



The Cambridge Baby Growth Study Newsletter



Families, staff and representatives of Mothercare celebrate the achievements of the study to date.



Mothercare: making a difference to the lives of children and families in Cambridgeshire

On Saturday 13th March, families that have participated in the Cambridge Baby Growth Study (CBGS) joined to celebrate achievements to date at the Weston Centre, Addenbrooke's Hospital in a morning of fun and laughter. Children were entertained by a magician and balloon modeller, and received goody bags courtesy of Mothercare representatives: a big thank you to Sue Shaw, Penny Airjoub and Dan Leuty!

Well over 2000 families have now given generously of their time and support to the Study that aims to establish links between environmental chemicals and early childhood development. In total, families have made over 7000 visits to the Addenbrooke's Hospital, Cambridge and The Princess of Wales Hospital, Ely for detailed measurements. A whopping number of 6500 biological samples have been collected and 2700 questionnaires have been completed, all of which require analysis.

Results to date are yielding valuable and unique information. The Study has shown that the condition of undescended testes has increased more than 3-fold in this country since the 1950s. A further study to perform measurements in boys who come to Addenbrooke's Hospital for surgery to correct an undescended testis is due to commence soon. About 100 such operations take place each year and these new measurements will be compared with the information already gained from the Study.

Medical staff have also been gathering data from blood spot samples to establish markers that reflect the chemicals that infants and children are exposed to.

This means the team is focussing on the right chemicals to measure (there are over 80,000) in the samples gathered. These blood spot specimens have been a great success; easy to collect and easy to store. State of the art machines measure several chemicals in tiny blood samples, just like the scientists now do with minute amounts of DNA collected from the scenes of crime.

Much of this has been made possible through the support of the Mothercare Group Foundation, whose generosity has enabled the nursing resource for the Study over the last 18 months. We were therefore delighted when representatives of Mothercare were able to join us for a coffee morning to meet participants and hear first hand more about how the study is benefiting children and families in Cambridgeshire.

There are lots of other things happening as a result of this wonderful resource. Far more is being learnt about how babies grow in early life and what is healthy nutrition and weight gain. We even now know how to predict the happy, smiley baby and the cranky, whiney baby. Pity we can't do that for teenagers and adults! We are proud to tell Mothercare that their initial investment has been well spent and their support is making a difference!

The study has also generated a lot of interest amongst colleagues in Cambridge, where there is a wealth of research talent. We will be approaching you about two new studies quite soon for which we would like your help in completing a couple of simple questionnaires.

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One is on finding out what makes a boy behave like a boy, and a girl like a girl. Don't we all want to know the answer to that question?! The second will analyse factors that may indicate if a child has behavioural characteristics similar to what is now called, autism spectrum disorder. The world-renowned Autism Research Centre, based in Cambridge University and directed by Professor Simon Baron-Cohen, has shown that the level of male hormones before birth is linked with some of these characteristics. It is important to emphasise that the identification of these characteristics does not mean a child has a diagnosis of autism. The questionnaire is sensitive enough to identify factors in children as young as two years of age.

Whilst the CBGS is yielding results, we are hopeful that through the continued generosity of our supporters we can go on to complete the first phase of the Study and perhaps secure extension funding to keep tabs on your children for longer, through the provision of nursing support. From the feedback we have been getting, that would seem a popular idea. To this end, a detailed report is being submitted to Mothercare Group Foundation, whom we hope to persuade of the value of their investment to the benefit of children and families everywhere. Thank you all for taking part, and thank you to Mothercare Group Foundation for their vision in investing in this important area of research!

Professor Ieuan Hughes, Director of the CBGS

UPDATE ON THE STEP TEST STUDY

You may remember us telling you about another research study that has been running alongside the Cambridge Baby Growth Study over the last few months. The Step Test Study aims to test a new fitness measure for use within large populations and in particular, children.



Thanks to our wonderful volunteers we have now nearly completed this research with **100** children aged between 9 and 18 years. No mean feat, as this test involved two and half hours of various activities and exercises including a rest test, walk test, step test and running at top speed on a treadmill!

The children who took part in this study also wore 4 activity monitors at home so that we could measure their movement and physical activity during normal day-to-day life.

A huge "Thank You" to everybody who got involved!

We know that many mothers who decide to formula-feed their babies would like to have more information and support.



To meet this need we have developed a programme to help mothers feed the correct amounts of formula so that babies have a healthy pattern of growth. By healthy growth we mean not too fast, which makes babies more likely to become overweight, and not too slow.

In 2004, new international guidelines were published on the amount of milk that babies should be fed. These amounts were lower than the previous guidelines of 1985, on which current instructions on formula-milk tins/packets are based. We want to find out how much help and support mothers need to follow the new guidelines, hence we will be comparing two approaches.

Mothers who start formula-feeds before their babies are 8 weeks old will be invited to take part in the Baby Milk Study and will be put into one of two groups. One group will be given general advice about formula feeding and weaning. The other group will be given help and support to follow the new guidelines for formula feeding. We will then compare the growth of babies in the two groups and also try to understand how mothers make feeding decisions. We hope to start the study later this year.

If you would like any more information about the study, please call us on 0800 783 4611 or email us at babymilkstudy@mrc-epid.cam.ac.uk.

Dr Raj Lakshman



Safely Secured!
Joshua Coe, participant of the Cambridge Baby Growth Study, was born on Saturday 29th August 2009, weighing 2.66kg (5lbs 14oz)

Please remember to inform us if your contact details have altered. **SEND US AN EMAIL** if you would like to receive the next newsletter electronically.

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Thank you to all those who are taking part or have completed the Study!