SCPN

Newsletter

Scottish Cancer Prevention Network - Evidence to Practice and Policy

VOL 8 . ISSUE 4.

SCPN

The SCPN are committed to getting the word about cancer prevention out to individuals, health professionals, policy makers and government. We want to let everyone know what they can do to stack the odds against developing cancer through lifestyle choices. It's not enough for individuals to attempt to change. Health professionals, cancer charities and other agencies with an interest in this field want to be informed about the latest research on how to support that change. Policy makers and government also have a role to play in ensuring our environment and legislative structures enable change rather than inhibit it.

We promote action for cancer prevention by disseminating news on recent research, initiatives and events through our website, newsletters and social media platforms.

Do you have a health promotion activity for the staff in your health board area that you would like to showcase?

As a network which aims to promote a healthy lifestyle to lower the risk of cancer, we are keen to engage with those who can put opportunities in place to facilitate healthy individual behaviours. The Health Promoting Health Service and Healthy Working Lives initiatives support the call to action for NHS boards, trusts, and individual units to promote the health and wellbeing of their patients and staff at all opportunities. We know there is excellent work going on across the country to facilitate a healthier lifestyle for **NHS employees** – promoting active travel, physical activity opportunities within and out with the working day, improved choices of foods and drinks available for consumption whilst at work, greenspaces, community gardens etc. etc.

To showcase the best of these health promoting activities the SCPN is holding a competition inviting a short video (3 mins maximum) and written description (1000 words) of what your area is doing. You may want to submit an overview of the breadth of the health promoting activities in your area or concentrate on a single initiative. The video will be judged on content (not on quality) so a video filmed on a mobile phone/tablet will suffice. If videoing is not a possibility a PowerPoint presentation (max 3 mins) will be accepted. As part of the submission we also require a short written account (300 words) of what you would do with the winning prize money should you be selected.

Submissions will be assessed by members of the SCPN team and advisory board and shortlisted entries will be screened at our annual conference in February 2018 and voted on by delegates. The winning entry will receive a £500 cash prize to be spent on further health promoting initiatives within your organisation.

We warmly invite you to submit an entry. Submissions will be welcomed until 7th January 2018 either by email to *scpn@cancerpreventionscotland.org.uk* or online at *https://www.cancerpreventionscotland.org.uk/news/health-promotion-competition/*

The SCPN survey is out.

We recently sent you a link to our annual survey in which you can help to shape the activities of the SCPN. We really do listen to your opinions so please take a few minutes to have your say (the average completion time is 4 minutes)

https://www.surveymonkey.co.uk/r/thescpnfeedback

We really don't want to lose you....

We have always treated your personal details with care and respect but, from May 2018 we are required under new legislation to be able to show that you have given your informed consent for us to contact you with, for example, our newsletter emails and E-updates. If you have not already done so, please confirm you want to continue to receive or newsletters and emails by visiting our website *http://www.cancerpreventionscotland.org.uk/change-is-coming/*

Great to have you on board Katie!

Katie Lindsay has joined the SCF and SCPN as a research and development officer. Katie has been placed with us as she is participating in Charityworks, the UK non-profit sector's graduate programme. Over the next year Katie will be helping to raise the profile of the SCPN through our social media platforms and written communications.

Join our network

www.cancerpreventionscotland.org.uk/subscribe/

SCPN STUDENTS

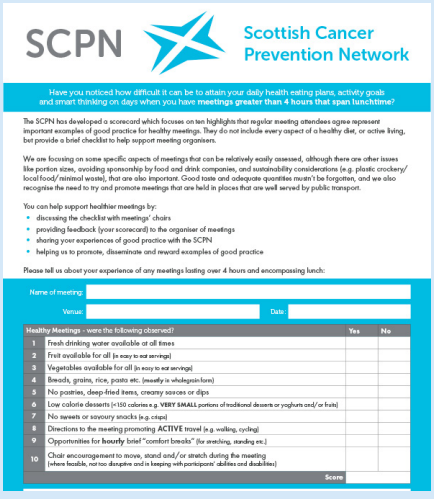
www.cancerpreventionscotland.org.uk/students/join/

Follow us on Social Media

@thescpn

Healthy Meetings

www.cancerpreventionscotland.org.uk/what-we-do/healthy-meetings/


SCPN Scottish Cancer Prevention Network

Have you noticed how difficult it can be to attain your daily health eating plans, activity goals and smart thinking on days when you have meetings greater than 4 hours that span lunchtime?

The SCPN has developed a scorecard which focusses on ten highlights that regular meeting attendees agree represent important examples of good practice for healthy meetings. They do not include every aspect of a healthy diet, or active living, but provide a brief checklist to help support meeting organisers.

We are focusing on some specific aspects of meetings that can be relatively easily assessed, although there are other issues like portion sizes, avoiding sponsorship by food and drink companies, and sustainability considerations (e.g. plastic crockery/local food/minimal waste), that are also important. Good taste and adequate quantities mustn't be forgotten, and we also recognise the need to try and promote meetings that are held in places that are well served by public transport.

You can help support healthier meetings by:
- discussing the checklist with meetings' chairs
- providing feedback (your scorecard) to the organiser of meetings
- sharing your experiences of good practice with the SCPN
- helping us to promote, disseminate and reward examples of good practice

Please tell us about your experience of any meetings lasting over 4 hours and encompassing lunch:

Name of meeting:
Venue: Date:

Healthy Meetings - were the following observed?		Yes	No
1	Fresh drinking water available at all times		
2	Fruit available for all (in easy to eat servings)		
3	Vegetables available for all (in easy to eat servings)		
4	Breads, grains, rice, pasta etc. (mostly in wholegrain form)		
5	No pastries, deep-fried items, creamy sauces or dips		
6	Low calorie desserts (<150 calories e.g. VERY SMALL portions of traditional desserts or yoghurts and/or fruits)		
7	No sweets or savoury snacks (e.g. crisps)		
8	Directions to the meeting promoting ACTIVE travel (e.g. walking, cycling)		
9	Opportunities for hourly brief "comfort breaks" (for stretching, standing etc.)		
10	Chair encouragement to move, stand and/or stretch during the meeting (where feasible, not too disruptive and in keeping with participants' abilities and disabilities)		
	Score		

Booking is now open for the SCPN conference, We Can I Can 2018

www.thescpn.org/scpn2018

Editorial

Scotland is awash with alcohol. Weekly sales amount to 20.2 units a week for every adult in the country when the recommendation for both men and women is to drink no more than 14 units a week.

Given that around a fifth of people in Scotland don't drink, it means that a huge number of Scots must be regularly consuming alcohol at worryingly high levels. The sales figures don't lie. Scotland has a serious drink problem.

Alcohol is now 54 per cent more affordable than it was in 1980 and more is being drunk in the home where it is easier – and cheaper – to overindulge. The Scottish Government is alive to the problem. It has introduced a ban on multi-buy drinks promotions, lowered the drink drive limit and done its best, against opposition from the drinks industry, to introduce minimum pricing.

While these interventions are welcome, the wine, whisky, vodka, gin and beer continue to flow. Alcohol is our favourite drug, served to celebrate special times as well as being part of the daily lives of vast numbers of people. It also raises the risk of developing cancer and high blood pressure, is a contributory factor in a third of all A&E attendances and results in violence breaking out on the streets and in the home.

Yet, despite the health and social problems associated with alcohol, its use is widely accepted and seen by many as something positive and even attractive. Drinking has become normalised to such an extent that its problems are largely ignored and its benefits exaggerated. The result can be seen in weekly sales that greatly exceed sensible drinking levels.

It is this normalisation that is one of the greatest barriers to reducing the harm caused by alcohol. Attitudes to drinking need to change to get to a point where it is seen as an infrequent indulgence rather than a daily pick-me-up. Public sector organisations could take a lead in this by removing all alcohol from events and functions held by them. It would provide a clear signal that all is not well with how alcohol is being used in Scotland.

If we are serious about improving health in Scotland, drinking alcohol needs to become the exception, not the norm.

Bryan Christie
SCF Board Member

Inside this issue

THE TEAM

Dr Maureen Macleod - SCPN Fellow
Jill Hampton - Network Administrator
Bryan Christie - Journalist
Eoin McCann - Designer
Connor Finlayson - Digital Communications
Katie Lindsay - R+D officer

Eating Well During Cancer – a guide to coping with common side-effects of cancer treatment

In a recent YouGov survey of 893 people who have a close family member who has had or is having cancer treatment, commissioned by the WCRF only seven per cent felt their family member received a lot of dietary advice that could help them ease some of the side-effects of cancer treatment.

Nutrition matters! Finding ways around loss of appetite, diarrhoea, nausea and taste changes are only some of the challenges that people diagnosed and treated for cancer may experience. We know that being able to eat well during treatments means we can continue to nourish the body and be able to join in with others and regain pleasure from meals and snacks. This excellent guide provides answers to many common questions as well as great practical ideas for boosting the nutrient content of foods e.g. adding lentils, beans, oil, Greek yoghurt to casseroles or soups) and some recipes. No reason to feel that having anything is better than nothing – it is clearly possible to eat well during cancer. Keeping active is also recommended (of course), with a focus on starting small and setting achievable goals. This booklet was written with support from the British Dietetic Association Oncology specialist group and is highly recommended.

https://www.wcrf-uk.org/uk/here-help/publications-and-resources/booklets-and-factsheets

#kettlecise on tour

The SCPN team had an exciting phone call from Ruth Wilson, Business Development Manager, Royal United Hospitals Bath NHS Foundation Trust recently. She had been following our campaign, #kettlecise, on Twitter and wanted to use our text and images to make up resources to support health promotion in her hospital. Ruth intends to display the resources in 150 kitchens to 5,000 staff – a lot of people potentially to reach. We look forward to seeing the finished product and thank her for her enthusiasm for **#kettlecise**. Anyone else?

You can access the exercise images from *http://www.cancerpreventionscotland.org.uk/resources/kettlecise/* or we have a limited stock of cards available on request.

SCPN #Kettlecise #003

Kettleside Calf Raises

Starting with your feet shoulder-width apart and feet flat on the floor, move up to your tiptoes over 2 seconds, then lower your feet down to being flat on the floor over the next 2 seconds, Repeat sequence until kettle boils!

SCPN #Kettlecise #005

Kettle-ups

Stand facing the counter, arm's length away from it. Lean forward, supporting yourself with your hands on the counter. Bend your arms until your elbow is at 90°, then push off the counter to straighten your arms again. Repeat sequence until kettle boils!

SCPN #Kettlecise #006

One-Legged Kettlesquats

Stand side-on to the counter, with your hand placed on top for balance. Lift the leg closest to the counter in front of you slightly, as your balance on the other leg. Squat down slightly, then push to straighten your leg. Turn 180°, and repeat on the other leg. Repeat until the kettle is boiled!

Moving More: A workplace challenge!

Prof Robert Copeland, National Centre for Sport & Exercise Medicine, Sheffield Hallam University

Sheffield, along with East Midlands and London, combine to form the National Centre for Sport and Exercise Medicine (NCSEM), an 2012 Olympic legacy commitment to improve the health of the nation through sport, exercise and physical activity.

Our vision is to transform Sheffield into the most active city in the UK by 2020. A 5-year plan called ***Move More*** aims to make it easier for people living in Sheffield to be physically active as part of everyday life.

The International Society for Physical Activity and Health, through their advocacy paper ***'investments that work'*** suggest that whole-of-community approaches that use key settings, such as cities, schools and workplaces provide opportunity to mobilise large numbers of people in physical activity. With this in mind, the NCSEM in Sheffield designed Move More Month, which takes place in June each year, and attempts to engage the whole city in physical activity.

One of the programmes within Move More Month is the 'Workplace Challenge', which sees teams of up to 10 people 'compete' to clock up as many combined minutes of movement as they can during the month. Participants' activity can be tracked using a bespoke Move More smartphone app, via tracking devices e.g. Fitbit or participants can manually input their steps from a pedometer. For the individual, medals are awarded for reaching specific levels of minutes of movement per day - 30 minutes for bronze, 45 for silver and 60 for gold. Those that reach 90 minutes become a Move More Legend.

In 2017, the Workplace Challenge engaged more than 100 workplaces, with 420 teams and 2,500 participants, clocking up over 7 million minutes of movement. Importantly, 57% of players reported not to be hitting government guidelines for physical activity at the beginning of the competition, showing that these types of fun challenges can engage inactive people.

For more information visit ***www.movemoresheffield.com***

Editor's note: Anything like this happening in Scotland? We'd love to hear about it.

Breast cancer risk and prevention research grants–Apply Now

Breast Cancer Now is seeking applications from researchers aiming to tackle gaps in our understanding of the risk factors for breast cancer, and how this information could be used in prevention. We're particularly interested in research projects aiming to provide evidence to implement risk-adapted screening in the UK. This could include:

- Feasibility or pilot studies within the breast screening service.
- Psychosocial studies to determine the acceptability of risk-adapted screening for women to whom it would be offered.
- Research into the most clinical and cost effective screening modalities for the different risk groups.

For further information and to apply please visit our ***website***.

The deadline for applications to Breast Cancer Now is 12th January 2018

Kale, Sweet Potato and popped Chickpeas with Hummus Sauce

By Kellie Anderson, MSc – kelliesfoodtoglow.com

2 large sweet potatoes, scrubbed

2 tbsp olive oil, divided use (or 1 tbsp regular olive oil and 1 tbsp garlic olive oil)

150g cooked chickpeas, rinsed and patted dry

1 tsp ground turmeric

1/2 tsp freshly ground black pepper

60g or so young kale leaves, torn (amount is really up to you)

100g hummus

1/2 juicy lemon

40g toasted seeds of choice – I like pumpkin, sunflower and sesame

Optional: crispy dried onions/shallots

1. Preheat the oven to 200C fan/ 220C/450F. Slice the potatoes into 2.5 cm rounds, or if big sweet potatoes, large dice. Coat the potatoes with 1 tablespoon of the oil and roast on a tray in the oven for about 15-20 minutes – until soft and just starting to colour.
2. Meanwhile, toss the chickpeas with about half of the remaining oil and spread on a baking tray, dust with the turmeric and black pepper. Place in the oven for 15 minutes with the potatoes, or until they begin to burst and a few jump off the tray.
3. Rub the remaining oil onto the kale and massage until the kale has shrunken a little and softened.
4. For the dressing, mix the lemon juice with the hummus, loosening it a bit with some water too. Add any spices that you fancy, such as smoked paprika.

When the sweet potatoes and chickpeas are ready, let them cool a few minutes before tossing together the potatoes and kale. Decant these veggies into a nice serving dish, drizzle with the dressing, top with chickpeas and sprinkle over the seeds and crispy onions, if using. Eat at room temperature with a green salad.

Scottish fruits and vegetables- autumn

There is increasing evidence for the health benefits of a Mediterranean diet for cancer prevention (*see https://www.ncbi.nlm.nih.gov/pubmed/28260236*) and the subject of on-going research (*https://www.ncbi.nlm.nih.gov/pubmed/28031860*) and although it is tempting to try and identify the key components that account for protection it is probably the whole package (olive oil, fish, wholegrains, garlic and vegetables) that matters.

There is little doubt that vegetables make an important contribution to the healthy Mediterranean diet and much attention has focussed on the Allium genus which includes garlic, onion, shallots, leeks and chives – all of which are ready to eat in our Scottish autumn.

The cancer sites affected by allium intake from epidemiological evidence are largely gastrointestinal (notably stomach and colorectal cancer) and there is some lab based work which might explain mechanisms of action. One intervention study (using a high dose of garlic extract) reduced the risk of colorectal adenoma occurrence by 50%. These foods can provide some minerals (such as selenium) but there is more interest in bioactive constituents such as flavonoids and sulphur containing components (responsible for the characteristic smell) which are broken down to produce thiosulfinate compounds. In turn, these may help to prevent the formation of nitrosamine carcinogenesis. In addition, these compounds may decrease the level of heterocyclic amines arising during the meat cooking process- in fact a very good reason to add onions and garlic to meaty dishes! *http://cancerpreventionresearch.aacrjournals.org/content/8/3/181.long*

What to do with garlic

- Roast a head of garlic in tin foil for 45 mins at 180C – add to salads, cottage cheese, mix in soup
- Add raw garlic to stir–fries
- Cut 4 peeled garlic bulbs and 8 shallots, add thyme, 4 bay leaves, chicken stock and sherry and bake
- Use garlic mushrooms (in olive oil) as a filler for savoury wholemeal pancakes
- Gently sauté 2 garlic cloves with ½ teaspoon of cumin seeds for 2 minutes. Add a dash of honey, chilli flakes and lemon juice and toss over brussel sprouts. Roast for 20 mins.

Interested in Scottish food and growing? See more at *http://www.nourishscotland.org/*

Yorkshire Bike Libraries

Yorkshire Bank, in association with Cycle Yorkshire, are encouraging local residents to Donate, Borrow, and Ride bikes. Bikes in any condition (they don't need to be in working order) can be dropped off at over 55 donation stations throughout Yorkshire. A team of mechanics will make repairs where necessary before making them available to the community via a network of over 45 Bike Libraries across Yorkshire. Cycles are free to hire and so far, there have been over 36,000 opportunities taken to borrow a bike and 5,000 bikes donated. The scheme aims to make cycling more accessible for all ages and all ability levels and thousands of kids have already benefited as part of the Cycle Yorkshire legacy of the Tour de Yorkshire (TdY).

In addition an Enterprise Fund is available to give financial and marketing assistance to any not-for-profit organisation e.g. schools, charities, existing groups offering bike taster sessions and other community projects.

We love the sound of this scheme and would be very interested to hear of similar ones near you.

Art and Design Prize 2017

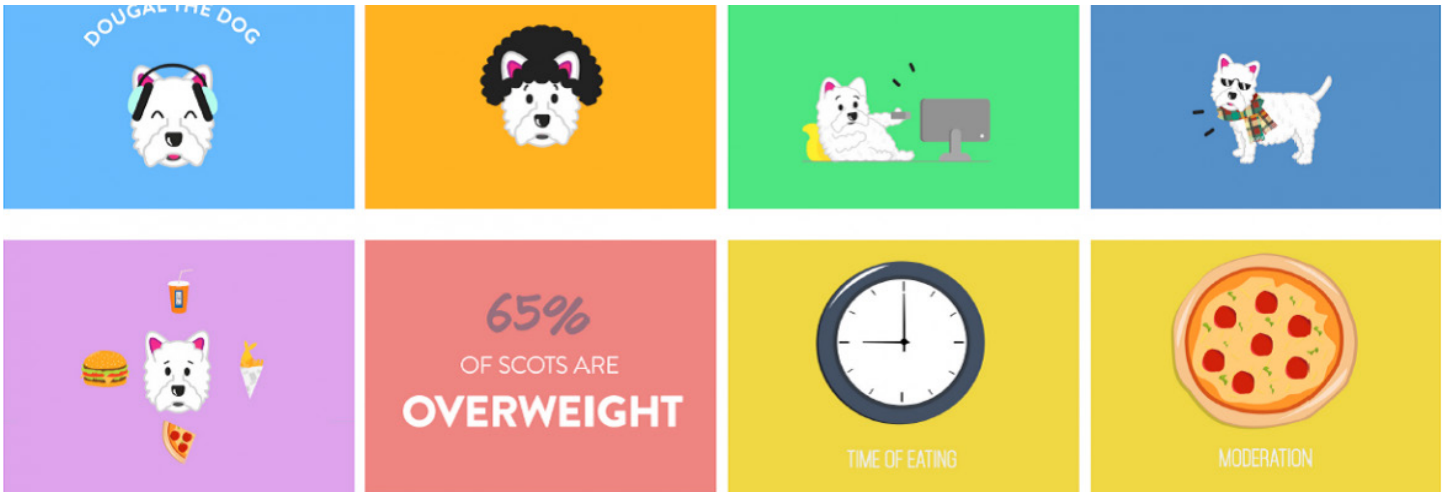
We are delighted to announce Ibrahim Karim and Erin Docherty as this year's recipients of the SCPN Art and Design prize for Creative Communication. Both third year students at Duncan of Jordanstone College of Art & Design, Dundee; 'Dougal the Dog' was created as part of their third year project on cancer prevention.

Research shows that overweight adults have an increased risk of a cancer diagnosis. Shocked by the fact that 65% of Scottish adults are overweight or obese Ibrahim and Erin set about making a short video which could be used to encourage individuals to make small behaviour changes. Dougal, the dog, advocates portion control and substitution of healthier foods in to our diet – changes made in the same way we change what we listen to, watch and wear. This lovable pup teaches us to make lifestyle changes to reduce our risk of a cancer diagnosis.

When we had the chance to interview the winning pair, Ibrahim told us: "When we came up with Dougal, the main thing we wanted was he would appeal to a wide audience, and the whole idea of small change… it's all about lifestyle." Ibrahim and Erin wanted Dougal to be appealing to all kinds of people and act as a pioneer of making small changes to diet, exercise and lifestyle.

Watch out for Dougal as we will be using him in many of our future communications. We wish both Ibrahim and Erin all the best in their final year and onwards!

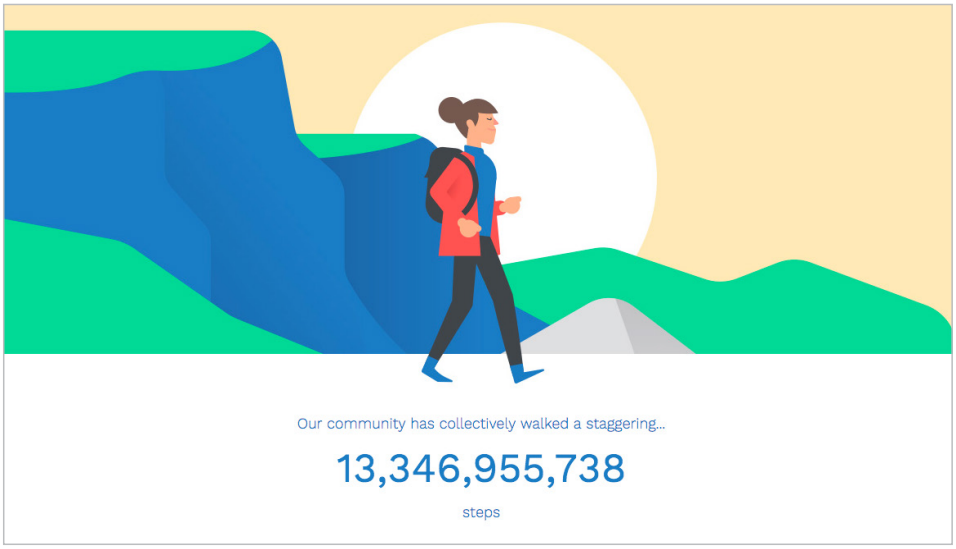
Watch the video on our website. *http://www.cancerpreventionscotland.org.uk/art-prize/winners/2017/*.



ActWELL study – full steam ahead.

The Scottish government funded ActWELL study now has 33 fully trained Breast Cancer Now lifestyle coaches in Aberdeen, Dundee, Edinburgh and Glasgow. The response to the lifestyle change programme from women attending routine breast screening clinics has been excellent and a real sign of interest in lifestyle breast cancer risk reduction. More details about the programme are available at *www.actwellstudy.org*

World walking



World Walking is a Scottish charity run initiative which offers a simple, free and fun way to help you keep active, either individually or as a group. It's also your virtual ticket to some of the greatest places on Earth!

World Walking can be used by anyone, anytime, anywhere. It is fun, free and easy to use. You log the steps/miles you walk in the real world and World Walking overlays the distance on your chosen virtual route, from city walks to trekking across a continent.

Getting started is as simple as a walk in the park. Just visit the website *www.worldwalking.org*, or download the app on your smartphone, choose your virtual walk... and go!

Join the thousands of people already using World Walking today.

Tessa Hollyoake

Tessa Hollyoake, a world-renowned expert in Chronic Myeloid Leukaemia (CML) has sadly passed away at age 54. Professor Hollyoake was Director of the Paul O'Gorman Leukaemia Research Centre and Professor of Experimental Haematology in the Institute of Cancer Sciences at the University of Glasgow. Among Tessa's many accolades is the Scottish Cancer Foundation Prize and Evans Forrest Medal, which she was awarded in 2015.

Tessa will be remembered as a hardworking and dedicated individual, with a passion for cycling and a love of the outdoors. Our condolences go to her husband and wider family.

The benefits of smoke-free public places

The smoke-free legislation is hugely popular; in 2015 87% of Scottish adults (65% of smokers) were supportive and only 8% (22% of smokers) opposed it. The legislation has resulted in significant health benefits, as well as changes in behaviour and attitudes towards smoking.

18%
reduction in the rate of child asthma admissions per year, compared to an increase of 5% per year in the years preceding it.

17%
reduction in heart attack admissions to nine Scottish hospitals. This compares with an annual reduction in Scottish admissions for heart attack of 3% per year in the decade before the ban.

39%
reduction in second hand smoke exposure in 11 year olds and in adult non smokers.

86%
reduction in second hand smoke in bars.

+
increase in the proportion of homes with smoking restrictions.

no
evidence of smoking shifting from public places into the home.

high
public support for the legislation even among smokers, whose support increased once the legislation was in place.

Many researchers in Scotland contributed to the evaluation of the legislation. A complete list of the research is available at: **www.ashscotland.org.uk/evaluation**

Reflections on 'gender neutral' HPV immunisation

Prof Heather Cubie MBE, Consultant Clinical Scientist, University of Edinburgh

In the UK we have two very effective interventions to make cervical cancer a disease of history - a national cervical screening programme for women > 25 and, since 2008, school-based HPV vaccine for girls aged 12-13. The UK has the highest sustained uptake of vaccine in the world – reaching over >80% overall and ~90% in Scotland. This is a real success story.

However, persistent infection with human papillomavirus (HPV) is the ultimate cause of more than just cervical cancer. Some HPV types, notably HPV 6/11, are associated with genital warts, the most common STI in both men and women. In addition, the more oncogenic types, particularly HPV 16, are associated with anal and some oropharyngeal cancers, with both increasing alarmingly in both men and women. In 2013, Australia became the first country to offer vaccine to both sexes, at a cost of $21m over four years for adding boys to the national programme. The campaign for 'gender neutral' immunisation of adolescent boys and girls is understandable.

Recently, the UK Joint Committee on Vaccination and Immunisation (JCVI) advised that it would not be cost effective to extend the programme to boys, even though they acknowledged there could be benefit to boys. Our high uptake in girls is providing better herd protection than in countries which have failed to reach the 80% uptake which earlier UK work suggested was needed for the programme to be cost effective against cervical cancer and precancer. Considering the many financial pressures on the NHS at this time, this outcome is realistic. The advice is 'interim' and the subject will surely be hotly debated in the months/years ahead. It must be remembered that this is a very expensive vaccine, requiring 2 doses at least 6 months apart and with high delivery costs. Perhaps a cheaper, one dose vaccine would alter the cost effectiveness balance.

Talking about alcohol ...

Alcohol consumption is associated with increased risk of seven cancers and current estimates suggest that 21,000 cases of cancer could be saved per year in the UK if everyone stopped drinking *https://www.wcrf-uk.org/uk/preventing-cancer/what-can-increase-your-risk-cancer/alcohol-and-cancer-risk*.

But there is lots to suggest that talking about alcohol (especially with women) is one of the hardest subjects to raise and often leads to discussion and debate around concepts of "guilty pleasure" or "healthy measure?". In a recent survey, only one in two people were aware of the links between alcohol and cancer and without prompting, only 13% identified cancer as a possible health outcome *http://www.cancerresearchuk.org/sites/default/files/an_investigation_of_public_knowledge_of_the_link_between_alcohol_and_cancer_buykx_et_al.pdf*.

In part, many people still like to think of alcohol as "healthy", good to protect against heart disease, something expected routinely in all social occasions and a reward for a hard day's work. Maybe these findings are in part fuelled by what the industry says about alcohol and cancer. A recent review of 26 alcohol industry websites *http://www.smh.com.au/cqstatic/gybwn5/Alcohol-industry_DrugAlcoholReview_paper.PDF?utm_content=bufferb5cd2&utm_medium=social&utm_source=twitter.com&utm_campaign=buffer* reported a number of strategies that misrepresent the evidence about alcohol and cancer including:

- Denying, omitting or disputing the evidence that alcohol consumption increases cancer risk.
- Distorting the evidence by mentioning cancer but misrepresenting the link, such as implying risk is present only with higher levels of drinking.
- Distracting or diverting discussion away from the independent effects of alcohol on common cancers, such as mentioning alcohol is one of many causes. Breast and bowel cancer appeared to be particular targets for this type of misrepresentation.

We may have warning labels for pregnant women but what about women and breast cancer – where risk starts to increase at >10g per day (one glass of wine). Uncomfortable though it may be we need to find a way to talk positively about bringing drinking down – especially in the baby boomer generation (those now in their 50s and 60s) who are drinking more than ever.

Interestingly, the latest SIGN guidelines on prevention of cardiovascular disease *http://www.sign.ac.uk/assets/sign149.pdf* flag that patients with or without evidence of cardiovascular disease should be advised to reduce alcohol consumption and that even light to moderate alcohol consumption may increase cardiovascular risk. The guidelines also highlight the merits of keeping below 14 units per week ("if you drink as much as 14 units").

We need to talk more!

The school environment to prevent overweight and obesity

Laura Martin, Public Health Intelligence Advisor, NHS Health Scotland

Note from the editor - *There is a strong evidence base that being overweight or obese increases the risk of developing 11 types of cancer – bowel, breast (in post-menopausal women), gallbladder, kidney, liver, oesophagus, ovary, pancreas, prostate (advanced), stomach and womb. It is estimated that 17% of all cancers could be prevented if everyone stayed a normal weight. As almost two thirds of children at the highest BMIs become obese adults it is particularly important to consider what can be done to reduce childhood obesity rates.*

The prevalence of childhood obesity in Scotland has remained stubbornly high. In 2015, 28% of 2-15 year olds were at risk of being overweight or obese[1]. Overweight and obesity in childhood is associated with poorer health outcomes in later life, such as, type 2 diabetes, cardiovascular diseases, depression and thirteen cancers[2-4].

The scale of the problem in Scotland requires action to change systems and environments in which people live to enable weight loss to be both made and maintained[5-6], alongside action to support individual knowledge and skills.

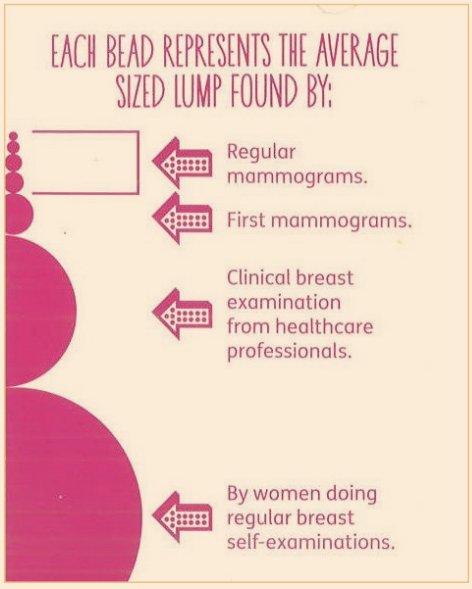
A rapid evidence review undertaken by NHS Health Scotland Evidence for environmental interventions to prevent childhood overweight and obesity within schools[7], found the following actions may be effective in reducing the rise of overweight and obesity within school populations.

- Comprehensive nutritional policies within schools, which include all aspects of food provision e.g. canteens, vending machines and tuck-shops, were associated with greatest impact on overweight and obesity levels.
- Reducing availability of unhealthy foods, lowering fat content and reducing portion sizes of food provided can all decrease overall calorie consumption during school lunch times.
- Making water more accessible was associated with a reduction in prevalence of overweight within the school population
- Reducing financial and social barriers to eating in school and making school dining areas more aesthetically pleasing may encourage pupils to eat in school, therefore increasing the impact of school nutritional policies

1. Brown L, Campbell-Jack D, Gray L et al. The Scottish Health Survey: Main Report 2015. Vol 1 Edinburgh: The Scottish Government, 2016.
2. Sonntag A, Lehnert K, Reidel-Heller K. Estimating the lifetime cost of childhood obesity in Germany: Results of the Markov Model Pediatric Obesity 2015
3. Public Health England. Making the case for tackling obesity – why invest? Presentation and fact sheet available at https://www.noo.org.uk/NOO_pub/
4. Cancer Research UK http://www.cancerresearchuk.org/about-cancer/causes-of-cancer/bodyweight-and-cancer
5. Roberto CA, Swinburn B, Hawkes C et al. Patchy progress on obesity prevention: Emerging examples, entrenched barriers, and new thinking. The Lancet. 2015; 385(9985), 2400-9.
6. Swinburn, Egger and Raza. Dissecting obesogenic environments, the development and application of a framework for identifying and prioritising environmental interventions for obesity. Prev Med 29 1999 563-70
7. http://www.healthscotland.scot/publications/interventions-to-prevent-childhood-overweight-and-obesity-within-schools

Scottish Breast Screening Programme Statistics 2015/16

John Quinn and Doug Clark, Information Services Division, NHS National Services Scotland



The Scottish Breast Screening Programme began in 1988, attaining full coverage in Scotland by 1991. Women aged 50-70 are invited for routine screening once every three years. Women aged 71 and over are screened every three years on request, through self-referral to their local screening centre. There are six screening centres in Scotland: Aberdeen, Dundee, Edinburgh, Glasgow, Inverness and Irvine. These centres are supported by 19 mobile screening units which visit outlying areas.

Data relating to the programme are collected by the centres and retained on the Scottish Breast Screening Programme Information System. Performance data are then compiled by the Information Services Division and statistics relating to the programme are published annually. The most recent publication was released in April 2017 and contained data up to 31 March 2016 https://www.isdscotland.org/Health-Topics/Cancer/Publications. The publication includes information relating to programme performance standards, uptake, cancer detection and outcomes.

Some of the key points from the most recent publication are:

- Uptake of breast screening in Scotland for the three-year period to March 2016 was 71.9%. This was slightly lower than for the previous period (72.5%). Both periods exceeded the minimum performance standard of 70%.
- All but four NHS Boards in Scotland (Greater Glasgow & Clyde, Lanarkshire, Fife and Lothian) achieved the 70% minimum performance standard.
- In the period April 2015 – March 2016, there were 1,392 cases of screen-detected breast cancer diagnosed in women of all ages. Of these cases, 81.3% were invasive cancers.
- Nearly 60% of the invasive cancers detected were less than 15 mm in size and were unlikely to be detected by physical examination.

Acknowledgement

Our publication uses data shared by patients and collected by the NHS as part of their care and support.

Ask the experts - liver cancer

Prof John F Dillon, University of Dundee

Dr Michael Johnston, NHS Greater Glasgow & Clyde

How big a problem is liver cancer in Scotland (and is it getting bigger)?

The main form of liver cancer is hepatocellular carcinoma (HCC). Although the majority of cases occur in developing countries it is becoming a bigger problem in the UK. In 2015, HCC was 7th overall in terms of cancer mortality in Scotland.

How important is obesity as a cause of liver cancer?

Obesity is the main risk factor for non-alcoholic fatty liver disease (NAFLD) which can lead to cirrhosis and HCC. In recent years the number of liver transplants performed for NAFLD and HCC associated with NAFLD have risen several-fold. In one centre just south of the border, NAFLD was the most common underlying aetiology in transplants for HCC.

Can you explain how obesity contributes to the development of liver cancer?

Though still not completely understood, insulin resistance, intestinal dysbiosis (an imbalance of beneficial and harmful bacteria in the gut) and an increased pro-inflammatory state appear to be key.

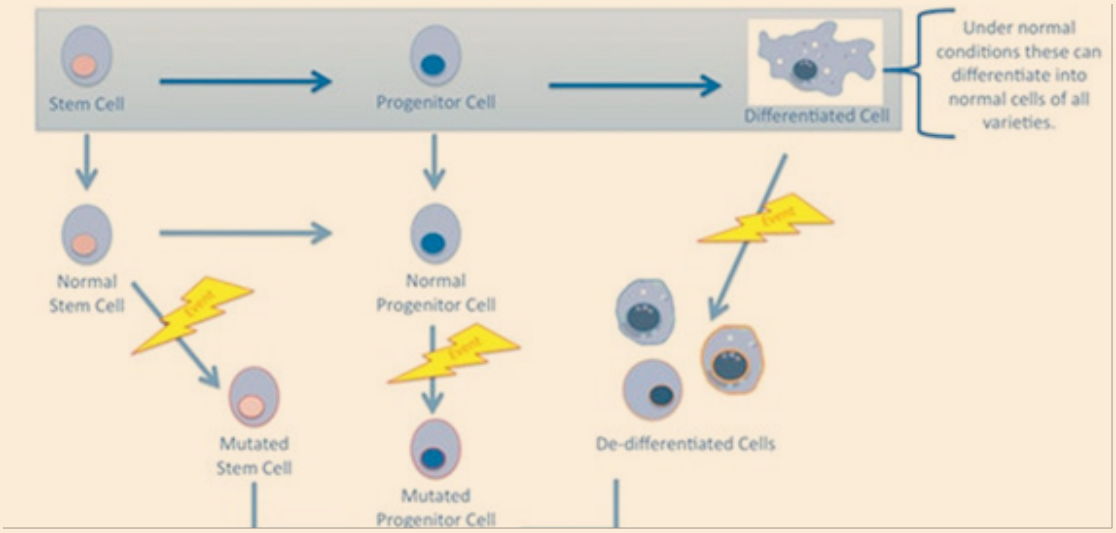
Progenitor cells, abundant in fibrosis and associated with cancer, are thought to be one reason why cirrhosis is associated with HCC. In NAFLD progenitor cells are found even without fibrosis.

Can you detect liver cancer early and stop or delay its progression?

Surveillance in cirrhosis with biannual ultrasound has been shown to reduce mortality from HCC. Whereas transplantation and resection exist as curative treatments, the greater challenge remains risk stratification of the spectrum of NAFLD within our obese population. Risk assessment scores do exist. However, the driver to use them often depends on the initiative of individual clinicians acting on incidental findings of fat on ultrasound or abnormal liver biochemistry.

Everyone thinks that alcohol is a major cause of liver cancer but is it true that obesity is a greater risk?

It is true that historically alcohol related cirrhosis has been the most prevalent risk factor for HCC in Scotland. In alcohol related disease it is predominantly the presence of cirrhosis that confers risk, whereas in NAFLD the risk of HCC exists even before cirrhosis which may delay detection of HCC. Furthermore, obesity and the "metabolic syndrome" do not exist in isolation. Features of the metabolic syndrome occur in other aetiologies, including alcohol. The cumulative effect is the rise in HCC mortality we see today.



Ongoing Scottish Research

Improving bowel cancer screening uptake in traditional non-responders

Aaron Quyn, Surgical Registrar, University of Dundee

Population-based CRC (bowel) screening programmes have an overall uptake of just over 50%. It is known that those who are younger, male, more deprived and from certain ethnic minority groups are less likely to engage in a programme. Population abdominal aortic aneurysm (AAA) screening for 65 year old men by a single ultrasound was recommended by the UK National Screening Committee in 2007. Reported uptake in this traditionally resistant to screening male group has been between 88 and 90%. In comparison, uptake of bowel screening in the 65-69 year old age group is only 55% in Scotland.

The aim of this study, funded by the Detect Cancer Early programme, was to determine what effect a brief intervention by a health professional in the context of AAA screening could have on bowel screening uptake.

Why is this study important?

The general public perceive health professionals as experts in matters relating to disease prevention and management. Thus, individual communication on behaviour change may help endorse the messages of public health campaigns and improve uptake of screening.

Attendees who had not responded to their latest bowel screening invitation were seen by CRC clinical nurse specialists. Participants were asked about symptoms, previous participation with bowel screening and reasons for not completing the FOBT. A brief intervention on the purpose of bowel screening, advice on how to complete the FOBT and an invitation to complete a new FOBT was then provided.

Interim analysis suggests a significant increase in bowel screening uptake within the intervention group With this simple face-to-face intervention, we demonstrate that a brief intervention, if delivered at an opportune time, can improve uptake in participation in bowel screening even in a difficult to engage population.

Bottom line

Recent initiatives in the UK, such as the "health promoting health service" and "every contact counts", may provide opportunities to enhance uptake in screening and prevention programmes.

A study to look out for when it's published!

Have you seen this report?

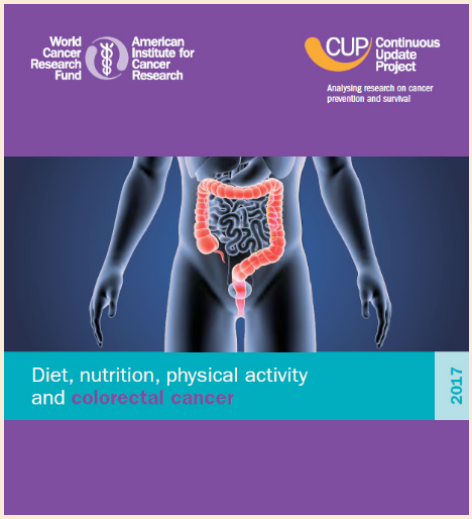
Colorectal cancer (CRC) is one of the most common cancers both in the UK and worldwide. It is the 4th most common cancer in the UK and 3rd most common in Scotland with 3,671 cases diagnosed in 2015. Although its incidence in Scotland and the UK has seen a decline in recent years, globally CRC rates are rising. The highest rates are seen in Australia and New Zealand and the lowest rates in West Africa. It is not all bad news however as this type of cancer is very preventable – it is estimated about half of cases could be prevented by adhering to WCRF recommendations and if caught early its 5 year survival rates are 90%.

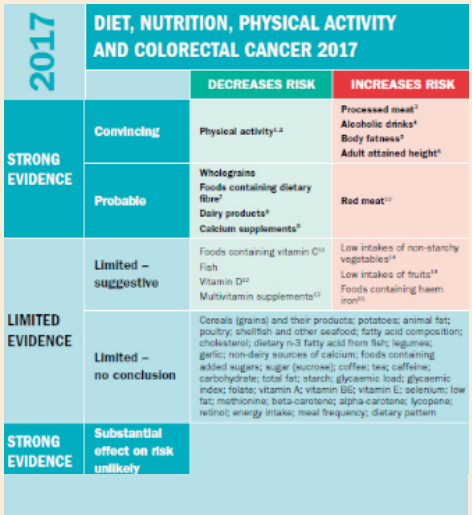
The World Cancer Research Fund (WCRF) systematically reviews worldwide research into lifestyle choices which impact on the risk of developing many cancers. Its latest publication, as part of its Continuous Update Project (CUP), concentrates on CRC and provides updated evidence on the risk factors which impact the odds of developing the disease.

The report finds there is strong evidence that being physically active and eating a diet rich in wholegrains, fibre, and dairy products reduces the risk of developing CRC. Calcium supplements are also protective. However there is also strong evidence that consumption of processed meats (meats preserved by smoking, curing, salting and chemical additives) and red meat (beef, pork and lamb) raises the risk of CRC. In addition there is strong evidence that alcohol consumption and being overweight or obese increases the risk also. Smoking is also known to be a risk factor for developing CRC.

This evidence will inform updated recommendations from the WCRF which are expected to be published in early 2018.

http://www.wcrf.org/int/research-we-fund/continuous-update-project-findings-reports/colorectal-bowel-cancer





Cancer and lifestyle – research round up

Do alcoholic beverages, obesity and other nutritional factors modify the risk of familial colorectal cancer? A systematic review

Fardet A et al. (2017) Critical Reviews in Oncology / Hematology

A strong family history of colorectal cancer (CRC) is known to raise an individual's risk of developing the disease. To date this population group has been kept under in colonoscopic surveillance but interventions and support about lifestyle choices are not routinely offered.

This systematic review of 31 papers analysed epidemiological studies investigating the associations between dietary intake, family history, and colorectal cancer risk to assess whether lifestyle impacts on disease risk. Higher consumptions of alcohol, red or processed meat, and overweight/obesity (and more largely the exposure to multiple unhealthy behaviours) were found to significantly increase the risk of CRC in those with a familial risk. This review concluded that doctors and their patients need to be better informed about current evidence on nutritional modifiable risk factors for cancer prevention.

http://dx.doi.org/10.1016/j.critrevonc.2017.09.001

Physical activity, sedentary behaviour, diet, and cancer: an update and emerging new evidence

Kerr J et al. (2017) Lancet Oncol; 18: e457–71.

The second in a series of five this paper reviews existing and emerging evidence on lifestyle factors which are associated with cancer risk. It provides a comprehensive critical analysis of the literature on physical activity, sedentary time, obesity, alcohol consumption and dietary pattern in a range of cancers including breast, colorectal and prostate. Underlying mechanisms of how the lifestyle behaviour impacts on the normal physiology to produce cancerous changes are also discussed.

Gaps in our knowledge and areas for future research conclude a must read for those with an interest in cancer prevention through behaviour change.

Other papers in the series explore preventative therapies for cancer prevention e.g. vaccines, prophylactic surgery and drug therapies; the role of government and regulation and the genomic approaches to cancer prevention which is an emerging field of great interest to cancer prevention researchers.

http://www.thelancet.com/series/cancer-prevention

Long-term improvement of breast cancer survivors' quality of life by a 2-week group physical and educational intervention: 5-year update of the 'PACThe' trial

Kwiatkowski F et al. (2017) British Journal of Cancer (2017) 116, 1389–1393

Quality of life is often reduced after treatment for breast cancer due to anxiety, depression, and weight gain. In the original 'PACThe' trial, 251 participants were randomised to receive a 2 week intervention, shortly after breast cancer chemotherapy completion, at a thermal centre, with ongoing dietary/physical activity advice for 3 years or ongoing dietary/physical activity advice only. The intervention delivered a combination of physiotherapy, physical exercises, nutrition and group support. Quality of life, weight loss in the overweight/obese and weight maintenance if in normal weight range and physical activity were studied.

Quality of life was significantly improved in the intervention group at 1 and 5 years. Significant between group differences were seen in weight management at 6 months and 1 year. At 5 year follow up, weight difference to baseline was -1.1% in the intervention group (95% CI -1.7; -0.6) vs +0.7% (+0.2; +1.2) in the control group ($p<0.001$).This intervention appeared to be effective in helping breast cancer survivors improve their quality of life and weight management enabling a faster return to occupational and social activities of living.

https://www.ncbi.nlm.nih.gov/pubmed/28427084

Lifestyle Changes in Breast Cancer Survivors May Protect Against other Health Conditions

AE Lohmann, et al. (2017) Breast Cancer Research and Treatment Volume 164, Issue 2, pages 451-460.

Although the survival of breast cancer (BC) patients has improved in recent years, competing causes of mortality, such as diabetes, are of great relevance in improving lifestyle choices of BC survivors. In a recent review, Lohmann et al studied changes including metabolic factors and physical activity of BC survivors over time, comparing them to age-matched women with no history of BC in order to determine the prevalence of metabolic syndrome and diabetes in survivors. These conditions were significantly more prevalent in BC survivors of lower physical activity compared to control groups, and mortality was higher in BC patients with a BMI >30 compared with normal weight patients. It was concluded that screening for diabetes and metabolic syndrome should be enhanced along with lifestyle changes to decrease prevalence of these conditions and improve outcomes for BC survivors.

https://link.springer.com/article/10.1007%2Fs10549-017-4263-z