BREASTFEEDING AT MUNICIPAL POOLS IN CANADA

A REPORT FROM THE BREASTFEEDING ACTION COMMITTEE OF EDMONTON

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Prepared on behalf of the
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"Breastfeeding Incidents"

Women breastfeeding their children in public places often feel uncomfortable doing so, for a variety of reasons. There is evidence that mothers breastfeeding in public have on occasion been treated in disrespectful and even humiliating ways. The places where this seems most likely to happen are restaurants, malls, and especially swimming pools.

The Breastfeeding Action Committee of Edmonton (BACE) was organized in the summer of 2001 as a response to a number of "breastfeeding incidents" at a municipal pool in Edmonton, in which women breastfeeding had been asked to exit the water, or cover up, or move to a change room. In each case, the experience was very embarrassing and upsetting for the mothers involved.

The purpose of this report is to express our concerns regarding the treatment of women nursing their children at municipal pools in Canada, and to call for changes to this situation.

Pools Surveyed

In July of 2001 and July/August 2002, BACE carried out an informal survey by email of municipal pools in other Canadian cities, asking what policies they had, if any, regarding breastfeeding at their pools. Many pool administrators indicated that breastfeeding was "allowed" or "not a problem" on the one hand, but went on to stipulate that it needed to occur, or did in fact occur, under conditions of "discretion", such as using a towel to cover the woman's breast and child's head, or going to a change room. These actions were even more likely to be recommended if another pool patron had complained about seeing a woman breastfeed.

At many pools, breastfeeding while the mother is standing or sitting partially immersed in the water is either not permitted or is discouraged. Reasons for this are not always given, but when they are,

- "No food or drink in the pool" rules are cited, or more generally, rules to prevent the contamination of pool water with debris or bodily fluids (such as breastmilk) are put forward;
- A few administrators mentioned the possibility that the child might spit up or vomit into the water;
- One pool's policy mentioned the risk of the baby having a bowel movement in the water; and
- One pool raised concerns for the health of the breastfeeding child should she ingest pool water.

Breastfeeding in the Water No Cause for Concern

Breastfeeding in swimming pools is no cause for concern because:

- When a woman breastfeeds in a swimming pool, the public is not endangered by her breastmilk, even if some of it gets into the pool;
- Breastfeeding babies are no more likely than artificially fed (formula-fed) babies to spit up or have bowel movements in swimming pools and should not be treated any differently;
- A breastfeeding child is not any more likely to ingest pool water than an artificially fed baby enjoying the water with an adult; and
- Ingestion of small amounts of pool water by babies, however fed, occurs frequently, and while less than desirable, does not generally result in illness.

A breastfeeding child's health *is* endangered, however, by supplementing with artificial infant milk (formula) and by premature weaning, which can be the result of a cultural milieu hostile to the needs of breastfeeding women and their children.

Discomfort with Breastfeeding in Public

It is important to note the number and variety of conditions given by pool managers under which breastfeeding can or should take place at their facilities. What may actually underlie this is not how dangerous or offensive breastfeeding at (or in) swimming pools is, but rather the discomfort that many people feel regarding breastfeeding in public, as well as society's confusion about the anatomical purpose of breasts – that is, to feed and comfort our young.

When women feel they need to be ultra-vigilant about being discreet while breastfeeding, rather than focusing on the needs of their children in the moment, they are less likely to breastfeed outside their homes and for as long as they would like or as is recommended by health professionals. Since there are economic, health, social and emotional costs to not breastfeeding, women, children, and society suffer as a result.

Recommendations

In light of the problems which mothers have experienced breastfeeding their children in public, BACE makes the following recommendations –

We call on pool administrators to:

- withdraw any unwelcoming policies that presently exist and replace them with truly breastfeeding-friendly ones;
- communicate these new policies to pool staff, nursing mothers and all users of the facilities;
- install signs, literature and, where possible, web messages indicating that breastfeeding mothers are welcome in their facilities; and
- educate pool staff as to the importance and normalcy of breastfeeding, the hesitancy with which some mothers venture out in public to breastfeed, the embarrassment it causes them to be asked to move or stop, and the resolution of complaints about breastfeeding in a manner sensitive to breastfeeding mothers, consistent with their legal rights, and that do not involve her in the discussion.

In particular, there should be no suggestion or requirement, written or otherwise, that a breastfeeding mother be "discreet".

We encourage municipalities to ensure that all users of their public facilities, particularly pools, know that these facilities endorse a policy of "Breastfeeding Friendly – Anytime. Anywhere" and "Breastfeeding Mothers Welcome Here". We also call on cities to enact breastfeeding-friendly bylaws and provinces to enact human rights provisions explicitly protecting a woman's right to breastfeed in public.

We call on human rights commissions, Canada Health, and provincial public health services to launch campaigns promoting awareness of breastfeeding women's rights and needs. We call on Canada to uphold its commitments under international law to protect, promote, and support breastfeeding.

Taking the measures outlined would be bold steps forward and will create a culture where breastfeeding is seen as the normal, natural method of feeding an infant. Once breastfeeding becomes more visible, it will start to be seen as both usual and ordinary and fewer people will see it as strange or offensive. As society changes and more women start to breastfeed wherever they happen to be, the expression "breastfeeding in public" will cease to be meaningful. Women, it will be observed, are simply feeding their babies.

Part 1. Breastfeeding in Public and Breastfeeding at Pools

The purpose of this report is to express the serious concerns of the Breastfeeding Action Committee of Edmonton (BACE) regarding the treatment of women nursing their children at municipal pools in Canada, and to call for changes to this situation. More broadly, we are concerned that women breastfeeding their children in public places often feel uncomfortable doing so, for a variety of reasons.

There is evidence that mothers breastfeeding in public have on occasion been treated in disrespectful and even humiliating ways. The places where this seems most likely to happen are restaurants, malls, and especially swimming pools. We explore this problem here and highlight the need for changes at the societal, institutional, and individual levels.

How BACE started

The Breastfeeding Action Committee of Edmonton (BACE) was organized in the summer of 2001 as a response to several "breastfeeding incidents" at a municipal pool in Edmonton. It became apparent that at least as far back as 1996 women breastfeeding while sitting on the side ledge of the warm pool had been routinely asked to stop nursing or leave the pool. The experience was very embarrassing and upsetting for these mothers.

It became evident through a process of inquiry that there had been a pattern of what we would call "low level harassment" of nursing mothers at this pool and perhaps elsewhere. Pool staff admitted that mothers breastfeeding at pool-side (not in the water) had also been approached and asked to cover up if a complaint from another pool user regarding breastfeeding was received.

A written policy was put in place in May of 2001 formalizing this practice:

- Item #1 of the policy outlined a directive to staff that any mother breastfeeding a child "in the water" would be asked to leave the water to an area adjacent the pool until the feeding was over. The reason cited was a concern that the child with its immature immune system might ingest pool water while breastfeeding.

- Item #2 of the policy applied to breastfeeding in or out of the water and it began, "In the event a complaint about overt breast feeding occurs, the complainant is not likely having a positive recreational experience due to the actions of another." In this situation, the policy directed pool staff to approach the nursing woman, note that someone had expressed a concern, and suggest she use a towel or feeding blanket to cover up, or other alternatives, such as moving to "a family change room or other appropriate area".[1]

Pool staff also indicated verbally that if in their judgment they felt a woman was nursing "overtly", she would be approached and it would be suggested that she cover up or nurse

in a more private place, even in the absence of a complaint from another patron. This was described as "a process of education".

In August 2001, BACE submitted a formal report to the Edmonton leisure centre department outlining our concerns about this policy and about the "breastfeeding incidents". The report also contained in-depth research into the issues raised and some suggested resolutions. Most of the information from that report is contained in this document.

In September 2001 the city responded to BACE with a three page letter essentially addressing all of our concerns. The letter stated in part:

> The current research on RWI's (recreational water illnesses) indicates no specific reference to health problems for children who are breastfeeding while parents are partially immersed in pool water. . . . Capital Health (Community Care and Public Health, Environmental Health Section) . . . indicated there is no research to support the speculation that breast milk provides any greater risk of polluting the water than any other body fluids, (ie: sweat) and that standard levels of chlorine will provide adequate sanitation. In light of the foregoing our new standard of practice will leave it up to individuals to determine what is safe and comfortable for them and their children. . .
>
> From this point, we will inform any patrons who complain that breast feeding is an acceptable practice in facilities and does not contravene any legislation. Our staff, as well, will inform patrons in appropriate cases, that there is no strong evidence of any health risk, to infants or to other users of the facility through people breastfeeding in the water. . .
>
> The new policy provides for discussion with the person complaining, not the breastfeeding woman. We will also be directing staff to ensure this is dealt with from a customer service viewpoint, by being sensitive to the issue from both the mothers and other patron's perspective at all times.

Naturally BACE was very pleased to see this response. The leisure centre department also invited us to place breastfeeding brochures and other literature in designated public areas of their facilities. This literature would serve to educate the public and staff about the issues we had raised as well as provide referral information.

We have heard of no other concerns since this time regarding city pools. However, BACE did receive a complaint in May 2002 from a woman who was told by the supervisor of the YMCA pool she was swimming at that she needed to either stop breastfeeding her 13 month old or leave the pool area. She was told that she could sit in the viewing area, a considerable distance from the water, if she needed to "finish". Her five year old daughter would also have to leave the pool to accompany her, as she couldn't be left unsupervised in the pool. No less than three pool staff felt it necessary to surround this woman during the discussion that ensued. The baby stopped breastfeeding,

started to fuss, and the mother thought she looked quite frightened as well. Needless to say, no further breastfeeding took place at this pool.

At first the pool supervisor gave no reason for his request. When this mother asked why she needed to do this, "health concerns" were cited. Several other reasons followed this one: it was deemed "a nutrition issue", then she was told that the Y is a private organization and does not have to follow the same rules as city pools, then she was told that there were clearly posted signs forbidding food and drink in the pool area, then she was told that breastfeeding is no different than bottle feeding and *that* is not allowed in the pool, and then she was told that another such incident had occurred but *that* woman had just left quietly.

When she later called the manager of the YMCA to complain, she was told that she probably had not been watching her 5 year old properly and "maybe that is why you had to leave," that *other* women had the decency to breastfeed discreetly, and that she could use the facilities if she kept in mind that other people might be offended if she was not "covering" herself "properly". In the mother's words, she refused to agree to "shroud" herself and informed the manager that it was inappropriate to ask her to do so. An independent-minded woman, she was nevertheless deeply upset by this incident and its aftermath.

In June 2002 BACE and the woman affected met with the CEO of the YMCA, who confirmed that she should never have been asked to stop breastfeeding or leave the pool, as the YMCA welcomes all families including breastfeeding women and children. Public health concerns raised by Y staff at the time of the incident regarding the possible contaminating effect of any breastmilk that might get into pool water were put to rest with information from the local health authority confirming there is no health reason for women to be excluded from breastfeeding their children in or around the pool area.

The YMCA administration declined to put a new, breastfeeding-friendly policy in writing as BACE had suggested. However, they did agree to have representatives from a breastfeeding support group such as La Leche League give in-services to pool staff regarding breastfeeding, to put up signs and/or stickers indicating that breastfeeding women are welcome in YMCA facilities, and to place breastfeeding literature provided by BACE in public areas. They also agreed to have the staff members involved in this incident apologize personally to the woman. Unfortunately, despite the positive resolution, this woman no longer feels welcome at that facility and does not swim there.

Policy and practice at other Canadian municipal pools

In July of 2001 and July/August 2002, BACE carried out an informal survey by email of municipal pools in other Canadian cities, asking what policies they had, if any, regarding breastfeeding at their pools. Twenty-three replies were received. The survey covers most major cities in Canada and a number of smaller cities in Alberta. These are the results.

The representatives from no less than four cities (Kelowna, Lethbridge, Medicine Hat, and Red Deer) suggested that women should be breastfeeding *discreetly* at their pools, and in two cities (Kelowna and London), the representatives pointed out that women do indeed breastfeed discreetly anyway. In Charlottetown, women would be asked to use a "more discreet approach" if there was a complaint, and in Grande Prairie, they ask that that "discretion be used by covering up with a blanket so all patrons are comfortable" because they are a "family facility". Thus a total of seven replies mentioned the word "discreet" in some form or another.

In Fort McMurray, breastfeeding at the pool "should not be a concern . . . as long as mothers handle the breastfeeding in a similar manner as they would elsewhere in public, by putting a towel or burping cloth over their shoulder and the baby". In Red Deer, women are actively "encouraged" to use the change rooms for breastfeeding. In Calgary, patrons are "invited" to use family change rooms and quiet areas for breastfeeding, and they may also use deck-side chairs "if necessary". In Markham, they are worried about experiencing "severe customer service issues" with women breastfeeding. However, the award for Best Remark goes to Saskatoon, where they are grateful that so far they "have not had a problem with anyone abusing this privilege."

In three cities (Calgary, Kelowna and Markham), breastfeeding is not allowed in the pool, and in a fourth (Regina), it is "communicated" to the mother that it is not a good idea for her to breastfeed in the pool. In Vancouver, "breastfeeding in public areas is not an issue"; however, breastfeeding is discouraged in the water as well as in the change rooms, as they "do not allow eating or drinking" in those locations. They state that "the primary issue is body fluids," those fluids being vomit from the breastfed child as well as breastmilk. The Vancouver response was accompanied by the City of Vancouver *Blood & Body Fluid Exposure Procedures* brochure. This pamphlet is intended:

> For City employees exposed on the job to:
> - Needle sticks
> - Blood or body fluid (saliva/spit) splash in eyes, mouth or cuts
> - Human Bites[2]

Representatives in Markham and Regina also cited their reasons for the rule against breastfeeding in the pool: they were worried that the breastfed child might "foul" the pool by spitting up, and in Regina, they thought that babies tended to have bowel movements during feedings and so might foul the pool in yet another way.

In Ottawa it was recognized that breastfeeding "around City pools," whatever that might mean, poses no health risk to mother, baby, or others. In Toronto, it is acceptable to breastfeed, as long as this does not increase the risk to other children that the mother may be supervising. Chilliwack makes a somewhat non-committal, possibly positive, statement: "We do not have a policy specific to breast feeding, there have been many women who have breast fed their children on the pool deck. The Chilliwack Family YMCA [which runs two city-owned pools] tries to accommodate people of all ages."

It seems that only in Edmonton, and only in the recent past, do we now have a fairly clear statement that breastfeeding in swimming pools poses no health risk to the infant or to other swimmers, and that breastfeeding women should not be approached in the event that other patrons complain. The Markham policy also implies that breastfeeding women will be left out of any discussion arising from a patron offended by breastfeeding, but they are quite concerned that some lifeguards may become so discombobulated by the sight of a woman breastfeeding that they may need to be relieved from their duties until they are able to compose themselves.

There may also be other, informal policies and practices in existence at these pools that we don't know about, since a fairly open-ended question was asked and we received only the information the pool representatives decided to volunteer, which varied considerably. See Appendix 1 for the text of all replies from municipal pools.

Breastfeeding in public: women's experiences

THIS SECTION COMING SOON

Part 2. Breastfeeding in Pools: Is It Safe?

Is it safe for a child to be breastfed in the water?

Children often ingest pool water

Breastfeeding in or at swimming pools seems to be problematic in many places, as noted earlier. Pool policies which forbid women from breastfeeding while immersed in the water reflect a misunderstanding of what happens when a child breastfeeds. Women can and have breastfed while sitting on the ledges of shallow pools meant for warming up or teaching, as well as while standing in somewhat deeper water. The child's face is usually nowhere near the water at the time of the feeding. If it did happen to be at water level, the child's lips form a seal on the breast which makes it unlikely that any water would enter her mouth. It is conceivable, although improbable, that some water might enter a breastfeeding child's nose, however.

Babies ingest pool water all the time, actually. City leisure centres usually offer parent-and-tot swimming lessons for babies 6 months of age and up, and it is well known among mothers who have taken these classes and the instructors who give them that in the process the babies ingest some pool water more often than not. Babies are encouraged to put their faces in the water and blow bubbles, and sometimes ingest water while doing so. Infants less than a year and even less than six months old can be seen enjoying the water with their parents in most pools. It is inconceivable that these children would never ingest pool water. Babies can also be seen sucking on their wet life jackets. In an unpublished study done for the Canadian Red Cross, in which babies were intentionally submerged during a water experience program, 31 of 80 test weights done afterwards showed an average gain of about 50 ml, or 1/4 of a cup of water, with no ill effects.[3] Not only do swimming pools not exclude young children from the water, they actively encourage them to participate. Thus a double standard seems to exist at some pools regarding breastfeeding babies who might ingest pool water and other babies enjoying the water who might do the same.

Recreational water illnesses (RWIs)

Why the fuss over a baby ingesting pool water? A look at the public health literature shows that people do occasionally contract diseases from ingesting pool water, so-called "recreational water illnesses" (RWIs), due to such organisms as Cryptosporidium and Giardia.[4] The Centers for Disease Control (CDC) Healthy Swimming project has published extensive information for parents, the general public, pool staff, and public health professionals on the prevention of RWIs.[5] Measures recommended include not swimming if you have diarrhea, washing hands after going to the toilet, changing diapers in the change area rather than at poolside, and of course, not swallowing pool water. Not every ingestion will result in illness, obviously, but minimizing it is considered prudent.

Professionals are advised to filter the water in "kiddie" pools separately from other pools, frequently clean surfaces around the pool area, develop a bathroom break policy, develop a fecal accident response policy, educate both the public and pool staff, and consider "keeping diaper/toddler aged children in the pools specifically designed for them," among other things. If the pool does become accidentally contaminated with fecal material, extensive and internationally recognized protocols exist to deal with such incidents and to minimize the risk of pool users contracting RWIs.[6]

A look at these materials finds no mention of disallowing babies from swimming or mothers from breastfeeding while their lower bodies are immersed in the water, as when sitting on a pool ledge nursing or standing in the water. There is no special concern expressed for babies. What we can infer from the information presented by the CDC and other sources is that the focus of any policy or campaign of education to prevent RWIs among pool patrons should be on the so-called "healthy swimming behaviors" and pool practices mentioned in their guidelines. It should not be on ejecting breastfeeding mothers and babies from the water.

The immune system of the breastfed baby

Let's assume that a baby might on occasion ingest some water in the process of being nursed in a pool. A policy which tries to prevent this nevertheless reflects a surprising failure to appreciate the robust immune systems of breastfed babies. On average, they are sick significantly less often than formula-fed babies, and when they do get sick, are usually less so and recover more quickly than their artificially fed counterparts.[7] Although it is true that the immune system of the young child is not yet fully mature, those who the pool staff should be most worried about are the formula-fed. These infants lack the benefits of breastmilk, which contains secretory IgA antibodies and dozens of other anti-bacterial, anti-viral, and anti-parasitic substances.[8] Breastmilk contains factors which inactivate protozoans such as Cryptosporidium, the most common culprit in gastrointestinal infections contracted from recreational pool water[9], and Giardia.[10], as well as illness-causing bacteria which are also present at times in swimming water, such as Shigella and E. Coli.[11] Lawrence and Lawrence state:

> Protection [by breastfeeding] against gastrointestinal infections is well documented.[12]

In a discussion of gastrointestinal infections in infancy, Riordan and Auerbach note that:

> Even partial breastfeeding reduces the severity and duration of diarrhea episodes – and the likelihood of mortality from diarrhea.[13]

Breastmilk is thought to "fast forward" and modify the immune system of the breastfed baby in ways that scientists do not yet fully understand.[14] Amazingly, it is also possible for a pathogenic organism to colonize the intestinal system of an infant and yet be prevented through the action of breastmilk from actually causing disease.[15]

Statements from physicians' and water safety groups

What if, despite healthy swimming practices and the strong immune systems of our breastfed children, we are told that the risk of this age group ingesting pool water and getting sick is still too great? We then have to ask, should they really be in the water at all, breastfed or not? The CDC Healthy Swimming guidelines express no special concerns for the health of babies or young children, as discussed above.[16] A survey of information published by the American Academy of Pediatrics (AAP), the Canadian Paediatric Society (CPS) and water safety groups such as the Red Cross and the YMCA on the subject of infant and toddler swimming and swim programs reveals four consistent concerns. These are drowning, hypothermia, water intoxication, and communicable diseases (see Appendix 2). No information is contained in any of these publications to suggest:

- that breastfeeding while the mother is immersed in the water has led or can lead to ingestion of pool water by the breastfed child; or
- that there is any greater risk of the breastfed child who has ingested pool water contracting a recreational water illness as compared to the bottle-fed child who has ingested pool water.

Presumably if the act of breastfeeding in the water were any more dangerous than the act of participating in an infant or toddler swim program, these authorities would say so. In light of this, a directive to staff mandating that women breastfeeding in the water be requested to exit the pool seems to be a disproportionate response to the theoretical possibility that a breastfeeding child might ingest pool water as compared to young children participating in water activities in general. It is not only a disproportionate response, it is an illogical one. It is the formula-fed babies who are most at risk here.

Is breastfeeding in the pool safe for other people?

"No Food or Drink in the Pool" -- What if breastmilk gets into the water?

As we have seen, the policies at some pools discourage or even forbid women from breastfeeding while sitting or standing in pool water. Often they give no rationale for this rule. But some of them cite concerns that breastmilk might "contaminate" pool water. "No Food or Drink in the Pool" rules have been known to be invoked in support of these policies.[17]

According to Nelson Fok, Research and Development Manager of the Environmental Health Section, Capital Health Authority, Edmonton, Alberta, there are two concerns regarding organic matter such as breastmilk getting into swimming pools. One is that the protein in such matter will bind with pool chlorine, thereby inactivating the chlorine. The

other is that a body fluid such as breastmilk might contain bacteria or viruses potentially capable of causing disease in other swimmers.

Fok indicates that neither of these problems is a realistic concern as far as breastmilk goes. He said that the small amount of breastmilk that might enter the water when a woman breastfed would not be enough to cause any significant level of de-activation of chlorine nor would it pose any real risk of causing disease. He also pointed out that breastmilk contains anti-infective substances.[18] We can speculate that these might actually act on bacteria and viruses already in the water.

Even the remote possibility of HIV-infected breastmilk getting into pool water would be unlikely to cause harm to anyone. The HIV virus is extremely fragile and has difficulty surviving outside the human body. The CDC states:

> Scientists and medical authorities agree that HIV does not survive well in the environment, making the possibility of environmental transmission remote. . . no one has been identified as infected with HIV due to contact with an environmental surface. Additionally, HIV is unable to reproduce outside its living host (unlike many bacteria or fungi, which may do so under suitable conditions), except under laboratory conditions, therefore, it does not spread or maintain infectiousness outside its host. . . It is important to understand that finding a small amount of HIV in a body fluid does not necessarily mean that HIV can be *transmitted* by that body fluid.[19]

There is recent evidence that breastmilk contains immune cells that target and kill HIV, thus reducing the viral load and explaining the relatively low transmission rate from mother to child during breastfeeding.[20] In 1992, the International Lactation Consultant Association (ILCA) asked OSHA, the U.S. Occupational Safety and Health Administration, whether the OSHA regulation "Occupational Exposure to Bloodborne Pathogens" applied to breastmilk. They replied that,

> Breast milk is not included in the standard's definition of "other potentially infectious materials". Therefore contact with breast milk does not constitute occupational exposure, as defined by the standard.[21]

They based their position on "the Centers for Disease Control's findings that human breast milk has not been implicated in the transmission of the human immunodeficiency virus (HIV) or the hepatitis B virus (HBV) to workers".[22] Like the CDC, they recommend that gloves be worn by *healthcare* workers where exposures to breastmilk might be *frequent*, such as in human milk banking.[23]

What about other organisms occasionally found in breastmilk, such as Hepatitis B? As noted above, the CDC states that breastmilk has not been implicated in the transmission of hepatitis B to workers. The World Health Organization discusses the Hepatitis B virus (HBV):

> Breastfeeding has been suggested as an additional mechanism by which infants may acquire HBV infection, because small amounts of Hepatitis B surface antigen (HBsAg) have been detected in some samples of breastmilk. However, there is no evidence that breastfeeding increases the risk of mother to child transmission.[24]

The CDC also provides us with this information:

> HBsAg [hepatitis B surface antigen] has also been detected in low concentrations in other body fluids, including tears, sweat, urine, feces, breast milk, cerebrospinal fluid, and synovial fluid; however, these fluids have not been associated with transmission.[25]

They discuss Hepatitis C:

> There is no evidence that breast-feeding spreads HCV. HCV-positive mothers should consider abstaining from breast-feeding if their nipples are cracked or bleeding.[26]

Note that these sources are discussing *breastfeeding*, in other words, the direct ingestion of *significant quantities* of breastmilk, not drops of breastmilk in liters or gallons of chlorinated water.

There are still other disease-causing organisms of concern, such as Hepatitis A, but these are found in feces (and/or blood), rather than breastmilk -- hence the importance of the "healthy swimming behaviours" mentioned earlier in preventing *fecal* contamination of pool water. While the CDC notes the fact that "various bodily fluids" are present in swimming water, their emphasis is on fecal contamination:

> Because swimming typically involves sharing water with many other persons in a pool, the water contains various bodily fluids, fecal matter, dirt, and debris that wash off bodies during swimming activities. Fecal matter is regularly introduced into the water when someone has a fecal accident through release of formed stool or diarrhea into the water, or residual fecal material on swimmers' bodies is washed into the pool. Fecal contamination may be more likely to occur when there is a high density of bathers, particularly diaper- and toddler-aged children. Swallowing this fecally contaminated water is the primary mode for transmission of enteric pathogens in recreational water outbreaks.[27]

If breastmilk *was* a bodily fluid of concern, presumably the CDC would state that fact. Moreover, no lactating woman could be allowed to swim, with or without baby, since it is possible for her to leak small quantities of breastmilk at any time (although they usually do so only in response to their babies).

It would be quite a leap to extrapolate from the situation of frequent exposure to breastmilk in human milk banking, where gloves are recommended, to that of the swimming pool, where mere drops of breastmilk *might* on rare occasion contain

infectious agents not already neutralized by the milk itself, which *might* get into the pool and *might* become dangerous to others. So great a leap, in fact, that it ranks as an unfounded concern. The fact that no where can you find any mention of breastmilk as a contaminant of pool water probably speaks the loudest. It just isn't a problem, so no one needs to write about it. As far as breastmilk goes, "No Food or Drink in the Pool" rules are inapplicable and unnecessary.

What if the baby has a bowel movement or spits up in the pool?

Bowel Movements

Some pool administrators indicated concerns that an infant being breastfed in the water might spit up or even having a bowel movement at that time. There are a number of responses to this.

First of all, the strong *gastro-colic reflex* of the newborn, where stool is automatically released from the rectum when the stomach is full, diminishes by the age of about two months if not sooner. Thereafter stool is actively pushed out by the baby and only when it is present in sufficient quantities in the rectum.[28] A formula-fed baby is actually more likely than a breastfed baby to have a full stomach due to slower and less complete digestion of formula as compared to breastmilk.[29] If there is to be any attention to this "problem", then, it should include the formula-fed baby, who may be just as likely or more likely to have a bowel movement with a full stomach. The fact that pool administrators are conspicuously silent in that respect says something either about the misinformation they hold or their attitudes towards breastfeeding.

Moreover, after the first month of life, breastfed babies have bowel movements *less* often and formula-fed babies *more* often:

> Whereas the totally breastfed infant passes copious stools very infrequently after the fourth week of life, the bottle-fed infant tends to pass larger and more odorous stools more frequently.[30]

However fed, the likelihood of a baby having a bowel movement in the water is not very high after two months of age, as mentioned earlier.

Parents of all babies – breastfed and formula-fed, need to observe the healthy swimming guidelines as set out by the CDC, in order to keep the water safe for everyone. There are no separate rules for breastfed babies in the guidelines.

Note that the CDC casts doubt on whether the commercial swim diapers which have become so popular actually do any good as far as preventing contamination of pool water:

> **What is the truth about swim diapers and pants?**

> The use of swim diapers and swim pants may give many parents and pool staff a false sense of security regarding fecal contamination. No published scientific information exists on how well they are able to keep feces or infection-causing germs from leaking into the pool. Many pools are now requiring children to be in swim pants or diapers. However, it is unlikely that swim diapers are able to keep diarrheal stools from leaking into the pool.[31]

If it is true that swim diapers are ineffective in preventing contamination of the water with fecal material, then it seems pointless to focus on the rare occasions when a baby breastfeeding while mom is partway in the water has a bowel movement. It is equally likely that her formula-fed counterpart will have a bowel movement while being held in the water, and a near certainty that toddlers (wearing swim diapers) and young children (wearing only bathing suits) will have accidents as well.[32]

Spitting Up

As far as spitting up goes, this is a common event for both breastfed and bottle-fed infants.[33] This so-called "reflux" (or *gastroesophageal reflux*) has been found to be less frequent and shorter in duration for breastfed infants as compared to bottle-fed.[34] Any concern about babies spitting up should not be directed solely at breastfed babies, but all babies. We should also remember that the amount of food of whatever kind being regurgitated is likely to be small enough to be neutralized by the pool chlorine, and both breastmilk and (fresh) formula are relatively clean substances: they're not colonized with E. coli, for example, as stool invariably is.

What are the CDC's main concerns? Do we really need to worry?

We have dealt at considerable length here with ingestion of pool water by the breastfeeding baby, as well as ingestion by other pool patrons of pool water potentially contaminated by breastmilk, stool, or "spit-up". No real risks were uncovered, at least no risks any greater than pool operators already encounter on a day-to-day basis in dealing with formula-fed babies, toddlers and young children.

One city's response was accompanied by that city's brochure on blood and body fluid exposure procedures, as mentioned earlier. The brochure is intended for city employees exposed on the job to such things as needle sticks, body fluid splashes into eyes, mouth, or cuts, and human bites. (See Appendix 1.) The comparison of the risk of exposure to pool water containing minute quantities of breastmilk to the risk of exposure to HIV and hepatitis viruses through needle sticks, blood, and human bites is inappropriate, and, one could argue, irresponsible. The comparison ignores current knowledge regarding the properties of breastmilk, the efficacy of pool disinfection, and relative risks of various bodily fluids. There is a small but real risk of transmission of infectious agents through needle sticks, for example, whereas the risk of transmission via breastmilk in pool water is nil.

Even a quick review of the CDC's Healthy Swimming 2002 website and related links reveals that contamination by feces is considered to be of paramount importance,[35] not only with respect to pool water but also regarding all surfaces surrounding the pool.[36] Other "biologic contaminants", such as sweat, hair, urine, skin cells, and lotion are mentioned as contributing to the deactivation of chlorine, but not as sources of pathogenic organisms.[37]

Breastmilk as either a source of organic matter or pathogenic organisms is absent from the list of biologic contaminants. There is no specific mention of feces or vomit from breastfed babies. It seems quite clear from all this that neither swimming patrons nor breastfed babies are in any danger whatsoever from babies being breastfed in the water.

What is more to the point, however, is this: we suspect that it is not the potentially infectious nature of the pool water that aquatics personnel are really concerned about, it is the act of breastfeeding itself which bothers them. Breastfeeding a child is unfortunately an act with which many people remain uncomfortable.

Part 3. Breastfeeding at Pools: Is it Really Necessary?

Why can't they just wait and nurse later?

Some people may wonder why women can't nurse their babies at a later time when they might have more privacy, or just give the child a bottle. Then everyone would be happy, right? People who say this are usually equating breastfed and bottle-fed children. They understand correctly that most formula-fed babies may go for several hours between feedings, but may not understand that this may or may not be true of the breastfed baby. He may nurse every hour or two, or may *cluster feed* several times within a period as short as a half-hour or hour. Not only does breastfeeding work on a supply and demand system - the supply increases as the demand increases - but waiting to breastfeed, rather than storing up the milk in the breast, actually *inhibits* milk production.[38] Another breastfeeding paradox is that the more frequently the baby breastfeeds, the *greater* the fat content of the milk.[39] The converse of this, of course, is that the less often the baby is fed, the *lowe*r the fat content, and the less satisfied the baby may be.

For these reasons, breastfeeding experts are unanimous in their advice that breastfed babies need to be fed frequently and according to *feeding cues*, that is, whenever they show signs of hunger.[40] Cue feeding maintains the mother's milk supply, the baby's interest in nursing, and ultimately, the growth and health of the baby.[41] Scheduling feedings is specifically advised against, as it can lead to failure-to-thrive in the baby and lactation failure in the mother.[42] As well,

> The infant is frequently too frantic from crying or too sleepy to feed well at the appointed times.[43]

For these reasons, forcing a baby to wait to nurse is detrimental to her health and development and stressful to both mother and baby.

Why not use baby bottles or pacifiers in public?

Hazards of Artificial Baby Milk (Formula)

Similarly, some people wonder why a nursing mother wouldn't just give her baby a bottle of formula in public situations. In a landmark 1997 statement, the American Academy of Pediatrics stated:

> Human milk is uniquely superior for infant feeding and is species-specific; all substitute feeding options differ markedly from it. The breastfed infant is the reference or normative model against which all alternative feeding methods must be measured with regard to growth, health, development, and all other short- and long-term outcomes.[44]

The World Health Organization (WHO)[45], the American Academy of Pediatrics[46], and breastfeeding experts agree that the period of exclusive breastfeeding, that is, the period in which the baby receives *nothing by mouth other than breastmilk*, should be his or her first 6 months. On May 18, 2001, the World Health Assembly (WHA), which sets the UN's World Health Organization's policy, reaffirmed this standard in a unanimous resolution in which member states are urged to:

> "...support exclusive breastfeeding for six months as a global public health recommendation taking into account the findings of the WHO Expert Technical Consultation on optimal duration of exclusive breastfeeding and to provide safe and appropriate complementary foods, with continued breastfeeding for up to two years or beyond...."[47]

The WHO Expert Technical Consultation on optimal duration of exclusive breastfeeding found, among other things, that the incidence of gastrointestinal disease (ie. diarrhea and vomiting) is reduced in children exclusively breastfed for 6 months, as opposed to only 4 months.[48] The WHA states that infant formula and baby foods should not be marketed for use by children under the age of six months, except in particular medically-indicated circumstances.[49] Solids can be gradually started after six months of age, but breastfeeding ideally continues until at least one year of age and preferably longer.[50] (See Appendix 3 for relevant WHO statements.)

An important reason for the avoidance of formula is given by Lawrence and Lawrence (1999):

> Bovine milk [cow's] is the most common single allergen affecting infants. . . Modern heat treatment of formula may have reduced – but certainly has not eliminated – the allergic potential of these proteins. . . Because the symptoms [of allergy to cow's milk] are varied and nonspecific, the diagnosis is often mistaken or missed. . . When the introduction of foreign proteins[51] is delayed for four to six months, the baby's own IgA system is permitted to become more fully functional; thus *allergic responses may be minimized or entirely avoided.* . . The rationale for delay of solids for the first half year after birth is thus reinforced. [52] [italics added]

As these authors make clear, the early introduction of formula and/or solids, that is, foreign proteins, predisposes the baby to allergic reactions and the development of allergic conditions. If mother and child are healthy, children may be kept off solids and formula for up to 9 months in some cases.[53] This is more likely to be done if they are prone to allergies and asthma, either by heredity or individual predisposition.

The reason why foreign proteins (or parts thereof) are able to pass into the bloodstream of a baby is because babies lack what is known as *gut integrity*. This means that they are born with permeable intestines, which allow *macromolecules* (large molecules) such as proteins or protein fragments to pass through the intestinal walls into the bloodstream. Intestinal permeability starts to decrease as soon as a baby starts breastfeeding, however.[54] It is thought that the secretory IgA (sIgA) antibodies present in breastmilk

"paint" the inside of the intestines, preventing foreign proteins *as well as infectious agents* from entering the bloodstream.[55] It has been shown that the intestines of artificially fed (formula-fed) babies are slower to achieve intestinal integrity, or *gut closure*, than the intestines of breastfed babies.[56] It is for this reason that in babies sensitive to cow's milk proteins – that is, babies allergic to cow's milk – cow's milk formula actually causes damage to the intestinal mucosa, the lining of the intestines, in some cases causing chronic diarrhea and malnutrition.[57]

Another important reason for avoiding feeding formula is that there is evidence that the positive effects of breastmilk are *dose-dependent*. This means that the greater the proportion of breastmilk in a baby's diet, compared to artificial baby milk (formula), the greater the positive effects, such as fewer and less acute episodes of diarrhea, vomiting, and ear infections.[58] These norms of infant health are maintained only by exclusive breastfeeding; the more formula that is fed, the greater the deviation from these norms.

Formula is likely also responsible for the development of insulin-dependent diabetes mellitus (IDDM) in some children.[59] Cow's milk, with its greater load of unmodified proteins, may be even more likely to cause IDDM, and it is partly for this reason that parents are advised not to start cow's milk before the age of one.[60] There are many other hazards of artificial feeding, such as cognitive deficits, increased morbidity and mortality from infections, asthma, excesses and deficiencies of essential ingredients, contaminants, baby-bottle tooth decay, and increased risk of schizophrenia, Crohn's disease, ulcerative colitis, MS, and lymphomas (cancers).[61] Not breastfeeding also affects the mother to her detriment.[62]

This discussion demonstrates that neither formula nor cow's milk are adequate substitutes for breastmilk. Supplementing breastmilk with formula also diminishes the mother's milk supply, which over time can lead to early weaning.[63] Skipping or delaying feedings leads to breast engorgement,[64] which in turn can result in plugged ducts and breast infections (mastitis).[65] Most breastfeeding mothers have probably had the experience of the baby sleeping "too long" or for some other reason having to wait to breastfeed, with very uncomfortable results for the mother, and most are not anxious to repeat the experience. Similarly, women who intend on breastfeeding for a number of months or years are usually aware of the potential dangers of supplementing and of delaying feedings and will want to avoid these negative outcomes.

Problems associated with bottle-feeding

The benefits of feeding exclusively breastmilk, combined with the hazards of formula-feeding, mean that some breastfed children never receive formula. As well, many breastfeeding mothers are reluctant to use bottles, even bottles filled with breastmilk, because babies can develop *nipple confusion*[66] or *nipple preference*, meaning the artificial nipple is preferred over the breast and the baby refuses to nurse, effectively weaning herself.[67] Older nursing babies are often reluctant to use bottles if they have not already been introduced to them.[68] A bottle offered at the pool would be roundly rejected; the comfort of the breast sought after.

Problems associated with pacifiers

A pacifier might at first glance seem to be able to provide interim comfort to a baby that wants to nurse. But pacifiers suffer from the same problems as bottles: they can lead to nipple confusion,[69] and the baby will only use one if she is used to it. Daily use of pacifiers is associated with early weaning.[70] Pacifiers can cause yeast infections in the baby[71] which can then be passed to the mother.[72] They also increase the incidence of ear infections in the baby[73]. Both pacifiers and bottles are thought to be responsible for more cases of malocclusion in children.[74]

Pacifiers and bottles are simply not acceptable alternatives for many nursing mothers. Many moms prefer breastfeeding simply because bottle-feeding is so much more expensive and less convenient, and they want to maintain closeness with their babies.

Why nurse an older child?

Some people seeing a child over the age of 1 nurse may wonder why she is "still" nursing. The duration of breastfeeding can be quite long. The natural age of weaning for human infants is thought to be between 2.3 and 7 years of age.[75] Various markers for weaning in higher primates, such as the quadrupling of birth weight, six times the length of gestation, and the appearance of the first permanent molars, are used to obtain this age range. Among a group of 179 mothers practicing so-called extended breastfeeding in the United States, the average age for weaning was between 2 years 6 months and 3 years, with a range of weaning ages from 1 month[76] to 7 years 4 months.[77] The American Academy of Pediatrics states,

> It is recommended that breastfeeding continue for at least 12 months, and thereafter for as long as mutually desired.[78]

Similarly, the 1998 joint statement of the Canadian Paediatric Society, the Dieticians of Canada, and Health Canada titled *Nutrition for Healthy Term Infants* states:

> Breastfeeding is the optimal method of feeding infants. Breastfeeding may continue for up to two years of age and beyond.[79]

As noted earlier, this is also in agreement with World Health Assembly resolutions, to which Canada is a signatory, encouraging breastfeeding for two years or more.[80] (See Appendix 3.)

A longer duration of breastfeeding has been found to be associated with fewer toddler illnesses.[81] A recent study found that a longer duration of breastfeeding may also be associated with higher toddler energy intakes at age 18 months. Mothers who breastfed their children for at least 12 months used lower levels of control in feeding other foods, which in turn was associated with higher toddler energy intakes.[82] Few studies exist of

children nursing past age 1[83], even fewer still past age 2, but it is likely that children continue to receive the benefits of breastmilk, including strengthened immunity, for as long as they nurse.[84]

Nursing for comfort: an overlooked aspect of breastfeeding

Breastfed babies and young children also nurse for comfort, and this is one of the least appreciated and most unknown benefits of breastfeeding. It is also one of the most common reasons for children to want to nurse, particularly after the age of 6 months. Most nursing mothers consider nursing for comfort when a child is ill, injured, anxious or tired to be an essential element of their breastfeeding relationship, one that the child should not be denied simply because others may be unfamiliar with or embarrassed by breastfeeding. Indeed, for some of us, comfort is the primary reason for nursing our children in the pool itself. A child new to the water and somewhat apprehensive about the many other children in it may be uneasy about the new experience and is soothed by being able to nurse a little. Nursing toddlers who can talk will sometimes tell their mothers they need to nurse "to get the scariness out". As anthropologist Katherine Dettwyler puts it,

> Women need to know that breastfeeding quiets a noisy or fussy child, relaxes an anxious child, comforts a sick, injured, or frightened child, and conveys unequivocally that the child is safe and loved. They need to know that a child who has the "safe haven" of his or her mother's arms is a secure, independent child, one who has the self-confidence to reach out and explore the world.[85]

Interestingly, breastmilk contains a substance called *cholecystokinin*, or CCK, which actually relaxes the child and will even put her to sleep in a quieter situation. She also produces her own CCK during suckling, with the same result.[86] In a more active situation such as the swimming pool, CCK would help calm the nursling so that she would be ready for other experiences.

These facts and statements, taken together, mean a number of things:

- that many nursing mothers rightly regard artificial baby milk (formula), baby bottles, and pacifiers as potentially harmful to their babies and will not use them even in situations, such as the pool, where it might be the more socially comfortable thing to do;
- that most nursing mothers will not want to compromise their milk supply by delaying feedings or using artificial baby milk;
- that breastfeeding can be used as a parenting tool and is a wonderful way to create confidence in a child; and
- that women may be seen breastfeeding their toddlers and preschoolers as well as their babies, and none of this should be regarded as abnormal or undesirable.

Part 4. Breastfeeding and Culture: What Are Breasts For?

It appears that the staff at some swimming pools routinely request that women breastfeeding leave the pool, cover up, go to the change room, etc. These requests or directives are probably intended to smooth relations between an upset complainant (or lifeguard) on the one hand and a breastfeeding mother on the other. The former City of Edmonton pool policy mentioned concerns about "overt" breastfeeding, for example, and gave directions to staff about how to handle it. The majority of Canadian pools surveyed by BACE expressed concerns about breastfeeding and/or indicated special treatment of breastfeeding women was called for, such as being directed to change rooms, or in the case of one city, away from change rooms. (see Appendix 1). What is really going on here? Why would so many pools feel the need to address breastfeeding at their facilities?

Breastfeeding in public seems to be a fairly common issue across North America, Britain, and Australia. The survey of the news, the internet, and internet newsgroups discussed above reveals that many women have had problems breastfeeding in public, a surprising number of them at swimming pools. Research sheds some light on why this is so: a group of researchers from the University of Adelaide in Australia surveyed 66 restaurants and 27 shopping malls, finding that two-thirds of restaurant managers and just over half of shopping mall managers disagreed with the statement that a mother could breastfeed anywhere in their facility regardless of what other customers might say. These managers stated they would either discourage breastfeeding anywhere in their facility or suggest a mother move to a more secluded area if she wished to breastfeed, or else they were unsure how they would react.[87]

The word "discreet" comes up frequently in relation to breastfeeding in public, and not just in the context of swimming pools. For some, breastfeeding is deemed "OK" as long as the woman breastfeeding is being "discreet". For others, any and all breastfeeding in public is unacceptable regardless of how discreet a mother is trying to be. To put it another way, to these people, *all* breastfeeding in public is indiscreet.

But what constitutes being discreet, exactly? What about the mom with a fussy new baby who doesn't always latch on right away, the "moving target" kind of baby? Is mom failing to be discreet if she doesn't get the baby latched on quick enough for others' liking? What about the mom who doesn't quite get the clothes and the baby all arranged just so right away? What about the situation with an older baby keen to look around and see what's going on, who will repeatedly come off the breast to check things out, then go back to her "snack"? And the baby or toddler who hates to be covered with a blanket or likes to lift mom's top? What about the baby who wants to nurse even when mom's in the swimming pool? And what if, horrors, the mom believes that breasts are for breastfeeding and nothing to be ashamed of, and doesn't even try to cover up while nursing?

All of these women, from the inexperienced, flustered new mom struggling to latch and cover up at the same time, to the proud experienced mom who carries on, taking no notice of others, could be accused of not being "discreet". Similarly, what is considered to be “overt” breastfeeding, and who decides? Assuming we knew what it was, why would “overt” breastfeeding need to be hidden, anyway?

Breastfeeding appears to be seen at least by some as a sexual act or an overt display of sexuality. However, while breastfeeding is often joyful and pleasurable for both mother and baby, it is not sex or sexual. Breasts are what mammals use for feeding their young. We seem to forget this. Anthropologist Katherine Dettwyler outlines four assumptions that underlie our North American beliefs about breasts:

> (1) the primary purpose of women’s breasts is for sex (ie. for adult men), not for feeding children, (2) breastfeeding serves only a nutritional function, (3) breastfeeding should be limited to very young infants, and (4) breastfeeding, like sex, is appropriate only when done in private.[88]

Regarding her second and third points, it has already been pointed out here that breastfeeding is for more than nutritional purposes and ideally lasts well into toddlerhood or in some cases longer, depending on the child’s needs. Dettwyler elaborates on the issue of sexuality and breastfeeding:

> The physical sensations of an infant or child nursing at the breast can be pleasant, of course. They can also be painful, or annoying, or totally neutral, depending on the context, the mother’s mood, and the child’s position at the breast (see above). By the same token, the sensations of a back rub can be physically pleasant, or painful, or annoying, or neutral, depending on the context, one’s mood and the skill of the masseuse. The breasts are not particularly sensitive body parts; and while breastfeeding can be physically pleasant, it isn’t always. When it is pleasurable, these feelings should not automatically be interpreted as *sexual* feelings.[89]

A number of authors and activists have noted that those who object to breastfeeding in public share perceptions of this activity that are rooted in shame, discomfort, and even revulsion towards the body in general. The issues are well explained by Professor Paul Rapoport of McMaster University in Hamilton. In an article for a Hamilton, Ontario newspaper discussing a breastfeeding “incident”[90] at a local pool, he wrote:

> . . . Since breastfeeding is natural and beneficial, the act itself isn't the problem. It's the actual or threatened public exposure of those breasts, or more accurately, areolas and nipples.
>
> Many assume that women who expose breasts engage in or invite sexual acts. This assumption is created and maintained by heterosexual men. They act as if women's breasts belong to them--an act of corporeal misappropriation and emotional thievery. No wonder many women won't breastfeed in public!

> A corollary is that men seeing women's breasts can't control themselves. It's false. It also sounds like the old and discredited notion that women are "asking for it" in dressing or not dressing a certain way.
>
> Several letters [to the editor of that paper] also implied, "I wouldn't breastfeed in public, so she shouldn't." Aside from the defective logic, this represents the kind of coercion our laws are designed to prevent.
>
> At the heart of the matter is the issue of offense. People have the right to be offended. They do not have the right to remove their offense by removing others who are causing no harm. It would help if people unsettled at the thought of women breastfeeding or uncovering their breasts in public would recognize the source of what is mostly their own problem.
>
> That source is often revulsion at the body. It helps produce calamities---mostly for women---such as bulimia/anorexia, low self-esteem, mutilating surgery, reduced breastfeeding, and sexual dysfunction. Not least is the debilitating body shame and guilt adults lay on children, based on peculiar and damaging adult phobias.
>
> But where does all that come from? Two major places: misapplication of Freudian ideas---some of them untenable in the first place---and misunderstanding of religion, often manifested in inappropriate use of Christian scripture. Not least is the precept that the mind is pure and the body is filthy. That attitude doesn't do much for the temple of the soul, or human beings created in God's image.
>
> Disgust at women's breasts causes women to live their entire socially conscious lives as if there is something bad or wrong about the upper parts of their bodies but not men's. Why? Because men say so. Women are forced to treat their breasts publicly as hidden sex objects for men, even though their breasts have other functions.[91]

If people were used to seeing real breasts, in all their shapes and sizes, as opposed to the glimpses of young breasts seen in bikinis at the pool or the perfectly coloured and shaped breasts seen in pornography and in a daily avalanche of advertisements, perhaps the breast would become de-eroticized. Most of the shame and discomfort associated with breasts would disappear and they would be appreciated for their biological purpose of nurturing children.

In fact, many traditional cultures do not see the breast as erotic. Dettwyler compares these cultures to our own:

> Are mammary glands *intrinsically* erotic in humans? The ethnographic evidence clearly says “no”. As Anderson himself points out, ‘We seem to be the only mammal in which the mammary gland has this erotic function’. Even among humans, according to Ford and Beach’s survey (1951), only 13 out of 190

> cultures report that men view women's breasts as being related to sexual attractiveness, and only 13 out of 190 cultures [interestingly, not the same 13 as above] report male manipulation of female breasts as a precursor or accompaniment of sexual intercourse. . . we are led to the conclusion that such behavior has a *purely cultural basis, with a limited distribution.* [92] [first italics in text; second italics added]

It would be ethnocentric in the extreme, arguably racist, to suggest that because these cultures do not see the breast as erotic, they do not have as much sexual enjoyment as we do in the more industrialized world. Dettwyler continues:

> Obviously, humans can *learn* to view breasts as sexually attractive. We can learn to prefer long, pendulous breasts, or upright, hemispherical breasts. We can learn to prefer large breasts. All of these views can be culturally imposed, just as some Chinese men learned to view tiny, deformed feet as sexually attractive. . . Because these views are culturally imposed, we can choose not to accept the idea that large breasts are desirable, and worth the high cost to women's and children's health. Because these views are culturally imposed, we can consciously choose the alternative route of using cultural beliefs to reinforce, rather than deny, the biological function of women's breasts as body parts designed for nurturing children.[93] . . .
>
> . . . The size of a woman's breasts is not related to her ability to produce breast milk.[94]

We must accept, however reluctantly for some, that viewing breasts from an erotic perspective is not essential nor is it necessarily central and indeed, there are many damaging ramifications arising from seeing breasts this way. Dettwyler asks the question "[c]an't we 'have our cake and eat it, too?'"; ie. can we not retain the breast as fetishized sexual object as well as child-nurturer, answering,

> Perhaps, but only to the extent that using our breasts for these purposes does not lead to the excesses represented by female mammary mutilation[95], widespread dissatisfaction among women with the way their bodies look, men who judge a woman's value on the size of her breasts, and widespread misunderstanding of the primary function of women's breasts, which leads to breastfeeding being defined as sexual behavior.[96]

Working towards a de-eroticization of the breast – or perhaps more accurately, large breasts - for that is what, in part, is being called for - is not to say that consenting women and men cannot eroticize the breast at a time and place of their choosing. The breast can be eroticized, just as lips, a shoulder, an ankle, or a back, areas of the body that in everyday life are often not hidden and are not usually viewed as sexual, might be eroticized in certain contexts by willing participants. Certainly the fact that many people engage in oral sex does not lead us to call for the concealment of our lips in public. Similarly, breasts can be a source of pleasure for many men and women; this does not

mean that large breasts must be an obsession. Under "suitable" circumstances (ie. consenting sexual activity), breasts can take their place alongside lips, ankles and backs as erotic areas of the body.

When and where a woman's breasts are seen as sexual needs to be within an individual woman's control. Right now that is clearly not the case, as can be seen from the widespread use of images of breasts to market products as well as the taboos surrounding public breastfeeding and exposure of women's breasts in public.

Part 5. Effects of Restrictions on Breastfeeding

The courage to nurse in public

It is probably accurate to say that many if not most breastfeeding women have some degree of uneasiness nursing in public, depending on the time and place, and the experience of the mother. Nursing women are only too aware of prevailing attitudes towards exposure of the breast, however misguided those attitudes may be. Many nursing mothers are acutely embarrassed to think that anyone would even *notice* that they are breastfeeding at all. For many women, it takes a great deal of courage to nurse anywhere in public, even more to take the baby to the pool and nurse there.

It is therefore all the more humiliating to be asked to cover up while breastfeeding or to stop breastfeeding in one area and move to another when nursing in the pool or "overtly" at poolside. The reaction of the average nursing woman to being asked to exit the water, cover up or move to the change room is likely to be to comply with the request and never return to the pool again.

This is anything but a positive recreational experience for the woman involved; it likely fills her with feelings of humiliation and shame. Even more upsetting, the breastfeeding mom has also been reprimanded in front of her child or children, who may then become equally distressed. If women don't feel welcome to breastfeed in public places, are they to be relegated to their homes for the entire period of breastfeeding, whether that is several months or several years? One hopes not.

Steep decline in breastfeeding rates after birth

The predictable result of policies and practices that target breastfeeding as "the problem" is that women simply decide not to breastfeed. Policies such as these, written and unwritten, are part of the reason for the dramatic drop-off of breastfeeding rates seen in the first weeks and months after a baby's birth and for the decision of many women not to start breastfeeding at all. Statistics Canada reports that in the 1996/97 survey year, their results show that Canada-wide, 22.0% of babies were never breastfed at all, and 21.6% of all babies were breastfed less than 3 months (equivalent to about 28% of the babies who were ever breastfed).[97] In some studies, only 30% of nursing mothers are still breastfeeding at 6 months.[98] A 1995 New Brunswick study of 776 newly delivered mothers revealed a 56% initiation rate (Canadian average: 76.7% in 1996/97[99]), with only 31% continuing to breastfeed at 3 months and 16% at 6 months. *Exclusive* breastfeeding, which is recommended by experts for 6 months, as noted above, was found in only 13% of breastfeeding pairs at 3 months and a mere 1% at 6 months.[100] In 1995 in Edmonton, only 28 to 39% (depending on the study area) of women who initiated breastfeeding were still practicing some breastfeeding at 6 months (no data were collected regarding how much breastmilk was being received by the babies – ie. whether they were exclusively or only partly breastfed).[101] Clearly, many women want to breastfeed as shown by initiation rates, but many barriers are encountered to continued breastfeeding.

Research on the social aspects of breastfeeding

Although the reasons women stop breastfeeding are multiple and complex,[102] research has shown that embarrassment about breastfeeding in the presence of other people is a significant factor influencing breastfeeding rates.[103] Men are reported to be even more embarrassed by their female partner's nursing in front of non-family members than the woman is herself.[104] In one study, fathers taking childbirth classes in five private hospitals in Houston were surveyed on their attitudes towards breastfeeding. Over 70% of the men whose spouses were planning to exclusively breastfeed and 78% of the men whose spouses were planning to exclusively formula-feed indicated that breastfeeding was "not acceptable in public."[105] Research has shown that the attitudes and beliefs of a woman's social support network, particularly those of the baby's father,[106] are more influential on women's infant feeding decisions than other sources of influence.[107] A 2001 survey of 2500 adults in Australia found that more than 80% of participants agreed that bottle-feeding was more acceptable in public places than breastfeeding, and 70% agreed that there was not always a place to breastfeed when outside the home.[108]

Higher rates of breastfeeding at six weeks have been found to be more strongly linked to willingness to breastfeed away from home than to sociodemographic variables such as education and number of children.[109] One study found that the percentage of mothers who cited social stigma as a negative aspect of breastfeeding increased dramatically as the age of the child increased: 29% cited social stigma for breastfeeding past 6 months, 44% for breastfeeding past 12 months, and 61% for breastfeeding past 24 months.[110] These results probably err on the conservative side, since the mothers surveyed were all members of La Leche League, a breastfeeding peer support group and information service. Presumably these women were somewhat more confident in their breastfeeding than others. Another study in Chicago found that 55% of women who had chosen to bottle-feed gave reasons for not breastfeeding such as embarrassment and not feeling comfortable with breastfeeding.[111] A recent Health Canada study found that most mothers who discontinued breastfeeding before 4 months "remained housebound or restricted in their movement while breastfeeding" to avoid the social stigma associated with nursing in public.[112] As other authors have commented, "This self-imposed confinement was not feasible for 4 months, however, and contributed to these women's decisions to discontinue exclusive breastfeeding."[113]

Economic costs of not breastfeeding

When women don't breastfeed, it is more than a mere lifestyle choice, however: it is a public health issue. Not breastfeeding affects the health of both mother[114] and baby detrimentally[115] and costs the health care system millions of dollars a year, even in developed countries.[116] In the U.S., for example, it is estimated that the cost of the increased incidence due to formula-feeding of only four medical diagnoses is an additional $1.3 billion annually.[117] A March 2001 U.S. Department of Agriculture Economic Research Service study found that a minimum of $3.6 billion would be saved

annually if breastfeeding rates increased to levels recommended by the U.S. Surgeon General, that is, a 75% initiation rate and 50% still breastfeeding at 6 months.[118] This study was limited to only three diagnoses.

These analyses likely grossly underestimate the real economic costs of not breastfeeding: not only do they cover only a limited range of costs of formula-related illness in children, they do not include any of the costs with respect to formula-related illness and disease of adults, nor do they include costs associated with poorer healthcare outcomes for women who don't breastfeed or who breastfeed for less than optimal lengths of time.

Breastfeeding benefits employers by reducing the absenteeism rate of working mothers who breastfeed as compared to formula-feed. This is due to the fact that the children of breastfeeding mothers experience less illness.[119] Breastfeeding saves the individual family money: in industrialized nations, the cost of formula may exceed the cost of additional food for the lactating mother by two or three times.[120] Breastfeeding also empowers women, gives them a sense of well-being (which is partly hormonal), and allows them to see themselves as efficacious and successful.[121] When we discourage women from breastfeeding, we take something very valuable away from them, their children, and ultimately from society.

Part 6. Legal Rights of Breastfeeding Women

There appear to be no Canadian court decisions on the issue of a woman's right to breastfeed in public. But certain decisions do by inference support the right of women to breastfeed in public without fear of a charge of indecent exposure or public nudity (ss. 173 and 174 of the *Criminal Code of Canada*). In the 1996 case of *R. v. Jacob*, decided unanimously by a three member panel of the Ontario Court of Appeal, the accused, Gwen Jacob, was charged with indecent exposure after walking down city streets topless and then sitting on a residential porch. Osborne J.A.[122], speaking for the majority of the court stated:

> . . . there is no evidence of harm that is more grossly speculative [referring to the decision of the trial judge]. . . There was nothing degrading or dehumanizing in what the appellant did. The scope of her activity was limited and was entirely non-commercial. No one who was offended was forced to continue looking at her. I cannot conclude that what the appellant did exceeded the community standard of tolerance when all of the relevant circumstances are taken into account. It follows that what the appellant did on July 19, 1991 did not constitute an indecent act.[123]

If appearing topless in public is not considered to be an indecent act, it is quite unlikely that breastfeeding one's baby would be considered so. Although decisions of the Ontario Court of Appeal are not binding in other provinces, they are nevertheless considered to be *persuasive authority*, to be given significant weight in the decision-making process of any Canadian court of the same level or lower.

Not only is this type of public nudity not illegal, as the *Jacob* case decided, the *failure to allow or to properly accommodate* breastfeeding in public has been found to contravene provincial human rights legislation. Provincial human rights codes prohibit acts of discrimination on a number of grounds, including gender. In the 1989 decision of *Brooks v. Canada Safeway*, the Supreme Court of Canada found that discrimination because of pregnancy constituted discrimination on the basis of sex contrary to the *Human Rights Act of Manitoba*.[124] *Brooks* established that discrimination against women because of pregnancy includes not only discriminatory action, but also the failure to accommodate the special needs of persons who fall into this category. It can reasonably be inferred from this decision that breastfeeding as an act performed only by women[125] is protected under human rights legislation from discriminatory acts, including harassment and failure to accommodate.

In fact, this is exactly what a B.C. Human Rights Tribunal decided in the 1997 case of Michelle Poirier, whose employer refused to accommodate her request to breastfeed her baby at work on her breaks. Citing *Brooks*, the tribunal stated:

> The capacity to breastfeed is unique to the female gender. I conclude therefore that discrimination on the basis that a woman is breastfeeding is a form of sex discrimination.[126]

A protection against discrimination on the basis of gender or sex equivalent to Manitoba's and British Columbia's is contained in all other provincial and federal human rights codes in Canada. This protection typically applies to services and facilities which are "customarily available to the public", such as swimming pools.[127] This includes private facilities, such as the YMCA, if they are customarily available to the public, for a fee or otherwise.

The human rights commissions in the provinces of Nova Scotia, Quebec, Ontario, and Manitoba have all received complaints in the recent past from women who were approached while breastfeeding in public places, with results such as monetary compensation to the breastfeeding woman from the offending parties and new policies interpreting the human rights legislation of the province to explicitly include breastfeeding as a protected incident of gender. See Appendix 4 for further discussion of these cases and breastfeeding policies developed out of them.

Women who feel they have been discriminated against while breastfeeding may also be able to invoke the *Canadian Charter of Rights and Freedoms* in certain circumstances, ie. those involving state (government) action. The *Charter* contains a prohibition against sex discrimination similar to those contained in provincial human rights codes.

The state of the law in Canada appears to be this: exposure of the breast while breastfeeding provides no ground for criminal charges of any kind; it goes further, however, and states that breastfeeding is a protected activity under human rights legislation. Knowledge of these rights should be disseminated widely by governments, community health services, and other organizations providing services to mothers of young children.

It should be noted here that there are efforts in the United States to protect a woman's right to breastfeed in public by specifying that she is excluded from the reach of criminal laws regarding indecent exposure and public nudity. These legal initiatives are insufficient and may be misguided, however.

They are insufficient because they don't require any form of accommodation for women breastfeeding in public - they still leave such women open to harassment and exclusion from public places purely on the basis that they are breastfeeding. And they don't carry any sort of sanction for proprietors or administrators who discriminate in this manner against women breastfeeding.

The reason why such laws may also be misguided is because they fail to address the more fundamental issue of how North Americans see women's breasts and why they may not be seen in public. As inferred earlier (see Part 4), the reason why breastfeeding in public is controversial, at least for some people, is due to the "actual or threatened public

exposure of . . . areolas and nipples", which in our society is erroneously equated with engaging in and inviting sex acts.[128]

We need to ask deeper questions about why it is acceptable in certain places and at certain times for men to be appear publicly without tops, but not for women. If we accept that there is a larger equality issue at stake here, it is logical that we direct our efforts not only towards the rights of women to breastfeed in public, but also toward making the right of women to appear "topfree" in public, as it is becoming known, part of human rights legislation, rather than simply relying on court cases such as *Jacob.*

It is always preferable to have rights outlined in legislation where possible rather than in the common law – that is, in decided cases. Human rights commissions in any given jurisdiction may or may not interpret cases of discriminatory acts against women breastfeeding in public as sex discrimination. This is why it is important to protect breastfeeding in public and topfree rights expressly within human rights legislation.

In the United States, breastfeeding in public is perhaps best protected in New York State at present, where mothers have an absolute right to breastfeed in public under the state's civil rights act. The act states:

> § 79-E. Right To Breast Feed
>
> Notwithstanding any other provision of law, a mother may breast feed her baby in any location, public or private, where the mother is otherwise authorized to be, irrespective of whether or not the nipple of the mother's breast is covered during or incidental to the breast feeding.[129]

This is one step further than any Canadian province has gone, because the provision is actually part of the statute and not merely an interpretation or policy statement regarding the meaning or extent of "discrimination due to sex and/or pregnancy".

When Oregon passed legislation in 1999 affirming a woman's right to breastfeed in public, Oregon Health Services designed wallet-sized cards imprinted with the legal wording of the bill for women to use if they are questioned about their right to breastfeed. Also available from the Health Services are "Breastfeeding Welcome Here" notices designed for businesses to display, to let their customers know they support breastfeeding customers. This is an example of how the purpose of the law can be embodied in practical terms and made to work for ordinary women.[130]

Whether incidental or not, New York also has at least one legal decision in favour of women's topfree rights. Judge Titone, a member of the six-judge appeal court panel, stated:

> Interestingly, expert testimony at appellants' trial suggested that the enforced concealment of women's breasts reinforces cultural obsession with them,

> contributes toward unhealthy attitudes about breasts by both sexes and even discourages women from breastfeeding their children.[131]

As judges are not generally known for their radicalism, this statement is quite significant.

To protect and promote breastfeeding in public (and therefore breastfeeding in general), we need to encourage and lobby provincial and federal governments to enact more explicit rights for women in both of these areas – breastfeeding in public as well as "topfreedom". It is only by protecting women's rights in both areas that breastfeeding in public will cease to be an issue.

Part 7. Responsibility of Governments and the Community to Protect, Promote and Support Breastfeeding

Breastfeeding is a basic right of breastfeeding mothers to give and breastfeeding babies to receive.[132] It is embodied either directly or inferentially in international instruments such as the *UN Convention on the Rights of the Child*, the *International Covenant on Economic, Social and Cultural Rights*, the *Convention on the Elimination of All Forms of Discrimination Against Women*, and the *International Labour Organization Convention on Maternity Protection*.[133]

Canada has an even more specific commitment to protect, promote, and support breastfeeding under the WHO[134]/UNICEF[135] *Baby-Friendly Hospital Initiative*, or BFHI (known in Canada as the *Baby-Friendly Initiative*[136] due to the inclusion of the community in the program), the *Innocenti Declaration* (arising from a UN sponsored international meeting in 1990)[137], the *International Code of Marketing of Breastmilk Substitutes*[138] and many resolutions of the World Health Assembly,[139] to which Canada belongs. (See Appendix 3.)

In making breastfeeding women feel unwelcome, pools which attempt to confine breastfeeding to certain places and times within the facility are at odds with these international commitments as well as the statements of various Canadian courts and human rights tribunals, as discussed in the previous section. These statements would be considered persuasive authority in the event of any complaints to a Canadian human rights commission.

Moving beyond the law and focusing on matters of health policy, the actions of many of these pools also violate the spirit of Health Canada's *Ten Steps to a Baby Friendly Community*. This document reads in part:

> Step 4. The community is informed as a whole about the benefits of breastfeeding and the risks of not breastfeeding.
> Step 5. Attitudes are addressed within the community that perceive bottle feeding as the norm and provide education directed at changing these attitudes.

> Step 6. Communities recognize the importance of supporting the mother-baby relationship.
> Step 7. Education is provided about breastfeeding as the natural and normal method of infant feeding.
> Step 8. All public and private facilities, including parks and recreation centres, restaurants, and stores, support the need to be mother- and baby-friendly.[140]

To promote these steps, Health Canada, in cooperation with La Leche League Canada[141], has a campaign to encourage public facilities to publicly demonstrate through the use of signs that they are "breastfeeding-friendly". The campaign slogan is "Breastfeeding. Anytime. Anywhere."

A breastfeeding-friendly policy informs mothers that they are welcome to breastfeed in that facility and need not fear disapproving actions from facility staff. We would argue that administrators of public facilities such as swimming pools have both a duty and a moral obligation to develop such policies and ensure that they are carried out.

Part 8. Breastfeeding: An Invisible Practice

We are in a vicious circle of sorts. The less breastfeeding is observed in the community, the more secret and stigmatized it becomes. Previous exposure to breastfeeding has been shown to be associated with the decision to breastfeed.[142] Yet, as author Jean Samuel has said:

> In North America it is entirely possible that a child will grow to adulthood without ever having seen a baby breastfed, and yet will see, on numerous occasions, breasts displayed in a sexually provocative fashion on television, in print media and at the corner store on the magazine rack.[143]

Dettwyler relates an astonishing story confirming this:

> In the fall of 1993, one of the undergraduate students in my "Women and Culture" course was totally flabbergasted to discover that the biological function of women's breasts was for feeding children. With obvious shock and disgust evident in her voice she asked, "You mean women's breasts are like a cow's udder?" That a young woman could reach college without ever having even heard of women using their breasts to feed their children is a sad commentary on American culture.[144]

At the swimming pool with our nursing children, some of us will feed and comfort them by nursing them whenever they need it and for as long as they need it. We do this not to "make a point" (although we surely will), but in the natural course of our breastfeeding relationship with our children. But many women, perhaps most, do not share this confidence in their right and ability to meet their child's nursing needs, and it is this

pervading unspoken but unmistakable disapproval of breastfeeding which virtually forces many women to hide this activity and eventually to give it up.

Although a number of municipal pools surveyed or encountered by BACE expressed the desire to provide positive recreational experiences for all patrons, the recreational experience of the breastfeeding woman does not seem to be considered as being very significant at some of them. The female staff member at the YMCA pool who told one breastfeeding mom that other women had "the decency to breastfeed discreetly" - there's that word again – seemed to have no idea how unwelcoming, never mind discriminatory she was being. Why is the recreational experience of the complaining patron apparently of greater concern than that of the soon-to-be-embarrassed breastfeeding woman and her child or children?

Making women feel uncomfortable about feeding their babies at the breast can trap women in their homes for the duration of breastfeeding, lead to unnecessary and harmful supplementation with formula, and result in early weaning. These are choices women who want to breastfeed should not have to make. In discouraging public breastfeeding, the policy and practices discussed here sacrifice the comfort, self-esteem and confidence of breastfeeding mothers and the needs of their breastfeeding children in the process. The "D-word" – "discreet" - is one of those words that keeps women "in line" and which we must avoid using if we want to support women to breastfeed.

The authors of the Australian study of attitudes of restaurant and shopping mall managers towards breastfeeding in public (discussed earlier) concluded that, "The variability in support for breastfeeding by managers of restaurants and shopping centers will continue to create uncertainty for mothers wishing to breastfeed in these public places."[145] We would add swimming pools to that list.

The proper focus of the efforts of pool administrators should be on the management of complaints about breastfeeding in a manner sensitive to breastfeeding mothers and consistent with their legal rights, not on the harassment of breastfeeding women. Instead of "offering" the nursing mother a place in the change room or a towel with which to cover up, as some pools have done, why not ask the complainant to move to the change room or cover his or her head with a towel until the breastfeeding is over?

On the less facetious side, when rights and preferences collide, an onlooker's discomfort should not outweigh a child's need to be fed and comforted. As Dettwyler aptly puts it:

> . . .caring more about the feelings of those who are offended by something natural and good than about the person who is doing the natural and good thing is the same, logically, as caring more about the feelings of people who are racist or sexist or who think handicapped people should be hidden away. . . . The idea is to get you to see that just as you would not want to elevate the rights of racists, sexists, and the anti-handicapped not to be offended above the rights of minorities, women, and the handicapped, so you might also want to reconsider whether the rights of those offended by breastfeeding in public are more

> important than the rights of women and children to breastfeed wherever they happen to be. The issue of discreet or not discreet breastfeeding is a red herring.[146]

Part 9. Towards a Breastfeeding-Friendly Society

The wonderful thing about culture is that it can change and be changed. Dettwyler discusses positive ways in which necessary cultural changes in our attitudes towards breasts and breastfeeding could take place:

> We can teach our daughters that whatever the size of their breasts, they will be able to sustain and nurture their children through their breast milk. If we can teach our children that breasts are for feeding children, then the phenomenon of female mammary mutilation and the issue of breast implant safety will simply fade away, as the desire and demand for artificially inflated breasts disappears.
>
> We can educate ourselves, and others, about all the different roles that breastfeeding plays in normal, healthy child development. Breastfeeding is more than just the transfer of nutrients from mother to child . . . Women also need to know about the very real "risks" of bottle-feeding, . . . Women need to know that infant formula is not "almost as good" as breast milk. . . .
>
> Everyone, from doctors and lactation consultants down to the youngest school children, needs to know that breastfeeding is not only for newborn infants. . . .
>
> We can work to counter the artificial separation of private and public domains, the cultural perception that our private lives have no relevance for our professional lives, and that our roles as "mothers" render us "unprofessional". Women can make a statement by breastfeeding their children wherever they happen to be, whatever they happen to be doing, to show others that breastfeeding is important and can be accomplished by normal women living in the real world. Women can continue to lobby for realistic maternity/nursing leave, and employment opportunities that allow them to care for their children at the same time. All women, whether breastfeeding or not, whether mothers or not, as well as all men, need to understand the importance, for all members of society, of nurturant child rearing practices. . . .
>
> We can teach fathers other ways to nurture and care for their children besides giving them a bottle. We can show them that their cultural beliefs about the sexual nature of women's breasts are cultural beliefs, not biological givens. Men need to know that however much sexual pleasure they may derive from women's breasts, breasts were designed, first and foremost, to feed children. Every father can be taught that the long-term health of his spouse and children should overshadow his culturally taught sexual desires for access to his wife's breasts.

> We can teach our sons that they should not judge a woman's character or sexual attractiveness on the basis of her breast size. We can teach our daughters to value their bodies, to have confidence in their bodies, and to not be ashamed of using their bodies as they were designed. We can make sure that children have many opportunities to see women breastfeeding, in many different contexts. . . .
>
> . . . we can continue to combat the "culture of misinformation" that surrounds breastfeeding among medical professionals and the lay public.[147]

Although no one entity can do all of these things, each can make a positive contribution towards a breastfeeding-friendly society.

We therefore call on pool administrators at a minimum to:

- withdraw any unwelcoming policies that presently exist and replace them with truly breastfeeding-friendly ones;
- communicate these new policies to pool staff, nursing mothers and all users of the facilities;
- install signs, literature and, where possible, web messages indicating that breastfeeding mothers are welcome in their facilities; and
- educate pool staff as to the importance and normalcy of breastfeeding, the hesitancy with which some mothers venture out in public to breastfeed, the embarrassment it causes them to be asked to move or stop, and the resolution of complaints about breastfeeding in a manner sensitive to breastfeeding mothers, consistent with their legal rights, and that do not involve her in the discussion.

In particular, there should be no suggestion or requirement, written or otherwise, that a breastfeeding mother be "discreet".

We encourage municipalities to ensure that all users of their public facilities, particularly pools, know that these facilities endorse a policy of "Breastfeeding Friendly – Anytime. Anywhere"[148] and "Breastfeeding Mothers Welcome Here". We also call on cities to enact breastfeeding-friendly bylaws and provinces to enact human rights provisions explicitly protecting a woman's right to breastfeed in public.[149] We call on human rights commissions, Canada Health, and provincial public health services to launch campaigns promoting awareness of breastfeeding women's rights and needs.[150] We call on Canada to uphold its commitments under international law to protect, promote, and support breastfeeding.

Once breastfeeding becomes more visible, it will start to be seen as normal and fewer people will see it as strange, offensive, or unusual. Those who object need only avert their eyes. Taking the measures outlined above would be bold steps forward and a signal to all that breastfeeding is the normal, natural method of feeding an infant. Breastfeeding will no longer be seen as an act worthy of notice, except perhaps in the pleasurable sense of seeing a sweet young child being nurtured by his or her mother.

Endnotes

[1] City of Edmonton Leisure Centres. *Facility Standard of Practice for Breast Feeding*, May 31, 2001.
[2] City of Vancouver. *Blood & Body Fluid Exposure Procedures*, July 2001.
[3] Keely, K.L.; N.E. Macdonald, and W.J. Ferris. *Medical Safety of Infant Water Experience Programmes* (Ottawa: Department of Pediatrics, Children's Hospital of Eastern Ontario, [undated]), p. 2. Available from the Canadian Red Cross Society.
[4] "Surveillance for Water-Borne Disease Outbreaks - United States 1997-1998", *Morbidity and Mortality Weekly Report (MMWR)* May 26, 2000 (includes information on recreational swimming sites) http://www.cdc.gov/mmwr/preview/mmwrhtml/ss4904a1.htm. Health Canada's *Canada Communicable Disease Report* (*CCDR*) tends to cite to the American *MMWR*: http://www.hc-sc.gc.ca/pphb-dgspsp/publicat/ccdr-rmtc/index.html
[5] *CDC Healthy Swimming 2002 Project*. http://www.cdc.gov/healthyswimming/index.htm
[6] "Responding to Fecal Accidents in Disinfected Swimming Venues", *Morbidity and Mortality Weekly Report (MMWR)* May 25, 2001: http://www.cdc.gov/mmwr/preview/mmwrhtml/mm5020a7.htm; Fecal Accident Response, CDC Division of Parasitic Diseases, Healthy Swimming Project: http://www.cdc.gov/healthyswimming/fecal_response.htm
[7] Riordan, J. & K. Auerbach. *Breastfeeding and Human Lactation*, 2nd ed. (Sudbury, Massachusetts: Jones and Bartlett Publishers, 1999), pp. 14-15; Lawrence, Ruth A. & Robert M. Lawrence. *Breastfeeding: A Guide for the Medical Profession*, 5th ed. (St. Louis, Missouri: Mosby, Inc., 1999), pp. 26-29. A 1995 New Brunswick study of breastfed babies approximately 6 months old found that they were 47% less likely to have gastrointestinal illness, 34% less likely to have respiratory illness, and 56% less likely to have middle ear infection: Beaudry M, Dufour R, Marcoux S. "Relation between infant feeding and infections during the first six months of life." *J Pediatr* 1995 Feb.; 126(2): 191-7.
[8] "Host-resistance factors and immunologic significance of human milk". Lawrence & Lawrence (1999) note 7, Chapter 5, pp. 159-195; Riordan & Auerbach (1999), note 7, Chapter 5, pp. 121-161.
[9] See note 4. See also "Questions and Answers for Pool Staff", *CDC Healthy Swimming 2002 Project*. http://www.cdc.gov/healthyswimming/faq/operators.htm
[10] May, J.T. "Microbial contaminants and antimicrobial properties of human milk." *Microbiol. Sci.* 5:42-46, 1988.
[11] See notes 4, 9, and 10.
[12] Lawrence & Lawrence (1999) note 7, p. 218. References omitted. See also Kramer MS, Chalmers B, Hodnett ED, Sevkovskaya Z, Dzikovich I, Shapiro S, Collet JP, Vanilovich I, Mezen I, Ducruet T, Shishko G, Zubovich V, Mknuik D, Gluchanina E, Dombrovskiy V, Ustinovitch A, Kot T, Bogdanovich N, Ovchinikova L, Helsing E; PROBIT Study Group (Promotion of Breastfeeding Intervention Trial). "Promotion of Breastfeeding Intervention Trial (PROBIT): a randomized trial in the Republic of Belarus" *JAMA* 2001 Jan 24-31;285(4):413-20.
[13] Riordan & Auerbach (1999) note 7, p. 639. References omitted. See also: Banajeh SM, Hussein RF. "The impact of breastfeeding on serum electrolytes in infants hospitalized with severe dehydrating diarrhoea in Yemen." *Ann Trop Paediatr* 1999 Dec; 19(4): 371-6, which states, "Breastfeeding significantly reduces case fatality and the likelihood of electrolyte disturbances among infants hospitalized with severe dehydrating diarrhoea."
[14] International Lactation Consultant Association. *Summary of the Hazards of Infant Formula: Part 2*: "The immune system of formula-fed babies develops and functions differently than that of infants fed breast milk.", citing 8 references. To order, go to http://www.ilca.org/index.html. See also: Rodriguez-Palmero, M.; B. Koletzko, C. Kunz, & R. Jensen. "Nutritional and biochemical properties of human milk: Part II. Lipids, micronutrients, and bioactive factors." *Clinical Perinatol.* 1999 June; 26(2): 335-59. Filipp D et al. "Soluble CD14 enriched in colostrums and milk induces B cell growth and differentiation." *Proc. Natl. Acad. Sci. USA*, Vol. 98, Issue 2, 603-608, January 16, 2001. This study was discussed in "Canadian research reinforces breastfeeding benefits" CBC News Online; Jan. 16, 2001: http://cbc.ca/cgi-bin/templates/view.cgi?category=Sci-Tech&story=/news/2001/01/16/breast_milk010116
[15] Glass RI, Svennerholm A, Stoll BJ. "Protection against cholera in breastfed children by antibodies in breast milk. *N. Engl. J. Med.* 308: 1389, 1983.
[16] See note 5.

[17] eg. A Hamilton, Ontario, lifeguard ordered Shannon Wray, 25, out of a municipal pool in February 1999 when she began to breastfeed her 9-month-old daughter. Wray assumed it was because she was offending other swimmers, but the lifeguard pointed to the "no food in the pool" rule. http://www.orlandoweekly.com/weird/index.asp?now=1807

[18] Personal communication; June 14, 2002.

[19] Centers for Disease Control and Prevention, National Center for HIV, STD, and TB Prevention, Division of HIV/AIDS Prevention, *Fact Sheet: HIV and its Transmission*. Jan. 31, 2001: http://www.cdc.gov/hiv/pubs/facts/transmission.htm

[20] Sabbaj S, Edwards BH, Ghosh MK, Semrau K, Cheelo S, Thea DM, Kuhn L, Ritter GD, Mulligan MJ, Goepfert PA, Aldrovandi GM. "Human immunodeficiency virus-specific CD8(+) T cells in human breast milk" *J Virol* 2002 Aug;76(15):7365-73.

[21] Clark, Roger A., Director, Directorate of Compliance Programs, U.S. Occupational Safety and Health Administration (OSHA). "Breast milk does not constitute occupational exposure as defined by standard": http://www.osha.gov/pls/oshaweb/owadisp.show_document?p_table=INTERPRETATIONS&p_id=20952&p_text_version=FALSE

[22] "Perspectives in Disease Prevention and Health Promotion Update: Universal Precautions for Prevention of Transmission of Human Immunodeficiency Virus, Hepatitis B Virus, and Other Bloodborne Pathogens in Health-Care Settings" *MMWR Weekly* June 24, 1988/37(24); 377-388. http://www.cdc.gov/mmwr/preview/mmwrhtml/00000039.htm

[23] See note 21.

[24] World Health Organization (WHO). *Hepatitis B and Breastfeeding*. No. 22, Nov. 1996: http://www.who.int/child-adolescent-health/New_Publications/NUTRITION/updt-22.htm

[25] Centers for Disease Control and Prevention, National Center for Infectious Diseases. *Concentration of Hepatitis B Virus in Various Body Fluids*: http://www.cdc.gov/ncidod/diseases/hepatitis/slideset/hep_b/slide_10.htm

[26] Centers for Disease Control and Prevention, National Center for Infectious Diseases, *Viral Hepatitis C: Frequently Asked Questions*: http://www.cdc.gov/ncidod/diseases/hepatitis/c/faq.htm#3c

[27] Centers for Disease Control and Prevention (CDC). "Prevalence of parasites in fecal material from chlorinated swimming pools --- United States, 1999". *MMWR* 50(20): 410-2; May 25, 2001. http://www.cdc.gov/mmwr/preview/mmwrhtml/mm5020a4.htm

[28] Laura Walther Nathanson. *The Portable Pediatrician for Parents* (New York: HarperCollins, 1994), p. 45.

[29] Riordan & Auerbach (1999), note 7, p. 647.

[30] Riordan & Auerbach (1999) , note 7, p. 325.

[31] Centers for Disease Control and Prevention (CDC). "Questions and Answers for Pool Staff", *Healthy Swimming 2002*: http://www.cdc.gov/healthyswimming/faq/operators4.htm#10

[32] Approximately 300 formed stools resulting from fecal accidents in swimming pools were collected in 1999 by pool operators for study by the CDC of the bacteria and viruses they contained: see note 27.

[33] Riordan & Auerbach (1999) , note 7, p. 644.

[34] Heacock HJ, Jeffery HE, Baker JL, et al. "Influence of breast versus formula milk on physiological gastroesophageal reflux in healthy, newborn infants" *J Pediatr Gastroenterol Nutr* 1992; 14: 41–6.

[35] For example, ten steps for reducing pool contamination are listed in the following reference. None of them mention breastmilk or breastfeeding: Centers for Disease Control and Prevention (CDC). "What steps should be considered for reducing germ contamination of swimming pools?" *Questions and Answers for Pool Staff, Healthy Swimming 2002*: http://www.cdc.gov/healthyswimming/faq/operators5.htm

[36] Centers for Disease Control and Prevention (CDC). "Why is it important to clean the surfaces around the pool?" *Questions and Answers for Pool Staff, Healthy Swimming 2002*: http://www.cdc.gov/healthyswimming/faq/operators3.htm#8

[37] Colleen Carpenter, Ronald Fayer, James Trout, and Michael J. Beach. "Chlorine disinfection of recreational water for *Cryptosporidium parvum*" *Emerging Infectious Diseases Journal*. 1999 July/Aug., 5(4). This journal is published by the CDC. http://www.cdc.gov/ncidod/eid/vol5no4/carpenter.htm

[38] Lawrence & Lawrence (1999), note 7, p. 80.

[39] Woolridge, Michael W. "Baby-Controlled Breastfeeding: Biocultural Implications", in P. Stuart-MacAdam & K.A. Dettwyler (eds), *Breastfeeding: Biocultural Perspectives* (New York: Aldine de Gruyter, 1995), p. 227.

[40] American Academy of Pediatrics ("AAP"). "Breastfeeding and the Use of Human Milk." Position Statement RE9729. *Pediatrics* 100(6): 1035-1039; Dec. 1997: http://www.aap.org/policy/re9729.html "RECOMMENDED FEEDING PRACTICES . . .3. Newborns should be nursed whenever they show signs of hunger, such as increased alertness or activity, mouthing, or rooting.[85] Crying is a ***late*** indicator of hunger." http://www.aap.org/policy/re9729.html

[41] Mirasco, Lisa & Jan Barger. "Cue Feeding: Wisdom and Science" *Breastfeeding Abstracts* 18(4): 27, May 1999. See also AAP Position Statement RE9729, note 40 above.

[42] Mirasco (1999), see note 41, p. 27; Lawrence & Lawrence (1999), note 7 above, p. 204.

[43] Lawrence & Lawrence (1999), note 7, p. 204.

[44] See note 40.

[45] WHA Forty-Seventh World Health Assembly. WHA 47.5. Agenda Item 19, *Infant and young child nutrition*. May 9, 1994: http://www.ibfan.org/english/resource/who/whares475.html; WHO/UNICEF *Innocenti Declaration on the Protection, Promotion and Support of Breastfeeding*. Breastfeeding in the 1990's: Global Initiative WHO/UNICEF sponsored meeting, Florence, Italy, 1 Aug. 1990: http://www.waba.org.br/inno.htm

[46] "RECOMMENDED BREASTFEEDING PRACTICES . . . 6. Exclusive breastfeeding is ideal nutrition and sufficient to support optimal growth and development for approximately the first 6 months after birth."; AAP Position Statement RE9729, note 40.

[40] Fifty-fourth World Health Assembly. *Infant and young child nutrition* Agenda item 13.1, World Health Assembly Resolution 54.2; 18 May 2001:
http://www.who.int/wha-1998/EB_WHA/PDF/WHA54/ea54r2.pdf
See also: "Science defeats baby food industry vested interests at the World Health Assembly." *International Baby Food Action Network (IBFAN) Press Release*; May 18, 2001:
http://www.ibfan.org/english/news/press/press18may01.html

[48] Fifty-fourth World Health Assembly. *Global strategy for infant and young child feeding.* Provisional agenda item 31.1 A54/INF.DOC./4; 1 May 2001. http://www.who.int/wha-1998/EB_WHA/PDF/WHA54/ea54id4.pdf

[49] *International Code of Marketing of Breastmilk Substitutes*.
http://www.geocities.com/HotSprings/Falls/1136/webdoc23.htm (a BCC web page); "Feed only breast milk for first 6 months, UN says." *Globe and Mail*; 24 May 2001, pA1.

[50] AAP Position Statement RE9729, note 40; World Health Assembly Resolution 54.2, note 47.

[51] Foreign proteins include but are not limited to those found in cow's milk.

[52] Riordan and Auerbach (1999), note 7, p. 147 [References omitted]. Refer also to a study published in the July 2002 issue of the Journal of Allergy and Clinical Immunology, which found that the risk of childhood asthma increased if exclusive breast-feeding was stopped (other milk was introduced) before 4 months of age. [Oddy WH, Peat JK, de Klerk NH. "Maternal asthma, infant feeding, and the risk of asthma in childhood." J Allergy Clin Immunol 2002 Jul;110(1):65-7.]; and Juvonen P, Mansson M, Kjellman NI, Bjorksten B Jakobsson I. "Development of immunoglobulin G and immunoglobulin E antibodies to cow's milk proteins and ovalbumin after a temporary neonatal exposure to hydrolyzed and whole cow's milk proteins." *Pediatr Allergy Immunol* 1999 Aug; 10 (3): 191-8.

[53] Borresen HC. "Rethinking current recommendations to introduce solid food between four and six months to exclusively breastfeeding infants." *J Hum Lact* 11(3); 201-4.

[54] Shulman RJ, Schanler RJ, Lau C, Heitkemper M, Ou CN, Smith EO. "Early feeding, antenatal glucocorticoids, and human milk decrease intestinal permeability in preterm infants" *Pediatr Res* 1998 Oct;44(4):519-23; Vukavic T. "Timing of the gut closure" *J Pediatr Gastroenterol Nutr* 1984 Nov;3(5):700-3.

[55] Lawrence & Lawrence (1999), note 7, p. 160.

[56] Catassi C, Bonucci A, Coppa GV, Carlucci A, Giorgi PL. "Intestinal permeability changes during the first month: effect of natural versus artificial feeding." *J Pediatr Gastroenterol Nutr* 1995 Nov;21(4):383-6; Goto K, Chew F, Torun B, Peerson JM, Brown KH. "Epidemiology of altered intestinal permeability to lactulose and mannitol in Guatemalan infants" *J Pediatr Gastroenterol Nutr* 1999 Mar;28(3):282-90.

[57] Savilahti E. "Food-induced malabsorption syndromes." *J Pediatr Gastroenterol Nutr* 2000 30 Suppl:S61-6; Ahmed T, Fuchs GJ. "Gastrointestinal allergy to food: a review." *J Diarrhoeal Dis Res* 1997 Dec 15(4):211-23; Desjeux JF, Heyman M. "Milk proteins, cytokines and intestinal epithelial functions in children." *Acta Paediatr Jpn* 1994 Oct;36(5):592-6.; Walker-Smith JA. "Cow milk-sensitive enteropathy: predisposing factors and treatment" *J Pediatr* 1992 Nov 121(5 Pt 2):S111-5.

[58] Raisler J, Alexander C, O'Campo P. "Breast-feeding and infant illness: a dose-response relationship?" *Am J Public Health* 1999 Jan;89(1):25-30; Scariati PD, Grummer-Strawn LM, Fein SB. "A longitudinal analysis of infant morbidity and the extent of breastfeeding in the United States" *Pediatrics* 1997 Jun;99(6):E5.

[59] See: Working Group on Cow's Milk Protein and Diabetes Mellitus of the American Academy of Pediatrics. "Infant feeding practices and their possible relationship to the etiology of diabetes mellitus." *Pediatrics* 1994; 94: 752-4; Hammond-McKibbon D, Karges W, Gaedigk R, Dosch H-M. "Immunological mechanisms that link cow milk protein and insulin dependent diabetes: a synopsis." *Can J Allergy and Clin Immunol* 1997;2:136-46. These references and 7 others are viewable at:
http://users.erols.com/cindyrn/30.htm

[60] The American Academy of Pediatrics Committee on Nutrition. "The Use of Whole Cow's Milk in Infancy." RE 9251. *Pediatrics* June 1992; 89(6): 1105-1109. Reaffirmed April 1998.
http://www.aap.org/policy/04788.html

[61] International Lactation Consultant Association. *Summary of the Hazards of Infant Formula: Part 1* (1992) and *Part 2* (1998); Dr. Jack Newman. *Risks of Artificial Feeding Reference Sheet*, May 2000: http://users.erols.com/cindyrn/30.htm; David Cho. "Black-market milk puts babies at risk: powdered formula rivals rolexes as hot item for crime gangs" *Edmonton Journal*, 5 Aug 01, pA3, on the theft, repackaging and resale of powdered formula. Expiry dates are often changed with repackaging; the powder may also become contaminated or otherwise adultered in the process.

[62] For example, not breastfeeding has been found to play a part in the high rates of breast cancer found in women living in industrialized countries: Beral V. "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 Jul 20;360(9328):187-95; Mezzacappa ES, Guethlein W, Vaz N, Bagiella E. "A preliminary study of breast-feeding and maternal symptomatology" *Ann Behav Med* 2000 Winter;22(1):71-9; Labbok MH. "Health sequelae of breastfeeding for the mother." *Clin Perinatol.* 1999 Jun;26(2):491-503, viii-ix. Review; Dermer A. "Breastfeeding and women's health" *J Womens Health* 1998 May;7(4):427-33.

[63] "RECOMMENDED BREASTFEEDING PRACTICES . . . 4. Supplements and pacifiers should be avoided whenever possible and, if used at all, only after breastfeeding is well established." AAP Position Statement RE9729, note 40; Hornell A, Hofvander Y, Kylberg E. "Solids and formula: association with pattern and duration of breastfeeding." *Pediatrics* 2001 Mar; 107(3): E38. Hill PD, Humenick SS, Brennan ML, Woolley D. "Does early supplementation affect long-term breastfeeding?" *Clin Pediatr* (Phila) 1997 Jun; 36(6): 345-50.

[64] Moon JL, Humenick SS. "Breast engorgement: contributing variables and variables amenable to nursing intervention." *J Obstet Gynecol Neonatal Nurs* 1989 Jul-Aug;18(4):309-15; Stamp GE, Crowther CA: "Breastfeeding – why start? Why stop? A prospective survey of South Australian women." *Breastfeed Rev* 1995; 3:15-9.

[65] Kinlay JR, O'Connell, Kinlay S. "Risk factors for mastitis in breastfeeding women: results of a prospective cohort study." *Austr N Z Public Health* 2001 Apr; 25(2): 115-20; Newman J. "Breastfeeding problems associated with early introduction of bottles and pacifiers." *J Hum Lact* 1990 Jun; 6(2): 59-63.

[66] See, for example: Righard L. "Early enhancement of successful breast-feeding." *World Health Forum* 1996; 17(1): 92-7: "The introduction of a bottle and the use of pacifiers seemed to interfere with the course of normal nursing in a group of mother-infant pairs referred to a Swedish pediatric clinic for nursing problems, as compared to a control group of infants without nursing problems;

[67] Riordan & Auerbach (1999), note 7, p. 585; Newman (1990), note 65.

[68] Riordan & Auerbach (1999), p. 585.

[69] Lawrence & Lawrence (1999), note 7, pp. 159-195; Riordan & Auerbach (1999) note 7, pp. 204-5.

[70] Vogel AM, Hutchison BL, Mitchell EA. "The impact of pacifier use on breastfeeding: a prospective cohort study." *J Paediatr Child Health* 2001 Feb; 37(1):58-63.

[71] Mattos-Graner RO, de Moraes AB, Rontani RM, Birman EG. "Relation of oral yeast infection in Brazilian infants and use of a pacifier." *ASDC J Dent Child* 2001 Jan-Feb; 68(1):33-6; Darwazeh AM, al-Bashir A. "Oral candidal flora in healthy infants." *J Oral Pathol Med*. 1995 Sep;24(8):361-4.
[72] Riordan & Auerbach (1999), note 7. p. 489.
[73] Warren JJ, Levy SM, Kirchner HL, Nowak AJ, Bergus GR. "Pacifier use and the occurrence of otitis media in the first year of life." *Pediatr Dent* 2001 Mar;-Apr; 23(2): 103-7; Niemela M, Pihakari O, Pokka T, Uhari M. "Pacifier as a risk factor for acute otitis media: A randomized, controlled trial of parental counseling." *Pediatrics*. 2000 Sep;106(3):483-8; Jackson JM, Mourino AP. "Pacifier use and otitis media in infants twelve months of age or younger." *Pediatr Dent*. 1999 Jul-Aug;21(4):255-60.
[74] Larsson E. "Sucking, chewing, and feeding habits and the development of crossbite: a longitudinal study of girls from birth to 3 years of age" *Angle Orthod*. 2001 Apr;71(2):116-9; Karjalainen S, Ronning O, Lapinleimu H, Simell O. "Association between early weaning, non-nutritive sucking habits and occlusal anomalies in 3-year-old Finnish children" *Int J Paediatr Dent*. 1999 Sep;9(3):169-73; Turgeon-O'Brien H, Lachapelle D, Gagnon PF, Larocque I, Maheu-Robert LF. "Nutritive and nonnutritive sucking habits: a review" *ASDC J Dent Child*. 1996 Sep-Oct;63(5):321-7; Ogaard B, Larsson E, Lindsten R. "The effect of sucking habits, cohort, sex, intercanine arch widths, and breast or bottle feeding on posterior crossbite in Norwegian and Swedish 3-year-old children" *Am J Orthod Dentofacial Orthop*. 1994 Aug;106(2):161-6; Davis DW, Bell PA. "Infant feeding practices and occlusal outcomes: a longitudinal study" *J Can Dent Assoc*. 1991 Jul;57(7):593-4.
[75] Dettwyler, K.A. "A time to wean: the hominid blueprint for the natural age of weaning in modern human populations", in P. Stuart-MacAdam & K.A. Dettwyler (eds), *Breastfeeding: Biocultural Perspectives* (New York: Aldine de Gruyter, 1995); Dettwyler, Katherine. "Kathy's Commentaries: A Natural Age of Weaning", 10 Feb. 97: http://www.prairienet.org/laleche/detwean.html. Here we are using the word "wean" to mean the time after which no further mother's milk is taken by the young.
[76] Some women had weaned one child early and another later, for example.
[77] Sugarman, M. & K.A. Kendall-Tackett. "Weaning ages in a sample of American women who practice extended breastfeeding." *Clin Pediatr* (Phila). 1995 Dec;34(12):642-7. See also: Goldfarb, J. "Extended breastfeeding in the United States." *Clin. Pediatr*. (Phila.) 1995 Dec. 34(12):648-9.
[78] See note 40.
[79] Canadian Paediatric Society, Dieticians of Canada and Health Canada. *Nutrition for Healthy Term Infants* (Ottawa: Minister of Public Works and Governmental Services, 1998), p. 3. http://www.cps.ca/english/InsideCPS/nutrition.htm
[80] See note 45.
[81] Gulick EE, 1986. "The effects of breast-feeding on toddler health." *Pediatr Nurs* 12(1):51-54); Saarinen UM. "Prolonged breastfeeding as prophylaxis for recurrent otitis media." *Acta Paediatrica Scandinavia* July 1982; 71(4): 569-70.
[82] Fisher JO, Birch LL, Smiciklas-Wright H, Picciano MF. "Breast-feeding through the first year predicts maternal control in feeding and subsequent toddler energy intakes." *J Am Diet Assoc* 2000 Jun; 100(6): 641-6.
[83] See: Goldman AS, Goldblum RM, Garza C. "Immunologic components in human milk during the second year of lactation." *Acta Paediatrica Scandinavia* 1983; 72: 461.
[84] Newman, Jack; Pitman, Teresa. *Dr. Jack Newman's Guide to Breastfeeding* (Toronto: HarperCollins, 2000), pp. 304-305. Dewey KG. "Nutrition, growth, and complementary feeding of the breastfed infant." *Pediatr Clin North Am* 2001 Feb; 48(1): 87-104: "Breast milk continues to provide substantial amounts of key nutrients well beyond the first year of life, especially protein, fat, and most vitamins." Donovan, Debbi. "Extended breastfeeding: Is it of any value?" http://parentsplace.com/babies/bfeed/qa/0,8891,6366,00.html. See also Katherine Dettwyler's comments: http://www.prairienet.org/laleche/detrefs.html and in Dettwyler, K.A. "Beauty and the Breast", in P. Stuart-MacAdam & K.A. Dettwyler (eds), *Breastfeeding: Biocultural Perspectives* (New York: Aldine de Gruyter, 1995) at p. 204.
[85] Dettwyler, K.A. "Beauty and the Breast", in P. Stuart-MacAdam & K.A. Dettwyler (eds), *Breastfeeding: Biocultural Perspectives* (New York: Aldine de Gruyter, 1995), p. 203; and "The Cultural Context of Breastfeeding", an excerpt from the conclusion of this chapter, at: http://www.prairienet.org/laleche/detcontext.html

[86] Riordan & Auerbach (1999), note 7, pp. 146; 149-50.
[87] McIntyre E, Turnbull D, Hiller JE. "Breastfeeding in public places" *J Hum Lact* 1999 Jun;15(2):131-5.
[88] Dettwyler, K.A. "Beauty and the Breast", in P. Stuart-MacAdam & K.A. Dettwyler (eds), *Breastfeeding: Biocultural Perspectives* (New York: Aldine de Gruyter, 1995), p. 174. See also "The Cultural Context of Breastfeeding", an excerpt from the conclusion of this chapter: http://www.prairienet.org/laleche/detcontext.html
[89] See note 88, p. 187.
[90] Shannon Wray was asked to leave a Hamilton pool while breastfeeding her child because there was "no food or drink allowed in the pool". This incident received wide media attention.
[91] Dr. Paul Rapoport. "Breastfeeding frenzy: two views" *Hamilton Spectator* 25 Feb. 1999. http://www.tera.ca/articles.html#Topfreedom. Dr. Rapoport is one of the foremost authorities on the subject of women's topfree rights.
[92] See note 88, p. 181. References omitted.
[93] See note 88, p. 181.
[94] See note 88, p. 202.
[95] Breast augmentation surgery. In Canada, more than 8000 women undergo breast augmentation annually: "The Saline Solution: Breast implants becoming big again" *Marketplace, CBC Online*; Aug. 3, 1997: http://cbc.ca/consumers/market/files/health/implants/hfx.html. The American Society of Plastic Surgeons (ASPS) reported that the number of women having breast augmentation performed by its members for cosmetic reasons increased 533% from 1992, rising to 206,354 patients in 2001: "2001 Cosmetic Surgery Trends" National Clearinghouse of Plastic Surgery Statistics. *Plasticsurgery.org:* http://www.plasticsurgery.org/mediactr/2001_expanded_stats/cosmetic_trends.pdf. Different survey methods by the American Society of Aesthetic Plastic Surgery (ASAPS) reported a 114% increase in cosmetic breast augmentations from 1997 to 2001, when 216,754 such procedures were performed: "Percent of Change in Select Procedures" Statistics. *Surgery.org:* http://surgery.org/stats_html_pages/percent_change_2001.html. A February 2001 ASAPS consumer survey found that 61% of women surveyed "approved of cosmetic surgery", up 7% from the previous years' survey: "Quick Facts: Highlights of the ASAPS Attitudes on Cosmetic Surgery Survey" Statistics. *Surgery.org*: http://surgery.org/stats_html_pages/quickfacts_2000_attitudes.html. A 1996 study found that 64% of augmented women versus less than 7% of a control group of non-augmented women later experienced insufficient lactation when they attempted to breastfeed: Hurst NM. "Lactation after augmentation mammoplasty." *Obstet Gynecol* 1996 Jan; 87(1): 30-4.
[96] See note 88, p. 202.
[97] Statistics Canada, *National Longitudinal Survey of Children and Youth* (NLSCY) 1996/97 in Health Indicators 2001(2); June 27, 2001. http://www.statcan.ca/english/freepub/82-221-XIE/00502/tables/html/2171.htm. See also Health Canada. *Canadian Perinatal Health Report 2000* (Ottawa: Minister of Public Works and Government Services Canada, 2000) http://www.hc-sc.gc.ca/hpb/lcdc/publicat/cphr-rspc00/#intro or http://www.hc-sc.gc.ca/hpb/lcdc/publicat/cphr-rspc00/pdf/cphr00e.pdf, pp. 9-11.
[98] Watters, N.E. & S. Hodges. *National breastfeeding guidelines for health care providers*, Rev. Ed. (Ottawa: Canadian Institute of Child Health, 1996.), p. 5.
[99] Health Canada. *Canadian Perinatal Health Report 2000* (Ottawa: Minister of Public Works and Government Services Canada, 2000) http://www.hc-sc.gc.ca/hpb/lcdc/publicat/cphr-rspc00/#intro or http://www.hc-sc.gc.ca/hpb/lcdc/publicat/cphr-rspc00/pdf/cphr00e.pdf, p. 9.
[100] Beaudry M, Dufour R, Marcoux S. "Relation between infant feeding and infections during the first six months of life" *J Pediatr* 1995 Feb;126(2):191-7.
[101] Community Health Promotion and Prevention Services, Capital Health Authority, Edmonton, Alberta, 1995. Cited in "Capital Health Region Rates Up: Support includes free visit by a LC", Canada Breastfeeds News, *INFACT Canada Spring 97 Newsletter*: http://www.infactcanada.ca
[102] Health Canada. *Breastfeeding in Canada: A review and update*. (Ottawa: Health Canada, 1999), pp. 12-20; Matthews K, Webber K, McKim E, Banoub-Baddour S, Laryea M. "Maternal infant-feeding decisions: reasons and influences." *Can J Nurs Res* 1998 Summer; 30(2): 177-98. Dykes F, Griffiths H. "Societal influences upon initiation and continuation of breastfeeding." *British Journal of Midwifery* 1998 Feb; 6(2): 76-80; Wagner CL, Wagner MT. "The breast or the bottle? Determinants of infant feeding

behaviors." *Clin Perinatol* June 1999; 26(2): 505-25; Scott JA, Binns CW. "Factors associated with the initiation and duration of breastfeeding: a review of the literature." *Breastfeed Rev*. 1999 Mar;7(1):5-16. Review.

[103] Pollak A, Robson R, Evers S. *Study of attitudes on breastfeeding.* Health Canada Catalogue No. 0-662-23702-1 (Toronto: Sage Research Corp., 1995). Fooladi MM. "A comparison of perspectives on breastfeeding between two generations of black American women." *J Am Aca Nurse Pract* 2001 Jan; 13(1): 34-8. On a related topic, in a study of U.S. college students, embarrassment was perceived to be a major barrier to breastfeeding; less than half thought breastfeeding should be done publicly: Forrester IT, Wheelock G, Warren AP. "Assessment of students' attitudes toward breastfeeding." *J. Hum. Lact*. 1997 Mar.; 13(1): 33-7.

[104] Shepherd CK, Power KG, Carter H. Examining the correspondence of breastfeeding and bottle-feeding couples' infant feeding attitudes. *J Adv Nurs* 2000 Mar;31(3):651-60.

[105] Freed GL, Fraley JK, Schanler RJ. "Attitudes of expectant fathers regarding breast-feeding." *Pediatrics* 1992 Aug; 90(2 Pt 1): 224-7.

[106] Arora S, McJunkin C, Wehrer J, Kuhn P. "Major factors influencing breastfeeding rates: Mother's perception of father's attitude and milk supply." *Pediatrics* 2000; 106(5): e67; Bentley ME, Caulfield LE, Gross SM, Bronner Y, Jensen J, Kessler LA, Paige DM. "Sources of influence on intention to breastfeed among African-American women at entry to WIC" *J Hum Lact* 1999 Mar;15(1):27-34; Sharma M, Petosa R. "Impact of expectant fathers in breastfeeding decisions." *J Am Diet Assoc* 1997 Nov; 97(11): 1311-3; Scott JA, Binns CW, Aroni RA. "The influence of reported paternal attitudes on the decision to breast-feed."
J Paediatr Child Health. 1997 Aug;33(4):305-7; Pollak (1995), note 103; Giugliani ERJ, Caiaffa WT, Vogelhut J, Witter FR, Perman JA. "Effect of breastfeeding support from different sources on mothers' decisions to breastfeed." *J Hum Lact* 1994 Sep; 10(3): 157-61; Libbus MK, Kolostov LS. "Perceptions of breastfeeding and infant feeding choice in a group of low-income mid-Missouri women." *J Hum Lact* 1994 Mar; 10(1) 17-23.

[107] Humphreys AS, Thompson NJ, Miner KR. "Intention to breastfeed in low-income pregnant women: the role of social support and previous experience." *Birth* 1998 Sept.; 25(3): 169-74; Dix, DN. "Why women decide not to breastfeed." *Birth* 1991 Dec; 18(4): 222-5

[108] McIntyre E, Hiller JE, Turnbull D. "Community attitudes to infant feeding" *Breastfeed Rev* 2001 Nov;9(3):27-33.

[109] Salt MJ, Law CM, Bull AR, and Osmond C. "Determinants of breastfeeding in Salisbury and Durham." *J Public Health Med* 1995 June; 17(2): 238.

[110] Kendall-Tackett KA, Sugarman M. "The social consequences of long-term breastfeeding." *J Hum Lact* 1995 Sep; 11(3): 179-83.

[111] Dix (1991), note 107.

[112] Pollak (1995), note 103.

[113] Sheeshka J, Potter B, Norrie E, Valaitis R, Adams G, Kuczynski L. "Women's experiences breastfeeding in public places." *J Hum Lact* 2001; 17(1): 31-8 at 31-32. Other studies discussing the embarrassment associated with breastfeeding are: Libbus (1994), note 106; Marchand L, Morrow MH. "Infant feeding practices: understanding the decision-making process." *Fam Med* 1994; 26: 319-24.

[114] Labbok MH. "Health sequelae of breastfeeding for the mother." *Clin Perinatol*. 1999 Jun;26(2):491-503, viii-ix; Mezzacappa ES, Guethlein W, Vaz N, Bagiella E. "A preliminary study of breast-feeding and maternal symptomatology" *Ann Behav Med* 2000 Winter;22(1):71-9; Dermer A. "Breastfeeding and women's health" *J Womens Health* 1998 May;7(4):427-33. In recent news, not breastfeeding has been found to play a part in the high rates of breast cancer found in women living in industrialized countries: Beral V. "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 Jul 20;360(9328):187-95.

[115] International Lactation Consultant Association. *Summary of the Hazards of Infant Formula: Part 1* (1992) and *Part 2* (1998). See also: Haby MM, Peat JK, Marks GB, Woolcock AJ, Leeder SR. "Asthma in preschool children: prevalence and risk factors." *Thorax* 2001 Aug; 56(8): 589-95. This study was discussed in: "Fatty diets may boost asthma risk in children, study finds". *Globe and Mail*, 20 July 2001, pA1: "Not breastfeeding could account for as much as 16 per cent of asthma cases, the study says. . . .

Chris Haromy, an asthma educator at the Asthma Society of Canada, said nearly 11 per cent of Canadians aged 19 and under have been diagnosed with asthma by a physician. About 20 children a year die from asthma attacks." And see: Dr. Jack Newman ."Risks of Artificial Feeding Reference Sheet", Articles by Dr. Jack Newman, *Breastfeeding Online*, May 2000: http://users.erols.com/cindyrn/30.htm

[116] Breastfeeding Committee for Canada. "Cost Savings from Breastfeeding: An annotated bibliography." June 1999. http://www.geocities.com/HotSprings/Falls/1136/webdoc24.htm; Zeretzke, Karen M. "Cost Benefits of Breastfeeding." 1997 (updated Nov. 27, 1999): http://www.prairienet.org/laleche/bfcost.html; International Baby Food Action Network (IBFAN). *Breastfeeding: Everyone Benefits*. http://www.ibfan.org/english/news/briefing/benefits.html#references

[117] Riordan JM. "The cost of not breastfeeding: a commentary." (Review) *J Hum Lact* 1997 June; 13(2): 93-7. The four diagnoses are infant diarrhea, respiratory syncytial virus (RSV), insulin-dependant diabetes mellitus (IDDM), and otitis media (ear infections.)

[118] Jon Weimer. *The Economic Benefits of Breastfeeding: A Review and Analysis*. ERS Food Assistance and Nutrition Research Report No. 13. ERS (Economic Research Service), U.S. Department of Agriculture, March 2001: http://www.ers.usda.gov/publications/fanrr13. The figure given is an underestimate because only three diagnoses are covered: otitis media (ear infections), gastroenteritis (intestinal infections), and necrotizing enterocolitis (a frequently fatal intestinal disorder suffered primarily by premature babies).

[119] Cohen R, Mrtek MB, Mrtek RG. "Comparison of maternal absenteeism and infant illness rates among breastfeeding and formula-feeding women in two corporations." *American Journal of Health Promotion* 1995; 10(2): 148-53.

[120] Jarosz LA. "Breast-feeding versus formula: cost comparison." *Hawaii Med J* 1993; 52: 14-15. The difference is even greater in developing nations.

[121] See note 88, pp. 183-184.

[122] Justice of Appeal

[123] *R. v. Jacob* 31 O.R. (3d) 350, [1996] O.J. No. 4304, No. C12668.

[124] *Brooks v. Canada Safeway Ltd*. (1989), 10 C.H.R.R. D/6183 (S.C.C.)

[125] With the exception of a few medical oddities.

[126] *Poirier v. British Columbia (Ministry of Municipal Affairs, Recreation and Housing)* (1997), 29 CHRR D/87, (B.C. Trib.), para. 7. http://www.bchrt.gov.bc.ca/1997.htm and http://www.bchrc.gov.bc.ca/home.htm

[127] For example, in Alberta, the relevant provision reads:
Human Rights, Citizenship and Multiculturalism Act. Chapter H-11.7:
Discrimination re goods, services, accommodation, facilities
3 No person shall
(a) deny to any person or class of persons any goods, services, accommodation or facilities that are customarily available to the public, or
(b) discriminate against any person or class of persons with respect to any goods, services, accommodation or facilities that are customarily available to the public, because of the race, religious beliefs, colour, gender . . . http://www.gov.ab.ca/qp/ascii/Acts/WPD/H11P7.TXT

[128] Dr. Paul Rapoport. "Breastfeeding frenzy: two views" *Hamilton Spectator* 25 Feb. 1999. http://www.tera.ca/articles.html#Topfreedom

[129] New York Senate Bill # 3999-A, 1994. *1994 N.Y. ALS 98; 1994 N.Y. LAWS 98; 1994 N.Y. S.N. 3999 NY CLS Civ R.* See Elizabeth N. Baldwin and Kenneth A. Friedman. "Summary of enacted breastfeeding legislation." *A current summary of breastfeeding legislation in the U.S.* La Leche League International website: http://www.lalecheleague.org/Law/Bills30.html. And generally, Elizabeth N. Baldwin. *Breastfeeding and the Law*. La Leche League International website: http://www.lalecheleague.org/LawMain.html.

[130] "Breastfeeding moms get important support." Press release, Oregon Public Health Services. Aug. 25, 1999. The bill is called Senate Bill 744: http://www.ohd.hr.state.or.us/bf/bf4.htm

[131] The People and C., Respondent, v. Ramona Santorelli and Mary Lou Schloss, Appellants, et al., Defendants. 80 N.Y.2d 875, 600 N.E.2d 232, 587 N.Y.S.2d 601 (1992). July 7, 1992. CoCt No. 115. http://www.tera.ca/legal.html#Rochester

[132] "Is Breastfeeding Protected by Human Rights Legislation?" *INFACT Canada Spring 2000 Newsletter*: http://www.infactcanada.ca/HRLegislation.html; "Breastfeeding: a human right – Human and legal rights of breastfeeding women and children". *INFACT Canada Winter 1997 Newsletter*: http://www.infactcanada.ca; *Do You Know Your Rights?* http://www.infactcanada.ca/HumanRights.htm; *Breastfeeding in Public -- a Human Rights Issue*: http://www.infactcanada.ca/BreastfeedinginPublic.htm; *Women on the frontlines: breastfeeding and human rights*: http://www.infactcanada.ca/women_on_the_frontlines.htm

[133] *INFACT Canada Winter 1997 Newsletter*, note 132.

[134] World Health Organization

[135] United Nations Children's' Fund

[136] Breastfeeding Committee for Canada: http://www.geocities.com/HotSprings/Falls/1136/contents.html

[137] WHO/UNICEF *Innocenti Declaration on the Protection, Promotion and Support of Breastfeeding*. Breastfeeding in the 1990's: Global Initiative WHO/UNICEF sponsored meeting, Florence, Italy, 1 Aug. 1990: http://www.waba.org.br/inno.htm

[138] *International Code of Marketing of Breastmilk Substitutes.* IBFAN Resource Center: http://www.ibfan.org/english/resource/who/fullcode.html

[139] Most recently, see WHA Resolution 55.25 *Infant and young child nutrition*; May 18, 2002: http://www.ibfan.org/english/resource/who/whares5525.html

[140] Health Canada. Appendix 4. "Chapter 7: Breastfeeding" *Family-Centred Maternity and Newborn Care: National Guidelines* (Ottawa: Minister of Public Works and Government Services, 2000). http://www.hc-sc.gc.ca/hppb/childhood-youth/cyfh/pdf/fcmc/fcmc07.pdf

[141] La Leche League Canada is a mother-to-mother breastfeeding support organization. It is affiliated with La Leche League International.

[142] Lizzaraga JL, Maehr JC, Wingard DL, Felice ME. "Psychosocial and economic factors associated with infant feeding intentions of adolescent mothers." *J Adolesc Health*. 1992 Dec;13(8):676-81; Baisch MJ, Fox RA, Whitten E, Pajewski N. "Comparison of breastfeeding attitudes and practices: low-income adolescents and adult woman." *Matern Child Nurs J* 1989 Spring; 18(1): 61-71.

[143] Jean Samuel. "Breastfeeding and the empowerment of women." *Canadian Nurse* 1997 Feb; 93(2): 47-48 at 47. See also Dettwyler (1995), note 88, p. 198 for a discussion about how little breastfeeding is observed in our society.

[144] See note 88, p. 198.

[145] See note 87.

[146] Dettwyler, K. LACTNET, July 6, 2000: http://peach.ease.lsoft.com/scripts/wa.exe?A2=ind0007A&L=lactnet&P=R10807&I=-3&m=86117

[147] Dettwyler, K.A. "Beauty and the Breast", in P. Stuart-MacAdam & K.A. Dettwyler (eds), *Breastfeeding: Biocultural Perspectives* (New York: Aldine de Gruyter, 1995), pp. 202-205. See also "The Cultural Context of Breastfeeding", an excerpt from the conclusion of this chapter, at: http://www.prairienet.org/laleche/detcontext.html.

[148] Motto of the joint Health Canada/La Leche League Canada breastfeeding social marketing campaign.

[149] See for example, Elizabeth Baldwin and Kenneth Friedman. *A current summary of breastfeeding legislation in the U.S.* La Leche League International, Aug. 23, 2001: http://www.lalecheleague.org/LawBills.html; and generally, *Breastfeeding and the Law*. La Leche League International: http://www.lalecheleague.org/LawMain.html. Pending U.S. legislation pertaining to breastfeeding is discussed at *SupportBreastfeeding.com:* http://www.supportbreastfeeding.com

[150] See, for example, *Breastfeeding is a human right: new campaign launched* , October 2, 2000: http://www.ohrc.on.ca/english/news/e_pr_breastfeeding.shtml