An Occasional Medical *Newsletter* from The Blood Care Foundation

Dear Member,

We all worry about our weight and spend a great deal of time and money attempting to keep trim. A huge number of people, led by a number of Hollywood film stars, have followed the Atkins diet as a technique for weight control or reduction. Recently a number of papers have provided evidence as the possible benefits and problems arising from a high protein diet. In Newsletter 41 I reported the preliminary findings on the effect of fish consumption on the incidence of Alzheimer's disease. The full findings have now been published by Morris and Evans (*Arch.Neurol*. 2003;**60**:940-6) showing that participants who ate fish at least once a week reduced the risk of developing Alzheimer's disease, or an associated dementia, by 60% and people whose consumption was in the top 20% had a 70% lower risk than those in the bottom 20%. So much for the good news, now follows the less good. Two recent studies have reported a correlation between a diet rich in animal fats and the incidence of breast cancer. Cho and colleagues examined the medical records of 90,655 premenopausal women living in the USA and found that the incidence of aggressive breast cancer was a third higher in those who had a high intake of animal fat, when compared with those who had the lowest intake (*J.Nat.Cancer Institut*. 2003;**95**:1079-85). The second study, conducted by Dr Sheila Bingham's group, studied 25,630 men and women between the ages of 45 and 74 and found that women in the top fifth for saturated fat intake were twice as likely to develop breast cancer as those in the bottom fifth (*Lancet*. 2003;**363**:212). To end on a note of hope, I have just read the abstract of a paper given by Dr Randall Harris at the July meeting of the American Association for Cancer Research in which he reported that postmenopausal women, who regularly took aspirin, ibuprofen or one of the other NSAIDs had a risk reduction for breast cancer of nearly 50%.

Euthanasia and Bereavement.

There are about 3,500 cases of euthanasia practised in the Netherlands each year. A recent study by Swarte and colleagues compared how well relatives and friends of those who opted for euthanasia coped with the death, when compared to matched controls, who had died of natural causes. The bereaved of patients who died by euthanasia had fewer grief symptoms and less post-traumatic stress and it was felt that this was mainly due to the ability to say goodbye to the patient before they died. (*Brit.Med.J*. 2003;**327**:189-92)

Prostate Cancer Screening.

The standard prostate cancer screening test, the prostate specific antigen (PSA), has been considered to be unreliable for a number of years. Now a study of 6691 men has shown that PSA fails to identify eight of every ten males under 60 who have prostate cancer. In an accompanying editorial, Dr Reis Kranse from the Erasmus Medical Center in Rotterdam states that there is no evidence that PSA screening reduces the risk of death from prostate cancer. (*New Engl.J.Med*. 2003;**349**:335-42)

Malaria Prevention in Children.

In Newsletter No.40 I drew your attention to part III of the series by Stauffer, Kamat and Magill on travelling with infants and young children. Part IV, covering insect avoidance and malaria prevention has just been published. (*J.Trav.Med*. 2003;**10(4)**:225-40)

Malaria Chemoprophylaxis.

Continuing with the theme of malaria, I was delighted to find the article by Kofoed and Petersen in which they compared the efficacy of various antimalarial prophylactic regimens. The estimated efficacy, judged by the incidence of malaria in those taking each regimen, was 1:599 for chloroquine and proguanil, 1:2,232 for mefloquine (Larium) and 1:1,943 for atovaquone/proguanil (Malarone). They also calculated the country specific risk, which varied from 1 per 140 travellers to Ghana to almost 1:40,000 for Thailand. They suggest that prophylaxis should be restricted to high-risk areas. (*J.Trav.Med*. 2003;**10(5)**:150-4)

Drug-Drug Interactions with Mefloquine.

Two cases of major drug-drug interactions are reported by Loefler. Both cases involved patients who were diabetics taking oral antihyperglycaemic drugs and were also taking warfarin. Both patients presented with bleeding problems and their diabetes out of control. As coumarin anticoagulants, oral antihyperglycaemic drugs and mefloquine are all highly bound to plasma proteins, it is postulated that mefloquine may displace the others from protein-binding sites, thus leading to an iatrogenic overdose. These cases point out the need to be especially cautious when prescribing mefloquine to diabetics or patients on anticoagulants and the requirement for careful monitoring of the INR and blood sugar levels until the mefloquine levels have reached a steady state. (*J.Trav.Med*. 2003;**10(5)**:194-5)

Pain and Warm Vaccines.

It has long been believed that warming a vaccine prior to injection will reduce the associated pain. Maiden and colleagues conducted a double-blind trial in which the 3 arms were vaccine with no deliberate warming, vaccine from a bottle that the nurse had rubbed in her hands for a minute and vaccine that had been placed in a warming cupboard at 37^0C for 5 minutes. There was no difference in the pain experienced by the 3 groups. The temperature of the vaccine was measured with a flux wire temperature probe immediately before injection and this approached ambient in all 3 groups. This was probably due to the large surface area of the syringe relative to the small amount of fluid (0.5ml). (*Med.J.Aust*. 2003;**178**:433-6)

Chocolate and Health.

A tiny study, recently reported, showed that consumption of plain, dark chocolate led to an increase in both the antioxidant capacity of plasma and the plasma level of the dietary flavonoid ?-epicatechin, which is believed to promote cardiovascular health. These effects were grossly reduced when chocolate was consumed with milk or milk was incorporated as milk chocolate. (*Nature*. 2003;**424**:1013)

Salt and Blood Pressure.

Whilst the recommended daily intake of salt is 6g/day, the average British daily intake is 11g for males and 8g for females. This, coupled with obesity, is a major cause of hypertension in the UK. About 75% of salt intake is from processed foods such as ready meals, soups, sauces and savoury snacks. Further information from:
http://www.foodstandards.gov.uk/healthiereating/dailydiet/salt

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Michael JG Thomas
MA, MB, FRCP (Edin), DTM&H
Clinical Director