

HEALTH 2020 news

December 2006

We need you to keep coming back



John and Noeline Dean keep coming back because 'Participating creates awareness in your health and enables you to be aware of any pitfalls, like the links between being overweight and cancer. The link between diet and disease is very important and the more is known the more prevention can occur.'

Every single person who takes part in Health 2020 is important. Professor Dallas English, one of the principal researchers in the study, explains why.

'I use the example of a marginal seat in an election. You might say, "I'm just one of 40,000 people in that seat". But you might be the one who tips the result. In Health 2020, you might be the one who confirms that something is critical in preventing cancer, or that something contributes to causing cancer.'

Health 2020 researchers are already finding significant results from the data. These

results add to world knowledge about disease causes.

In order to keep making these advances in knowledge, Health 2020 needs to keep following up the same people over time.

Dallas emphasises that this is true whether you're healthy or ill.

'We use the data to compare people who develop disease with people who don't. Some sicker people are not returning. This is really concerning.

'We sometimes hear, "I'm of no use to you because I'm sick." But these people are just as important as they were at the beginning of the study. Without them returning, we lose vital information. We need

people who develop illness in the study. Without them, we'll get biased information.

'We need to have as many people return as possible. If people drop out, the results are going to be less reliable. This could potentially be harmful. The last thing we want is to give people advice based on incorrect information.'

Dallas acknowledges that some people may not return because they find the questions intrusive.

'I understand how they must feel. But these questions are so useful for identifying what causes disease and how people can prevent it.'

Dallas emphasises the crucial importance of following up every person who began in the study. 'It's not just cancer that we're finding important information about, it's also other very disabling conditions, such as heart and eye disease, fractures and arthritis.

'Your involvement in this study could potentially provide very important information which will help to prevent disease in future generations.' **Your follow-up visit could be easier, now that Melbourne Pathology is working with us to run Health 2020 study centres closer to home. As well as centres where you can have your follow-up visit in Reservoir, Doncaster and the Peninsula, we can arrange Melbourne Pathology to visit you at home. For information on making your appointment easier, call Health 2020 on 9635 5323.**

My thanks to all of you for your continuing support of Health 2020. This newsletter reminds you of what your participation is achieving: new ways to understand disease, which are informing new ways to think about how we can prevent disease.

A central aim of Health 2020 is to get more information about how diet affects cancer. Health 2020 is not alone in this. Various studies around the world are looking at similar questions. To make the most of the information you are providing to us (and only with your consent), Health 2020 is part of an international project called the Pooling Project of Prospective Studies of Diet and Cancer.

This project 'pools' and analyses the data from diet and cancer studies around the world. For example, if one study suggests that a certain food is linked to an increase in a certain cancer, the pooling project analyses whether this finding is consistent across the other studies.

This is a great tool, which will give every study more certainty about its findings. It will also increase the chance of obtaining reliable new understandings about diet and cancer.

Our great thanks to you for continuing your support of Health 2020. We hope that this newsletter answers some of your questions, including how Health 2020 links to international research, and how this adds to the value of the information that each of you so generously provides.

Professor Graham Giles
Chief Investigator, Health 2020

Why are we photocopying hands?

Everyone who is taking part in Health 2020 is being asked to photocopy their hands. This may seem a little strange, but there's a good reason.

Studies from around the world have suggested that digit ratio – the length of the ring finger compared to the length of the index finger on the same hand – may point to a person being more or less likely to develop certain diseases. For example, digit ratio has been linked to heart disease and breast cancer.

Why would the relative length of your fingers have anything to do with disease? Theories include that finger length may be related to exposure to the male hormone testosterone before birth. (Yes, women have male hormones in their bodies, too.) An exposure like this could raise the risk of some diseases, while incidentally affecting finger length.

It may be that digit ratio is a sign of increased risk of certain diseases. However, reliable evidence is still needed. This is where you can help. If you're asked to photocopy your hand, remember, we have a good reason.



Principal Investigator, Professor Graham Giles, with Mary Kaimakamis, Study Centre Manager. Graham is also a participant in Health 2020.

Smoking adds to social inequalities

Findings from Health 2020

Men with low levels of education are known to have shorter life expectancies than men with higher levels of education. But is some of this due to smoking?

Using Health 2020 data, Dr Mohammad Siahpush looked at the contribution of smoking to early deaths among educationally disadvantaged men.

The results confirmed that smoking accounts for a proportion of deaths that would otherwise be attributed to low levels of education. In fact, around one in three of these deaths are due to smoking

How will this add to world knowledge about disease?

Dr Siahpush says the results confirm that a substantial part of social inequality in disease is likely to be due to socioeconomic variations in smoking.

What does it mean for reducing disease risk?

The results will be useful for disease prevention work, Dr Siahpush says. 'Targeting smoking among socially disadvantaged groups may substantially reduce social inequalities in health.'

Life expectancy: measuring body fat

Findings from Health 2020

You may know that body size can say something about a person's life expectancy. Being extremely overweight or underweight can lead to an early death. But what's the best way to measure a person's body size? Are some measures better predictors of early death than others?

Julie Simpson, a Health 2020 researcher, examined Health 2020 data on body size measures along with information about deaths from cardiovascular disease and cancer. She found that measuring body size using waist circumference and waist-to-hip ratios* were better predictors of mortality than measures of total body fat.

How will this add to world knowledge about disease?

Julie says that when determining if a person's body size is in a high risk category for early death, it is better to measure their waist circumference and waist-to-hip ratio than simply height and weight.

'We found that high waist circumferences and waist-to-hip ratios were associated with an

increased risk of 30% for death.

'In Health 2020, a high waist circumference was defined as greater than 102 cm for males and 88 cm for females, and for waist-to-hip ratio, the cut-offs were 0.97 for males and 0.84 for females.'

What does it mean for reducing disease risk?

The message is clear. To reduce your risk of an early death, it is still important to maintain a healthy body size and not be extremely overweight.

*Body fat is measured in different ways:

- **waist circumference** (measured with a tape around the narrowest point between your ribs and hips)
- **waist to hip ratio** (comparison of your waist and hip circumference, hip circumference is measured with a tape around the widest point around your bottom)
- **body mass index** (your weight in relation to height)
- **fat mass** (amount of fat in your body)
- **percent fat** (the amount of the body mass that is fat compared to the rest of the body)

New angles on prostate risk



Illustration by Con Stamatis

Men in Health 2020 will soon be asked some intriguing questions that could provide new evidence about prostate cancer.

Diet and lifestyle questions haven't given conclusive evidence about prostate cancer risk – so the researchers are digging deeper.

You may be asked about acne, hair loss and finger length. Each can be associated with levels of male hormones in the body at different times of life. The researchers will also look at tissue for biological markers that are linked to prostate cancer risk.

Even if you'd prefer not to remember adolescent acne or talk about recent hair loss, your answers could be vital in uncovering much-needed information about hormones and prostate cancer. We appreciate your help with this important new research.



Who do you speak to on the phone at Health 2020? (L-R) Emmy Gavrilidis, Ritsa Kotsopulu (front), David Muller, Carol El-Hayek, Roxanne Kritharidis (front), Georgina Marr, Silvana Zaccari, Stephen Roberts, Mary Kaimakamis, Julie White, Gaetano Mazza, Andrea De Colo, Helen Fitzgerald, Manuela Rigo, Vicky Koutoukidis, Pauline Kolivaris, Kosta Kongas

Alcohol and diabetes risk

How does alcohol influence a disease such as diabetes? The link has been looked at before; however Cancer Council researcher Allison Hodge used Health 2020 data to examine the link in new ways.

‘Our study is the only one that I am aware of that has included both men and women, has adjusted for diet and body fat distribution, and has looked at different beverage types and at drinking pattern in men. It is this combination that makes our study special,’ Ms Hodge says.

The study looked at alcohol intake and other factors from around 30,000 people. The results suggest that alcohol consumed at ‘low risk’ levels is not associated with an increased risk of Type 2 diabetes. In fact, wine drinking at low risk levels was linked to reduced risk of Type 2 diabetes. However, high alcohol use appeared to increase the risk.

(Low risk drinking in this study was no more than four standard drinks per day for men and no more than two for women.)

How does this add to world knowledge about disease?

‘I think we can be reasonably confident that moderate alcohol intake may reduce risk of diabetes,’ Ms Hodge says. However, there’s not enough evidence to say that some alcohol types are ‘healthier’ than others. ‘I am not so sure about

the evidence for different types of drinks. It is still possible that the apparently good effects of wine are due to other healthy lifestyle factors that we could not completely account for.’

What does it mean for reducing disease risk?

Ms Hodge says the bottom line is that drinking alcohol within current guidelines will not increase diabetes risk, and wine may reduce risk. This doesn’t mean that people who don’t drink alcohol should start. ‘As with cardiovascular disease, this does not mean that people should be advised to drink for their health, but that people enjoying alcohol in moderation need not stop,’ she says.

Ms Hodge adds a word of caution: ‘The most important thing you can do to reduce your risk of diabetes is to avoid becoming overweight or obese. Keep in mind that alcohol may contribute to overweight and obesity.’

Please note that alcohol is known to cause some cancers and the Cancer Council recommends that, if you choose to drink, you drink no more than two standard drinks a day (for men), and one a day (for women). People who do not drink alcohol are not advised to take up alcohol to try to prevent any disease.

Why we keep coming back



Francesco and Maria Dicerto explain why they keep coming back to Health 2020: ‘The outcomes of research have benefits for many of us. If no one participated there would be no further development in research. Participating is very important for the future: with research the results would benefit those in need. A diet recommended by experts would benefit many.’



Dimitra and Con Xenos explain why they keep coming back: ‘To help the Cancer Council. Looking back 15 years ago it is all very interesting: the way body shape changes, waist and hip measurement changes when body weight stays the same. We found the interview very beneficial and helpful in all aspects of health, diet and exercise. [For us] the diet is the most important aspect of the study.’

Do you have any questions about Health 2020? We do like to hear from you! Please telephone on 9635 5323 or email Health2020@cancervic.org.au

Please let us know if your details change

It's really important to us that you let us know if you move house. It means we can stay in touch to let you know how Health 2020 is progressing, what we're finding out, and about new activities underway.

Keeping your address up to date with Health 2020 is a little easier now. Please just tear off this strip, put it in your wallet, on the fridge or in your diary and then send it to us when you know your new address.

First name

Middle name

Last name

New address

Preferred Phone No

Old address

Health 2020 investigators

These Health 2020 researchers are based at The Cancer Council Victoria:

- Prof Graham Giles
- Prof Dallas English
- Dr Gianluca Severi
- Dr Julie Simpson
- Dr Laura Baglietto
- Dr Helen Kelsall
- Maree Brinkman

They work with the researchers listed below.

Cancers:

- Prof John Hopper, The University of Melbourne
- Dr David Forman, University of Leeds, UK
- Prof Michael Abramson, Monash University
- Prof John Pederson, Alfred Hospital
- Prof Catriona McLean, Alfred Hospital
- Prof Jeremy Jass McGill, University Montreal Canada
- Dr Joanne Young, Queensland Institute of Medical Research
- Dr Andrew Haydon, Monash Medical School
- Dr Robert MacInnis, Cambridge University

Cardiovascular and metabolic research (including heart disease, stroke and diabetes):

- Prof Andrew Tonkin, Monash University
- Dr Kevin Rowley, University of Melbourne
- Prof Kerin O'Dea, University of Melbourne

- Allison Hodge, The Cancer Council Victoria
- Linton Harris, The Cancer Council Victoria
- Lei Chen, Monash University
- Alison Beauchamp, Monash University

Eye-related disease:

- Prof Hugh Taylor, Centre for Eye Research Australia
- Dr Robyn Guymer, Centre for Eye Research Australia
- Dr Tien Wong, Centre for Eye Research Australia
- Elaine Chong, The Cancer Council Victoria

Interventions and behaviour:

- Prof David Hill, The Cancer Council Victoria
- Dr Melanie Wakefield, The Cancer Council Victoria
- Dr Victoria White, The Cancer Council Victoria

Healthy ageing:

- Prof John McCallum, Victoria University of Technology
- Prof Leon Flicker, University of Western Australia

Ageing and health service use:

- A/Prof Leonie Segal, Monash University

Osteoarthritis:

- A/Prof Flavia Cicuttini, Monash University
- Prof Stephen Graves, Royal Melbourne Hospital

Iron disease:

- A/Prof Dorota Gertig, The University of Melbourne

Our new name is Health 2020 – we think the name neatly captures the study's vision and far-sightedness

Health 2020 publications in 2006

Asia Pacific Cohort Studies Collaboration, Martiniuk AL, Lee CM, Lam TH, Huxley R, Suh I, Jamrozik K, Gu DF, Woodward M. The fraction of ischaemic heart disease and stroke attributable to smoking in the WHO Western Pacific and South-East Asian regions. *Tob Control* 2006;15:181–8.

Asia Pacific Cohort Studies Collaboration. Central obesity and cardiovascular in the Asia Pacific region. *Asia Pacific J Clin Nutr*. 2006 (in press).

Asia Pacific Cohort Studies Collaboration. Coronary risk prediction for those with and without diabetes. *Eur J Cardiovasc Prev Rehabil*. 2006;13:30–6.

Asia Pacific Cohort Studies Collaboration. The burden of overweight and obesity in the Asia-Pacific region. *Obes Rev*. 2006 (in press).

Baglietto L, Severi G, English DR, Hopper JL, Giles GG. Alcohol consumption and prostate cancer risk: results from the Melbourne Collaborative Cohort Study. *Int J Cancer* 2006. 119:1501–4.

Gertig DM, Fletcher AS, English DR, MacInnis RJ, Hopper JL, Giles GG. Hormone therapy and breast cancer: what factors modify the association? *Menopause* 2006;13:178–84.

Giles GG, Simpson JA, English DR, Hodge AM, Gertig DM, MacInnis RJ, Hopper JL. Dietary carbohydrate, fibre, glycaemic index, glycaemic load and the risk of postmenopausal breast cancer. *Int J Cancer* 2006;118:1843–7.

Haydon AM, MacInnis RJ, English DR, Giles GG. Effect of physical activity and body size on survival after diagnosis with colorectal cancer. *Gut* 2006;55:62–7.

Haydon AM, MacInnis RJ, English DR, Morris H, Giles GG. Physical activity, insulin-like growth factor 1, insulin-like growth factor binding protein 3, and survival from colorectal cancer. *Gut* 2006;55:689–94.

Hodge AM, English DR, O’Dea K, Giles GG. Alcohol intake, consumption pattern and beverage type, and the risk of Type 2 diabetes. *Diabet Med* 2006;23:690–7.

MacInnis R, English DR. Body size and composition and prostate cancer risk: systematic review and meta regression analysis. *Cancer Causes Control*. 2006 (in press).

MacInnis RJ, English DR, Hopper JL, Gertig DM, Haydon AM, Giles GG. Body size and composition and colon cancer risk in women. *Int J Cancer* 2006;118:1496–500.

MacInnis RJ, English DR, Hopper JL, Giles GG. Body size and composition and the risk of gastric and oesophageal adenocarcinoma. *Int J Cancer* 2006;118:2628–31.

Severi G, English DR, Hopper JL, Giles GG. Re: Prospective studies of dairy product and calcium intakes and prostate cancer risk: a meta-analysis. *J Natl Cancer Inst* 2006;98:794–5; author reply 95.

Severi G, Hayes VM, Neufing P, Padilla EJ, Tilley WD, Eggleston SA, Morris HA, English DR, Southey MC, Hopper JL, Sutherland RL, Boyle P, Giles GG. Variants in the prostate-specific antigen (PSA) gene and prostate cancer risk, survival, and circulating PSA. *Cancer Epidemiol Biomarkers Prev* 2006;15:1142–7.

Severi G, Morris HA, MacInnis RJ, English DR, Tilley W, Hopper JL, Boyle P, Giles GG. Circulating steroid hormones and the risk of prostate cancer. *Cancer Epidemiol Biomarkers Prev* 2006;15:86–91.

Severi G, Morris HA, MacInnis RJ, English DR, Tilley WD, Hopper JL, Boyle P, Giles GG. Circulating insulin-like growth factor-I and binding protein-3 and risk of prostate cancer. *Cancer Epidemiol Biomarkers Prev* 2006;15:1137–41.

Siahpush M, English DR, Powles J. The contribution of smoking to socio-economic differentials in mortality: results from the Melbourne Collaborative Cohort Study, Australia. *J Epidemiol Community Health*. 2006 (in press).

Simpson JA, MacInnis RJ, Peeters A, Hopper JL, Giles GG, English DR. A comparison of adiposity measures as predictors of all causes mortality: the Melbourne Collaborative Cohort Study. *Obesity*. 2006 (in press).

Sharing information

How is information about me protected?

Health 2020 conforms to strict privacy and confidentiality principles. These include:

- Your information is stored safely at The Cancer Council Victoria.
- Your name and address do not appear on data used by researchers. They see an ID number, not your personal details.
- Your name and address would never be given out to anyone without your specific written consent.

Sharing information for research

The information that you have so generously given is very valuable for research into many diseases like heart & eye disease, diabetes and fractures. If a researcher outside Health 2020 approaches us, with a request to use the data, we first ask if other researchers agree this study should proceed. If they agree we ask our Ethics Committee to approve the project. Only when all these groups agree do we release any information.

In recognition of how valuable this information is, the National Health and Medical Research Council has awarded a grant designed to help researchers access the information you have given. The grant will enable us to improve our databases, to help us provide information to researchers and to continue to protect your privacy.

Please be assured that your personal data, such as your name and address, is protected and is not given to external researchers.