



Nutri Scene

DR TEE E SIONG
starhealth@thestar.com.my

BREASTFEEDING is the gold standard in infant feeding as it confers protection against illnesses and helps forge a strong bond between mother and child. Breast milk is certainly the best food for infants.

These benefits of breastfeeding are widely established and accepted. However, it is not so well known that breastfeeding can be protective against breast cancer. I would therefore like to highlight this important aspect of breastfeeding.

The World Cancer Research Fund (WCRF) expert report on *Food, Nutrition, Physical Activity and the Prevention of Cancer* (www.dietand-cancerreport.org/) was released in November 2007. There are eight general recommendations and two special recommendations in this WCRF

Breastfeeding can help prevent cancer

Breastfeeding provides many benefits to both mother and child. One rather surprising benefit to the mother is added protection against breast cancer.

report. Together, these 10 recommendations are designed to contribute to healthy dietary patterns, healthy lifestyles and general well-being.

I have highlighted the eight general recommendations of the WCRF report through a series of write-ups in this

column over the past 10 months. In this write-up, I will discuss one of the two special recommendations, namely breastfeeding and cancer. In addition to the WCRF report, I will also rely on the Hong Kong WCRF Recommendations for Cancer



There is strong and consistent evidence that breastfeeding by the mother protects her against breast cancer. – AP photo

Prevention booklet (www.wcrf-hk.org/).

Breastfeeding and cancer – the evidence

Upon reviewing all available evidence, the WCRF expert panel conclude that:

- There is strong and consistent evidence that breastfeeding by the mother protects her against breast cancer at all ages.
- There is limited evidence suggesting that lactation protects against cancer of the ovary.

In addition to this protective effect on the mother, breastfeeding is also beneficial to the infant. The WCRF experts conclude that sustained breastfeeding probably protects infants and children against overweight and obesity; overweight children tend to become obese adults.

What is the link to cancer?

Studies reviewed by the expert panel show that there are several possible ways in which high breastfeeding can reduce risk to breast cancer.

- Breastfeeding lowers the levels of some cancer-related hormones in the mother's body, thereby reducing the risk to cancer.
- During breastfeeding, menstruation reduces and often stops (amenorrhoea). Lactation induces a period of infertility. This decreases lifetime exposure to menstrual cycles and may be protective against some cancers. This is the general mechanism through which lactation could plausibly protect against cancer.
- At the end of breastfeeding, the body gets rid of any cells in the breast which may have DNA damage. This reduces the risk of breast cancer developing in the future.

The evidence indicates that being breastfed protects infants and children against overweight

and obesity. The WCRF report points out that this could be because exclusively breastfed children show different growth patterns from those of formula-fed infants. Babies who are breastfed consume less total energy and less protein than formula-fed infants. It is possible that the bioactive factors in human milk could modulate energy metabolism, a process in which leptin (present in human milk but not formula) may be implicated.

Alternatively, the effect of increased protein intake and plasma insulin concentrations in formula-fed babies could stimulate fat deposition and early development of fat cells.

This protective effect of breastfeeding against overweight and obesity amongst infants and children is particularly significant in later life because many overweight children tend to grow up to be obese adults.

WCRF recommendations

In view of the available scientific evidence, the recommendation of WCRF is therefore for mothers to breastfeed and children to be breastfed.

The public health goal, which is for populations and is therefore principally for health professionals, is for the majority of mothers to breastfeed exclusively, for six months.

The personal recommendation, meant for people, as communities, families, and individuals, is to aim to breastfeed infants exclusively up to six months and continue with complementary feeding thereafter. (Note: "Exclusively" means human milk only, with no other food or drink, including water.)

This recommendation has a special significance. While derived from the evidence on being breastfed, it also indicates that policies and actions designed

to prevent cancer need to be directed throughout the whole life course, from the beginning of life.

Other benefits

The other benefits of breastfeeding for mothers and their children are well established. First and foremost, breast milk has the perfect blend of nutrients in the exact amounts to meet a baby's nutritional needs for growth and development, including brain development. Feed baby nothing else – no other food or water – and watch him thrive for the first six months of life!

Secondly, breastfeeding protects against infections in infancy, and protects the development of the immature immune system. Research shows that babies who are breastfed exclusively for six months experience fewer childhood illnesses in the first 12 months of life. Breast milk contains nutrients and anti-infective substances that protect baby from various infectious diseases, particularly diarrhoea, cold, bronchiolitis and middle ear infections.

Breastfeeding also has a whole host of benefits to the mother. There is the mistaken belief that breastfeeding will “spoil” the shape of the mother. On the contrary, breastfeeding helps the mother to get back in shape! Breastfeeding helps the mother burn up the fat stored during pregnancy. Coupled with appropriate exercise, breastfeeding helps the mother lose the extra weight gained during pregnancy much faster.

Breastfeeding causes the secretion of hormones that act on the uterus, causing it to contract and return more quickly to its normal size. This contraction also prevents excessive bleeding after delivery.

Breastfeeding also causes a slower return of menstruation and thus reduces the chances of a woman becoming pregnant too soon. Breastfeeding can therefore be a natural way of spacing pregnancies.

Breastfeeding is also convenient, hassle-free, available anywhere, anytime and is absolutely free of charge! Equally important is the fact that breastfeeding also promotes bonding between the mother and baby.

Recommendations from other dietary guidelines

The Malaysian Dietary Guidelines (MDG) (www.nutriweb.org.my) has a very clear and specific message on promoting breastfeeding. It encourages all Malaysians to practise and promote breastfeeding. It encourages mothers to breastfeed babies exclusively without supplements for six months and to continue until the child is two years of age as well as to promote food supplements from the age of six months.

The guidelines explain the benefits of breastfeeding (similar to what has been summarised above). It also highlights that breastfeeding reduces the risk of mothers getting breast and ovarian cancer.

Learning more about successful breastfeeding

You might want to obtain more information on successful breastfeeding from a booklet published by the Nutrition Society of Malaysia: *Breastfeeding made simple: A practical guide for the mod-*

ern mum (www.nutriweb.org.my).

This 32-page booklet, in Bahasa Malaysia and English, has seven chapters, covering a range of topics related to successful breastfeeding. The benefits of breastfeeding are summarised in one chapter. A chapter describes breastfeeding step by step, from latch-on to burping baby, complete with illustrations. It has a chapter addressing concerns of working mums regarding breastfeeding and reaffirms that with a little advanced planning and determination, breastfeeding is indeed possible.

Some mothers are concerned about whether their baby is getting enough breast milk as you cannot measure how much milk is consumed each time. A chapter explains how to determine if a baby is feeding well and growing well.

Another chapter addresses some common questions and concerns on breastfeeding, including problems related to the breast, nutritional needs of lactating women, and issues related to the baby and mother.

The Malaysian Dietary Guidelines has also provided useful tips on steps to take for successful breastfeeding:

Step 1: Be prepared

- Psychologically prepare for breastfeeding early during pregnancy.

- Get information about how to breastfeed your baby.

Step 2: Techniques of breastfeeding

- Start breastfeeding soon, preferably within half to one hour after birth. Your baby is most alert during this period.

- Feed your baby on demand.

- Demand feeding will ensure your milk supply is enough.

- Ensure that baby is well attached at your breast during breastfeeding.

Step 3: Nutrition for the mother

- Eat well, and base your food preferences on the food pyramid, with a generous serving of protein-rich foods like fish, eggs, chicken, meat, liver or pulses, one to two glasses of low fat milk or other calcium rich foods like *ikan bilis*, sardines, soya-bean products, yoghurt and cheese, an extra serving of rice or other cereals for increased energy needs.

- Drink enough water (six to eight glasses).

Step 4: Continuing effort

Continue breastfeeding your baby for up to two years if possible. Introduce solid foods at six months.

■ *NutriScene is a fortnightly column by Dr Tee E Siong, who pens his thoughts as a nutritionist with over 30 years of experience in the research and public health arena. For further information, e-mail starhealth@thestar.com.my. The information provided is for educational and communication purposes only and it should not be construed as personal medical advice. Information published in this article is not intended to replace, supplant or augment a consultation with a health professional regarding the reader's own medical care. The Star does not give any warranty on accuracy, completeness, functionality, usefulness or other assurances as to the content appearing in this column. The Star disclaims all responsibility for any losses, damage to property or personal injury suffered directly or indirectly from reliance on such information.*