

Rethinking about breastfeeding

STAR HEALTH DESK

August 1-7 is being observed as World Breastfeeding Week. The theme for World Breastfeeding Week 2006 is "Code watch: 25 years of protecting breastfeeding". According to the World Alliance for Breastfeeding Action (the organisers of the week), over 60 countries have legislated all or many provisions of the International Code of Marketing of Breast milk Substitutes (the Code), which regulates the marketing of breastmilk substitutes. The week will celebrate this success and draw attention to the work still needed to improve breastfeeding practices worldwide.

Promoting proper feeding for infants and young children

Nutrition and nurturing during the first three years are both crucial for lifelong health and well-being. In infancy, no gift is more precious than breastfeeding; yet barely one in three infants is exclusively breastfed during the first four months of life.

The response

More than two decades of research have established that breast milk is perfectly suited to nourish infants and protect them from illness. Breast-fed infants have lower rates of hospital admissions, ear infections, diarrhea, rashes, allergies, and other medical problems than bottle-fed babies.

Human milk is made for human infants and it meets all their specific nutrient needs. Promoting sound feeding practices is one of the main programme areas that should be focussed on.

Benefits for baby

Breast milk is the most complete form of nutrition for infants. A mother's milk has just the right amount of fat, sugar, water, and protein that is needed for a baby's growth and development. Most babies find it easier to digest breast milk than they do formula.

The primary benefit of breast milk is nutritional. Human milk contains just the right amount of fatty acids, lactose, water, and amino acids for human digestion, brain development, and growth.

Cow's milk contains a different type of protein than breast milk. This is good for calves, but human infants can have difficulty digesting it. Bottle-fed infants tend to be fatter than breast-fed infants, but not necessarily healthier.

Breast-fed babies have fewer illnesses because human milk transfers to the infant a mother's antibodies to disease. About 80 percent of the cells in breast milk are macrophages, cells that kill bacteria, fungi and viruses. Breast-fed babies are protected, in varying degrees, from a number of illnesses, including pneumonia, botulism, bronchitis, staphylococcal infections, influenza, ear infections, and German measles (Rubella). Furthermore, mothers produce antibodies to whatever disease is present in their environment, making their milk custom-designed to fight the diseases their babies are exposed to as well.

A breast-fed baby's digestive tract contains large amounts of *Lactobacillus bifidus*, beneficial bacteria that prevent the growth of harmful organisms. Human milk straight from the breast is always sterile, never contaminated by polluted water or dirty bottles, which can also lead to diarrhea in the infant.

Human milk contains at least 100 ingredients not found in formula. No babies are allergic to their mother's milk, although they may have a reaction to something the mother eats. If she eliminates it from her diet, the problem resolves itself.

Sucking at the breast promotes good jaw development as well. It is harder work to get milk out of a breast than a bottle, and the exercise strengthens the jaws and encourages the growth of straight, healthy teeth. The baby at the breast also can control the flow of milk by sucking and stopping. With a bottle, the baby must constantly suck or react to the pressure of the nipple placed in the mouth.

Nursing may have psychological benefits for the infant as well, creating an early attachment between mother and child. At birth, infants see only 12 to 15 inches, the distance between a nursing baby and its mother's face. Studies have found that infants as young as 1 week prefer the smell of their own mother's milk. When nursing pads soaked with breast milk are placed in their cribs, they turn their faces toward the one that smells familiar.

Many psychologists believe the nursing baby enjoys a sense of security from the warmth and presence of the mother, especially when there's skin-to-skin contact during feeding. Parents of bottle-fed babies may be tempted to prop bottles in the baby's mouth, with no human contact during feeding. But a nursing mother must cuddle her infant closely many times during the day. Nursing becomes more than a way to feed a baby; it's a source of warmth and comfort.

Premature babies do better when breastfed compared to

premature babies who are fed formula.

Breastfed babies score slightly higher on IQ tests, especially babies who were born prematurely.

Benefits for mothers

Nursing uses up extra calories, making it easier to lose the pounds of pregnancy. It also helps the uterus to get back to its original size and lessens any bleeding a woman may have after giving birth.

Breastfeeding, especially exclusive breastfeeding (no supplementing with formula), delays the return of normal ovulation and menstrual cycles. (However, you should still talk with your doctor or nurse about birth control choices). It acts as natural contraceptive.

Breastfeeding lowers the risk of breast and ovarian cancers, and possibly the risk of hip fractures and osteoporosis after menopause.

Breastfeeding makes your life easier. It saves time and money. You do not have to purchase, measure, and mix formula. There are no bottles to warm in the middle of the night!

A mother can give her baby immediate satisfaction by providing her breast milk when her baby is hungry.

Breastfeeding requires a mother to take some quiet relaxed time for herself and her baby.

Breastfeeding can help a mother to bond with her baby. Physical contact is important to newborns and can help them feel more secure, warm and comforted.

Breastfeeding mothers may have increased self-confidence and feelings of closeness and bonding with their infants.

Health risks of NOT breastfeeding

Breast milk has agents (called antibodies) in it to help protect infants from bacteria and viruses. Recent studies show that babies who are not exclusively breastfed for 6 months are more likely to develop a wide range of infectious diseases including ear infections, diarrhea, respiratory illnesses and have more hospitalisations.

Some studies suggest that infants who are not breastfed have higher rates of sudden infant death syndrome (SIDS) in the first year of life, and higher rates of type 1 and type 2 diabetes, lymphoma, leukemia, Hodgkin's disease, overweight and obesity, high cholesterol and asthma.

Babies who are not breastfed are sick more often and have more doctor's visits.

Also, when you breastfeed, there are no bottles and nipples to sterilise. Unlike human milk straight from the breast, infant formula has a chance of being contaminated.

When formula milk is necessary?

There are very few medical reasons why a mother should not breast-feed.

Most common illnesses, such as colds, flu, skin infections, or diarrhea, cannot be passed through breast milk. In fact, if a mother has an illness, her breast milk will contain antibodies to it that will help protect her baby from those same illnesses.

A few viruses can pass through breast milk, however. HIV, the virus that causes AIDS, is one of them. Women who are HIV positive should not breast-feed.

A few other illnesses – such as herpes, hepatitis, and beta strep-

tococcus infections – can also be transmitted through breast milk. But that does not always mean a mother with those diseases should not breast-feed.

Breast cancer is not passed through breast milk. Women who have had breast cancer can usually breast-feed from the unaffected breast. There is some concern that the hormones produced during pregnancy and lactation may trigger a recurrence of cancer, but so far this has not been proven. Studies have shown, however, that breast-feeding a child reduces a woman's chance of developing breast cancer later.

Medicines and nursing mothers

A mother should be careful about her medication during nursing. They should first check with the child's pediatrician, however.

Drugs those are NOT safe while nursing

Some drugs can be taken by a nursing mother if she stops breast-feeding for a few days or weeks. She can pump her milk and discard it during this time to keep up her supply, while the baby drinks previously frozen milk or formula.

Radioactive drugs used for some diagnostic tests like Gallium-69, Iodine-125, Iodine-131, or Technetium-99m can be taken if the woman stops nursing temporarily.

Drugs that should never be taken while breast-feeding include Bromocriptine, most chemotherapy drugs for cancer, Ergotamine, Lithium, Methotrexate, drugs of abuse, tobacco smoke etc.

Facts on dengue fever

DR M KARIM KHAN

One hundred million cases of dengue fever are reported annually by the WHO, making it one of the most important viral diseases in the world. Dengue is a viral fever and is caused by four types of closely related viruses. Dengue virus (*Flavi virus*) causes acute febrile illness, generally self limited disease, but a minority of the patients (1 percent) may progress to complicated disease.

Dengue virus spread to human by the bite of infected female *Aedes aegypti* mosquitoes. These mosquitoes acquire the virus while feeding on the blood of an infected person. *Aedes aegypti* breeds in peridomestic fresh water as might be stored in natural and artificial containers in and around human dwellings, such as old tires, flower pots, water storage container, cans, coconut shells etc. These days biting species is most active in the morning and in late after noon. After introduction of virus they circulate in the blood of infected human for 2-7 days leading to fever. Recovery from infection provides immunity against that particular virus but offers only partial protection against the other three viruses.

In fact, subsequent infection increases the risk of a more complicated fever called as dengue hemorrhagic fever or dengue shock syndrome.

Susceptibility to dengue fever is universal but children generally have milder illness than adults. Dengue fever is usually mild and nonspecific in most children, associated with pharyngitis, rhinitis, mild cough and fever for several days to a week. Classic dengue fever most likely to occur in older children and adults. Fever is of sudden onset, fever persists for 2-5 days rarely lasting for 7 days. Fever accompanies severe headache, intense myalgia (muscle pain), arthralgia (bone pain) retro orbital pain (pain behind the eye). Severe limb or break bone pain develops in first 1-2 days often associated with red morbilliform rash on the skin. Nausea and vomiting may also

occur. Subconjunctival bleeding (red eyes), nasal bleeding, petechia, gum bleeding may occur. Decrease heart rate, enlarged lymphnodes are also present often.

Laboratory findings are often non specific, but leucopenia (decrease WBC count) often less than 2000/mm³ of blood with relative lymphocytosis are common. Antibodies to virus are positive after 4-5 days of illness but are occasionally done. Hematocrit value increases and platelet count decreases in DHF/DSS.

WHO classification of dengue fever are as below:

Grade I: Fever, constitutional symptoms, positive tourniquet test.

Grade II: Grade I + spontaneous bleeding (skin, gum GIT).

Grade III: Grade II + circulatory failure and agitation.

Grade IV: Grade III + profound shock (unrecordable blood pressure)

Treatment of dengue fever is symptomatic. Paracetamol (not more than 60mg/kg/day) to be used to reduce pain and fever. Avoid aspirin and clofenac group of drugs. Plenty of fluid to be taken orally to prevent dehydration, best is ORS. But in case of bleeding and shock, hospital management is needed. Sometimes blood and platelet transfusion are needed.

Prevention of dengue can be done by preventing mosquito bite. As *Aedes aegypti* mosquitoes are day biter, mosquito repellent can be used in school & house. Trouser and long sleeve dresses are helpful. Insecticides to be sprayed regularly to control mosquito breeding. Proper disposal of tires, cans and containers are very important. Stagnant water in air condition are to be looked for, as mosquitoes can breed there also. Actually education and awareness can only save us from dengue, as vaccine against dengue is yet to develop.

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Research investigates electricity in wound healing

REUTERS, London

An international team of scientists has discovered two genes that enable cells to respond to electrical signals in the body to heal wounds.

They also showed that by applying an electrical field to a wound they could change the movement of cells and speed up the healing process.

"Our studies show that electricity in the body is far more important than previously thought and that it has significant potential in wound healing and possibly also regeneration," said Professor Min Zhao, of

the University of Aberdeen in Scotland, who headed the research team.

Scientists have known about electrical currents in nerves and wounds since the 1800s when German physiologist Emil Du Bois-Reymond showed that electrical changes accompany muscle action.

His findings were the foundation for modern electrophysiology, the study of electrical properties in cells and tissues.

Zhao and collaborators in America, Japan and Austria identified two genes called Pl(3)Kgamma and PTEN that control a process known as electrotaxis – the movement of

cells in response to an electric current.

A wound, for example on the skin, generates an internal electric field that guides cells so they know where to go to heal it. Zhao and his team used time-lapse photography to witness electrotaxis in wounds in laboratory experiments.

"Scientifically, our findings offer a novel perspective in understanding how cells move to heal, and what genes and molecules the cells use to detect the electric fields," said Zhao, who reported the findings in the journal Nature. "Clinically, our findings offer a novel approach to speed up healing," he

added in a statement.

Professor Colin McCaig, a co-author of the study, said the findings could have far-reaching implications particularly for burn patients, diabetics and people with non-healing ulcers.

By manipulating the electric field around the wound directly or with topical chemicals that enhance the normal signal scientists may be able to improve wound healing.

"We've got a variety of different drugs that we can apply that will increase these electrical signals because they act on the cellular mechanism that drives the electrical signal," McCaig explained.



A measure to prevent dengue

Cotton wool placed around the top of flower vases to prevent mosquitoes from laying eggs in the water in the vase.

Your Doctor

Send your health related queries to Your Doctor, Star Health, The Daily Star, 19, Karwan Bazar, Dhaka 1215 or e-mail your problem to starhealth@thedailystar.net



HEALTH FITNESS TIPS

Looking good after 40

DR FIRDOUS QUADER MINU

Almost everybody dreads the 40's. It is the age where you are stepping into your middle ages. This is OK with a lot of people but for someone, it is hard to accept and they start to go through the mid-life crisis.

For somebody, it is more tough, because they start to become plagued by different health problems related to aging. This not only affects your health, but also affects the way you look. For somebody, the change is really drastic. Nevertheless there are ways to slow down or change the processes according to your liking. Modern technology not only is helping us to solve our health problems but it has also become very advanced in delaying the aging process through cosmetic surgeries.

Cosmetic surgery is the most popularly performed elective procedure in the western world. Its main aim is to beautify or change the way a person wants to look. So, now people don't have to live with wrinkles, sagging face or a body that sags all around you. All of these problems can be solved very easily by cosmetic surgery.

Fine wrinkles start around the eyes, lips and forehead at around the 40s. Rejuvenation therapy by Lasers reduces wrinkle formations and also tightens the skin around the face preventing facial sagging.

For the face which has just started to show signs of aging, 'thread face lift' can be done. This is a non-surgical procedure in which the sagging areas are pulled up by threads under the skin. This is a safe and painless procedure and the patient need no admission to hospitals or clinics. Filler injections like Botox or Restylane can also be used to fill the wrinkle lines or the unwanted dimples wherever required.

Some people develop bagginess around the eyes as they become aged. This can be reduced by 'blepharoplasty' operation where the excess fat is reduced. There is certainly facilities available for the proper face lift surgery which can be done on anyone who needs it. This is a major surgery done under general anesthesia and the patient requires hospital admission.

Some of us need to do a lot of field work that brings them under huge sun exposure. This causes damages to the skin

making it look rough and also there is pigmentation on the skin. This can be helped by micro-dermabrasion where the rough layer of skin is polished off. This can be followed up with laser therapy which makes the skin more fresh and vibrant to look at.

Some women develop excess hairs on their face due to effects of hormonal imbalance or changes in their levels and some just have it from before. These unwanted hairs can be removed permanently by laser therapy which relieves you from worrying about plucking or waxing every few days.

We tend to put on weight more easily after hitting 35 or in case of women after having had their first child. For some women, this weight gain is really hard to get rid of even with regular diet and exercise. Just to get started into reshaping the body there is the option for 'liposuction'. Here the excess fat is suctioned out through small ports by a special method. This helps to reshape the body and can be done on any part of the body that needs it.

Another depressing factor for the female is sagging of the breasts following delivery and breast-feeding. This can easily be corrected by uplifting or 'augmentation mammoplasty'.

Hair loss also becomes a problem at this age. For those who already have developed bald spots can be filled up by 'hair transplant surgery'. By this procedure, hair follicles are grafted into the bald areas to fill them up. And there is also hair restoration therapy available to help prevent the hair fall.

Apart from all these procedures other surgeries are available according to the need of the individual to make them look and feel better. There is nothing to feel embarrassed or ashamed of if you do want to age nicely and gracefully. Looking good or attractive makes a person feel confident and vibrant. With proper diet, exercise and a little help of cosmetic surgeries you can age gracefully and be happy and confident.

It is a matter of great pleasure that all these facilities are available in the country now-a-days.

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Upcoming Thalassaemia Events

10th International Course on Clinical Management of Thalassaemia for Health Professionals
7-10 Nov 2006, Hilton park Hotel, Nicosia, Cyprus

This is part of a series of scientific courses bringing together experts from around the world to present the latest developments in the clinical management of Thalassaemia Major, providing medical practitioners with an exceptional opportunity to exchange experiences and to learn from those of others.

Internationally recognised experts on all aspects of the clinical care of Thalassaemia Major have been invited to take part in the course, which will include case studies as well as opportunities for group discussion. Physicians, hematologists, pediatricians and other specialist involved in the treatment of patients with Thalassaemia major, who have not however participated in previous workshop/conference of this type are strongly encouraged to participate.

3rd International Workshop for National Thalassaemia Associations / Federations
12-13 November 2006

The Workshop provides a unique opportunity for National Thalassaemia Associations from around the world to come together, share ideas and experiences and gain knowledge on how to promote the fight for the control of Thalassaemia, including the preven-

tion and Clinical Management. The topics to be covered include:

- The Role and Function of Thalassaemia Associations
- Communicating with National government offices and dignitaries, including National Health Authorities
- Achieving their objectives more effectively for better survival and quality of life of their member patients
- Establishing and reinforcing efficient collaboration with health authorities, medical community and other national and international NGOs or health bodies which could support their mission and help them achieve their goals
- The promotion of their relationship with TIF and other national thalassaemia associations
- Establishing a network of collaboration with national and international scientific collaborators
- Fund-raising: the key issue in the strength and power of a national thalassaemia association

All Associations are strongly encouraged to participate in this important event. The participants must be officially representing, and be member of their National Thalassaemia Association. The Board of TIF has decided to provide financial assistance for each one representative of a national thalassaemia association, covering all the cost of three nights' hotel accommodation (11,12 and 13 November) including coffee breaks and lunches.

Visit: www.thalassaemia.org.cy for further information

Source: Bangladesh Thalassaemia Foundation