



Newsletter

2018

Welcome to the 2018 Hertfordshire Cohort Study Newsletter!

Message from Professor Cyrus Cooper, Unit Director



It was a pleasure to see so many of you at our Hertfordshire Open Day in June. This was an opportunity for us to share with you some of the key findings that

have emerged from the Hertfordshire Cohort Study over the last 20 years, and we thoroughly enjoyed hearing your reflections on your participation in this crucial work. Many of you attended with other family members, and in this newsletter we will tell you about our progress with the Hertfordshire Intergenerational Study. We are also planning a number of further studies in Hertfordshire in the coming months; please watch out for our letters!

As always, we are very grateful to everyone who has participated and made such ground breaking research possible.



The Hertfordshire Cohort Study Team

The Hertfordshire Intergenerational Study of Bone Health

We are delighted to announce that the Hertfordshire Intergenerational Study of Bone Health is now underway. We know from previous studies in Hertfordshire that the way we grow in our mother's womb and the first few years of life affects our risk of developing many diseases in later life, such as thinning of the bones (osteoporosis).

In this study we are interested in whether your early life has had an impact on the bone health of your offspring. Over 120 of you including grandparents, children

and grandchildren have been to Cambridge for measurements of your bones using state-of-the-art methods at the Elsie Widdowson Laboratory. These measurements will enable us to look in detail at the structure and makeup of your bones and see if there are any similarities across generations.

We also took blood samples that will allow us in the future to see if there have been any changes to your genes caused by the environment (epigenetics) and if these changes are passed down across generations.



We will shortly begin to analyse all the data and look forward to sharing the exciting findings with you. We would like to send our sincerest thanks to all those (younger and older) who were able to come to Cambridge to take part.

Interested in research? Want to get involved? We are looking to recruit some cohort members from the Hertfordshire Cohort Study to help guide our research. No prior expertise required. Please contact HCS (hcs@mrc.soton.ac.uk) for further information.

We have reviewed our Privacy Policy in line with the new General Data Processing Regulations. A copy is available on our website or can be requested by contacting the address on the reverse.

Our changing diets - diet activity at the HCS Open Day

On Saturday June 23rd 2018 we hosted our Hertfordshire Cohort Study Open Day at Harpenden Public Halls as part of the MRC Festival of Medical Research. It was lovely to talk to our guests, including many of our cohort participants, as well as their spouses, friends, children and grandchildren, and to hear their thoughts and memories of diet over the years. We have created 'word clouds' from their comments and display them here by decade.

1940's: 'We kept chickens and rabbits. The rabbits my father killed and we ate them. Veg from the garden. This was during the war.'

'I remember queuing up at the shop to be able to get chocolate for my Mum, 1949.'

1950's: 'First fridge in 1957, kept in garden outside caravan.'

'Home grown veg and chickens from the garden. Milk and bread delivered to the door!!'

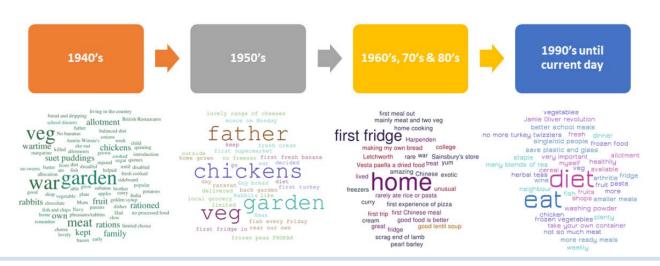
1960's, 70's and 80's: 'My first trip to a Sainsbury's store! Harpenden 1968.'

'I had my first Chinese meal in Letchworth in 1975.'

1990's until the present day: 'I only got a fridge in 1993.'

'You get a lot of frozen vegetables and other frozen food, now more than before.'

This shows some of the huge changes that have taken place in the food landscape and in our diets over the past 75 years. We would like to thank all of you who took part!



Exploring the effect of inflammation on muscle and bone health

Some of you kindly provided a blood sample when you were first recruited to HCS. Using information from this blood sample, we have investigated whether levels of inflammation are related to subsequent muscle and bone health. Inflammation was first described 2000 years ago as 'redness, heat, swelling and pain' in response to some kind of injury or infection. Since then our understanding has developed somewhat, and there are theories which suggest that the accumulation of inflammation across life can lead some people to age more quickly than others. In this study we measured overall levels of inflammation in your blood samples. We then explored relationships between these levels of inflammation and muscle strength, muscle mass and bone mineral density or thickness. We found interesting relationships between different blood markers of inflammation and both muscle and bone health in later life. Overall our findings support the theory that inflammation has an ageing effect on muscle and bone. We would like to extend a big thank you to everyone who took part in this study.

If you have any questions or comments, we would love to hear from you, and if you are moving house or changing your telephone number, please let us know so we can keep in touch!

Email: hcs@mrc.soton.ac.uk

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