



MRC

Lifecourse  
Epidemiology  
Unit

UNIVERSITY OF  
Southampton

# Newsletter

2019/2020

## Message from Professor Cyrus Cooper, unit director

It is a pleasure to be writing again with some recent findings from the Hertfordshire Cohort Study. This year I'm also excited to offer you the chance to help guide your study in the future. We would like to recruit between six and ten of you, ideally from a mixture of generations, to form a Research Review Panel for HCS. We might ask you to comment on anything and everything, be it the precise wording of a single question, whether our plans are feasible, or what you think it is most important to do next.

The exact details will be decided to suit the volunteers, but we would hope for the group to meet with MRC researchers for a couple of hours, once or twice a year, probably in a hotel in Hertfordshire. We can offer reasonable travel expenses and will provide a meal or refreshments depending on the time of day. We are keen to welcome people from a range of backgrounds, with or without a professional interest in health. Everyone has something to offer!

*To volunteer for the Research Review Panel, please contact Dr Sarah Carter using the details below – we look forward to hearing from you!*



## Keeping it in the family

We are thrilled to have brought the children and grandchildren of some of our original 'babies' into the HCS fold to help investigate how health is passed down through the generations.

The first question we have asked is a simple one: does the early growth of one generation affect the growth of their children and grandchildren?

The answer, we found, is that it does. People who were heavier at birth and who grew better during their first year had taller children and grandchildren than people who grew less well themselves. This shows that the importance of early life goes beyond the individual to echo through the generations. Many thanks to our intergenerational participants – more results next year!



*'It is wonderful that we have been able to extend an invitation for HCS members' children and grandchildren to get involved. This allows us to consider the effects of events early in life on the health of future generations. The enthusiasm we have received for this study has been fantastic, and we remain very grateful to our study participants.'*

*Professor Elaine Dennison*

## Thank you for your ongoing support for the Hertfordshire Cohort Study

Do get in touch if you have any questions, comments or would like to join the Research Review Panel

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### Introducing NAPA...

...that's the HCS Nutrition And Physical Activity study if we're being formal! We know that diet and physical activity affect the health of our muscles and bones in later life. But we also know that it can be very hard to eat well and stay active. In this new study, Drs Jean Zhang and Ilse Bloom are visiting people at home to talk about diet, physical activity and lifestyle, and to measure muscle strength, balance and walking speed. The aim is to test ways we can support you to maintain your bone and muscle health, and ultimately perhaps to develop a public health programme to help older people. We have invited almost 300 of you to take part in this study. Many thanks to those who have agreed; Jean and Ilse look forward to meeting you in the coming months.

*It's not too late to take part! If you received an invitation pack but have not yet replied, please get in touch and we'll book you in!*

### Staying one jump ahead

We are always excited to find new or better ways of assessing the health of muscles and bones, so recently we tried a new method called 'jumping mechanography' in one of our studies in Cambridge. This involves jumping on a very sensitive plate - like a large set of bathroom scales - that measures the forces the legs produce. More force means better strength and function, and in turn, lower risk of falls and fractures.

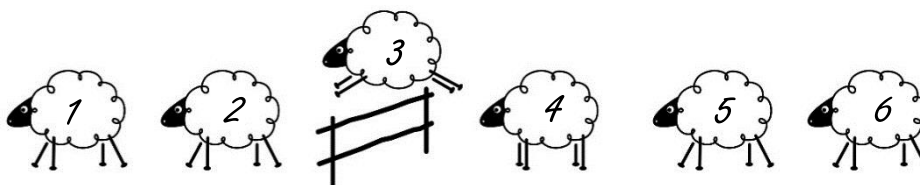
We have used these new data to test whether it is the pain, or the joint deformity, of knee osteoarthritis (OA) that affects function in people who have this condition. We can tell the difference because some people with painful OA have X-rays that don't show much joint damage, while others have less pain but very deformed knees on X-ray. Our findings showed an interesting sex difference: in women, deformity limited function more than pain, while in men, pain was the more limiting factor. Knowing this may one day help doctors to provide better treatment for OA.



### Did you sleep well?

We know that many older people have trouble sleeping, and some researchers think this is linked to poor health. To investigate, we asked you some questions on how well you usually sleep and for how long.

There were big differences between people. For example, although the average amount of night-time sleep was 7 hours, some people had as few as 4 hours and others as many as 10. Similarly, while most people fell asleep within 10-20 minutes, others took an hour or two. Just under half of you woke in the night several times per week. Common causes of waking were needing to use the bathroom (67% of men and 52% of women reported this); your own coughing or snoring (44% of men and 25% of women) and pain (35% of men and women). Other causes included worries, recent bereavement, indigestion, restless legs and cramp. More women than men used medicine to help them sleep (14% vs 9%). However, in spite of all these difficulties, very few people said their daily routine or activities were affected.



We have now begun to compare sleep patterns with information about health and will update you in a future newsletter.

### and finally...

Please don't forget to let us know if you are moving house or changing your telephone number!