

**GovNet Health & Wellbeing**

10th December 2009, QEII Conference Centre, London

[www.govnet.co.uk/health09](http://www.govnet.co.uk/health09)

WCRF UK will be exhibiting, so visit our stand to pick up some free resources.

**Health and Wellbeing at Work 2010**

9th – 10th March 2010, NEC, Birmingham

[www.healthatwork2010.co.uk](http://www.healthatwork2010.co.uk)

WCRF UK will be exhibiting.

**Tackling Obesity 2010**

23rd March 2010, QEII Conference Centre, London

[www.govnet.co.uk/obesity](http://www.govnet.co.uk/obesity)

For more information on upcoming conferences visit [www.wcrf-uk.org/conferences](http://www.wcrf-uk.org/conferences)

**Early food education for life-long healthy eating**

The Food Standards Agency has recently published a new range of workbooks and downloadable resources to help young people learn about food and health [1]. 'Food route: a journey through food' is a resource appropriate for primary and secondary schools and is supported by teachers. The new resources have been developed with the British Nutrition Foundation and will hopefully help children improve their food knowledge and encourage them to eat healthily.



**WCRF UK supporting learning about food and health**

WCRF UK runs an education programme for children, the Great Grub Club (GGC). The GGC website [2] includes sections for parents, teachers and educators working with children aged 4 to 7. Content for children aged 8 to 10 will soon be developed.

The website is full of interactive content and free resources, including instructions on how to grow fruits and vegetables, healthy recipes and display materials. Health professionals working with parents and children can download simple activities and factsheets to encourage early food education and to build life-long healthy food habits in children. Visit [www.greatgrubclub.com](http://www.greatgrubclub.com) for more information.

**References**

1. Food Standards Agency, 2009. [online]. Available from: <http://www.food.gov.uk/news/newsarchive/2009/aug/foodroute>
2. [www.greatgrubclub.com](http://www.greatgrubclub.com)

**Breastfeeding reduces premenopausal breast cancer risk**

In a large, prospective cohort study of premenopausal women, breastfeeding was protective against premenopausal breast cancer, especially in women with a first-degree family history of breast cancer [1].

The study, published in the *Archives of Internal Medicine*, assessed the relationship between breastfeeding and incidence of premenopausal breast cancer among women participating in the large Nurses' Health Study II.

The researchers analysed detailed information on breastfeeding history and supplemental feeding among 60,075 premenopausal women who reported at least one pregnancy. Questionnaires on demographic, anthropometric and lifestyle factors were also collected, with follow-up questionnaires every two years.

After 357,556 person-years of follow-up, 608 incident cases of premenopausal breast cancer were diagnosed, with an average age of diagnosis of 46 years. Women who had ever breastfed had a lower incidence of premenopausal breast cancer compared with women who hadn't.

Among women with a first-degree relative with breast cancer there was a 59 per cent reduction in incidence of premenopausal breast cancer when comparing those who had ever breastfed with those who hadn't. The authors concluded that women with a family history of the disease should be particularly encouraged to breastfeed.

This large study confirms the findings of the Second Expert Report [2] that breastfeeding protects against premenopausal breast cancer. The Report also found that exclusive lactation for six months reduces the risk of postmenopausal breast cancer. See *A Closer Look at: Breastfeeding* leaflet in the Publications Catalogue for more information.

**References**

1. Stuebe AL et al 2009 *Arch Intern Med* 169(15):1364-1371
2. WCRF/AICR. *Food, Nutrition, Physical Activity, and the Prevention of Cancer: a Global Perspective*. Washington DC: AICR, 2007



**Healthy New You Plan**



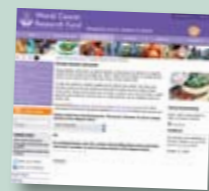
This new 12-week plan, which includes meal planners and activity charts, will help give your patients encouragement and advice to get started on their healthy lifestyle. To request a free copy, see the reverse of our Publications Catalogue.

Check our Publications Catalogue to order this and other publications

Visit our health professionals web section at [www.wcrf-uk.org/health-professionals](http://www.wcrf-uk.org/health-professionals) and register for our e-newsletter

**NEW! on the website**

Check the resources section for BMI and Energy density calculators



[www.wcrf-uk.org/health-professionals](http://www.wcrf-uk.org/health-professionals)

Please circulate this newsletter to colleagues to help us spread the message that cancer is a largely preventable disease.

Informed is available free of charge to all health professionals.

**How to join the mailing list**  
Please contact WCRF UK by emailing [informed@wcrf.org](mailto:informed@wcrf.org)

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**Informed** FOR HEALTH PROFESSIONALS  
News on diet, lifestyle and cancer prevention



World Cancer Research Fund

**The truth about processed meat and bowel cancer risk**

Recently there was global media interest in our advice to parents to avoid giving children ham in packed lunches. Here we talk about the scientific evidence behind this Recommendation, explain what processed meat is and how it raises the risk of bowel cancer.



**What is processed meat?**  
Processed meat is meat, usually pork or beef, which has been treated by various methods (excluding refrigeration), including curing (adding salt and other additives), drying and smoking to improve quality or flavour and for preservation [1].

There is a wide variety of processed meat products and there is no specific categorization. Processed meat includes bacon, ham (raw, smoked or cooked), sausages, such as hot dogs or salami, black pudding, pâtés and canned meat. Hamburgers are sometimes classified as processed meat. More than 70 per cent of the UK population eats bacon and ham on a regular basis [2].



**Processing methods and types of processed meats**

The need to preserve meat started when easy access to fresh food and refrigeration was not available. Some industrial processes were later introduced to enhance flavour and improve safety for the consumer. Two processes, curing and smoking, have become especially common.

Curing is the addition of salt, sugar and either nitrate or nitrite. Salt improves meat flavour and preserves it by reducing water activity thereby stopping bacterial growth. Nitrate and nitrite occur naturally in the environment and are also added to meat for preservation, colour enhancement and flavour. Nitrite in particular

stops the germination of *Clostridium botulinum* spores. Dry curing is a traditional way of preserving meat, especially ham. Traditionally only salt was used but the method required a long time and low temperature [3]. Nowadays most hams also contain nitrites and other preservatives.

Smoking enhances meat colour and flavour and helps its preservation [3].

**The scientific evidence**

As part of the WCRF/AICR Second Expert Report, for which scientists worldwide reviewed all the available evidence on diet, physical activity, weight and cancer risk, 14 large cohort studies on processed meat and cancer risk were identified [1]. The meta-analysis showed that regular consumption of an average of 50g per day of processed meat increased the risk of bowel cancer by 20 per cent. The average intake of processed meat for European men is 48g per day [4].

The review also showed a dose-response relationship where the more processed meat is consumed, the greater the risk. Since the Report was published in 2007 more evidence has become available, which confirms the WCRF/AICR findings [3, 5, 6, 7].

**Recommendations for patients**

The Panel of Experts could find no amount of processed meat that can be confidently shown not to increase cancer risk. That is why WCRF UK recommends people avoid processed meat to reduce their bowel cancer risk.

**Mechanisms of action**

Several hypotheses have been tested that may explain why processed meat consumption increases bowel cancer risk. Here we look at the main ones.  
♦ **Nitrites and N-nitroso compounds (NOCs).** Nitrites are preservatives that can react with secondary amines (contained in protein-rich foods) to produce NOCs, particularly in the

absence of inhibitors of nitrosation such as vitamin C and in the presence of enhancers such as red meat [3]. Many NOCs, including nitrosamines and nitrosamides, are carcinogenic. NOCs can be formed during the curing process, and are also formed in the body from ingested nitrites and nitrates in red and processed meat [1].

♦ **Haem in red meat.** Haem is an iron-containing molecule present in animal blood and meat, especially red meat. Free iron can induce the production of free radicals which can damage cell DNA [1]. Haem can also act as a nitrosation agent and induce the formation of NOCs in the body [3].

♦ **High-temperature cooking.** Cooking meat at a high temperature, especially frying and grilling, can cause the formation of carcinogenic compounds, such as heterocyclic amines and polycyclic aromatic hydrocarbons [1, 3].

**Promote informed choices**

In conclusion, there is substantial epidemiological and biological evidence to advocate a diet free from processed meat. Making people aware of the link allows them to make an informed choice to avoid or cut down on processed meat as they wish. See our *Red and Processed Meat: Finding the Balance for Cancer Prevention* leaflet for ideas on alternatives to processed meat for packed lunches and traditional dishes.



**References**

1. WCRF/AICR. *Food, Nutrition, Physical Activity, and Prevention of Cancer: a Global Perspective*. Washington DC: AICR, 2007
2. *The National Diet and Nutrition Survey Volume 1*. 2002. London: HMSO
3. Santarelli RL et al 2008 *Nutr Cancer* 60(2): 131-144
4. Linseisen J et al 2006 *Public Health Nutr* 9:449-64
5. Cross AJ et al 2007 *PLoS Med* 4(12):e325
6. Huxley RR et al 2009 *Int J Cancer* 125(1):171-80
7. Tasevska N et al 2009 *Am J Clin Nutr* 89(6):1884-94

## First WCRF/AICR update on breast cancer

The Continuous Update Project is a WCRF/AICR initiative in collaboration with Imperial College London that aims to keep the evidence from the Second Expert Report [1] updated.

The first report from the project on breast cancer added 81 papers published between 2006 and 2007 to the 873 studies analysed for the Second Expert Report. The updated breast cancer report confirms the Panel's conclusions that, for breast cancer at any age, drinking alcohol increases the risk and breastfeeding decreases the risk.

For postmenopausal breast cancer, being overweight or obese increases the risk and being physically active decreases the risk. The team at Imperial College found 11 new studies on body mass index (BMI) and postmenopausal breast cancer. The analysis of these new studies, as well as those included in the Second Expert Report, showed breast cancer risk increased by five per cent per 2kg/m<sup>2</sup> increase in BMI. This means that an obese woman with a BMI of 30 has a 40 per cent higher risk of developing

breast cancer than a woman with a healthy weight BMI of 22.

Breast cancer is the most common cancer in women in the UK with about 45,000 women being diagnosed with breast cancer in 2006. Figures presented in the WCRF/AICR Policy Report [2] estimate that about 42 per cent of breast cancer cases in the UK could be prevented if women were a healthy body weight, drank less alcohol and were more physically active.

Work is also underway to keep the literature on prostate and bowel cancers up to date and further reports on these cancers can be expected.

To find out more about the WCRF/AICR Continuous Update Project visit: [www.dietandcancerreport.org](http://www.dietandcancerreport.org).

### References

1. WCRF/AICR. *Food, Nutrition, Physical Activity, and the Prevention of Cancer: a Global Perspective*. Washington DC: AICR, 2007
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## Improving physical activity in the community

Promoting active lifestyles should be at the core of health professional practice according to Health Secretary Andy Burnham, who spoke during the build up to the 2012 Olympic Games. Not only is physical inactivity a major contributor to chronic diseases, including bowel and breast cancer, but it also costs us billions each year. According to the Department of Health, the NHS spends £3,000 every minute on fighting illness that could be prevented by physical activity [1].

Only 40 per cent of men and 28 per cent of women in the UK achieve the recommended 30 minutes of activity on five or more days a week [2]. When levels of physical activity are compared in Europe, the UK is in 21st place [1].

### Update on Change4Life campaigns

Here we summarise the progress of Change4Life, of which WCRF UK is now an official partner.

#### Swim4Life [3].

Around 250 councils, comprising more than a thousand local authority pools, have signed up to the free swimming programme for people aged under 16 and over 60. Over 4.4 million free swims have been made since April. To encourage new swimmers to join in, Sport England is offering 100,000 free swimming lessons to non-swimmers.

**Bike4Life** [4]. British Cycling has teamed up with Sky, the entertainment and communications company, to offer local and national led bike rides with the aim of inspiring a million more people to bike in the next five years.



**Walking for Health** [5] (part of the Walk4Life brand) is a successful campaign from Natural England, which encourages people who take little exercise to take regular short walks in their communities. The programme is already helping 30,000 people every week to walk more. A new Natural England initiative, Blue Gym, will also provide guided walks along English coastline, rivers, streams and canals.

### Practical ways to help patients get fit

Health professionals have been encouraged by the Department of Health to be proactive in helping people get fitter. Here are a few suggestions:

- ◆ Walking is free and accessible to young and old people throughout the country. Have a map of the area at hand to suggest safe green spaces accessible to patients and check the Walking for Health website [5] for local walks.
- ◆ Swimming is a safe and fun sport for all the family. Check the list of swimming pools subscribed to the free swimming programme in your area [6].
- ◆ Refer patients to easy online information on cycling routes such as [www.dft.gov.uk/cyclingengland](http://www.dft.gov.uk/cyclingengland) and [www.bikeforall.net](http://www.bikeforall.net).

### References

1. DoH 2009 [online]. Available from: [http://www.dh.gov.uk/en/News/Recentstories/DH\\_104254](http://www.dh.gov.uk/en/News/Recentstories/DH_104254)
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5. www.whi.org.uk
6. DCMS 2009 [online]. Available from: [http://www.culture.gov.uk/what\\_we\\_do/sport/5810.aspx](http://www.culture.gov.uk/what_we_do/sport/5810.aspx)

## The big South Asian health challenge

South Asians living in the UK are at increased risk of Type 2 diabetes and insulin resistance. High insulin levels are a possible risk factor for some types of cancer and a major risk factor for cardiovascular disease. In a multicultural society, such as modern Britain, it is important for health professionals to be informed on the health problems affecting different communities.

We asked experienced dietician, broadcaster and best-selling author, Azmina Govindji, to explain why South Asians today face such a big health challenge and to share her top tips for a balanced diet for people from this community.



Azmina has recently helped set up a new website, The Ismaili Nutrition Centre [1], which helps families factor health and nutrition into the preparation of their daily meals.

### Why are insulin resistance and Type 2 diabetes higher among South Asians?

I think this is a multifactorial issue. Firstly, genetically, South Asian people appear to be more at risk of these conditions. Secondly, we know that when they put on weight, particularly men, they tend to put it on around the abdomen, which is linked with insulin resistance and a greater incidence of conditions such as Type 2 diabetes and cardiovascular disease. Thirdly, all of this is combined with a lower rate of physical activity, as the South Asian community doesn't tend to be so active. Obviously, this depends on generation. It is very hard for us to generalize, but if you look at first generation immigrants they will be unlikely to attend the gym and cultural restrictions may not allow them to wear a swimming costume.

Another factor is eating habits. The Ismaili Nutrition Centre [1] recipes were collected from real communities, including Pakistani, Bangladeshi and Ismaili families, by King's College London. We also had published data from Gujarati and Punjabi families. This is the first time that nutrition composition data were collected from individual households and published into a data book for professionals. When we compiled the recipes for the website, we thought hard about including many of them because they were so 'red' in terms of traffic lights. Many recipes were high in ghee and saturated fat with a very high salt level, which is a risk factor for stomach cancer and high blood pressure.

Those data were published in 2000 but I haven't seen evidence to suggest that things have changed very much since then. And the younger generation immigrants will probably be having a mix of hectic lifestyles, ready meals and take aways, as well as having some of the traditional foods their grandparents are cooking.

### Are they taking the worst of both worlds in terms of calories and fat?

Possibly. We don't have the data to prove this so we need to be careful. We don't exactly know why there is a raised incidence of some conditions among South Asians, but we do know there are some key areas where more research is needed.

### So do you think diet plays a big part?

It is difficult to generalise. All we can say is that the data collected by King's College London showed an imbalance of saturated fats and salt intake.

I have noticed, anecdotally, that generally South Asians have a high intake of carbohydrates. For example, a typical meal might consist of potato and vegetable curry, some chapattis and rice. So you get three large servings of carbohydrate in a meal. And it would probably be potatoes without the skin, white rice and white chapatti flour, so possibly a diet rich in less healthy refined carbohydrates.

### Do you have any tips to make healthier versions of traditional recipes?

On the Ismaili Nutrition Centre website we give a list of healthy cooking tips such as substituting ghee with rapeseed or olive oil, using spray oils rather than pouring oil from the bottle and using a spoon to measure fats and salt instead of just 'eyeing' it.

Another key piece of advice is helping people achieve the right balance of foods on the plate. An unbalanced plate might be filled half with beef curry and half with rice and chapattis. I suggest a balanced plate where only a quarter would be filled with beef curry and a quarter with rice or chapattis, while half the plate would be made up of salad and curried vegetables.

### How can health professionals help South Asian families manage their weight?

I think we need to build a rapport. It is very important to understand their culture and dietary habits. You can only build a rapport if you have a true understanding of how dietary habits are affected by culture and even religion in some cases.

For example, it may be considered impolite or ungrateful to leave food; some may believe that dishes aren't tasty if they don't have an oily layer on top; it is common practice to give sugary tea to children; and often young children who are weaned are given solids like rusk in their milk bottle, which can affect nutrient intake. When health professionals give dietary advice to South Asian communities they will be more effective communicators if they take these cultural beliefs and traditions into account.

### Do you think reversing the trends in Type 2 diabetes will be challenging?

Of course it is a big health challenge. For example, South Asian people are up to six times more likely to have Type 2 diabetes, but we don't fully know why. What we can do is try to make sure that healthy lifestyle habits are in place before diagnosis and that cultural issues form part of dietary management after diagnosis. This is exactly the message I use in my role as lead dietician for the Change4Life BME interventions.

### References

1. [www.theismaili.org/nutrition](http://www.theismaili.org/nutrition)

## Recognising good science in the media

We know from the "1% or Less" campaign in the US [1], which encouraged people to switch to low-fat milk, that the media can play an important role in public health. But it seems that every week there is a new story about what increases or decreases cancer risk and this has led to public cynicism.

A YouGov survey commissioned by WCRF UK in April 2009 [2] found that 52 per cent of people think scientists are always changing their minds about cancer, despite the fact that the advice on cancer prevention has actually not changed much in the last 10 years. Also, 46 per cent said they generally do not trust news stories about what increases or decreases cancer risk.

Richard Evans, Head of Communications at WCRF UK, said: "We think this is because the results of small studies are given too much prominence in the media, making them sound like a scientific breakthrough when they are nothing of the kind. This is why we encourage scientists who issue press releases to be explicit about how significant their findings are, even if this is likely to reduce the media impact."

### What can you advise patients?

It is important that health professionals

do not pass on to patients cancer prevention advice they have seen in the media unless they are confident in the science behind it. If a new study is published, it is worth asking questions such as whether the results are laboratory-based or from population studies; how many people took part in the study; how long it was before follow up; and whether there were confounding factors.

The safest way is to see how WCRF UK, the government or other respected bodies such as NHS choices [3], respond to it. If they do not change their advice on the basis of it, then it is probably not worth telling patients about the results.

To improve the relationship between media and scientists, WCRF UK has recently delivered a talk on reporting science in the media at the WCRF-funded course in Nutritional Epidemiology held in collaboration with Imperial College in London.

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## Increasing fruit and vegetable consumption

In autumn this year, the Department for Environment, Food and Rural Affairs published the first report from the Council of Food Policy Advisors on food sustainability, public health and food policy [1]. The report aimed to help policy makers meet such challenges as providing a sustainable and healthy food supply, reducing the impact of food production on the environment and increasing food security.

A strategy to increase fruit and vegetable consumption was identified as a priority by the Council. According to the report, the cost to the NHS of poor nutrition is estimated at £6 billion a year. There is strong evidence that fruits and vegetables help reduce the risk of cancers of the oesophagus, stomach, mouth, larynx and pharynx. Fruits also help reduce the risk of lung cancer [2].

Despite the benefits to health, which also include a reduction of obesity and heart disease levels, consumption of fruits and vegetables is still low in the UK, especially among low-income consumers. Although levels have increased in recent years, the average consumption is only 3.6 portions a day for men and 3.9 for women [3]. It is estimated that if the current intake were increased to the recommended 5 A DAY portions, about 42,000 premature deaths in the UK would be avoided [4].

The report highlighted that increasing consumption will drive the need to increase production of fruits

and vegetables. In recent years there has been increasing interest from consumers in buying local and seasonal food. A key challenge will be to find a sustainable way to increase UK fruit and vegetable production to increase self-sufficiency and reduce environmental impact.



### Recommendations to increase fruit and vegetable consumption

The Council identified a series of key recommendations for policy makers to increase fruit and vegetable intake:

- ◆ Encourage greater food education in schools focusing on the importance of fruits and vegetables in the diet
- ◆ Renew and reinvigorate the 5 A DAY message to include a focus on seasonality
- ◆ Support small stores across the UK particularly in more deprived areas
- ◆ Make fruits and vegetables a priority in the public health agenda

The WCRF/AICR Policy Report [5] also found that price and availability can influence fruit and vegetable intake.

### References

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4. The Strategy Unit, *Food Matters: Towards a Strategy for the 21st Century*, 2008
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