and 1960s milk banks in Britain and North America went into decline. With the improvements in artificial feeding which led many to feel human milk could be replaced, “appreciation of the value of human milk became temporarily under-rated” (Williams, 1997, p. 378). Meanwhile in 1956 a milk bank opened in Greece and by 1959, West Germany had 24 banks and East Germany had 62 (Zachou, 1999; Springer, 1997).

By the mid 1970s, there was an upswing of interest in donor milk banking with 5 large milk banks operating in Britain (Williams, 1997). In 1974 a milk bank was established at B.C. Children’s Hospital “in order to facilitate the supply to infants in need” which has continuously functioned to current times (personal communication, R. Esdaile, May 23, 2002). In 1978, the Calgary Mother’s Milk bank was established at the Foothills Hospital by staff volunteers and the Calgary Junior League (Sauve, McIntosh, Clyne, & Buchan, 1982).

*Continued on page 8...*

Milk banking in North America reached its peak as far as number of banks in the 1980s (Arnold & Asquith, 1991). In the early eighties there were 23 milk banks in Canada and 30 active milk banks in the United States (Bednark, 1982; Sauve, McIntosh, Clyne, & Buchan, 1982). In 1981, the Calgary Milk Bank surveyed milk banks in Canada sending out survey forms to the 23 functioning milk banks (Sauve et al.). Only 19 responded indicating that they were all run under varying protocols; only 42% required a medical history, 73% did not require lab tests, 50% refused milk from mothers who were taking drugs, others rejected only for specific drugs, and all accepted milk from mothers who smoked. At least one institution paid donors 15 cents an ounce and charged recipients 25 cents an ounce. Sixty-three per cent of the banks used frozen untreated milk. The methods of collection, processing, storage and distribution all varied widely (Sauve et al.). By 1985 there were 12 banks in Brazil and 70 active banks in Britain (Williams, 1997). Unfortunately, with the AIDS epidemic in the mid 1980s and the potential concern of transmission of AIDS through breast milk, many milk banks closed.

*The conclusion of this article "Overcoming the Crisis – the birth of modern milk banking" is the Winter 2004 newsletter*

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## Evidence for the Benefits of Skin-to-Skin Care

Visit the UK Baby Friendly Initiative website [www.babyfriendly.org.uk](http://www.babyfriendly.org.uk) A new posting includes a review of 17 studies on skin-to-skin contact between mothers and babies. Of the statistically significant benefits documented in these studies are: positive effects on breastfeeding incidence and duration, newborn thermal regulation, infant blood glucose, maternal affection, infant crying and greater head growth in preterm infants.

Also in this UK website is the pamphlet for parents, *Sharing a bed with your baby.* This pamphlet encourages breastfeeding mothers to share their bed and describes how to do it safely.

## From the Journals

Another article on the economic benefits of breastfeeding: United States Breastfeeding Committee. (2002). *Economic benefits of breast-feeding.* Raleigh, NC. Available on the USBC website. This user friendly article summarizes the economics of breastfeeding and would be a useful summary to provide to advocacy groups.

Robinson, L.B. (2002). Olive oil. A natural treatment for sore nipples. *AWHONN Lifelines*, 6 (2), 110-112. In this opinion piece, the author suggests olive oil as a natural, edible and antifungal treatment for sore nipples.

Howard, C.R., Howard, F.M., Lanphear, B., Eberly, S. deBlieck, E.A. Oakes, D., Lawrence, R.A. (2003). Randomized clinical trial of pacifier use and bottle-feeding or cup-feeding and their effect in breastfeeding. *Pediatrics*, 111, 511-518. This randomized study of 700 breastfed infants did not find a difference in breastfeeding duration between babies supplemented by bottle or cup in the general population. However, in the babies delivered by cesarean or given multiple supplements those supplemented by cup had a longer breastfeeding duration than those supplemented by bottle.

Carbajal, R., Veerapen, S., Couderc, S., Jugie, M. & Ville, Y. (2003). Analgesic effect of breastfeeding in term neonates: randomized controlled trial. *BMJ*, 326, 13. This study confirms that breastfeeding during venepuncture was effective in reducing neonates pain response.

Khalida, A., Hale, T.W., Ilett, K.F., Hartmann, P.E., Mitoula, L.R., Kristensen, J.H. & Hackett, L.P. (2002). Pseudoephedrine: Effects on milk production in women and estimation of infant exposure via breastmilk. *British Journal of Clinical Pharmacology* 56, 18-24. This single blind crossover study of eight women and babies looked at the effect of a single dose of pseudoephedrine (or Sudafed, a nasal mucous membrane and sinus decongestant) compared with a placebo on milk production. The authors concluded that although the amount of the drug received by the infant is unlikely to affect the infant it reduced maternal milk production by 24%.

## Quintessential Thanks

Quintessence Foundation extends a huge “thank you” to two remarkable people.

Eva Bild, Victoria, B.C. translated all of the Breastfeeding Challenge information (located on the website) and the site participation certificates into French. We are very grateful for Eva’s help to make this a truly Canadian and international event. We are also delighted to find out how to say, “Three, two, one ... Latch-on!”

In addition to “Thank you,” we want to wish Gail Storey a very happy 60<sup>th</sup> birthday. Gail, from Vancouver B.C., kindly suggested that her birthday guests donate to the Quintessence Foundation in her honour. We appreciate Gail’s thoughtfulness.

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## Breastfeeding Baby Charlotte Should Run for Parliament

In Victoria, in the Australian parliament an infant caused quite a stir recently. Her mother Kirstie Marshall, was breastfeeding 11 day old Charlotte, when she was approached by the Sergeant-at-Arms. Kirstie left the chamber and missed the question period, the first in her elected position. A subsequent online discussion contained the usual pro and con arguments from several writers about breastfeeding: “Its natural”, “Should be kept private”, “Should not be allowed in public.” Joy Head’s succinct comment, “Perfectly reasonable.” Huge health and cost advantage for society” summed it up well. ‘Joe’ gets a round of applause for the most amazing bit of rationalizing with the comment, “I think this occurrence has been completely overstated. Remember she was not removed from parliament for breastfeeding but rather for having an unelected member on the floor of parliament.” Right, ‘Joe’ - based on that sort of rationale Baby Charlotte should run for office.

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## Not “Only in Australia”

And in case you thought the silliness was restricted to Australia, in Canada recently, a women with a two month old nursing baby was asked to leave a movie theater because the movie was rated “restricted”.

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## Do These Numbers Truly Ad Up?

“The British Medical Association estimates that the UK formula industry spends between L5 million (\$8million US) and L12 million (\$19.2 million US) a year, or up to L17 (\$27 US) per baby on advertising and promotion to mothers.” P. 31.

“In the U.S., a \$3 can of formula costs \$0.22 to produce.” P. 35  
*Quotes from the Milk of Human Kindness by N. Baumslag & C. Forman).*

## QF Contact information

If you would like to get this newsletter or make suggestions please check our website:  
[www.babyfriendly.ca](http://www.babyfriendly.ca)

**Contact us at:** [babyfriendly@canada.com](mailto:babyfriendly@canada.com)

**Write to us at:** Quintessence Foundation, Suite 501-4438  
West 10<sup>th</sup> Ave., Vancouver, B.C. V6R 4R8

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## Funding

Funding for Quintessence comes from charitable donations. The Foundation abides by the principles of the International Code of Marketing of Breast Milk Substitutes and will not accept funding from any sources who do not support the Code. To make a donation please send a cheque to our listed address and a tax receipt for donations over ten dollars will be provided.

If you would like to receive this newsletter please fill in the following information. We would also like to receive information or suggestions for future newsletters. We would prefer to e-mail our newsletter where possible.

Our newsletter can be downloaded from our website. If you have received this by mail and have computer access please let us know and we will notify you when we publish a newsletter. If you have suggestions please email or send us a note.

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Charitable number: 89941 1425 RR00001*

# Opportunity Knocks - 2004 Educational Offering!!

The Board of the Quintessence Foundation is delighted to announce that Molly Pessl, RN BSN IBCLC is the speaker for the second Wah Wong Memorial lecture on June 11, 2004. On June 12, 2004, there will be a one day work shop for health professionals.

## June 11<sup>th</sup>, 2004

*Honour the Parent, Honour the Child:  
a conflict in biology and culture.*

**Location:** Chan Centre at the Children's & Women's  
site (4500 Oak Street, Vancouver, B.C.)

**Audience:** open to all  
– parents and health professionals

**Time:** 7:00-8:30 pm

**Cost:** free

## June 12<sup>th</sup>, 2004:

*Getting Breastfeeding Started with Evidenced-  
Based Care. Innovative programs in Maternity  
Care.*

**Time:** 9am – 3pm

**Location:** Chan Centre at the Children's & Women's  
Site (4500 Oak Street, Vancouver, B.C.)

**Audience:** health care professionals

**Cost:** \$50

Please register for each event in order for us to be organized for the correct number of participants.

## Registration:

Name: \_\_\_\_\_

Address: \_\_\_\_\_

Telephone number: \_\_\_\_\_ Email: \_\_\_\_\_

Agency (for June 12<sup>th</sup>): \_\_\_\_\_

June 11<sup>th</sup>: no cost.

June 12<sup>th</sup>: \$50.00. Make cheques payable to Quintessence Foundation

Mail to: Quintessence Foundation,  
Suite 501- 4438 West 10<sup>th</sup> Ave.,  
Vancouver, BC  
V6R 4R8

**Check out our  
Quintessence Foundation  
Website: [www.babyfriendly.ca](http://www.babyfriendly.ca)  
for any updated information**