



Picture www.istockphoto.com

Rethinking breastfeeding: Facts and fallacies

Can a mother who has undergone caesarean breastfeed from day one? Breast milk is best, but formula will do fine? Mum's on medication, can she still breastfeed? Canadian pediatrician and breastfeeding expert Dr Jack Newman clears the air for Iris Tan

TWENTY YEARS AGO, A NEW MOTHER keen on breastfeeding her jaundiced baby would be warned by doctors of dire consequences – brain damage, or even death. Fast-forward to today, such bleak warnings no longer abound in hospital wards. However, new mothers and doctors continue to contend with poor information and advice regarding breastfeeding.

“Unfortunately many of us are still unfamiliar with breastfeeding,” says Dr Phyllis Liauw of Thomson Medical Center.

“Throughout my training, I was not taught anything about breastfeeding. In fact, I was an obstetrician before I learnt about breastfeeding.”

Today, Dr Liauw considers breastfeeding a very important aspect of patient care. And little wonder. In the past decade, medical research has turned up a staggering amount of information and evidence on the many benefits of breastfeeding for both mother and child. From improving the survival rates of premature babies, to protection against a multitude of diseases, including some forms of cancers, to enhanced mental development, Nature, it seems, truly knows what is best.

Not so for the rest of us it appears. In the forward of a 1997 World Health Organisation booklet on infant feeding during emergencies, the authors wrote: “...it was clear many mothers had become so accustomed to bottle-feeding that most women had lost their knowledge on how to breastfeed.”

Indeed. “Breastfeeding is something very difficult. Mothers look at pictures of other mothers breastfeeding, and assume it’s something that comes naturally, but it needs a bit of work and effort,” acknowledges Dr Liauw.

In this atmosphere of uncertainties and difficulties, it is hardly surprising that both mothers and doctors often turned to formula feeding by the bottle. Measurable by science and by the bottle, the certainties of infant formula and bottle-feeding are undeniably reassuring for everyone concerned for the newborn.

Well, almost everyone.

Controversies in breastfeeding

“The burden of proof should be on those who promote intervention,” maintains Canadian pediatrician Dr Jack Newman.

The breastfeeding expert and one-time UNICEF consultant was recently in Singapore to give a series of talks on breastfeeding to health professionals at various hospitals. Armed with years of practical experience working with breastfeeding mothers and an array of medical studies, Dr Newman challenges conventional hospital practices and assumptions regarding breastfeeding with the latest research findings and data. In one of his talks – “Controversies in Breastfeeding” - he discussed the following.

Fallacy #1: Breastmilk = Formula milk

Formula milk has certainly come a long way from the first synthetic human milk substitutes of the past. However breast milk is an incredibly complex substance, filled with living compounds that will be difficult, if not impossible to simulate in formula milk. More than ten years ago, researchers John D. Benson, Ph D. and Mark L. Masor, Ph D, wrote in the March 1994 issue of the medical journal *Endocrine Regulations*, “It has become increasingly apparent that infant formula can never duplicate human milk. Human milk contains living cells, hormones, active enzymes, immunoglobulins and compounds with unique structures that cannot be replicated in infant formula.” Interestingly, both Benson and Masor were then researchers for an infant formula manufacturer.

In the June 1999 issue of *Discover Magazine*, it was reported that Swedish and British immunologists working with a grant from the American Cancer Society found that breast milk contain a protein which literally destroys every cancer cell with which it comes into contact.

According to lead scientist Catharina Svanborg, her team pursued this research in an attempt to determine why “the relative risk of childhood lymphoma is nine times higher in bottle-fed infants, and the risk for carcinoma is also elevated.”

On the other hand, infant formula – often based on cow’s milk – contains much higher levels of minerals and proteins than breast milk, and the forms of proteins and fats also differ from that found in breast milk. This is because mammals produce species-specific milk and cow’s milk is physiologically tailored to the needs of a young calf, not a human baby. This is one reason why formula fed infants often require additional water to help the body cope with the mineral overload, while an exclusively breastfed baby does not have the same requirement.

Breast milk is an incredibly complex substance, filled with living compounds that will be difficult, if not impossible to simulate in formula milk

Fallacy #2: Early initiation of breastfeeding is not important

The majority of newborns can be at the breasts within minutes of birth. Research has shown that, given the chance, a healthy alert newborn will crawl

up from their mothers' abdomen to the breasts, latch on, and start breastfeeding on his own. This process may take up to an hour, but babies who "self-attach" run into far fewer breastfeeding problems. It was also found that babies who are kept skin to skin (not wrapped in a blanket) with the mothers for one to two hours after birth are more likely to latch on, and latch on well, as well as breastfeed longer and more exclusively.

The medical arguments supporting this early initiation extend well beyond the benefits of breast milk. A number of studies in recent years have shown that babies who are placed skin to skin with their mothers immediately after birth demonstrate more stable body temperature, more normal and more stable heart and breathing rates, as well as higher blood sugar levels. In addition, immediate skin-to-skin contact after birth allows the baby's body (which has just emerged from the sterile environment of the womb) to be colonized by the same bacteria as the mother. This, together with breastfeeding, is believed to be important factors in preventing allergic diseases.

Nonetheless, few doctors today emphasize the value of this skin-to-skin contact, and many mothers remain unaware of the potential benefits of this early initiation.

Even in cases of caesarean births, and with premature babies, this early initiation is possible, he maintains. In the case of premature babies, it may even be more important as research has found that premature babies who are kept skin to skin with the mothers not only enjoy the same stabilizing effects as full-term babies, but also display higher skin temperatures than babies who are kept in incubators. Even babies on oxygen can be cared for skin-to-skin, says Dr Newman, and this helps to reduce their need for oxygen.

Fallacy #3: It's okay to supplement formula in the first few days

The only similarity between colostrum – the first milk produced by the mother only in the early days of a baby's life – and infant formula is that both are liquid, says Dr Newman.

Viscous and yellow, colostrum is high in carbohydrates, protein and antibodies. Though the amount of colostrum produced by the body is small, it is easily digested by the baby and



Early initiation of breastfeeding after a caesarean birth. In this photo, the baby has been placed skin to skin with the mother even as doctors are closing up the wound. Photo credit: Dr Alison Barrett

contains large amount of living cells to protect the newborn from harmful bacteria and viruses. Interestingly, the concentration of immune factors in colostrum is much higher than in the creamy mature milk that the mother will produce later and is thus the newborn's first vaccine au natural. It also acts to protect the newborn's gastrointestinal tract by "sealing" the holes in the permeable tissue, preventing foreign substances from penetrating and possibly sensitizing a baby to foods the mother has eaten.

Babies who are given infant formula in the first few days are therefore getting a food that is very different from what Nature has intended, and in quantities that are much greater than what will be from the breasts.

"Where is the science that this is safe?" challenges Dr Newman.

In contrast, there are now emerging research that suggests that infant formula in the first days or weeks could increase the risks of a child developing a number of conditions, including inflammatory bowel disease, allergies, asthma and obesity.

He also highlights a possible link between early formula feeding, and juvenile diabetes, a condition that was once a medical rarity, but is becoming increasingly common. Increased stimulation of insulin by formula milk, as compared to breast milk, is also a possible contributor to insulin resistance, or type 2 diabetes.

But is there ever a need to give formula milk in the first few days? While acknowledging that there will be a minority of women who may not be able to produce sufficient breastmilk, Dr Newman maintains that the vast majority of women will be able to breastfeed successfully if they are given the correct help and guidance, especially where latching is concerned.

Even if there is a need for supplementation, says Dr Newman, formula should never be the

first alternative. He lists the alternatives in order of preference: expressed breastmilk, banked breastmilk, expressed breastmilk mixed with five per cent glucose water to increase the volume, plain five per cent glucose water, and finally formula milk.

Fallacy #4: Women with flat or inverted nipples cannot breastfeed

“Long nipples, flat nipples, inverted nipples... these are all normal nipples,” says Dr Newman. Though it may be easier for a baby to latch on to a breast with a prominent nipple, it is not necessary for nipples to protrude, and mothers with any shaped nipples can breastfeed with guidance and help. Even if the baby does not take the breast at first, with proper help, he will often take the breast later. Breasts also change in the first few weeks, and as long as the mother maintains a good milk supply, the baby will usually latch on by eight weeks of age no matter what.

Fallacy #5: Birth control pills do not affect breastfeeding

From his years of experience, Dr Newman has found that birth control pills,

SPOTLIGHT ON DR JACK NEWMAN

In April, Dr Jack Newman was invited to Singapore by the Association of Breastfeeding Advocacy (Singapore) – an alliance of health institutions and associations, as well as healthcare professionals committed to breastfeeding – to conduct a series of talks for health professionals in Singapore. Dr Newman started the first breastfeeding clinic in 1984 in his native Canada while working in the emergency department of a children’s hospital. These days, he devotes his time to helping mothers breastfeed successfully and works in several clinics around Toronto.

Today’s Parents speak with him about his work during one of his lectures:

TP: Your lecture is targeted mainly at healthcare professionals. How would you describe the state of breastfeeding knowledge among the healthcare professionals in Singapore?

Dr Newman: I find it just as poor as much of the world, including where I come from. We learn nothing about breastfeeding in our medical training and we don’t learn very much more once we’re in practice. In fact what we learn

when we’re in practice is what the formula companies tell us. Formula companies have lots of money to send people to tell doctors about their new formulas... I don’t want to say everybody is like this, but many health professionals are like this.

What are the most common questions that you get from health professionals?

From doctors, it’s usually ‘is it ok for the mother to breastfeed when she’s taking such and such a medication? And then what do I do?’. And the quick answer to that is there’s almost no medication that requires mothers to drop breastfeeding. The other question is probably the problem of sore nipples. And often it’s an easy thing to treat, but again, most doctors don’t have that information. The third would be, what if the mother doesn’t have enough milk? Again, it’s often to do with the latching technique and can be easily corrected with the right information. So the big three: medication, sore nipples and not enough milk.

If there is one thing that you feel can improve the breastfeeding situation, what would that be?

Decent maternity leave. When we started the breastfeeding clinic in Canada, the maternity leave in Canada was four months. We asked the mothers then, ‘How long do you plan to breastfeed?’, everyone said four months. In 1992, the maternity leave was changed to six months. And the mothers immediately said six months. Then in 2001, they changed the maternity leave to one year. What did the mothers say? One year. So mothers want to breastfeed, and their determination to breastfeed often depends on how long the time they have off from their jobs.

especially those containing estrogens can severely diminish milk supply. He pointed out that the birth control pill simulates pregnancy, and milk production is usually minimal in a pregnant woman. The reason why this remains controversial among doctors, explains Dr Newman, is because not all women will experience a drop in milk production, and a mother's breastfeeding experience with the birth control pill can differ from one child to another. He also cautions against progestin only pills, and Depo Provera.

Fallacy #6: Babies with jaundice cannot be breastfed

In the majority of cases, jaundice will not require a mother to stop breastfeeding. While it is true that severe jaundice can cause brain damage, breast milk itself does not. In fact, a more common aggravating factor in jaundice is the lack of breast milk, leading to dehydration and a high bilirubin level.

Besides the common jaundice that appears and clears up within the first week of an infant's life, there is also a condition known as breast milk jaundice – a display of jaundice in a baby who is more than a week old, and is otherwise thriving on exclusive breastfeeding. Breastmilk jaundice can last for two or three months with no apparent ill-effect on the child.



It has also been found that the breastmilk produced by the mother of a nursing toddler contains much higher levels of fats and energy, as compared to a mother nursing a young baby

According to Dr Newman, there is “not one bit of evidence” that breastmilk jaundice harms the baby in any way and breastfeeding should not be disrupted if the child is otherwise healthy. Interestingly, Dr Newman observes over the years that most exclusively breastfed babies who are healthy and gaining weight are still jaundiced at five or six weeks of life, and even later. This suggests that the phenomenon of breast milk jaundice is entirely normal, he says.

Fallacy #7: Breastmilk has no value beyond six months

You may have been told that there is little value in breastfeeding after six months. But how, asks Dr Newman, does breast milk with all its nutritional components become “white water” after six or 12 months? Not only does breastmilk still contain the major nutrients in appropriate amounts beyond the first year, it also continues to supply the nursing child with huge amount of immunological factors, anti-inflammatory agents, and growth factors so needed by the young body.

It has also been found that the breastmilk produced by the mother of a nursing toddler contains much higher levels of fats and energy, as compared to a mother nursing a young baby. In other words, breastmilk continues to change in accordance to the nursing child's needs, be it premature, at six months, or after 12 months. Incidentally, the World Health Organisation and UNICEF recommend that older babies should receive “complementary foods with continued breastfeeding up to two years of age or beyond.”

There is also no evidence that prolonged breastfeeding makes a toddler more dependent, or prevent him from developing his own immunity. To the contrary, a toddler who is allowed to self-wean (usually between two to four years) generally grows up more secure, and breastfeeding actually stimulates the development of the immune system.

But above and beyond these sound reasons for breastfeeding a toddler, is the bond fostered between the breastfeeding pair.

“There is just so much more to breastfeeding than nutrition,” he says, summing up.

“It's a special relationship.” 



Sources: ■ “Controversies in Breastfeeding”, a lecture given by Dr Jack Newman at Thomson Medical Center on 25 April, 2006.

■ Dr Jack Newman's website ■ World Health Organisation website ■ La Leche League International Website

Disclaimer: Information in this article is for readers' interest only. Please consult your doctors if you or your child have any medical conditions