Food, nutrition, physical activity and prevention of cancer

Maintain a normal body weight, be physically active and eat more of a variety of fruit and vegetables, while limiting intake of red and processed meats, alcohol and salt – these are among the perhaps obvious conclusions of a new study, *Food, Nutrition, Physical Activity, and the Prevention of Cancer: A global perspective,* from the World Cancer Research Fund and the American Institute of Cancer Research.

The 537-page study, 5 years in the making, was aimed at reviewing all the relevant research, particularly from over the past decade, in order to generate a comprehensive series of recommendations on food, nutrition and cancer prevention.

Patterns of production and consumption of food and drink, of physical activity, and of body composition have changed greatly throughout human history, with remarkable changes having taken place as a result of urbanisation and industrialisation, at first in Europe, North America, and other economically advanced countries, but increasingly also in other countries. Notable variations have been identified in patterns of cancer throughout the world, with studies showing that the patterns change as populations migrate from one part of the world to another and as countries become increasingly urbanised and industrialised. Projections indicate that rates of cancer in general continue to increase – and are likely to double by 2030 – and the prevention of cancer worldwide is now one of the most pressing challenges facing scientists and public health policy-makers, among others.

According to the report great progress has been made since the mid-1990s in the understanding of the cancer process. Evidence is accumulating that shows or suggests that food and nutrition, and physical activity and associated factors, are important in modification of the cancer process. Moreover, there is increased evidence that specific dietary patterns, foods, drinks and dietary constituents can and do protect against cancer, not only before the process starts, but also afterwards.

Understanding the mechanisms that control cell structure and function, and so influence the cancer process, will aid not only understanding of cancer as a whole, but also the development of preventive strategies, says the report, which reviews among others cancers of the mouth, pharynx and larynx, nasopharynx, oesophagus, lung, stomach, pancreas, gallbladder, liver, colon and rectum, breast, ovary, endometrium, cervix, prostate, kidney, bladder and skin.

Among the other recommendations is that nutritional needs should be met through diet alone, without the use of dietary supplements. Additionally it is recommended that children be breastfed up to at least 6 months, and that all survivors of cancer receive nutritional care from an appropriately trained professional.

The report also identifies areas for research, such as exposures in early life that affect birth weight, growth in childhood, age at menarche, and adult height, the interactions between food and nutrition and other factors, notably smoking, inflammation, and infectious agents, and epidemiological research on the inter-relationship between elements of diets.

Source: www.wcrf.org

Lentils better than white bread for dieting

There is a greater possibility of losing weight on a diet that is high in foods like lentils that release energy slowly once they have been consumed, rather than one that is high in foods that rapidly release sugar into the blood stream such as white bread, according to a recent *Cochrane Systematic Review* (2007, Issue 3). Comparing high and low glycaemic index foods in six randomised controlled trials involving a total of 202 participants, the Cochrane review, led by Dr Diana Thomas, scientific director of the Centre for Evidence Based Paediatrics Gastroenterology and Nutrition, in Westmead, Australia, found that people eating low glycaemic index diets lost a mean of 1 kg more than those on similar energy high glycaemic index diets.

Body mass, total fat mass, body mass index, total cholesterol and LDL cholesterol all decreased significantly more in participants receiving the low glycaemic index diet, and in addition lipid profile also improved more.

'Low glycaemic index diets appear to be particularly effective for people who are obese,' commented Thomas, adding: 'It may be easier to adhere to a low glycaemic index diet than a conventional weight loss diet, since there is less need to restrict the intake of food so long as the carbohydrates consumed have a low glycaemic index.' No study reported adverse effects, mortality or quality of life. However, further research with longer-term follow-up is required to determine whether improvement continues in the long term and improves quality of life.

Another Cochrane review aimed to establish the impact of dietary treatments for type 2 diabetes in people who have just been told they have the disease. However, of 18 different trials identified, only a minority examined hard clinical endpoints such as death or vascular disease, and those that did offered no details. Nevertheless, data were found suggesting that if people with type 2 diabetes increase the amount of exercise as an adjunct to dietary advice, then they can see an improvement in their blood sugar levels after 6 and 12 months.

Source: www.cochrane.org