Cancer development is not a spontaneous event. The process may take decades, with as much as 40 years between first assault and diagnosis. Scientific evidence shows that our patterns of growth and development over the lifespan, from conception forward, can influence the cancer process. Examining the causes of cancer throughout the entire lifetime is called the “life-course approach” to cancer research.

You may be aware that the life-course approach was highlighted and introduced in the WCRF/AICR 2007 Expert Report. World Cancer Research Fund Hong Kong (WCRF HK) made this the theme of its 6th WCRF HK Health Professional Conference to provide an opportunity for health professionals to investigate more into this important subject. Over 140 delegates attended the conference and learned from our Expert Report Panel members and local HK speakers the strategies for cancer prevention throughout the life cycle.

Life Stages and Cancer Risks
It is never too early or too late for cancer prevention. So it is the best to start as early as possible because diet and physical activity behaviours are established in early life, and cancer risks can accumulate at all stages of life.

Foetal-infancy, childhood and adolescence are the three life stages that are particularly sensitive to factors influencing cancer risks. Early nutritional exposure influences birth weight, rate of growth, onset of sexual maturity, hormone levels and cell development. Hormone shifts may influence adult height and body fat deposition later in life, which are both linked with increased cancer risk.1

Foetal-infancy
Satisfying the foetal nutrient requirements is important during pregnancy. However, the mother’s nutritional status on entering pregnancy is the major determinant for her capacity to deliver appropriate nutrients to the foetus. Any stress that influences her nutritional status, such as the changes of appetite and nutrient demand, can affect the availability of nutrients to the foetus, and thus the birth weight and overall health of the newborn.2 Nutrition after birth is also crucial for the newborn’s long-term health. A literature review showed that breastfeeding has beneficial health effects in both the short and the long term, including reducing incidence of childhood obesity.3 Therefore, WCRF HK, following the guidance of the World Health Organization (WHO), recommends that babies should be exclusively breastfed for up to 6 months.4

Childhood
Food preferences and physical activity patterns are set in this stage of life and lead to adoption of habits. Unhealthy habits like having an energy-dense diet and sedentary lifestyle can lead to childhood obesity. It has been shown, in a WCRF funded study, that childhood obesity is positively associated with higher cancer risk in later life.5

Moreover, energy-dense diets lead to high levels of insulin and insulin-like growth factor-1 (IGF-1). These hormones, in turn, increase the levels of oestriadiol and testosterone, which are strongly associated with the risk of both endometrial and postmenopausal breast cancers.6 Since parents greatly influence the dietary patterns of their children6 and food preferences established in childhood tend to be maintained in adulthood7, it is very important for health professionals to educate parents on making healthy food choices for themselves and their children.

Adolescence
As children enter their adolescence, their diets are no longer under parents’ control. Instead, their peers, media and other environmental factors such as availability of unhealthy foods greatly influence their food choices. In addition, their physical activity levels are lower,8 resulting in excess energy intake and fat deposition, and thus overweight and obesity.

Actions to take
Overweight and obese adolescents are more likely to become overweight and obese adults. There is convincing evidence that excess body fat increases the risk of cancers of the colorectum, oesophagus, pancreas, kidney, and breast (in postmenopausal women).3 Thus, it is crucial for health professionals to educate parents, children and adolescents about choices that reduce their chances of developing cancers and other chronic diseases.

In relation to this, policy makers play a significant role in providing environmental support, which is an essential element in addition to health education. In order to help achieve this, WCRF/AICR will launch in late February 2009 a subsequent Report – Policy and Action for Cancer Prevention: Food, Nutrition, and Physical Activity: a Global Perspective. This Policy Report will address the global evidence for effective interventions that help people adopt healthy ways of life and make recommendations for policies and actions to help achieve the goals and Recommendations of the WCRF/AICR 2007 Expert Report. Please stay tuned for more details.

Reference:
**Dark Chocolate helps lower inflammation**

It is good news for chocolate lovers, especially for those who love dark chocolate. Dark chocolate is well known for its high antioxidant (flavonoids) content. A recent study showed that regular consumption of small amounts of dark chocolate had a lower level of C-reactive protein (CRP).

The sample group (4849) comprised healthy subjects drawn from the Moli-sani Project, an ongoing cohort study of men and women aged 35 years randomly recruited from the general population in Italy. By July 2007, 824 of the 10,994 enrolled subjects reported regular consumption of dark chocolate. The researchers looked at their dark chocolate intake using the European Prospective Investigation into Cancer and Nutrition Food Frequency Questionnaire and compared their intake to levels of the acute phase protein, CRP. CRP is linked to inflammation, which in turn is strongly related to heart disease and some types of cancer.

After adjustment for age, sex, social status, physical activity, systolic blood pressure, BMI, waist-to-hip ratio, food groups, and total energy intake, an inverse association was found between dark chocolate consumption and the level of CRP. Those who regularly ate small amount of dark chocolate (≤20g every 3 days) had lower levels of CRP when compared with the non-eaters. However, the benefits disappeared as the amount of dark chocolate consumption increased.

Reference:

**Launch of WCRF/AICR Second Expert Report, Chinese version**

WCRF HK launched the Chinese version of WCRF/AICR Second Expert Report in Beijing on 20th October 2009. Over 140 Chinese health professionals specialising in cancer prevention and clinical oncology attended the conference. They welcomed the Recommendations and expressed keen interest in putting them into practice so as to benefit the general public.

For details of the launch conference programme and to download the presentations, please visit [www.wcrf-hk.org](http://www.wcrf-hk.org) or [www.wcrf-cn.org](http://www.wcrf-cn.org)


**4th Beat the Banana! Run**

**Sunday, 1 March 2009**

**The Tsimshatsui Promenade**

WCRF HK is excited to announce that the 4th Beat the Banana Run will be held on Sunday, 1 March 2009 along the Tsimshatsui Promenade.

In addition to the 3K fun run when runners take on the challenge to chase and beat our very own life-sized running banana, there will be a new 5K elite race for serious runners to compete for two winning places -- the quickest male and female runner to represent WCRF HK and participate in WCRF UK’s Beat the Banana Run to be held in London in May 2009! The two winners will get sponsored air tickets and accommodation for a 5-day (3 nights) trip to London, together with other fabulous prizes.

MIX, the principal sponsor of the 2009 Banana Run, will again provide light refreshments to all participants on the day. Prizes and trophies will also be awarded to the first three Banana male and female beaters respectively, as well as those who achieve a sponsored run and raise the most funds. All entrants will also receive a race t-shirt, a finisher’s medal and a goody bag full of surprises. Please stay tuned and visit [www.wcrf-hk.org](http://www.wcrf-hk.org) for more details.

Mark your diary now to come and enjoy a fun morning out with family, colleagues and friends!

**WCRF HK’s New Leaflet**

"Reducing Your Risk of Breast Cancer"

This leaflet provides you with the most up-to-date advice on how you can help reduce your risk of the most common female cancer.

To order your own free copy, please contact us on 2529 5025 or email [p.chiu@wcrf.org](mailto:p.chiu@wcrf.org)

**Check List**

Please circulate this newsletter to other colleagues in order to help us spread the good news that cancer is largely preventable.

*Informed* is available free of charge to all healthcare professionals.

**How to join the mailing list**

If you would like to join the mailing list for *Informed*, please contact WCRF HK or email us at [info-hk@wcrf.org](mailto:info-hk@wcrf.org)

**Newsletter copy review**

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