

The Thousand Families Study Newsletter

May/June 2005

WELCOME FROM THE DIRECTOR



Welcome to this edition of the Thousand Families Newsletter and very best wishes for your 58th Birthday. We continue to make great progress with the Thousand Families study and I hope you will find this newsletter both interesting and informative.

Dr Mark Pearce
Director, 1000 Families Study
University of Newcastle upon Tyne

A RED SPOT'S PERSPECTIVE

"I'm guessing you are all as bored as I am with what seems to be the ONLY question in the world – 'What was it like as a child to be a Red Spot Baby?' – and since you all know what it was like, let's not pursue that route, except to say 'special'.



Over my adult life, however, I can say with confidence that the sense of being privileged to take part in this study has continued and increased as I have learnt more about what is involved. Two events have particular significance for me: one which was personally important, and one

which emphasised the renown of the original study.

In 1976 I was working in a small town in a very remote part of Washington State in the USA where I was regularly wheeled as the alien from distant parts and therefore worth coming to see. On one of these occasions a member of the group I was talking to was a doctor in the local hospital, who rapidly made the connection between Newcastle upon Tyne, the RVI and Newcastle University Medical School. I hope I am not offending the medics, but I was surprised that the reputation of the hospital and university was so international and totally astounded when he asked if this was where the Red Spot study had come from. When I told him I was one of the original babies, that was the

beginning of a very long conversation about my experiences and the importance of the study.

The other very personally important event was an outcome of the battery of tests we had at age 50 which showed that I had Impaired Glucose Tolerance (IGT). As a result I was invited to take part in a research project into IGT and diabetes at the RVI. My good luck continued because I was put into the treatment group rather than the control group and I started a 2 year diet and exercise programme working with a dietician and physiotherapist. I am happy to say that it seems to have worked for me and I have stuck with the sensible diet (mostly!) and exercise and I expect the proof will come with our age 60 tests.

No doubt as the momentum builds up to 2007 we will all start to feel special again and look forward to the next set of outcomes."



Jean Taylor, Red Spot and member of the Study Steering Group

Photograph courtesy of the "Evening Chronicle"

LATEST FINDINGS

The past year has been very productive for us and we have made progress in a number of areas. Rather than summarise all of our findings, we outline just the main ones below.

Oral Health

We counted your teeth at the last follow-up and found that adult lifestyle, in particular cigarette smoking, was the main influence on the number of teeth people had lost by that time. When published, this story was covered in most of the British newspapers and was covered by BBC television and many radio stations across the UK. Further a field, the story was reported in a number of other countries including Germany, Bulgaria, India, the United States, Argentina and Colombia.

“Health: Smoking Causes Bad Teeth”

Sofia News Agency, Bulgaria

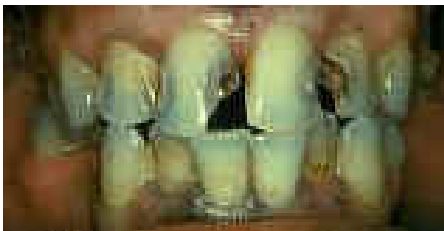
24 June 2004



“Smoking blamed for tooth loss in adults”

The Daily Telegraph

24 June 2004



“Don’t blame bad teeth on childhood”

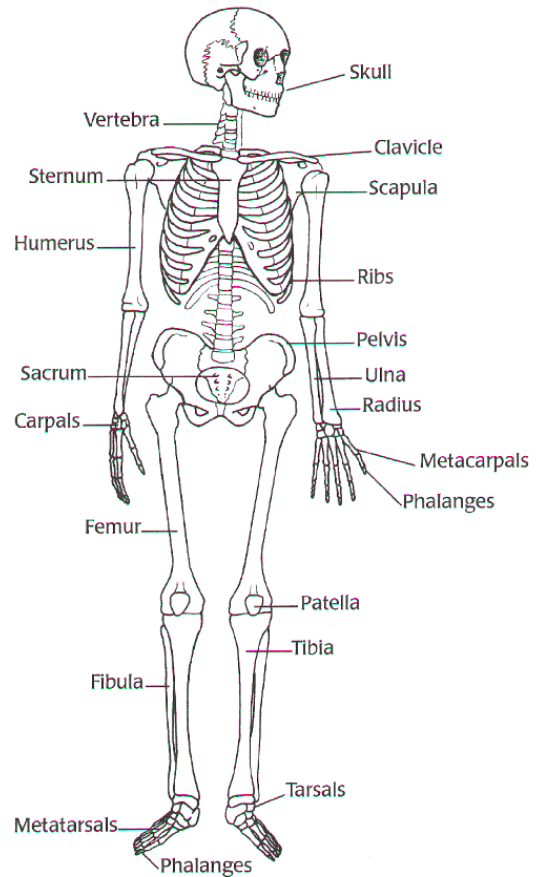
METRO

24 June 2004

Bone Health

Many of you had bone scans at the Freeman Hospital as part of the 50-year follow-up. Using this information, we found that birth weight was linked to the size of your bones, but not to how healthy they are. We also showed that adult lifestyle factors, such as smoking, diet and physical activity are the main influences on bone health in middle age.

We also found that bone measurements differ between men and women in terms of bone size and bone angles, but they did not differ in terms of bone mineral content, suggesting that the higher risk of fractures in women than in men could be due to the size and angle of bones. We’re all aware of osteoporosis and the effects it can have on our lives, especially women’s, so these are important findings.



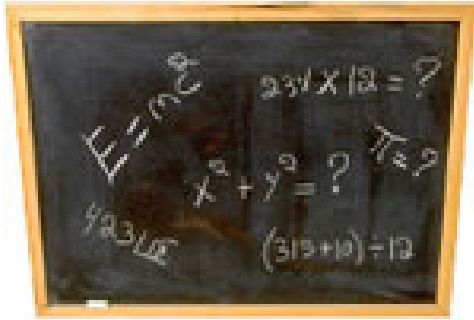
Diabetes

Diabetes is increasingly common. It occurs when the insulin, produced by the pancreas to control the amount of glucose in blood, doesn’t do its job properly. When this happens it is managed by monitoring sugar intake in the diet or by insulin injections. Our results suggest that it’s adult lifestyle that we should be most concerned about for diabetes.

Although most of our work is looking at your health, we have also looked at whether there is an association between your birth weights and whether your parents suffered diabetes. In contrast to other studies, we found no evidence of such a relationship, although the number of parents of red spots who you said had had diabetes was quite small.

School Days

We recently began looking again at the results of your 11-plus examinations as research elsewhere has suggested these scores may be linked to factors later in life. Using the extensive data we have on your childhood experiences, we were able to show that childhood growth is strongly associated with the 11-plus scores. We plan to now look further at the relationship between 11-plus scores and a number of health and lifestyle factors in later life.



WHAT WE ARE DOING NOW

Breast tissue density

We have just begun looking at possible factors throughout a woman's life that may affect breast tissue density, which is used as an indicator of how likely a woman is to develop breast cancer. We only need to look at the films from screens you've already had, so all the women who took part in the last follow-up should have received a new questionnaire from us asking for their permission to use them. Less than a week after sending them out, almost a third of them had been completed and returned, which is an incredible response. This part of the study was reported in the Evening Chronicle (the reporter being a Red Spot's son!) with the headline "Red Spots to the Rescue" and BBC Look North who made a point of detailing how important the study has always been. For those of you that have responded - thank you! (For those who haven't, please do your best to return them; we still need as many responses as possible). If you've lost the questionnaire, let us know and we'll send a new one. We are busy going through the detailed information already received and will hopefully be able to tell you what we find next year. In case the men are feeling left out here, we want to look at testosterone in our next follow-up.



WHAT NEXT?

As you can see, we are still busy looking at all the information we have gathered on you so far.

The study continues to make a huge contribution to understanding what influences our health throughout life. Whenever we meet colleagues from other Universities, both in the UK and abroad, they have a very good opinion of this study and of you, the study members.

We hope that, with your help, we can continue making such a contribution and keep the study at the forefront of this area of medical research.

We are busy finalising our plans for another full follow-up to take place when you are around 60 years of age. Much of what we want to do in the next follow-up builds on what we have been previously investigating. So, as last time, we'd like to weigh you, measure you, test your blood for things such as cholesterol and insulin levels, measure your blood pressure and lung function, count your teeth and use ultrasound to look at your arteries. We'd also like to scan your bones to measure your bone mineral density. If this all sounds familiar, then yes, we did this last time as well. By doing it again we can see how things have changed over a ten year period, and the way in which changes in your lives, throughout life, may have influenced this.

We also want to do some new things as well, so some new areas of research, such as cognition, and hearing are proposed and we also have some new methods of looking in more detail at your blood, your bones and your teeth.

There will also be another questionnaire, but unlike last time we won't need to go back and ask what you were doing when you were 15, 25, etc. We will be including some new parts of the questionnaire though, as some of the health outcome data can be collected in that way rather than having to wait for the health check.

We haven't finalised exactly what we'll ask you to do, but this will all be explained well before we ask you to do anything for us.

The key thing is to include as many of you as possible, so we will be doing our best to make sure

that each and every one of you can contribute as much as you wish.

In the meantime, here are other ways you can help.

1. Our Steering Group meets a few times a year to discuss progress and the direction of the study. We currently have one study member on the Steering Group, so if anyone else would like to join, please let us know.
2. We have a Thousand Families Study website (www.ncl.ac.uk/plerg/Research/1000F/1000home.htm) which is still under development. We would be delighted to hear your thoughts about the website and in particular things that you, as study members, would like to see on it.
3. We are occasionally contacted by television, radio and most often newspapers about this study. They often ask if they can speak to and take pictures of a study member to add their own experiences to what we're saying. We'd like to build up a list of study members who are willing to speak to the media, so if this interests you, then please let us know.
4. Similarly, we'd like to know which of you might be willing to write something in a future newsletter, as Jean did for this one. Again, if you would like to go on our list of people we can call on, please let us know.

SCHOOL FRIEND ALERT!!!!

Finally, a study member, Cynthia Graham, contacted us about getting in touch with other Red Spots who went to **Edgefield Primary School in Fawdon**. If anyone else went to Edgefield and would like to contact Cynthia, give us your details and we'll pass them on.

Cynthia's suggestion gave us an idea, a kind of **Red Spots Reunited**. If any of you are interested in getting back in touch with old friends who are also Red Spots, then please tell us and say which details you'd be happy about sending to other study members (or if you'd like contact to be made through us). As well as your name, things like where you lived, the school you went to or people you'd like to contact would be useful.

HOW TO CONTACT US

We hope to contact as many Red Spots as possible with this newsletter, but it is inevitable that we no longer have contact details for everyone. We would like to thank those of you who have been in contact over the past year. We would be grateful if you could check that any other Red Spots that you know have received this newsletter, or have notified us of any change in their details. If not, please do

encourage them to let us know. It is particularly important with the next full follow-up of you all planned for 2007 that we trace as many of the study members that we no longer have the right address for.

Our contact details are as follows:

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We look forward to hearing from you.

PUBLICATIONS

Here are details of all papers published or accepted for publication by scientific journals since the last newsletter. If you would like copies of any of these papers, please let us know.

1) Adams J, Pearce MS, White M, et al (in press). No consistent association between birth weight and parental risk of diabetes and cardiovascular disease. *Diabetic Medicine*

2) Birrell FN, Pearce MS, Francis RM, et al (in press). Self report overestimates true height loss: Implications for cross-sectional studies and the clinic. *Clinical Rheumatology*

3) Pearce MS, Birrell FN, Francis RM, et al (2005). A lifecourse study of bone health at age 50 years: the Newcastle Thousand Families Cohort Study. *Journal of Epidemiology and Community Health* 59: 475-80.

4) Pearce MS, Deary IJ, Young AH, et al. (in press) Growth in early life and childhood IQ at age 11 years: The Newcastle Thousand Families Study. *International Journal of Epidemiology*

5) Pearce MS, Hayes L. (in press) Self-reported smoking status and exhaled carbon monoxide: Results from two population based epidemiological studies in the North of England. *Chest*

6) Pearce MS, Parker L (2005). Childhood growth influences cognition in the Thousand Families Study, but not income at age 50. *Archives of Disease in Childhood Online*

7) Pearce MS, Steele JG, Campbell DI, et al (2005). Tooth loss and helicobacter pylori infection: The Newcastle Thousand Families cohort at age 49-51. *Helicobacter* 10:90-4

8) Pearce MS, Steele JG, Mason J, et al (2004). Do circumstances in early life contribute to tooth retention in middle age? *Journal of Dental Research* 83:562-6

9) Tiffin PA, Pearce MS, Parker L. (In press) Social mobility over the lifecourse and self-reported mental health at age 50: Prospective cohort study. *Journal of Epidemiology and Community Health*.

10) Tuck SP, Pearce MS, Rawlings D, et al (in press). Differences in bone mineral density in men and women: The Newcastle Thousand Families study at fifty years old. *British Journal of Radiology*