Royal College of Nursing Congress
26th – 28th April 2010, Bournemouth
www.rcn.org.uk/newsevents/congress/2010 WCRF UK will be exhibiting at this event

Primary Care 2010
5th – 6th May 2010, NEC, Birmingham www.primarycare2010.co.uk

The 2010 International Nursing Research Conference
11th – 13th May 2010, The Sage Gateshead, Newcastle
www.rcn.org.uk/research2010

Breast Cancer Research 2010 Conference
18th May 2010, The Royal Society, London www.bccconference.ukevents.org

For more information on upcoming conferences visit **www.wcrf-uk.org/conferences**

NHS plans to support all cancer survivors by 2012

An update on the first year of the National Cancer Survivorship Initiative (NCSI) [1] was published by the Department of Health and Macmillan Cancer Support in January. Their vision is that, by 2012, all cancer survivors will receive support and improved care.

Over 1.6 million people in England are currently living with cancer. With the population ageing and survival improving, this number is predicted to grow to over 3 million by 2030 [1]. Thus, improving the services for cancer survivors will become crucial.

The NCSI envisions that all cancer survivors should have access to a personalised care plan and specialist medical care alongside information and support to self-manage their condition. Supported self-management to help patients make lifestyle changes is a key factor in the NCSI vision. Lifestyle factors including physical activity and diet can delay cancer progression, reduce relapse and treatment side effects and improve quality of life and survival [2, 3]. However, according to the Macmillan Health and Well Being Survey [1], one third of cancer survivors are unaware of the importance of healthy lifestyles. The survey also found that 42 per cent would like more information on diet, physical activity, and weight and stress management.

The document also includes examples of innovative practice and 38 community pilot studies aimed at improving the quality of care. Results and advice for NHS workers will be published later this year.

You can find up-to-date lifestyle recommendations for cancer survivors in WCRF UK's booklet *Eating Well and Being Active Following Cancer Treatment* and additional advice in our *Health Professionals' Guide to Supporting Cancer Survivors.* Download both from our resources section at **www.wcrf-uk.org/health-professionals**

References
1. The NCSI vision, 2010 [online]. Available from: www.dh.gov.uk/en/Publicationsandstatistics/Publications/PublicationsPolicyAndGuidance/DH_111230
2. Irwin M.L. et al (2008) *J ClinOnc*, 26(24): 3958-64
3. WCRF/AICR. *Food, Nutrition, Physical Activity, and the Prevention of Cancer: a Global Perspective.* Washington DC: AICR, 2007

Financial incentives to lose weight

One of the first long-term pilots of a weight loss incentive system has been completed by NHS Kent this February [1]. The trial was commissioned by the Eastern and Coastal Kent Primary Care Trust and used a programme, Pounds for Pounds, developed by the private firm Weight Wins. Participants were paid up to £425 for meeting their target weight. Although Weight Wins paid the rewards, the NHS had to pay an administration fee of £185 for each patient enrolled.

A three-month Pound for Pounds trial was piloted in 2007, and extended to 13 months in 2008, to investigate whether a structured incentive plan would be successful in helping people lose weight. The trial included a total of 600 obese people with an average follow-up of 10.3 months. The results were analysed by the University of Hertfordshire.

The average weight loss after six months was 6.5 kg. Those who completed the 13-month trial lost an average of 13 kg. In comparison, an average weight loss of 3–5 kg over a year is considered a reasonable result from any dieting approach [2].

Following these results, NHS Kent started a one-year pilot in 2009 with 300 obese patients. The programme has been received with mixed opinions. The National Obesity Forum believes it could promote long-term behaviour change; others have been more skeptical. At the moment there is not enough good quality long-term evidence that financial incentives are cost-effective for the NHS.

Other types of incentives, such as subsidised leisure centres and free-swimming schemes, are already in place in the UK. Government financial support to companies that promote the health of their employees could also potentially reduce obesity levels [3].

References
1. Pounds for pounds [online]. Available from: www.nhsweightlosstrial.com/index.html.
2. Pryke R and Docherty A 2007. *Br J Gen Prac* 58(547): 112-17
3. WCRF/AICR. *Policy and Action for Cancer Prevention. Food, Nutrition, and Physical Activity: a Global Perspective.* Washington DC: AICR, 2009

Reducing Your Risk of Bowel Cancer

This leaflet explains how you can help patients reduce their risk of this common cancer. **To request a free copy, see the reverse of our publications catalogue.**

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Get involved with **WCRF UK's Fruity Friday awareness campaign on 14th May 2010**

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News on diet, lifestyle and cancer prevention

World Cancer Research Fund

Bowel cancer: awareness of risk factors and screening needs to rise

With Bowel Cancer Awareness month taking place in April, we review the risk factors for this highly preventable cancer and ask a health promotion specialist from a bowel cancer screening centre about ways to increase awareness.

According to a recent national survey [1] only 23 per cent of people in the UK are aware of the NHS Bowel Cancer Screening Programme compared to 88 per cent for the Breast Cancer Screening Programme. The NHS Bowel Cancer Screening Programme, which started in England in 2006, has now been rolled out across the UK. The programme offers screening every two years to all men and women aged 60 to 69.

The survey, part of the National Awareness and Early Diagnosis Initiative (NAEDI), also found that only one in four people knows alcohol increases cancer risk, and just half recognised overweight as a risk factor. These figures are worrying, since bowel cancer is one of the most common cancers in the UK but also one of the most preventable.

A highly preventable disease

The rate of bowel cancer is four times higher in developed countries compared to less developed ones. Epidemiological studies show that this is probably because it is closely linked to diet and lifestyle. As part of the WCRF/AICR Second Expert Report [2], more than 750 studies on bowel cancer were reviewed. The evidence shows that excess body fat, especially around the abdomen, intake of red and processed meat and alcohol are all convincing causes of the disease, while physical activity, and probably dietary fibre, are protective. It is estimated that about 43 per cent of bowel cancer cases in the UK could be prevented by having a healthy diet, being physically active and maintaining a healthy weight [3].

Bowel cancer lifestyle risk factors and advice for patients

◆ **Being overweight.** Excess body fat, especially around the waist, affects hormones, such as insulin, which can encourage cancer development. Pro-inflammatory compounds released by fat cells can also promote cancer growth.
Advice: **Maintain a healthy weight.**

◆ **High red and processed meat and low fibre intake.** Haem in red meat can damage the lining of the colon while processed meat can produce carcinogens which damage DNA. Fibre speeds up bowel transit thereby reducing exposure to carcinogens.
Advice: **Eat mostly plant foods, limit red meat and avoid processed meat.** Base diet on plant foods and aim for less than 500g (cooked weight) of red meat a week, very little, if any, to be processed.

◆ **Drinking alcohol.** Alcohol can generate free radicals and by-products that damage DNA. Alcohol also affects oestrogen levels, which affects cancer risk.
Advice: **Limit alcoholic drinks to 2 for men and 1 for women a day.**

◆ **Being inactive.** Physical activity reduces body fat and levels of cancer-related hormones. It also helps keep the immune and digestive systems healthy.
Advice: **Be physically active for at least 30 minutes a day.**

◆ **Smoking.** Tobacco is a known carcinogen. Advice: **Do not smoke or chew tobacco**

Bowel cancer screening: a chance to promote awareness

Meeran Mumtaz is a health promotion specialist who works on the Bowel Cancer Screening Programme at Waltham Forest PCT. Her main responsibilities are to raise awareness of bowel cancer prevalence, symptoms, risk factors and screening and to promote uptake of screening in North East London. We asked her how she approaches bowel cancer prevention and screening to increase awareness in the community.

What strategies do you adopt to increase awareness of the screening programme?
We do extensive community outreach work, for example by having stalls at events and shopping centres or training volunteers in the community so they can deliver the message. I also work with GPs, as endorsement from them is crucial in getting patients to participate in the screening programme. We have an extensive communication campaign, including leaflets and posters in different local languages, articles and advertisements in local newsletters and radios. We also have a bus campaign, with posters at the back of local buses to coincide with bowel cancer awareness month in April.

Do you talk to patients about cancer prevention through healthy lifestyle?
Yes, we do. That is one of the important things people are usually interested in – ways of reducing their risk. We also hand out leaflets on topics like healthy eating, exercise, alcohol and smoking.

How long do you usually spend talking about diet and lifestyle?
A fair amount of time. It depends upon the interest level of the people or the group. But more often, people are very keen to know about diet and lifestyle. People have some idea but bowel cancer is something people don't want to talk about. It is like a taboo subject. We have a lot to do in terms of raising awareness of bowel cancer – including symptoms and lifestyle changes. *Cont'd on page 2*

Which age or population group is most challenging?

In my role, I usually work with people who are over 60 as the screening programme is aimed at them, but we also see younger people. It's very difficult to generalise about particular population groups – I get my fair share of "I don't want to know if anything is wrong with me", "No thanks, I don't want to talk about cancer", "I have no symptoms – that must mean I am fine" from people across different communities.

Promoting prevention, especially for highly preventable diseases like bowel cancer, is paramount. For more information on bowel cancer prevention see our *Reducing Your Risk of Bowel Cancer* leaflet in the Publications Catalogue.

To learn more about the NHS Bowel Cancer Screening Programme visit: www.cancerscreening.nhs.uk/bowel/index.html

References
1. Public awareness of cancer in Britain, 2009 [online]. Available from: http://www.dh.gov.uk/en/Publicationsandstatistics/Publications/PublicationsPolicyAndGuidance/DH_108749
2. WCRF/AICR. *Food, Nutrition, Physical Activity, and the Prevention of Cancer: a Global Perspective.* Washington DC: AICR, 2007
3. WCRF/AICR. *Policy and Action for Cancer Prevention. Food, Nutrition, and Physical Activity: a Global Perspective.* Washington DC: AICR, 2009

Highlights from AICR annual research conference

The American Institute for Cancer Research (AICR), a member of the WCRF global network of charities, held its 20th annual research conference at the end of 2009. The conference has become an important event to catch up on the latest scientific findings on lifestyle and cancer prevention and survival. Here are some of the highlights.

Exercise lowers insulin levels in breast cancer survivors

Melinda Irwin, Associate Professor of Epidemiology at Yale University and one of the leading experts in the field of breast cancer survivorship, presented recent findings from the Yale Exercise and Survivorship (YES) intervention trial [1].

The aim of this randomised controlled trial was to investigate the effects of exercise on insulin levels in postmenopausal breast cancer survivors. Two groups of survivors were assigned to either a moderate-intensity aerobic exercise group (30 minutes three times a week) or the usual care group.

After six months the women in the exercise group had insulin levels 20 per cent lower than the usual care group. High insulin levels may be linked with higher risk of postmenopausal breast cancer and mortality [2].

New estimates of obesity and cancer

According to new estimates from AICR [3], more than 100,000 cancer cases in the United States are attributable to excess body fat every year. Professor Laurence Kolonel (pictured right), Deputy Director of the Cancer Research Center of Hawaii, presented a review of the evidence on obesity and cancer risk.

The evidence shows that excess body fat increases the levels of certain hormones linked to cancer growth. Recent findings also suggest that body fat may decrease immune functions and increase oxidative stress, both of which can cause DNA damage, which could lead to cancer development.

Workplace project improves health

Findings from the North Dakota Worksite Health Promotion Program [4] revealed that promoting healthy eating and lifestyle in the workplace may help employees prevent cancer and employers save money. In this pilot study, which received a top poster award at the AICR conference, employees from four worksites received materials and service to improve their health as well as access to health screening and coaching.

After three years of follow-up, researchers at the University of Dakota recorded improved diet and activity levels and found that employees who were moderately physically active were 20 per cent less likely to report a cancer diagnosis. Health costs were also lower compared to a group of control employees.

WCRF UK is also piloting a workplace health project in the UK, the results of which will be available in early 2011.

References
1. Irwin M L et al 2009, *Cancer Epidemiology, Biomarkers & Prevention*, 18: 306-13
2. WCRF/AICR. *Food, Nutrition, Physical Activity, and the Prevention of Cancer: a Global Perspective.* Washington DC: AICR, 2007
3. WCRF 2009, New obesity estimates [online]. Available from: http://www.aicr.org/site/News2/2029474246?abbr=pr_&page=NewsArticle&id=17333&news_iv_ctrl=1102
4. The North Dakota Worksite Health Promotion Program [online]. Available from: http://www.med.und.nodak.edu/depts/chptr/ndpers.html

Independent mobility and child physical activity

The PEACH Project (Personal Environmental Associations with Children's Health) aims to investigate how a young person's environment (physical, school or home) may affect their levels of physical activity, eating behaviours and, subsequently, levels of obesity. The project has been funded by WCRF UK for three years and is currently underway. About 1,300 primary school children aged 10 to 11 from Bristol were recruited between 2006 and 2008 and will be followed up two years later.

At the start of the project the children were given an accelerometer to wear for a week to measure their physical activity alongside completing a questionnaire to measure factors believed to be associated with eating behaviours, physical activity and obesity. One of these factors was independent mobility, which refers to children's perception of their opportunities to move around their neighbourhood unaccompanied by an adult. Results from assessments made at the start of the project show that boys were more physically active and had greater independent mobility than girls. It also showed that higher independent mobility was related to higher levels of physical activity on weekdays for both boys and girls [1].

Understanding the factors that influence independent mobility is necessary to determine the best environment that encourages adult carers to allow their children to be physically active outside unsupervised. The work in progress will look at factors related to obesity, such as eating behaviours and physical activity, that may change when children move to secondary school.

Healthy lifestyles developed in childhood are important as they often follow through to healthy lifestyles in adulthood. An understanding of the factors that influence healthy eating and regular physical activity is important.

References
1. Page AS. 2009, *Int J Behav Nutr Phys Act*, 6: 2

Diet and breast cancer update in the EPIC study

Results from studies on the association between breast cancer and specific dietary factors other than alcohol have so far been inconsistent. However, lifestyle and diet-related causes, such as exposure to oestrogens in the diet and high body fat, are established causes. Research on eating habits, which might influence breast cancer risk either independently or in relation to known risk factors, is ongoing. Here, we report on the findings from two studies in the multi-centre European Prospective Investigation into Cancer and nutrition (EPIC).

Dietary patterns and breast cancer

The first study investigated the association between dietary patterns and breast cancer risk in the French branch of the EPIC study. The study [1] included 65,374 women, of whom 2,381 developed postmenopausal invasive breast cancer after a median 9.7-year follow-up period.

Two dietary patterns were identified: "alcohol/Western" typically associated with meat products, fast foods, eggs, alcoholic beverages, cakes and butter or cream; and "healthy/Mediterranean" characterised by vegetables, fruits, seafood, olive and sunflower oil.

Women eating the Western pattern were 20 per cent more likely to develop postmenopausal breast cancer. The Mediterranean pattern was protective against breast cancer, with a 15 per cent reduction in risk. These associations were more evident among women with oestrogen-related tumours.

These findings are interesting as previous EPIC results [2] did not find a consistent association between intake of meat, eggs, or dairy products and breast cancer.

Coffee and tea consumption

The second study, which used the Netherlands branch of EPIC, analysed the association between coffee and tea consumption and the risk of breast cancer [3]. Of the 27,323 participants, a total of 681 invasive primary breast cancers were diagnosed in 9.6 years of follow-up. The results showed no associations with either coffee or tea intake, dispelling the common myth that coffee might increase breast cancer risk. Although more research is needed, these papers seem to suggest that the overall dietary pattern is probably more important in modulating breast cancer risk than single dietary components.

The best advice currently available for women wanting to reduce breast cancer risk is to maintain a healthy weight, be physically active, eat a low energy-dense diet rich in fruits and vegetables and limit alcohol intake.

References
1. Cottet V et al 2009, *Am J Epidemiol*, 170(10): 1257-67
2. Pala V et al 2009, *Am J Clin Nutr*, 90(3): 602-12
3. Bhoo Pathy N et al 2009, *Breast Cancer Res Treat DOI 10.1007/s10549-009-0583-y*

What are the influences on adolescents' diet?

A poll of 3,000 people from the Stroke Association [1] showed that under-18s in the UK eat on average three or more ready meals or takeaways a week. Takeaways and fast foods are typically high in energy density, salt and fat, which can promote weight gain and some forms of cancer.

Teenage years are a crucial period of transition to adulthood and the dietary habits during this stage can have both short- and long-term effects. A recent issue of *Public Health Nutrition* was entirely dedicated to the dietary choices of teenagers. Here, we highlight two studies on the socio-environmental influences on the eating habits of teenagers.

The influences on fast-food choices

A longitudinal five-year study from Minnesota University [2] examined what influences unhealthy food choices in teenagers. Diet and behaviour were assessed at school through detailed in-class questionnaires.

Availability of unhealthy foods at home was the greatest influence. For girls, personal factors, especially concern about weight, were associated with eating less fast-food. For boys, social factors were more important. For example, the influence of friends and family concerned about health and maternal encouragement to eat healthily.

Adolescents' dietary patterns

The second study [3], part of the Western Australian Pregnancy Cohort, examined adolescents' dietary patterns and their association with socio-economic factors. Researchers collected data on diet and socio-economic and family behaviour.

After one-year of follow-up, two predominant dietary patterns were identified: the Western pattern, which included energy-dense foods, soft drinks and processed meat; and the healthy pattern consisting of whole grains, fruits, vegetables and fish. Predictors of the Western pattern were low family income, parents smoking and television viewing. The healthy pattern was associated with higher maternal education and a well-functioning family. Girls were more likely to eat the healthy pattern.

These results suggest that the family environment, as well as broader socio-economic factors, has a strong influence on adolescent health behaviours, including diet. To be more effective, interventions aimed at encouraging healthy choices among adolescents should address the psycho-social environment in which young people grow up.

References
1. The Stroke Association 2009 [online]. Available from: www.strokeforstroke.co.uk/get_healthy.aspx
2. Bauer KW et al 2009. *Pub Health Nutr*, 12(10): 1767-74
3. Oddy WH et al 2009, *Pub Health Nutr*, 12(10): 1807-15

Being green would make us healthy

In the latest report on Health and Climate Change [1], Health Secretary Andy Burnham called on health professionals to recognise the benefits to health that would be gained by tackling climate change.

The report was based on a series of studies published in the *Lancet* [2], which showed that decreasing greenhouse gases might result in additional benefits to health. The studies have been undertaken by a team of public health specialists, environmentalists and other scientists for the 2009 Copenhagen conference on climate change.

The research, led by the London School of Hygiene and Tropical Medicine and co-funded by the Wellcome Trust, has modelled the effects on health of various policies to reduce greenhouse gas emissions. Each study focuses on one sector in which action is needed in both high- and low-income countries: household energy use, urban transport, electricity generation and food and agriculture. Here we highlight the findings most relevant to the UK.

Low-carbon transport and cancer risk

Urban transport is responsible for about a quarter of greenhouse emissions. To reduce this, more people would need to walk or cycle and/or fewer people would need to use motor vehicles. One of the studies attempted to quantify the health benefits of a low-carbon transport system, by considering alternative 2030 future transport scenarios for London. The study showed that if emissions were cut through more walking and cycling and less use of motor vehicles, heart disease would be cut by 10-20 per cent and breast cancer by 12-13 per cent.

Reducing meat production and intake

Agriculture and food production cause about 10-12 per cent of greenhouse emissions, of which livestock farming is the main contributor. High red meat consumption has been linked to bowel cancer and heart disease. However, demand for animal foods is increasing.

To meet the target of reducing 50 per cent of greenhouse gases by 2030, recommended by the UK Committee on Climate Change, a 30 per cent reduction in livestock production would be necessary. According to the *Lancet*, if this led to a 30 per cent fall in meat consumption, heart disease would be reduced by 15 per cent in the UK. If the study had used additional health outcomes, such as cancer, the health gains would be even higher.

Small committed changes, such as the 'meat free Mondays' campaigns, could produce significant benefits both to the environment and to global health.

References
1. DoH 2009 [online]. Available from: www.dh.gov.uk/en/News/Recentstories/DH_109121
2. Executive Summary for *The Lancet* Series 2009 [online]. Available from: http://download.thelancet.com/flatcontentassets/series/health-and-climate-change.pdf