

G1 biological sample collection participant information sheets and consent forms pre HT Act

Please note

- 'The consent requirements of the HT Act are not retrospective. This means that legally it is not necessary to seek consent under the HT Act to store or use an 'existing holding' for a scheduled purpose. An existing holding is material from the living or deceased that was already held at the time the HT Act came into force on 1 September 2006.'¹ The samples outlined in this document are classified as existing holdings and are therefore exempt from the HT Act consent provisions.
- Other versions of the documentation provided may have been used during sample collection
- The request for donation of specific sample types may have changed throughout the course of the collection timepoint

¹paragraph 56 of the HTA Code of Practice and Standards, [Code E: Research](#)

Table of samples collected for G1 pre HT Act and their corresponding consent form and participant information sheet

cohort	collection	sample collection dates	sample type	non HTA relevant material	HTA relevant material existing holdings	HTA relevant material post HTAct	consent requested from G1-participant G0-parent/guardian	copy of PIS provided	copy of consent form provided
G1/G0 mother	Birth	1991-01 to 1993-01	blood derivatives, placenta, cord, DNA	Y	Y		G0	1. Joining in 'Children of the Nineties' (pg. 1)	1. Consent form -Children of the Nineties (pg. 3)
G1	6 to 18 months	1993-11	hair, nails	Y			G0	1. Newsletter Summer 1993 (pg. 4) 2. Hair and Nail letter (pg. 10)	1. Implied Consent (pg. 12)
G1	Children in focus 18 months	1994	blood derivatives	Y			G0	1. Newsletter for Children in Focus February 1994 (pg. 13)	1. Children in Focus Consent (pg. 17)
G1	Children in focus 31 months	1995-02 to 1995-07	blood derivatives, DNA	Y			G0	1. Newsletter for Children in Focus at 2 1/2 years (pg. 19)	1. Children in Focus Consent (pg. 17)
G1	3 years	1993-11 to 1996-01	hair, nails	Y			G0	not submitted	1. Implied Consent (pg. 12)
G1	Children in focus 43 months	1996-01 to 1996-07	whole blood, blood derivatives, DNA	Y	Y		G0	1. Newsletter for Children in Focus at 3 1/2 years (pg.23)	1. Children in Focus Consent (pg. 17)
G1	4 years	1994-12 to 1997-01	hair, nails	Y			G0	not submitted	1. Implied Consent (pg. 12)
G1	Children in focus 61 months	1997-07 to 1998-03	whole blood, blood derivatives, DNA	Y	Y		G0	1. Newsletter for Children in Focus at 5 years (pg. 27)	1. Children in Focus Consent (pg. 17)
G1	Children	1997-01 to 2002-06	teeth		Y		G0	1. Newsletter Spring 1996 (pg. 31) 2. Tooth letter (pg. 32)	1. Implied Consent (pg. 12)
G1	Focus at age 7	1998-09 to 2001-06	whole blood, blood derivatives, DNA	Y	Y		G0 and assent from G1	1. What happens at focus at 7? (pg. 34)	1. Focus at 7 Blood Samples (pg. 38)
G1	Before Breakfast Study	2000-07 to 2001-01	blood derivatives, urine	Y	Y		G0 and assent from G1	1. Before Breakfast Study (pg. 39)	1. Before Breakfast Study (pg. 41)
G1	Focus at age 9	2001-01 to 2003-01	whole blood, blood derivatives, cell line, DNA	Y	Y		G0	1. What happens at focus @9? (pg. 42) 2. DNA information, child (pg. 46) 3. Genes, DNA, What are they? (pg. 47)	1. Focus@9 Permission to use blood samples (pg. 49)
G1	Focus at age 10	2002-04 to 2003-10	urine, mouthswab		Y		G0 and assent from G1	1. It's a Fact, Focus 10+ (pg. 50) 2. Focus 10+ (pg. 53)	1. Focus 10+ Urine (pg. 52) 2. Focus 10+ Saliva (pg. 54)

cohort	collection	sample collection dates	sample type	non HTA relevant material	HTA relevant material existing holdings	HTA relevant material post HTAct	consent requested from G1-participant G0-parent/guardian	copy of PIS provided	copy of consent form provided
G1	Focus at age 11	2003-01 to 2005-01	whole blood, blood derivatives, mouthswab, cell line, DNA	Y	Y		G0 and assent from G1	1. Focus 11+ (pg. 55) 2. DNA information, child (pg. 46) 3. Genes, DNA, What are they? (pg. 47)	1. Focus 11+ Permission to use blood samples (pg. 58) 2. Focus 11+ Saliva (pg. 59) 3. Focus 11+ Permission to use blood sample for cell lines (pg. 60)
G1	Teen focus 1	2004-02 to 2005-11	saliva		Y		G0 and assent from G1	1. TeenFocus1 (pg. 61)	1. TeenFocus 1 Saliva (pg. 62)
G1	Teen focus 2 *	2005-03 to 2006-09	whole blood, blood derivatives, cell line, DNA	Y	Y	Y	G1 and G0	1. We're changing the world (pg. 63)	1. TeenFocus2 Blood consent Child (pg. 67) 2. TeenFocus2 Cell Line Consent (pg. 68)
G1	Date study *	2005-05 to 2007-06	urine		Y	Y	G1 and G0	1. Date Study Information Sheet (pg. 69)	1. Date Study (pg. 71)

NB: Page numbers in table are those labelled as 'G1 participant sample documentation pre HTAct page' in document. * The collection includes samples donated pre and post HT Act.

JOINING IN 'CHILDREN OF THE NINETIES'

QUESTIONS AND ANSWERS

What will I have to do?

Nothing unless you want to. As a mother you have the right to say 'no' at any point. You can decide to do some things but not others. Of course, we hope you will want to do every-thing as the more mothers who join in the better.

How can I help?

We will be sending you a number of questionnaires to fill in at various times. These will ask about you and your feelings, your home and how you live, your likes and dislikes. We hope you will enjoy filling them in.

What about my partner?

If you are living with a husband or partner, we would very much like to include them in the research. Partners can be an important influence on the health and development of a child. If you agree we will give you a questionnaire to pass on to him. His answers will, like yours, be confidential and he will be asked to return his questionnaire directly to us. The decision to include your partner in the study, however, will be yours.

How do you measure health?

We will know how your pregnancy progresses from the hospital records, and details of your baby and how he or she develops from the child health records. These will not give us enough information on you and your baby though, and we will be sending you questionnaires asking for details of how you are feeling and any problems you may have with the baby.

Does the study involve anything else?

We are not conscious of many of the things that are happening around us. We won't be aware, for example, of the amount of lead we are breathing in from car exhausts or the magnetic fields that result from electrical equipment.

Researchers can work out some of these things using chemical tests on blood and urine samples. In order to do this we will be keeping some of the blood and urine that is routinely taken from you during your pregnancy. We will keep the placenta (the afterbirth) once the baby is born. We may also ask for a lock of your hair. With the blood we will be able to find out whether you have an allergy, and whether your genes affect the health of your baby.

We won't do any of these tasks unless you give us your permission to do so.

Some of you will be asked if you would like to take part in special studies, (with additional measurements made in your home).

This will only be done if you are happy about it.

What if I don't want to fill in questionnaires?

If for any reason you do not wish to fill in the questionnaires yourself, you might prefer to be visited by one of our Children of the Nineties assistants. They can ask you the questions and fill in the form for you while you are busy with the baby or doing housework or just putting your feet up.

What if I miscarry?

Please let us know as soon as you can. We do not want to upset you by sending more questionnaires about your pregnancy, but we would like to ask you some questions about how you are.

What about privacy and confidentiality?

This is very important. The forms will only have a number on. A very complicated set of procedures will ensure that no one will be able to link the information you give us with your name. If you want to know more about this, please let us know, and we will send you an information sheet.

How long will the study go on?

It is starting during pregnancy. For some parents it will stop when the baby is born and for others it will continue until your child is at school.

A lot of the Children of the Nineties study will be interesting and fun. We hope you will want to take part. There will be newsletters letting you know the results of the study, and birthday cards for your child.

What happens next?

Please send back the enclosed card, and then we will send you a questionnaire in a few days time. Other questionnaires will follow in the next few months.

Further information

If you want to discuss any details please ring the Children of the Nineties hotline (Bristol 256260) during office hours, or write to the address below.

Dr. Jean Golding, Children of the Nineties - ALSPAC, Institute of Child Health, 24 Tyndall Avenue, Bristol. BS8 1BR.

Telephone: Children of the Nineties hotline - (Bristol) 256260.



**The Avon Longitudinal Study of Pregnancy & Childhood
(ALSPAC)**



Children of the Nineties

24 Tyndall Avenue
Bristol BS8 1TQ

Tel: Hotline (0117) 928 5007

Direct: (0117) 928 ____

Fax: (0117) 928 5010

Ref: (3)D:\usr\jean\consent.fm1

Consent Form - Children of the Nineties

I have now considered the proposal that various samples of blood and urine from me, and the placenta, may be kept by the Children of the Nineties project and used for research purposes.

I understand that the results of all analyses will be kept as highly confidential, that the samples will be stored with only a number on them, and that there will be no way of identifying either me or my child from these samples.

I confirm that I will be happy for these samples, including the baby's placenta, to be stored and used for research purposes.

I also understand that if I should change my mind at any point will be allowed to do so

Signed:

Date: 19

Name in full

Your date of birth: 19...

If you do not wish some or all of these samples to be used for research, please say so below and sign your name:



Newsletter

SUMMER 1993

CHILDREN IN FOCUS

You may think that with all the questionnaires you fill in, and the blood and urine samples and placentas, we have enough information to answer every conceivable question. Almost true, but for some studies it is necessary actually to meet, measure, and test some children at regular intervals to find out the answers.

For this reason we have picked out a thousand babies at random, and invited their mothers to bring them in to the clinic at 4 months and, if they are willing, again at 8, 12 and 18 months. At 4 months we measure growth accurately, look at vision and at the way the babies recognise pictures. At 8 months our staff again measure growth, and look at vision. They also look at the way the eardrum moves and take a small blood sample if the mother is happy with this. The mother is also asked to fill in a dietary diary of everything the baby has eaten and drunk, including medicines, over 3 days.

The feedback from parents about the clinics has been very positive, and most have enjoyed the experience and are willing to return. For our staff it has been a delight actually to meet mothers and babies instead of just dealing with names, numbers and piles of questionnaires.

One benefit of this part of our study will be to help the health service planners decide whether health visitors and GPs should examine all babies in different ways than they do at present. For example, should they be looking for anaemia or glue ear in the first year of life?



4 month old baby having his arm circumference measured

Our 1000th Child In Focus

(Left) baby Ross and his mother Sue Collins at the 4 month clinic. Ross has two big sisters, Michelle, 9, and Danielle, 7, who thoroughly enjoy their baby brother.

Sue says the age gap has allowed her more time and energy for him too. She feels that the study is very worthwhile and she enjoyed the tests at the clinic.



SHALL WE HAVE A PARTY?

One mother suggested how nice it would be to put on a party for parents who have taken part in Children of the Nineties. She wanted to meet Professor Golding and other mothers and babies to share experiences. What a lovely idea! The only problem is that there are more than 14,000 mothers, and nearly as many fathers taking part, plus babies and other children. We were somewhat overawed by the idea of a party on that scale. Any ideas?

A STUDY IN FRIENDSHIP

Having been an interviewer for Children of the Nineties in Weston-Super-Mare, for the last two years, I feel I must know every baby born in town.

I make very slow progress around Sainsbury's on a Friday night, delighted to meet all the mums to be, at varying stages, not forgetting the new babies being pushed by very proud dads, while mum struggles with the trolley.

I have met delightful ladies in my territory, always willing to put the kettle on first, and to search out questionnaires while I sit sipping tea. I have made some very firm friendships, and have grown to love and care a lot about mums, babies, dogs and toddlers alike. They make me feel like one of the family, and although I have always expected to be hit over the head with one of our longer questionnaires, I have always been made most welcome.

When mums have had problems, I have tried to help, and probably worried all night for them. Fortunately these are very rare, but I'd like to say "Julie, wishing you the very best of luck, the worst is over"; "Sharon, well done, and thank you for all of your time"; "Yvonne, I think you are one of the best mothers ever". The proudest moment though for me, is having been asked to be god-mother to one of our study babies, Alexander Monk. He was born on 19th October, 1991, a mid-way study baby. His mother Susan was terrific. Alexander was child number three for Mrs Monk, who is a professional singer. She still managed to breast feed throughout and managed to find time for all of the questionnaires, as well as the 'Home Environment Study' and 'Health Diaries'. It's with thanks to all mums like this that the study has been so successful.

Being an interviewer for the study, has been the most rewarding experience for me, as well as the most hilarious. Many memories will stay with me forever. I arrived at a house one beautiful warm sunny day, to find mum, dad and baby sitting on their front lawn. As I emerged from my hot car, I thought how peaceful they looked. "Hello, lovely



Caroline (left) with Susan Monk and baby Alexander.

day; I'm from Children of the Nineties", I said. They stared at me in disbelief, and told me they were locked out, and that the baby needed feeding. Was I able to help? Dad and myself toured the estate, and managed to find a very old rickety ladder, which we then transported to the back garden, over fences. Fortunately as I clung to the ladder, dad managed to squeeze through a back bedroom window. Once the front door was open, Mum sprinted in and quickly found her completed questionnaire, and apologised for the delay.

This has always impressed me, that you, our mothers have been so very willing to help. From our first meetings at the scan clinics, and throughout the pregnancy and birth, mums have been so keen to make this a better world for their babies to grow up in.

Caroline Saunders.

Weston-Super-Mare.

(written November '92).

CALLING FULL-TIME FATHERS

At the Children in Focus clinics we have met several of you who are caring for your children full-time, maybe while your partners are working. We have enjoyed chatting with you and hearing about your experiences. No doubt there are many more of you who are full-time fathers whom we have not met.

We would love to hear from you. Do write to the Editor. Perhaps we could have your ideas for an article in the next newsletter. You might also tell us if ways in which we have phrased letters or questions have made them unfriendly or difficult for you to answer as a man in charge of child care. Let us know. [Mothers who have suggestions to make are also welcome to write of course.]

TWINS?

Some women have twins diagnosed in pregnancy, but find later that there is only one baby developing. We are interested in the phenomenon of the "disappearing twin". If you had that experience, we would like to hear from you. Phone our hotline(0272) 256260 or write to;

The Editor

Children of the Nineties

Institute of Child Health

24 Tyndall Avenue

BRISTOL

BS8 1BR

KATE'S STORY

It's hard to believe, as I sit here hoping I can grab a short while to start, if not finish this article, that this time 2 weeks ago (written April 1992) I was in the Delivery Suite at Southmead Hospital with just an hour to go before our 2nd son was born, having that same week attained the 'ripe old age' of 39 years. The baby was actually due on my birthday. Even more amazing is watching our 16 month old son, Adam, exploring out in the garden and to know that each day is another day of discovery for both him and us.

Deciding to have a family 'later in life' was partly due to circumstances but choice did also pay a major part inasmuch as I was never someone who always knew that they wanted children and it was only when I married my husband 4 1/2 years ago and it was evident that having and being part of a family was clearly so important to him that it made me really start thinking of having a family of our own. At that stage we were already in our 30s and, although I didn't feel that age was a major factor, clearly there were age related issues involved, such as there being a limited number of child bearing years left and not knowing until you try whether you will actually be successful in having a family. One of my biggest concerns was that of losing my independence and also having to consider giving up a job I very much enjoyed and which I had been accustomed to for a longer period than if I had had a family in my 20s. Having said that, I have been very lucky on both counts in that my husband, Martin, has gone out of his way to ensure that I do still have time to myself, and when Adam was 7 months old I was able to return to work part-time so in my view I was able to enjoy the best of both worlds!

I think it is fair to say that there are advantages and disadvantages at whatever age you decide to have a family. If anything, I feel quite proud and very fortunate to have been able to produce 2 healthy children at my age and have always quite revelled in the fact that people often say that I look younger than I actually am and are often quite surprised when I reveal my age. It took some while for me to work out that I was, in fact, the oldest in the 2 ante-natal, and one post-natal, groups I became involved in. This is something else I view as quite an achievement!

I must say that I have been particularly lucky with both pregnancies and managed to escape the more unpleasant symptoms like morning sickness and even that awful feeling of tiredness that a lot of people experience in the first few months, so clearly this is not age related. A lot of people I have come across have

had a much worse time despite the fact that they are a lot younger than me!

I have to say that I am not someone who looks too far into the future so I haven't thought too long and hard about what it will be like to be coping with teenagers when we are well into our 50s. As far as the here and now is concerned the only real disadvantage we have come across is that our parents are that much older and not in quite such good health, so that they cannot be so actively involved as friends who have younger parents who can have the grandchildren to stay, or at least take them out for the day. Having said

that we are fortunate in other ways in that we have quite a wide cross section of friends of all different ages, several of whom are in their 50s and 60s and although they have grandchildren of their own they have also become 'special' to Adam and do fulfil at least some of the grandparent role.

The only other directly age-related factor we were faced with was that following the A.F.P. test I was told I was in the higher risk group for Downs Syndrome and was offered an Amniocentesis which I declined on the basis that you had to have decided whether you would actually want a termination if an abnormality was

detected and as the baby was already fairly well developed at 18 weeks I did not feel I would want to proceed with a termination so did not pursue the test.

Clearly a lot depends on your own personal view on the subject, along with your own personality and being able to cope with the uncertainty that this knowledge provides, but fortunately I was able to adopt the attitude of hoping we were one of the 159 (my risk factor was 1 in 160) and we were extremely grateful that that turned out to be the case.

Certainly from my own personal experience I feel there is a lot to be said for having a family 'later in life'. Financially we are more secure and generally more settled in life and better placed to give more to our children not just materially but emotionally as well.

We are quite happy to be more 'home based' rather than wanting to do more of the 'exploring and discovering' that one often wants to do in one's 20s. Also I was not under any false illusions about parenthood being 'easy', in fact quite the opposite. I expected it to be really hard, which it is, but in a different way to how I imagined and I didn't realise how much joy and pleasure it can bring in return and the way it provides a totally different perspective and challenge in life! I feel myself to be extremely fortunate to have discovered and appreciated the pleasures of having good health myself, what I consider to be a reasonable amount of energy (considering my age!) and 2 healthy children (not to mention a wonderfully supportive husband), and I look forward to all the challenges I am sure they will bring!



BABIES' SLEEPING PATTERNS

At 6 months you are asked about your baby's sleeping patterns. Our preliminary analysis of the first 6 month questionnaires sheds light on sleeping behaviour at that age.

Whether a baby sleeps through the night or not is a subject of intense interest to you, the parents, (and also to us). The conflict between your needs and expectations and the baby's behaviour may drive you to seek help from your health visitor or G.P.

For some parents, knowing that the baby is well and that the sleep pattern can be considered as 'normal', or at least that it is shared by many babies of a similar age, may be sufficient help for them to be able to cope with the situation.

So what is the normal range of sleep patterns? The

hours the baby slept each night ranged from 1 to 15 with 12 being most common. For 16% of babies there was no regular sleeping pattern.

Only 16% never woke at night at 6 months. 50% woke occasionally, 9% woke most nights, 5% once every night and a further 17% woke more than once per night with the number of times ranging from 2 to 8.

What parents do when their baby wakes is shown below. The strategies which are most frequently used are presumably those which work most often for most babies. By 6 months more than half the babies (61%) were put to sleep in their own rooms, on their own, although almost 1 in seven was moved during the night. Twenty eight percent slept in their parents' bedroom.

When your baby wakes at night what do you do?

		Always	Usually	Sometimes	Never
a	feed him/her milk	16%	13%	23%	48%
b	give other drink (including water)	2%	5%	27%	66%
c	rock or cuddle	23%	16%	33%	28%
d	give him/her a dummy	16%	14%	10%	60%
e	bring him/her into your bed	8%	7%	34%	51%
f	change his/her nappy	7%	8%	49%	36%

POINTS FROM THE OFFICE

You may have been thinking that it was a long time since you heard from us. As you see we have not forgotten you. It's just that the gap between questionnaires widens as the baby grows. The sequence for the first two years is 4 weeks, 8 weeks, 6 months, 8, 15, 18, 21, 24 months.

With the wider gap between questionnaires, it becomes easier to lose you, so please don't forget to let us know if you move or change your phone number.

UPDATE

Dannielle, the little girl with Turner's Syndrome whose story was featured in the Spring '92 newsletter, is doing very well. At 18 months she began walking and now, almost 2, she runs everywhere. She's eating and drinking normally and starting to put sentences together. With the treatment she receives she is growing fast, and her mother Sarah is constantly finding longer clothes for her.

Sarah and another mother of a child with T.S. are setting up a support group in Avon. They can be contacted through our hotline, 0272 256260.

CAN WE HELP?

Having a young family means busy days and nights. If filling in one of our questionnaires is the last straw for you and keeps going to the bottom of the pile - do ask for help! We are very happy to come out and go through it with you. If you have several children - a job - a sick child, or alternatively if our questionnaires seem totally inappropriate for you or your child Please call us on Bristol 256260 and ask for Pam.

HAIR AND NAIL SAMPLES

Many trace elements like aluminium and mercury occur naturally in small quantities in our bodies. We would like to examine hair and nail samples of children in our study to see what their current levels are, and whether there are any problems connected with higher or lower levels.

Sometime soon we may ask you if you could send us some of your baby's nail clippings and a small sample of hair. Using these we will be able to estimate levels of trace elements in the body. This is done by vaporising the samples with a laser and measuring the energy emitted. Different trace elements give off energy at different characteristic frequencies and up to 20 different trace elements can be measured from one sample.

DEAR MUMS,

Yesterday, Today Tomorrow
Trends in Baby Care 1951-1991.

Some of you will be aware that a new aspect of the Children of the Nineties study has been started recently. I am a social historian who is trying to identify the way caring for babies has changed over the last four decades. Some of you have received invitations either to enrol in this part of the study yourselves or to invite others to join. The response so far has been terrific. Thank you all.

One lady has returned a questionnaire telling me of a collection of baby care magazines from the 1970s that she still has, but as the questionnaire is anonymous I can't write to her. I would be very interested to look through them, so if anyone knows who this lady is, could you ask her to contact me on the Hotline (Bristol 256260).

I am not sending out reminders for this questionnaire so if any of you still have one, or know someone who has, I would be grateful if it could be returned soon.

Once again thank you all for contacting grannies, aunts, friends and neighbours for me and of course

to those of you who are actually taking part yourselves. I hope to have results of this study available in time for our next newsletter.

Best wishes

Julie Parmenter.

Calling all Mother & Toddler Groups, & Support Groups.

Does your group have speakers?
Would you like to know more about how Children of the 90s works?
We'd love to come and talk to you about how the study is going and what we hope to find out.

Phone our Hotline (0272) 256260 and ask for Pam.

NEWS FROM



EUROPEAN LONGITUDINAL STUDY OF PREGNANCY AND CHILDHOOD

ALSPAC is part of the European Longitudinal Study of Pregnancy and Childhood. The countries involved ask the same core of questions, and add others which are specific to their situation or culture. The Isle of Man, Russia, Czech Republic, Spain and Greece are already participating, Ukraine and Slovakia are starting and Sweden, Croatia, Belgium, Estonia are in the planning stage.

The Ukraine is running the survey in 4 different towns across the country - Kiev, Mariupol, Ivano-Frankisk and Dneprozherzhinsk. A successful pilot study was completed in August '92, and the full survey began on 1st May this year.

There is a lot of interest and enthusiasm from local health workers and researchers, which promises well for the success of the study in the Ukraine.

Life for Ukrainian women is quite different from life in England. Accommodation is overcrowded and often a couple has to live with one or other set of parents. The arrival of a child is an extra strain on their resources, and there is little chance for intimate relaxation.

Contraception is hard to come by. About 2% use the pill, 5% have IUDs, and the rest generally have to resort to abortion. Many unwanted pregnancies arise because of poor quality condoms. Every year, though there are about 1.6 million pregnancies, there are 1 million abortions and only 600 thousand live births

Those babies who are born face a general shortage of food and vitamins, which of course affected their mothers as well. Obstetric complications are said to have risen 3-fold over the last ten years, while over the same period the birth rate has dropped from 70 to 51 per thousand. Congenital defect rates are reported to have almost doubled in the last 5 years, and diphtheria rates were ten times higher in 1991 (1100 cases) than in 1990.

All told, it is not a good situation, but the local research workers are very keen to have the chance to document accurately exactly what is happening to mothers and children in their own country, and also to be able to compare with the experiences in other countries, from both Eastern and Western Europe.

YOUR COMMENTS AND QUESTIONS

Many of you write messages to us on the back of the questionnaires. Most are friendly, and many seek and deserve a reply. Our problem is that unless they have your name or signature, we cannot discover your name and reply to you because of the strict confidentiality rules. Below are some of the issues raised, and our replies.

Children in Focus

One mother wrote to us whose friend's baby had been invited to the Children in Focus clinics at 4 and 8 months. The baby had a lazy eye which the ophthalmologist had identified. Our correspondent felt that her child was missing out, not having been invited to Children in Focus.

The purpose of Children in Focus is research (see article p.1). We are looking at the range of measurements and patterns of developments in a population. The only feedback normally given to parents concerns the weight, length, head and arm circumference of the baby, and whether or not the baby appears to have a squint or long-sightedness. In the case of the eyes, babies with apparent problems will be offered follow-up at their local clinic. What is not at all clear is whether this very early screening, with early treatment where it appears to be justified, actually benefits the children's sight in the long run, and that is what this particular piece of research is about. Babies' development is checked at regular intervals by health visitors, who will identify babies whose development is slow in some respect, or who have a problem with vision or hearing for example. The Children in Focus study is not interfering with that system in any way. Any worries parents may have can be discussed with the Health Visitor or of course with the G.P.

Honestly....?

One mother raised the question of truthfulness. She felt that friends may have answered some questions by giving what they considered the 'right' answer, rather than an honest one. As she pointed out, answers are worse than useless if they are not true, and make the survey less accurate which would be a great pity, since so far it seems excellent. It is much better to leave a question blank than to invent a response.

It is worth repeating here that we do not know what you as a named person have said. Those who are dealing with the answers in the questionnaires have no way of knowing who filled them in, so please be completely honest - or leave out the question.

Second babies

Do you need to fill in questionnaires for a second study baby? Yes please, if you can, if it is a Children of the Nineties baby. If it's too much, just fill those in for the first child and ask us to stop the questionnaires for the second. (For the antenatal questionnaires we were able to send shorter ones for the second pregnancy as many questions referred to background information which would not have changed.)

I can't remember!

Some of you have said how difficult it is to remember about foods, medicines, accidents etc., which your baby has had since 6 months, when you are answering the 15 month questionnaires. We sympathise. It is difficult. If your baby is already approaching 15 months, do the best you can, and if you are really unsure, say so. If your baby is younger, you might like to keep a record of illnesses, medicines, accidents and new foods. If you can do so it might be a useful record for your own use, and it would certainly help with the 15 month and 2 year questionnaires.

Partners?

We have received two complaints, (and there may be more of you who feel the same way,) about our use of the word 'partner' throughout the questionnaires. We are sorry for the offence caused, and want to explain why we use the word.

We use 'partner' because we want answers from the person who is the day-to-day 'father' of the child on the study. This is likely to be the mother's husband and child's biological father. However, if we used the word 'father' we would appear to exclude stepfathers, and if we used 'husband' we would exclude those who are not formally married.

Our use of 'partner' is entirely practical. We do not mean to imply approval or disapproval. We simply want a single word for the person who is supporting the child's mother in caring for the child.

Warnings

One parent felt we should warn people when they write in questionnaires that they are doing something which we know is bad for the child. One reason we are doing this research is in order to find out for sure what is bad for children, rather than what people may think is bad. To do this we need to know what people are actually doing. Secondly we could not respond to a questionnaire, even if we thought something 'wrong' was being done, because of confidentiality, (see 1st paragraph.)

The Avon Longitudinal Study of Pregnancy and Childhood (ALSPAC)



11 APR 1994

Children of the Nineties
Institute of Child Health
University of Bristol
24 Tyndall Avenue
Bristol, BS2 8BJ
Tel: Hotline (0272) 256260

ref: hair.nai

8.3.1995
KT

Dear Mother,

Thank you again for all you are doing to help. This is enabling the study to continue to be the best ever.

There are just a few things we would like to ask you now:

1. We would like to put your study child's name in our files so that we can send birthday cards directly to him or her:

My study child's full name is

2. We are also anxious to bring our records up to date.

Is your name and address above correct? PLEASE WRITE ANY CHANGES BELOW.
Include any new telephone number.

.....
.....

TEL. NO.....

Thank you

HAIR	NAILS	
<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	CHILD
<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	MOTHER
<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	FATHER

NOW PLEASE TURN OVER →

Steering Committee:
Professor J. D. Baum, Professor G. M. Stirrat,
Professor M. Pembrey, Professor C. Peckham, Professor J. Golding,
Professor M. Rutter, Professor J. Berry, Dr. C. Pennock, Dr. J. I. Pollock.

AND NOW FOR SOMETHING COMPLETELY DIFFERENT

HAIR AND NAILS

In order to look at the ways in which the air we breathe, the water we drink and the food we eat may influence our health, we would like to have some hair and toe nails from you, your study child and your partner if you have one. We will be using these to look at levels of things like mercury and lead.

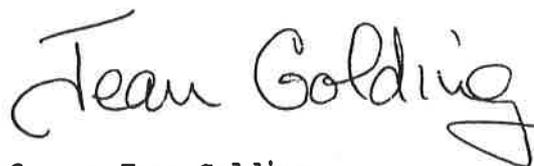
If you are happy to do this WE HAVE ENCLOSED 6 BAGS AND 6 LABELS. Two for YOU, two for your CHILD and two for your PARTNER.

1. Please peel off the labels and put one on each bag.
2. Hair should be cut from the back (nape) of the neck as close to the scalp as you can manage. We would like whatever you can give us, (the more the better) from each of you. PLEASE PUT THE SAMPLES IN THE APPROPRIATE LABELLED BAGS MARKED 'HAIR'.
3. Cut several toe nails and put them in the appropriate bags marked 'nails'.
4. Make sure the bags are sealed tightly and post back to us together with this piece of paper when completed.
5. Please answer the following questions for each of the persons for whom hair has been enclosed:

	Study child	Mother	Partner
a) Please list the types of shampoo (and conditioner) used in the past month
b) List anything else that has been used on the hair in the past 6 months (e.g. dye)

N.B. We are cutting costs by not sending a reminder - so please don't wait. Send this back as soon as you can. Many thanks for all your help.

Yours sincerely,



Professor Jean Golding

P.S. If this has come at around the same time as one of your regular questionnaires, we do apologise. This mailing is in fact going to everyone at roughly the same time.

IMPLIED CONSENT

The consent for the following collections was not formally documented

- hair and nails: 6 to 18 months
- hair and nails: 3 years
- hair and nails: 4 years
- teeth

However, as these samples were collected by the parents/guardians at home and posted to ALSPAC consent is implied.



Newsletter

FOR CHILDREN IN FOCUS

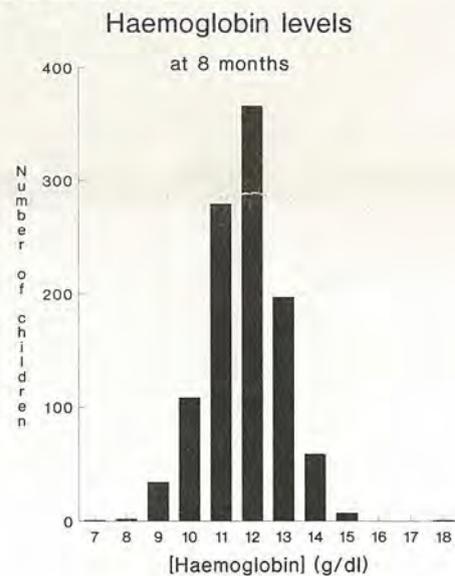
February 1994

A random sample of 1,200 Children of the Nineties are invited to the Children in Focus clinic. Measurements and observations that are made on these children as they grow and develop are of enormous value. They would be valuable on their own, but what makes them even more so is the wealth of other information we have about the children and their environment from your questionnaires. This not only gives a detailed picture of the Children in Focus, it also gives us insights in to the other 14,000 Children of the Nineties whom we do not have the opportunity to see.

Anaemia in Childhood

We are so grateful to all of you who have allowed us to take a sample of blood from your children. The first results of this are now becoming available. This is the first study that has ever been undertaken to look at children aged 8 months in this country. It helps to assess whether in fact the health services should be taking blood samples from all children to look for anaemia at this age.

As you can see from the figure, there was a wide range of haemoglobin values among the children in our study at 8 months. Only a very few were very low and those we have already contacted. What we want to go on to do is to discover how many children develop anaemia later in infancy and childhood. We will then relate this to mothers' haemoglobins and diets in pregnancy, and to the babies' haemoglobins at birth and their diet since. This should enable us to find out why anaemia develops in some children. It is very important therefore that we continue to take blood if we can from as many children as possible. This is why we would like



to take blood again next time we see your child, and I do hope we will be able to do so.

Our desire to have some blood from as many children as possible does not mean that we will pressurize you at all. It is your decision. What we are trying to do is emphasize how important it would be if you did allow us to take it.

Magic Cream

Because the 18 month clinic is longer than the previous ones we are planning to try using an anaesthetic cream to numb the skin before the blood sample is taken. It is covered with a dressing and needs to be put on at least an hour in advance. We need to see whether having

the cream on their heels bothers the children and whether or not it makes it easier to take blood.

We shall be offering the cream shortly for those who want to try it, but may be forced to stop using it if it proves too much of a distraction for the children.

News From The Dietary Diaries

The comprehensive way in which you all fill in your dietary diaries is seen as a great and impressive advantage for the Children in Focus study. A number of different research studies are interested in the way in which the diet fed to the infant affects the health of the child. We have interest not only from the Department of Health but also from a number of people who are interested in child growth. There really is very little evidence on what is a good healthy diet, and this study should produce some answers. Do keep up the good work. We have collected diaries from you when the child was 4 months of age, 8 months of age and we are now doing so at 18 months.

We thought you might like to know what happens once we have had your diary. The first thing we do is go through it, coding the actual items of food and drink given to the child, and then we key this information on to the computer

ready to analyse it. For the 4 month diary this was relatively simple, as there was a restricted number of things that most people gave their children. At 8 months, however, there is a huge range of different items given to them, and this can often take a long time to code. We need, for example, to find out what is in everything - so a new type of baby food will mean that we have to write to the manufacturers to find out what is in it, and then calculate the actual dietary components that the child eats. When it is your own cooking, we have to do our own estimates from what you have told us. The diaries at 18 months are even more complex - and we are very excited about them.

When linked to the other developmental measures we are making at Children in Focus, the results will be very important in advising mothers in the future what is a good diet for the young child.

Vision Screening

The eye tests are going very well and both Penny and myself are delighted with how well the children are doing. We are building up a much clearer picture of how well children can do different eye tests at different ages. We have also been able to spot a few problems early, like Danyele whom Penny found had a squint and a refractive error. He was referred by us to his local Eye clinic where he was given glasses. Danyele's mother asked us to say that not only have the glasses sorted out his squint but they have made "the world of



Penny testing Kirsty-Ann's vision at the 18 month clinic.



Leo (and teddy) being weighed at 18 months.

difference" because he takes much more notice of things now when out and about. This is what our part in the Children in Focus clinic is all about, so we are very pleased for Danyele and his family and we shall carry on checking all the children in the clinic.

Cathy Williams FRCOphth

THE BELL FAMILY

We are saying goodbye to Patrick Bell, whom many of you will remember as the person who made a video recording of you and your child while you were looking at a book together. This video recording has been obtained for 1200 children in the study. It is an extremely valuable way of illustrating how different children behave. Thank you so much all of you for helping and thank you particularly to Patrick for spending so much time on this.

Patrick is one of a family of six, all of whom are interested in children. Indeed, it was Clare his sister that many of you will have met first. Both she and Patrick were involved with showing the babies pictures on a screen at 4 months and recording



how long they looked at them. The particularly interesting thing about this is the way in which some children just refused to look at the pictures - and it is the characteristics of these children that are of most interest to Clare. Are these the children that will turn out to be hyperactive, stubborn, highly intelligent or just plain awkward? And what of the children who watched the pictures at length - will they turn out to be those who like looking at books, start speaking early or spend more time watching television? These studies will show just how much of their later behaviour might be predicted from as early as 4 months.

Your Comments At 12 Months

Of the 345 parents who made comments at the end of their visit to the 12 month clinic, 70% said it was fine, no problems, and a further 16% said they enjoyed the experience or that they found it interesting. Only two people said they did not enjoy the visit.

"No problems, wonderfully organised".

Eleven people said they had trouble parking. [We hope this will improve soon, Ed.] Twenty-two were critical of the book that they showed the baby, one commenting that the babies in it were all white. [Very good point.]

"Picture book wasn't very interesting. S... likes more pictures of animals".

There were fifteen appreciative comments about staff, their friendliness and good organisation, and another three about the tea and coffee!

"Lovely to be chosen to take part. You are all brilliant."

"Sofa difficult to get out of".

Ten people said they wanted feedback from the study. [We shall be reporting back to you in newsletters as soon as results are available and appear in the scientific press. We can only give individual feedback in specific areas, which are the eye tests, or where children are very anaemic, or, at 2 years, if their hearing is very poor and this has not been picked up before].

"This time was more interesting ... looking at the book was good".

How many of you came back?

94%!! of children seen at 8 months came back at 12 months. This is wonderful! The success of our research depends on seeing the same children regularly as they grow up.

Space News

The University of Bristol recently has purchased the Homeopathic Hospital from the National Health Service. The downside to this is that at the moment there is building work occurring, and this may be causing problems to people coming to the Children in Focus clinic.

The good news is that the University are going to adapt space specifically for Children in Focus that will

be ready for us to start using in the summer. This space will be directly facing the gardens at the bottom of the Homeopathic Hospital and should be an improvement on the areas that we are using now.

Car parking too should become easier as we will get more car parking spaces reserved for use by the Children in Focus parents.

Plans For The Future

There are a number of different measurements we would like to make in the future. When your child is two we will ask you to bring him/her back for a particular and very interesting type of hearing test, which involves looking at pictures and responding to sounds. We think your child will enjoy this - it is being developed by a famous hearing research group in Nottingham and is not the type of test that is done under the National Health Service. In this case we will let you know if we think the child has a serious hearing problem which has not previously been spotted.

Another possibility is the vigilance test - this is something we are investigating. It is a way of assessing how quickly your child reacts to different events. What we will do is have a computer screen, and your child will be asked to press a button when he sees something like a cat appear. This is probably not going to happen until the children are about 4 years of age.

Finger prints - this seems a very unlikely thing to study, but there has been some suggestion that the finger print pattern of the child's hand is related to the blood pressure. If this is true, then it would imply that something which happens very early in pregnancy, which is when the fingerprint is formed, is the key to understanding why some people are very prone to heart attacks when they are adults. We want to see whether there is any evidence for this.

What we would do is ask you to help us take finger



Leo watching the soldier while Veronica looks for glue ear.

prints from the child, so that we can quickly score them, and then we would give you back the finger prints as something you might like to keep. We shall not keep a copy. We do hope that you will think this is rather fun.

We will also want to take your child's blood pressure at some time. Again if found that it was very high we would tell you the results.

Unfortunately, there is only a limited amount of time that we can reasonably ask you to give us at the clinic, and before your child begins to get bored or upset.

What else should we be looking at? As I go round the world, telling distinguished people about the Children of the Nineties Study, they get especially excited by the Children in Focus component. There are a number of different ideas as to valuable pieces of information that could be collected on your children at this time to fit into the whole jigsaw of development - and we have taken the best advice in choosing the types of things that we ask of you. There might however be things that we have not thought of but that you think would be especially important.

What do you think for example of having a dentist look at your child's teeth? Would you think this is a terrible idea or would it be helpful? Dentists certainly do not know how early in a child's life they ought to start looking at teeth and feel that this would be an important and useful thing to do. We would like your views on this.

Professor Jean Golding



Sam (18 months) with Sophie at the play session.

Children in Focus Consent

Consent was documented for the Children in Focus clinics on the data collection form for each clinic sweep. This was signed by the parent/guardian against the blood sample section. An example of a data collection form is provided.



Newsletter

For Children in Focus at 2½ years

A random sample of 1,200 Children of the Nineties are invited to the Children in Focus clinic. Measurements and observations made on these children as they grow and develop are of enormous value. They would be valuable on their own, but what makes them even more so is the wealth of other information we have about the children and their environment from your questionnaires. This not only gives a detailed picture of the Children in Focus, it also gives us insights into the other 14,000 Children of the Nineties whom we do not have the opportunity to see.

What happens at the 2½ year clinic?

The way the blood sample is taken at this clinic is quite different from the previous ones and the children seem much happier about it. This is Zoe's experience.



1. Putting on the 'magic cream'



2. The cream comes off after an hour



3. We find a vein. Zoe watches Postman Pat



4. The needle goes in. Zoe doesn't notice

As you can see, with the right preparation and skilled staff with the right equipment, children show no fear and no pain. When we were asked to take blood from a vein at 2½ years we took the selection and training of staff to take blood very seriously. The result has reassured and delighted everyone involved with the clinic and children and parents have gone away happy.

So what happens? First we make a game of putting 'magic cream', which contains a local anaesthetic, on the arm. (Staff who have tried it and then had a blood sample taken, say that they didn't feel the needle at all.) When the cream has had time to work

we show the children what we are going to do using a volunteer - Teddy. The children give Teddy a cuddle and watch a video while the blood is being taken.



5. The sample is taken. "Mmm...that's interesting".



6. Now, which plaster? "The Flintstones please".



7. All finished. Well done Zoe, mum and the staff!

None of the children so far have made any sign that they felt anything unpleasant, most were relaxed even when they watched the sample being taken. Indeed they seemed surprised if we ask if it hurt.

If these children need to give blood, or to have injections, in the future, they will have this positive experience in mind to reassure them.

If you have any doubts or worries about the blood sample, do talk to the nurse at the clinic. There's also a short video of a child being prepared and giving the sample, which shows how it is done.

Why do we need the blood?

As well as looking for mild anaemia in children, we are finding the levels of lead in the blood. In spite of the move towards lead-free petrol and paint, there is still anxiety about the amount of lead that our

children are exposed to, and the effect it has on their development. Indeed, in the United States all children are screened for lead. Should we in Britain be doing the same? No one knows, but with the co-operation of you and your children, our study of a large normal population will give the answer.

The other questions we want to look into concern diet and its effect on our children. Are changes in prepared baby and toddler foods, and other processed foods, and in the way we feed our children, good for them? We are looking at various aspects of growth and development to answer this, but we also want to know about, for example, cholesterol and about allergic reactions to certain foods, and for these we need a blood sample.

Eyes

The vision study continues to go well and the children are now much easier to examine. We are pleasantly surprised at how well they can do the tests, which means we are gathering lots of information on normal visual development in children. Many childhood eye problems are first noticed by the parents and get referred to the hospital or clinic before we see the children at "Children in Focus". However, we have now picked up several children with either a squint or reduced vision, which hadn't been detected before. These children have been sent appointments for hospital or community clinics where they can be checked further and treated if necessary. This is exactly what we hoped to achieve, so we are very pleased and grateful that so many people keep attending the clinics. Thanks!



Danielle spots the ball in the stereotester

Ears

For the first time we are looking at the children's hearing as well as at any fluid in the middle ear. A voice from a speaker asks the children to point to one of the toys, and a machine records the quietest voice they can hear.

As in all the other sessions apart from 'Eyes' we cannot feed back any information about the results, but of course, if you are concerned about your child's hearing, or any other aspect of development, see your health visitor or GP.



"What's this George?"

Teeth

This time we have introduced a series of short and simple tooth observations designed to record aspects of dental development. The actual observation time is about **1 minute** and takes place once the child has settled on the parent's lap, resting back on to the adult's chest. The observations are spoken into a tape recorder. Each child receives a big sticker as a 'thank you' for taking part. It really is quick and easy, but if you would like to do something to help you could practice at home opening mouths 'as WIDE as a lion'.



Louise opening her mouth 'as wide as a lion'.

Daycare

Since 18 months we have been asking about any daycare arrangement you may have had for your Children in Focus child. Here are some simple figures from a first look at this information.

50% had some regular daycare in the first 18 months and of these:

- 67% had only one daycare arrangement
- 24% had two daycare arrangements
- 6% had three daycare arrangements
- 1% had four daycare arrangements

Of those who had one arrangement only, the hours involved per week were from 2 to 50, with the

average 18 hours. (The minimum to be included in the daycare group was 2 hours of care for 3 weeks running). This care started on average at 6 months and:

- 45% was with a relative
- 30% was with a child minder
- 14% was at a nursery or crèche
- 11% was with a nanny or other non-relative

Most families (56%) paid for the child care, and for 18% it was in the child's own home.

We shall again be asking you about daycare to see if your arrangements have changed.

.....and there's the **Measuring**

The two Georges seemed to enjoy it.



George liked the train in Reception too

Photographs taken by Maureen Brennan



NEWSLETTER

For Children in Focus at 3½ years

What happens at the 3½ year clinic?

A random sample of 1,200 Children of the Nineties are invited to the Children in Focus clinic. Measurements and observations made on these children as they grow and develop are of enormous value. They would be valuable on their own, but what makes them even more so is the wealth of other information we have about the children and their environment from your questionnaires. This not only gives a detailed picture of the Children in Focus, it also gives us insights into the other 14,000 Children of the Nineties whom we do not have the opportunity to see.

Ears

We shall be looking again at hearing this time, using the toys and loudspeaker as before. At 2½ some children were nervous about taking instructions from a speaker, even one with a friendly pink elephant! Now they are older we hope they will all take it in their stride. This time we will be able to tell you if your child needs to be referred for further hearing tests.

As at the other clinics since 8 months, we are looking at the pattern of glue ear in the Children in Focus population. Later we shall find out what, if any, are its effects on the child. So far, we are able to confirm that glue ear is more common in the winter months than in the summer. It is also more common in children with older brothers and sisters, the reason probably being that older children bring more infections into the home.





Eyes

We are delighted at how well this study is going. Over 100 children have now been referred for a suspected eye problem. Although many of these are minor, some are more significant and the children are being treated with glasses and/or eye patching. Several parents have contacted us to say how pleased they are that their child's eye problem was picked up and referred and that their child's sight is now improved. All the children have responded extremely well to the very intensive testing we carry out and this has given us a great deal of information about which tests will be most effective in real life clinics. We will soon be in a position to describe how many children have eye problems at or before the age of 3. This information will be very useful for those who plan the services provided for children. Now that the children are aged 3½ we will be doing similar tests to those we have done before, but we expect that more children will be able to do the more advanced ones.

We will continue to offer a referral to any child who seems to have developed an eye or sight problem. Over the next few months, we will let you know in more detail what results we have got so far - thanks for all your help!



Teeth

We shall be looking again at how the children's teeth are developing, in the same way as we did at 2½. Last time we were able to get good observations of 1075 out of the 1135 children who came to the clinic, which surprised and delighted us. We had expected more difficulty with such young children. At 3½ we hope to do even better, especially as the experience will be familiar. One thing that was difficult and caused much amusement was getting the children to put out their tongues to check whether or not they had a tongue-tie. Many of them obviously knew that poking out their tongues at people was naughty and so absolutely refused to do it, even when parents pleaded with them and promised not to be cross!

To help the observer, like a year ago we shall not be offering the children a biscuit before their teeth have been seen.



Dietary Diaries

The last time we asked for a record of the children's food and drink was when they were 18 months old. Their diet will probably have changed a lot since then, so we would very much like to have another set of detailed records.

At 3½ some children are likely to be spending time away from their parents with other carers, so this time we are including a letter which can be given to

carers asking for their help in recording food and drink the children have while with them.

It takes a long time to process the dietary diaries into data that can be analysed but we are making progress. We gave some feedback about the 8 month diaries in the last Children in Focus Newsletter, and we hope to give more in the near future.

Blood Sample

A year ago we asked if we might take a blood sample from a vein for the first time. This was because we needed a larger sample than a heel prick could provide. The bonus was that with the right preparation it was not painful.

We were delighted with the results. Very few children felt anything, and the great majority were totally unmoved by the whole thing. One mother contacted us later to say that her son had had to have

blood taken again and the nurse was most impressed by how relaxed he was. We hope that all children who have samples taken at the clinic will be just as relaxed if they have blood taken in the future.

This time we shall be asking permission again for a sample from a vein, to study iron, cholesterol and antibodies present due to infection. As before, we shall contact you within 2 weeks if your child is anaemic.

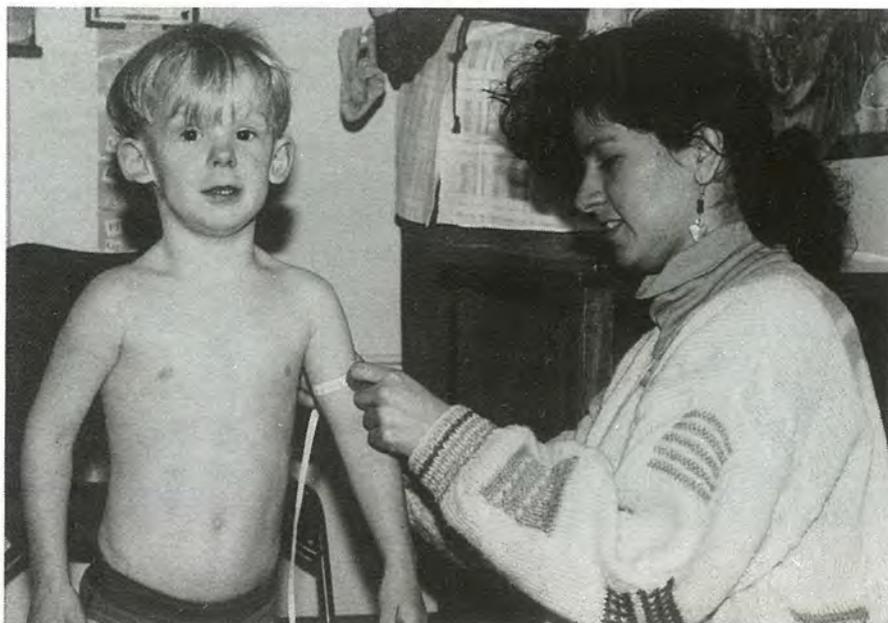


Finger Prints

We want to investigate the link that some researchers have suggested between our fingerprint patterns and the way we grew in the womb. We shall be asking if we may take the fingertip prints of your child in order to help us to see if this is true. Put together with information from the placentas, this may prove valuable information in understanding what happened during pregnancy.



and there's the **Measuring**





NEWSLETTER

For Children in Focus at 5 years

What happens at the 5 year clinic?

A random sample of 1,200 Children of the Nineties are invited to the Children in Focus clinic. Measurements and observations made on these children as they grow and develop are of enormous value. They would be valuable on their own, but what makes them even more so is the wealth of other information we have about the children and their environment from your questionnaires. This not only gives a detailed picture of the Children in Focus, it also gives us insights into the other 14,000 Children of the Nineties whom we do not yet have the opportunity to see.

Ears

We shall be using the toys and loudspeaker to look at hearing again as we did at 3½, as well as our regular look at glue ear. For the first time we shall be doing a pure-tone audiogram which looks in more detail at the hearing in each ear. We shall be able to tell you if we think your child needs to be referred for more hearing tests.



Communication



We are going to look at the way the children communicate. One of the questions we want to answer is how much this might have been affected by episodes of glue ear they have had.

Teeth



We last looked at teeth at 3½ and we would like to see how they have developed since then.

Growth and Skin

We shall measure the fat layer under the skin using calipers. They look fierce but they are spring loaded and gently press against the skin. They do not hurt. As well as the usual growth measurements we shall take the childrens' blood pressure and look at moles and skin conditions again. We will send a drawing in advance for you to mark them on.



Blood sample

We have been very pleased by your responses to our questionnaire about blood taking. It confirms our impression that the vast majority (91%) of you are happy about the way we are doing it, and glad that you gave consent, and most of the children felt little or nothing while it was being done. We are looking carefully at the comments that some of you made to see how we can improve the procedure still further.

Because we have been so successful, and your children have reacted so positively to our procedures, we intend to publish our blood taking procedure, your responses and those of the children in a scientific journal. We hope that our experience will lead to improved techniques being used elsewhere when blood samples are needed from children.

We shall be asking for another sample this time to follow up our studies of allergies, anaemia and a variety of other aspects of health. As before we shall let you know if your child is very anaemic but all other analyses will be done anonymously

and only linked to other information about the children by number and not to named children.

We shall of course have a suitable video for the children to watch. As usual, if you really don't want your child to have blood taken let us know.



Dietary diaries

Now that the children will be at school for much of the time, we would like to see how their diets have changed since the last dietary diaries were collected when they were 3½.



Lung function and exercise

We shall be measuring the children's pulse rate and blood pressure again, and then asking them to blow out hard to measure how much air they can blow out quickly. They will then be asked to do some physical exercise, while we measure their pulse rate. Then we will look again at how much they can blow. This is part of a study into the children's lung function, and will help us find out what in the environment might effect a child's lungs.



Allergies

Pollen, cats and housedust mites are among the many common substances which cause snuffles, asthma, eczema and other problems in people who are allergic to them. Skin tests can give clues as to whether a person is allergic to a particular substance although not everyone whose skin reacts actually shows an allergy. We would like your permission to skin test your child and we will let you know the results. We will test for reactions to horse, dog, cat, egg, milk, fish, peanut, house dust mite, grasses, and moulds.





NEWSLETTER

Children of the 90s

Spring 1996

TEETH

Where are the tooth fairies? We'd like to talk to them

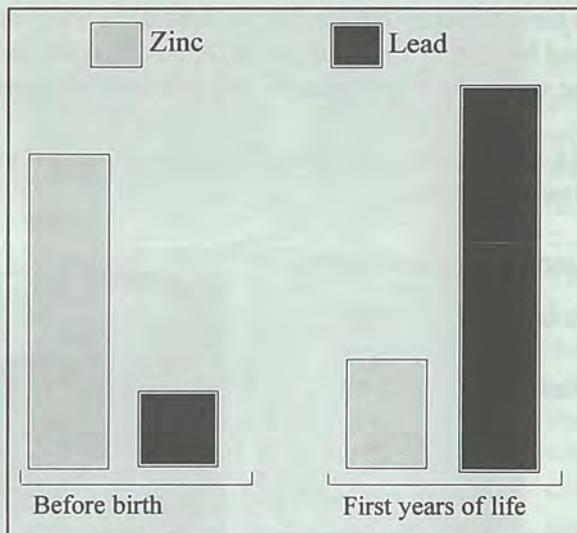
Locked up inside your child's teeth are minute amounts of many elements including metals such as zinc, chromium, iron, lead, and mercury. If you cut across a tooth there is a clear line (rather like a ring on a tree) separating enamel laid down before birth from that deposited afterwards. It is now possible to analyse pollutants from both sides of the line to show levels of metals before and after birth.

The chart shows the kind of results that can be obtained. Notice how the zinc was high before this baby was born but afterwards it fell to much lower levels. In contrast, for this particular child the levels of lead before birth were low, but during his first years they rose dramatically.

Presumably this reflects differences between the amount of zinc and lead in the mother's blood supply and that in the child after birth, but it raises many questions:- For example, where has all the lead come from? Is it related to the child's growth and development or to diseases later in

life? In order to find some of the answers to these questions, we shall be asking if you would send us two of your study child's milk teeth. We shall need to know the date when each one came out, so if you start collecting make sure that each is in an envelope with the date on.

Perhaps you could have a quiet word with your tooth fairy!



NUTS ! and other food you did not give your toddler

When your child was 15 months old we asked if there were any foods you did not allow your toddler to eat, and why. We had 11,128 questionnaires back, and 7661 of parents answered yes and made comments.

Nuts or peanuts were the most commonly excluded food, by 3716 of parents. Almost half of those said they were afraid of the child choking. A third gave no reason, 8% said they thought nuts were dangerous and 1.7% mentioned the special risk of inhaling peanut. 19 said their children were allergic to nuts.

An allergy, or suspected allergy to foods was

given as the reason for exclusion by 262 people (almost 4% of those excluding something). The numbers reporting reactions such as eczema, asthma, and nettle rash as a response to certain foodstuffs were:-

- Milk and dairy products 107
- Eggs 81
- Nuts and/or peanuts 19
- Tomatoes 13
- Fish 8
- Oranges 7
- Colouring in food & drinks 12

(continued on page 2)

**The Avon Longitudinal Study of Pregnancy & Childhood
(ALSPAC)**



Children of the Nineties

24 Tyndall Avenue

Bristol BS8 1TQ

Tel: Hotline (0117) 928 5007

Direct: (0117) 928 _____

Fax: (0117) 928 5010

Dear Study Child

You will soon be getting to the stage where your teeth start coming out, or maybe you have lost one or two already.

We wonder whether you would like to help the Children of the Nineties Study by letting the 'Tooth Fairy' send one or more of your teeth to us. Each time you or your tooth fairy send us a tooth we will send you a badge.

This will be a great help to us because inside each tooth there are various traces that will allow us to find out the sorts of things that are in the air about us, and will help us understand what might have made you ill at sometime, or what might have kept you well. This will help us find out how to make the world a better place.

I do hope you will help us. If a tooth has already dropped out, ask mummy or daddy if the tooth fairy could be asked to send it to us in the bag we have enclosed – and fill in the form with it.

If your tooth has not dropped out yet (or the one that has cannot be found) just keep this package in a safe place. As soon as a tooth drops out either send it to us yourself, or ask the tooth fairy to, and we will send you a badge.

We all look forward to hearing from you.

Yours sincerely,

Professor Jean Golding.

R:\secretary\secretarial\tooth fairy letter

*ALSPAC is a research initiative of the Division of Paediatric & Perinatal Epidemiology,
Institute of Child Health, University of Bristol*

Recycled Paper

Please fill in this form and send it to us with your tooth (or teeth).

This is the tooth of:

(name)

(address)

.....

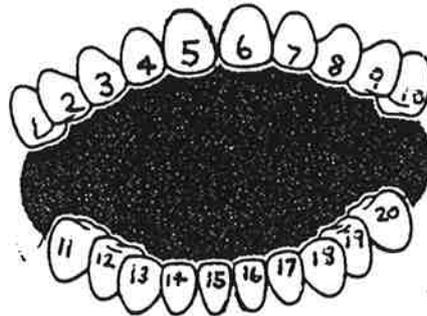
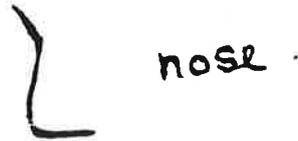
Please give the date you were born :

day month year

If you can, please give the date your tooth fell out:

day month year

Please mark (with an x) on
this picture which tooth it was:



chin

Please put the tooth in the plastic bag, and put the plastic bag and this form in the jiffy bag and send it to Children of the Nineties.



FOCUS@7





University of Bristol
 24 Tyndall Avenue
 Bristol BS8 1TQ
 Telephone: 0117 928 5096
 Fax: 0117 928 5010
 email: pam.holmes@bris.ac.uk

To all Study Children...

...ve to see you at FOCUS@7.
 ...great to meet you and show you all the
 ...ngs there are for you to take part in.
 ...t that if there is anything you don't want to do,
 ... nobody will mind at all.
 ... giving you your own book to fill in as you go
 ...s got lots of interesting bits in it and you will be
 ...ep it as a record of yourself at 7.
 ...king forward to seeing you. With best wishes
 ... all at Children of the 90s.

...u Golding
 ...or Jean Golding

...you want to know how to make an iron sandwich?
 ...Or, what's special about a dog's ear?
Come to FOCUS@7 and find out!

What happ

**Your help over the years and at this vital FOCUS@7
 and development of today's children and the an
 Each test is of course, voluntary, but we hope 1**

HEARING

We shall test your child's hearing by a pure-tone audiogram, which looks at hearing in each ear and a simple test called "glue ear". We will be able to tell you if your child has any hearing difficulties.



DIETARY DIARIES

A child's diet is important, but children can be very choosy about what they will eat. We want to find out if that matters. This is really important for a child to



...velop healthily? We shall be asking you to complete a diary of all your

ALLERGIES

Pollen, cats and house dust mites are among the many common substances that cause snuffles, asthma, eczema and other problems in people who are allergic to them.

Skin tests can give a clue as to what a person is allergic to, although not everyone whose skin reacts actually shows an allergy.

**Everything you
 part in at FOCUS@7
 totally voluntary
 If there is anything
 your child can do,
 to do, just let us
 No one will
 at**

**DID YOU KNOW
 you and your
 past 7 years, we
 to give advice
 and American
 the safety of
 sleep on
 This result**

ens at FOCUS@7 ?

at 7 visit will give us the best picture ever of the health
wers as to how we can improve things in the years to come.
at you will help us by taking part in as many as you can.



WORDS

Your child will be asked to look at some pictures and read some words. These are designed to fit the ability of your child and will be great fun! This will help us see whether aspects of his or her eyesight or hearing might have had an effect on reading skills.

MEASURING & SKIN

We will be measuring height, weight and sitting height (so that we can work out leg length). Then there is the circumference of the head, upper arm, waist and hip. We will measure fat by putting electrodes on the right arm and ankle and passing a tiny electrical pulse through the body. It's absolutely safe and painless. We are also going to look for "visible flexural dermatitis", an eczema-like rash in particular sites on the body. We will also look at your child's spine to make sure that there is no sign of a curve in it (scoliosis) and let you know the results.



CO-ORDINATION AND MOVEMENT

This is great fun!
It includes trying to throw a bean bag to hit a target;
walking along a straight line;
seeing how fast you can put pegs into a pegboard
and threading lace.



GERMS

Modern medicine relies heavily on antibiotics to treat infection. Unfortunately, some germs are now able to resist antibiotics and so are not killed by them. It is important to find out how common these antibiotic-resistant germs are in healthy children. So, during your visit we may ask your child if he or she is willing to rinse their mouth with water and spit into a tube for us. This will enable us to know how often these germs are likely to be found in children's mouths.



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both the British
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r backs?
n national
gns,
each country.

BLOOD SAMPLES

We would like to take a sample of blood and will be asking for permission from yourself and your child to do this. We will be looking for anaemia and in the future at other substances in the blood, like cholesterol. We will be preparing a sample of DNA to study the relationship between inheritance and environment in diseases like asthma. We will let you know within a few days if your child is anaemic, but all later analyses will be done anonymously and only linked to other information about the children by number, not to named children.

We have an excellent system for taking a sample of blood, using highly trained staff and 'magic' cream, which numbs the skin, but your child can ask us to stop at any time if he or she is not happy. They are usually too busy watching a video to worry, though!

EYES

We will test the sight in each eye and check whether the eyes are pointing in the same direction. No eye drops will be used. We will do the test with the child's glasses if they have been given any. If we find that any child cannot see well and if no one has treated them for this eye problem before, we will offer you an appointment with our optician who can prescribe glasses or refer your child if necessary. We can finally answer the questions about whether glasses actually help the children who have been given them early in their lives and how many children have problems that haven't been picked up before this age. This is a great opportunity that should lead to better vision care for all children in future years.



BLOOD PRESSURE



Although much is known about the blood pressure of adults, little is known about blood pressure of children.

This study will be important in advising whether children should have their blood pressure taken regularly.

Your child will be shown what will happen, then a cuff will be put around the child's arm and a machine will blow this up and take the blood pressure. It will do this twice.

We will tell you if the reading is unexpectedly high.

FOCUS at 7 will provide exciting information that will help us in our attempts to solve common but important problems, like eczema, glue ear, allergies, co-ordination, reading, eyesight and hearing difficulties.

Your visit will last for half a day and each child will need to be accompanied by an adult. Children will be given a coloured book to fill in, as they go around the clinic, to keep as a record of themselves at 7.



University of Bristol

24 Tyndall Avenue Bristol BS8 1TQ
Telephone: 0117 928 5096
Fax: 0117 928 5010
email: pam.holmes@bris.ac.uk

ALSPAC

Avon Longitudinal
Study of Pregnancy
and Childhood



*"Give us a ring,
write us a letter or
dash off an email"
We love to hear from
you. Phone Pam on
0117 928 5096*

Blood Samples

First some questions

Has your child ever had a bad reaction to local anaesthetics?
Y/N

Has your child used or been given a local anaesthetic in the last 24 hours?
Y/N

Is your child taking any medication containing sulphonamides, e.g. Septrin?
Y/N

Is your child anaemic?
Y/N

Does your child suffer from any clotting or bleeding disorders ?
Y/N

You will be informed if your child is anaemic*. After that analysis the name will be taken off the blood samples. They will be stored for future analyses including preparation of a DNA sample. The blood samples and the DNA sample will have no names attached to them. Results will be used for statistical purposes only and not linked to named children.

PARENTAL CONSENT

The purposes and possible risks in having blood taken have been explained to me.

I agree to my son/daughter having a blood sample taken for analysis for the 'Children of the 90s' study. I am his/her parent (or guardian).

Signed:

Date:

child assented

Name (PLEASE PRINT)..... (Parent or Guardian)

Name (PLEASE PRINT)..... (Study child)

* Hb below 9g/dl.



IT'S A FACT

BEFORE BREAKFAST STUDY

The body sends messages to make bones and muscles grow



We are very pleased that you were able to come today, and have been able to help us find out more about what makes children grow. You could help us find out even more.

..... How do my bones and muscles grow?

As we grow up the body sends messages to the bones and muscles to tell them to get bigger. Insulin is one of these messages, but there are others as well. We would also like to find out more about these and how they affect the way you grow.

When these other messages have done their job, the body chops them up and gets rid of them in the urine (wee). We can measure these bits in urine, and this tells us what kind of messages the body was sending and how many were sent.

..... How can I help?

Already, because of your help, we will discover more about the insulin message. To find out more about the other messages we would like you to collect all your urine for one morning and send us some of it in a small tube. We can find the bits of message in this.

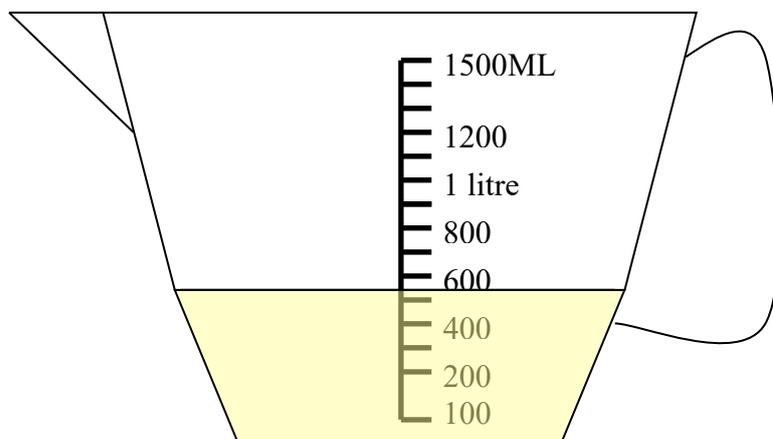
..... What do I need to do?

You just need to collect all your urine for one morning. Decide which day would be the easiest. Saturday or Sunday morning would be best because you won't be going to school, or you could do it one day when your on holiday. Let us know what would be easiest.

We will give you a plastic jug and a container to send a sample back to us. Put the jug in the bathroom next to the toilet where you will see it in the morning. When you get up in the morning, collect all your urine in the jug. For the rest of the morning, until 1.00pm, collect all your urine into the same jug each time you go to the toilet. (If you forget, you can always empty the jug, rinse it out, and try another day.)

.....Measure how much urine you have collected

When you have finished the collection (after 1.00pm), stand the jug on the lid of the toilet seat. Use the scale that looks like the one in the picture below. (Don't use the "PT. FL OZ" scale) Decide which mark on the side of the jug is nearest to the level of your urine. Read the number next to the mark. Work out the number if it's not shown. For example the mark between 400 and 600 is 500. In the jug below, we think there is about 530ML of urine. We have added a little because the level is a bit above the 500 mark. You can add a little if the urine is between the marks. Get a grown-up to check. Write this number (volume of urine), and the date, on the label of the small bottle we have given you. You don't need to put your name on the bottle.



.....We only need a little.

Now, take the soft plastic teat, squeeze it, and suck up some of the urine from the jug and squeeze it out into the small clear bottle. Keep doing this until the small bottle is nearly full. Put the lid on and screw it down tight. Get someone to check that it really is tight.

Put the bottle into the bigger white plastic tube, and screw on the cap. Put this tube into the padded envelope. The envelope already has our address on it and doesn't need a stamp. Post the envelope to us the same day or the next day. It will fit through an E II R postbox, or you can take it to the nearest post office. (It won't go into a G VI R postbox, we have tried!)

.....When you have finished

When you have finished, pour the rest of the urine into the toilet and put the jug in the rubbish, or wash it out and use it for other things.

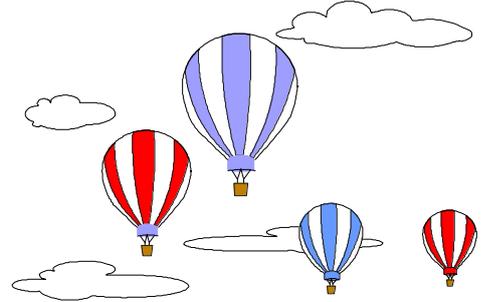
..... So, would you like to help us find out even more about how children grow?

If you would like to help us by taking part please ask your parent (or guardian) to fill in the consent form.

If you or your parent (or guardian) has any questions, phone Fay on (0117) 928 5518.

Thank You

CHILDREN OF THE 90s



24 Tyndall Avenue
Bristol BS8 1BR
Tel : 0117 970 6067

Before Breakfast Study

The urine samples have no name attached to them. They will be stored for analysis to measure hormone breakdown products. Results will be used for statistical purposes only and not linked to named children.

PARENTAL CONSENT

The purposes and possible risks of taking a urine sample have been explained to me.

I agree to my child giving a urine sample for analysis for the 'Children of the 90s' study. I am his/her parent (or guardian).

Signed:

Date:

child assented

Name (PLEASE PRINT)..... (Parent or Guardian)

Name (PLEASE PRINT)..... (Study child)

Children of the 90s is covered by the University of Bristol's insurance scheme.



FOCUS@9



Inside

- Find out more about your body
- Have fun and help us discover more about how your body is working
- New Discovery Club - Have you joined yet?





University of Bristol
24 Tyndall Avenue
Bristol BS8 1TQ
Telephone: 0117 970 6067
Fax: 0117 928 5010
email: pam.holmes@bris.ac.uk

To all Study Children...

I am delighted to be able to tell you that the research at FOCUS@7 and FOCUS@8 has been a great success!

Now that you are 9 or so, we would very much like to see you again - and carry out a number of the different sessions that happened before, together with some new ones.

The results will be very important for understanding about the health and development of all children.

As always, if there are any of the bits of FOCUS@9 that you would rather not do, you just have to tell us and we will understand. However, we do hope that you will try and do as much as possible.

We are looking forward to seeing you very much. With best wishes from us all at Children of the 90s.

Yours sincerely,

Jean Golding

Professor Jean Golding

Come to FOCUS@9 and have a great time!

FITNESS How fit are you?



Here we are talking about "Aerobic" fitness, which is how well your body gets oxygen to your muscles when they are working hard.

In children fitness depends on several things, like how old and big you are, what you eat, how much exercise you have and the genes you've got. We are trying to find out if being fit really does keep you healthy.

We would like you to help us either with a Basketball game or by pedalling an exercise bike. The pedalling will get harder as if you are going uphill. At the same time a belt around your chest will show how fast your heart is beating.

What happens

The activities at FOCUS@9 are designed to provide information about what children are developing. They have been carefully selected to provide us with as much information as possible.

BLOOD PRESSURE

What about blood pressure?

We know a lot about the blood pressure of adults, but not very much about the blood pressure of 9 year old children. Children of the 90s can discover a lot more!

You will have a cuff wrapped round your arm and the machine will pump some air into the cuff. When the cuff squeezes your arm it measures your blood pressure and your pulse.

Your pulse rate tells us how fast your heart is beating. The machine does this twice.

We will only tell you if your blood pressure is very high.



HEARING

Children's hearing often changes as they grow older

We want to find out how well you can hear at the moment. We do this by asking you to listen to little noises, high ones and low ones, and see if you can hear them when they are very quiet. We will tell you if there are signs that you might have a hearing problem, w

We also rest soft little probes just inside the opening of your ear. A Tympanometer and tells us how springy the eardrum is. Another test bounces them back and shows how that part of the ear works. This is the Acoustic Reflex Test, but you don't have to do anything except keep still.

Lastly we hope to take a picture of your eardrums.

Children at FOCUS@9 ?

on about how the 'Children of the 90s'
be fun for you, while at the same time

Everything in FOCUS@9 is totally
voluntary, nobody will mind if there
is something you don't want to do.

MEASURING YOU

How long are your legs?

We want you to feel comfortable while we measure you, so why not wear a crop top and pants, bikini, boxer shorts or swimming trunks under your clothes when you come to see us?

We will want to find out how tall you are when you are standing up and sitting down, so that we can work out how long your legs are. We will measure your arm, waist and hips; the length of the bones in your arm and how straight your back is.

We are also going to look for "visible flexural dermatitis" - this is like eczema and is in the creases of your arms and legs. We will check to see if you have any spots and how oily your skin is. To do this we put a small piece of tape on your forehead and leave it for an hour.



It's
a Great Day
Out and Super
Fun!



which will need some more tests.

ur ear. The machine attached to one is called a
ther one sends sounds to the inner part of the ear.
working. This is called an Otoacoustic Emissions

BREATHING

How are your lungs?

As you grow bigger, all the organs in your body, like your heart, lungs and kidneys, need to grow too.

We are very interested to find out how your lungs are growing.

To help us find out, we will ask you to do some blowing. When you blow hard into our machine (like blowing candles out on your birthday cake) we can measure how much air your lungs hold and how they are growing.



BLOOD SAMPLES

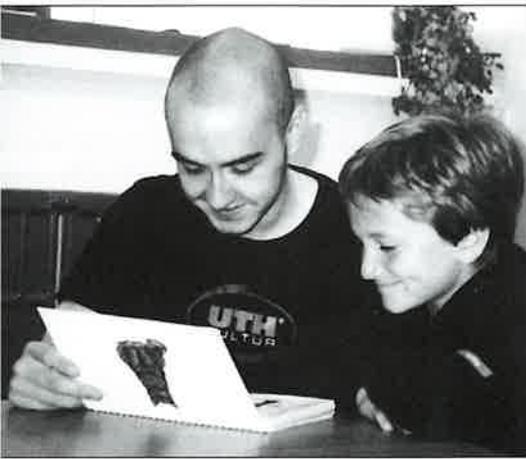
Your blood can help us be detectives!

Lots of things go on in your body that we don't know about, but your blood can help us be detectives.

If you are happy for us to take a sample, we will use 'magic cream' which makes your skin go numb so it shouldn't hurt. You can watch a video at the same time.

We will be looking for different things in your blood that will tell us more about your health and development. We will be able to tell you if you are anaemic, which means the blood hasn't got enough haemoglobin and won't carry as much oxygen as it should.

MORE WORDS!

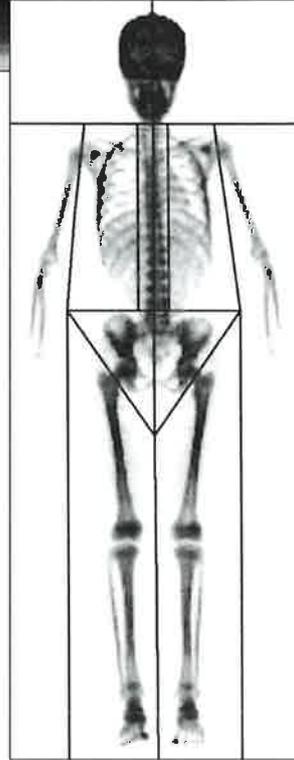
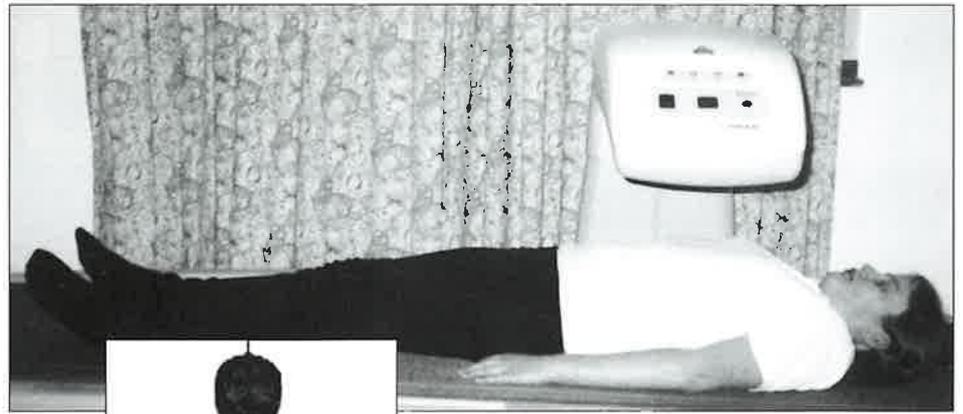


Different children read and write in different ways

With your help we will be able to learn more about this, and find out ways to help other children when they learn to read.

We will ask you to read to us, answer questions and do some spellings. It will be a bit different from the reading you do at school, because some of the words will be made up!

If you find it really difficult to read, don't worry. We will read to you and you can answer questions about what we have said.



BONES

What are your bones like?

We would like to take a picture of your bones. We use very tiny doses of X-rays - no more than you would get being outside for the afternoon.

The machine tells us how much calcium and other minerals are in your bones; in other words, how dense they are.

All you have to do is lie still for four to five minutes. The machine prints a picture of your skeleton, like the one shown left, that you can take away with you and keep!



Have You JOINED YET?

Every child that fills in questionnaires for Children of the 90s can be part of their own Discovery Club.

Just ask one of the staff for a form to fill in when you come to FOCUS@9 or fill in the leaflet on your last childrens' newsletter.

You receive a special folder, your own membership card, badge, fact finder file and find out about super things to do!

Your visit will last for about 3 hours and you will need to be accompanied by an adult. You will be given a book, including lots of puzzles and games, to fill in as you go around.

To contact FOCUS@9 telephone: 0117 928 8266



University of Bristol
24 Tyndall Avenue Bristol BS8 1TQ
Fax: 0117 928 8138
email: focus-admin@bris.ac.uk

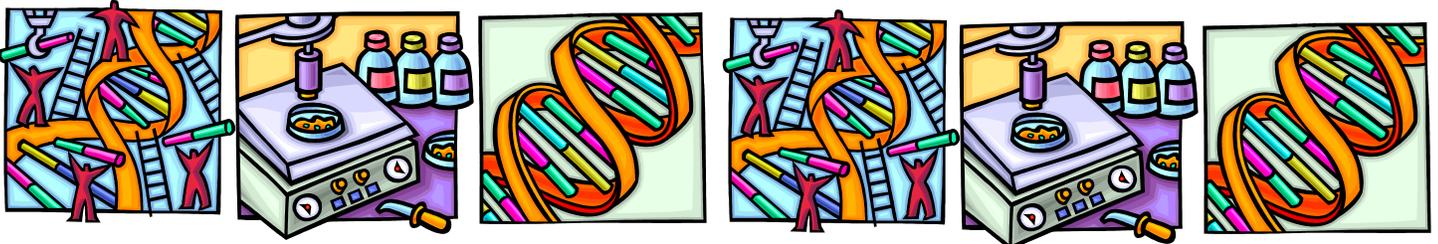
ALSPAC
Avon Longitudinal
Study of Parents
and Children



You may already have given us some of your blood at previous Focus visits.

Thank you !

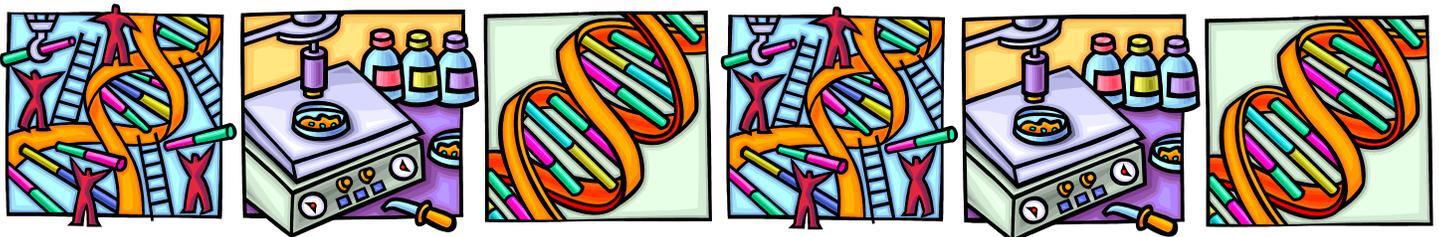
We have used it to discover more about how we grow and why we sometimes become ill.



Now we are asking for some more blood - there is so much more we want to find out, and you can help! We are particularly interested in studying a substance called 'DNA' which we can get from your blood cells. Our scientists can now keep growing new cells from the blood you give us; the cells keep on growing so we can keep on finding out more new and exciting facts about how our bodies work! A little bit of you can go a long way!

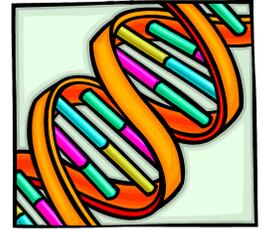
We will make sure we look after your blood sample properly - you and your blood are very special.

If you want to find out more about DNA or about our research you may like to look at your parent's fact sheet.



GENES WHAT ARE THEY ? DNA

Our genes are important in making us more or less likely to develop many common diseases. We all have a slightly different set of genes in our bodies. To help us look at these differences and understand the causes of diseases, we will ask each child visiting Focus@9 to provide a small blood sample which can be treated so that it provides a never-ending supply of DNA.



Question: What are genes?

Answer: Genes are the instructions which make our bodies grow and make the parts of our bodies work.

Question: What is DNA?

Answer: DNA is the chemical language in which are genes are written. All the parts of our bodies contain DNA.

Question: Why do you want to study my child's DNA?

Answer: Although we all have essentially the same genes as each other, there are many small differences which some of us have and others do not. These different versions of our genes make us more likely or less likely to develop many common diseases, such as allergies (like asthma), or diabetes or heart disease. We want to discover which versions of particular genes increase the risk of these diseases and which versions protect us.

Question: Is it just genes that cause disease?

Answer: No. We already know that many of our common health problems are partly caused by genes and partly by our environments. This is why we need to learn about the things that happen to your child as well as about your child's genes.

Question: How will this help?

Answer: By discovering the way in which genes and the environment cause common diseases we will be able to discover what makes people more likely to develop diseases like asthma or diabetes. We can then develop better ways of preventing or treating them.

Question: Why do you need more DNA?

Answer: We each have about 100,000 genes. With your permission, we want to study many of these genes, but the DNA we have collected so far will run out before we can complete this work. This time we would like to collect a blood sample from your child and treat the cells from the blood so that they can be stored indefinitely as 'immortalised' cell-lines. These cells can be used to make more DNA whenever it is needed.

Question: What are *immortalised* cell lines?

Answer: Cells are the building blocks of the body. Skin, muscle, bones, blood, and all the other parts of our body, are made up of millions of tiny cells. Each cell has a copy of all our genes. If we take cells from our bodies and put them in liquid food, we can only keep them alive for a limited time. However cells in a tube can be treated so that they can be kept alive indefinitely. This is why they are called *immortalised* cell lines.

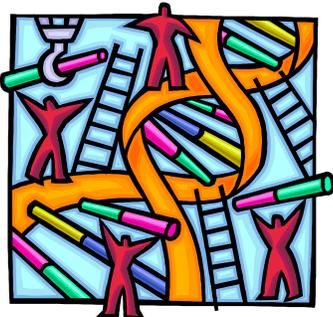


Question: Will anyone be able to connect the results of tests to me or my child?

Answer: No, all the information in the 'Children of the 90s' study is kept separate from your name. No-one who works with samples or answers to questionnaires, is allowed to know who they came from. This means that the study is completely confidential.

Question: Would you ever sell my child's DNA or cell-lines?

Answer: No, we would never sell these, or any of the information you have given us.



Question: If the Children of the 90s study makes cell-lines from my child's blood, can I be sure they will not be used for cloning?

Answer: Yes, you can be sure. The use of human tissues, including cell-lines, is strictly controlled. Charities and government organisations which give money for research, Bristol University and the Children of the 90s study ethics committee, which includes parents of study children, would not allow human cloning.

Question: If I change my mind later and don't want you to keep my child's DNA or cells, what should I do?

Answer: You can change your mind at any time. Write to us and say you don't want us to keep your child's DNA or cells. We will remove them and destroy them.

We welcome any further questions which you would like answered. Please phone 0117 970 6067, or ask the clinic staff. They will be able to help you, or put you in touch with someone who can.

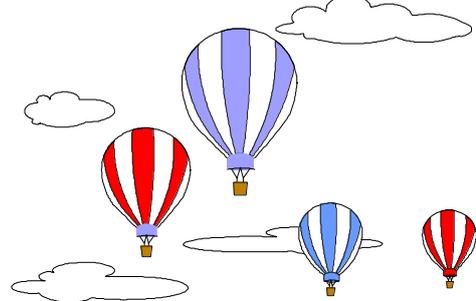


PARENTAL CONSENT FOR EMLA

- Has your child ever had a bad reaction to local anaesthetics? Y/N
- Has your child recently used or been given a local anaesthetic? Y/N
- Is your child taking any medication containing sulphonamides, eg Flagyl? Y/N
- Is your child anaemic? Y/N
- Does your child suffer from any clotting or bleeding disorders ? Y/N

Signed.....

Date.....



FOCUS@9

24 Tyndall Avenue
Bristol BS8 1TQ
(correspondence only)

Tel: 0117 928 8266 There is an answer phone on this line.
e-mail: focus-admin@bristol.ac.uk

Permission to use blood samples

If sample 3 has been taken, you will be informed if it shows that your child is anaemic*. After that analysis the name will be taken off the blood samples. They will be stored for future analyses. The blood samples, cell lines and DNA samples will have no names attached to them. Results will be used for statistical purposes only and not linked to named children.

PARENTAL CONSENT

The purposes and possible risks in having blood taken have been explained to me.

I agree to my son/daughter having the following blood samples taken for analyses for the 'Children of the 90s' study:

- 1. ACD sample for cell lines ('immortalised' DNA)}
- 2. ACD sample for DNA only } *delete as applicable*
- 3. Heparin sample for biochemical tests }

I am his/her parent (or guardian).

Signed:

Date:

Name (PLEASE PRINT)..... (Parent or Guardian)

Name (PLEASE PRINT)..... (Study child)

- **Hb below 9g/dl.**

Children of the 90s is covered by the University of Bristol's insurance scheme.



IT'S A FACT

Focus10+

The body sends messages to make bones and muscles grow



We are delighted that you have come to F10+. Enjoy your visit!

..... How do my bones and muscles grow?

As we grow up the body sends messages to the bones and muscles to tell them to get bigger. We would also like to find out more about these messages and how they affect the way you grow.

When the messages have done their job, the body chops them up and gets rid of them in the urine (wee). We can measure these bits in urine, and this tells us what kind of messages the body was sending and how many were sent.

..... How can I help?

To find out more we would like you to collect all your urine for one morning and send us some of it in a small tube. We can find the bits of message in this.

..... What do I need to do?

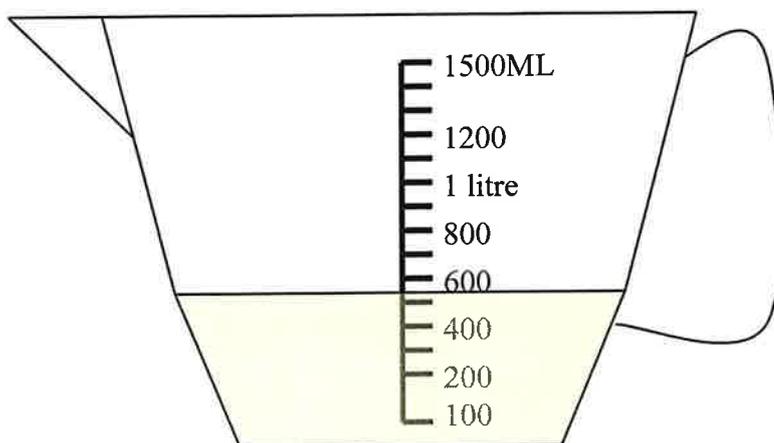
You just need to collect all your urine for one morning. Decide which day would be the easiest. Saturday or Sunday morning would be best because you won't be going to school, or you could do it one day when you are on holiday. Let us know what would be easiest.

We will give you a plastic jug and a container to send a sample back to us. Put the jug in the bathroom next to the toilet where you will see it in the morning. When you get up in the morning, collect all your urine in the jug. For the rest of the morning, until 1.00pm, collect all your urine into the same jug each time you go to the toilet. (If you forget, you can always empty the jug, rinse it out, and try another day.)

.....Measure how much urine you have collected

When you have finished the collection (after 1.00pm), stand the jug on the lid of the toilet seat. Use the scale that looks like the one in the picture below. (Don't use the "PT.

FL OZ" scale) Decide which mark on the side of the jug is nearest to the level of your urine. Read the number next to the mark. Work out the number if it's not shown. For example the mark between 400 and 600 is 500. In the jug below, we think there is about 530ML of urine. We have added a little because the level is a bit above the 500 mark. You can add a little if the urine is between the marks. Get a grown-up to check. Write this number (volume of urine), and the date, on the label of the small bottle we have given you. You don't need to put your name on the bottle.



.....We only need a little.

Now, take the soft plastic teat, squeeze it, and suck up some of the urine from the jug and squeeze it out into the small clear bottle. Keep doing this until the small bottle is nearly full. Put the lid on and screw it down tight. Get someone to check that it really is tight.

Put the bottle into the bigger white plastic tube, and screw on the cap. Put this tube into the padded envelope. The envelope already has our address on it and doesn't need a stamp. Post the envelope to us the same day or the next day. It will fit through an E I I R postbox, or you can take it to the nearest post office. (It won't go into a G V I R postbox, we have tried!)

.....When you have finished

When you have finished, pour the rest of the urine into the toilet and put the jug in the rubbish, or wash it out and use it for other things.

..... So, would you like to help us find out even more about how children grow?

If you would like to help us by taking part please ask your parent (or guardian) to fill in the consent form.

If you or your parent (or guardian) has any questions, phone Fay on (0117) 928 5518.

Thank You

CHILDREN OF THE 90s



Focus10+

24 Tyndall Avenue
Bristol BS8 1TQ
(correspondence only)

Tel: 0117 928 8900 There is an answerphone on this line.
e-mail: focus-admin@bristol.ac.uk

URINE

The urine samples will have no name attached to them. They will be stored for a variety of analyses in the future. Results will be used for statistical purposes only and not linked to named children. If you require more information, ask to be put in touch with Richard Jones.

PARENTAL CONSENT

The purposes and possible risks of taking a urine sample have been explained to me.

I agree to my child giving a urine sample for analysis for the 'Children of the 90s' study. I am his/her parent (or guardian).

Signed:

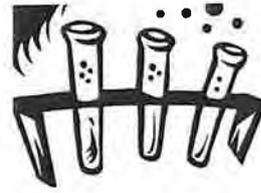
Date: Child agreed to sample (please tick)

Name (PLEASE PRINT)..... (Parent or Guardian)

Name (PLEASE PRINT)..... (Study child)

Children of the 90s is covered by the University of Bristol's insurance scheme.

Focus10+



Why are we collecting saliva samples at Focus10+?

The immune system guards and protects the body against infection. The way this works is that when we catch a cold, or any other infection, the immune system detects that something foreign has got into the body. In the case of a cold this is a virus, but it could be bacteria, or pollen or something in our food. Once the immune system has detected these foreign objects, it makes chemicals (antibodies), which attack them. This is how we get better after any infection.

Sometimes we can teach the body to protect against an infection by giving people a “jab” of dead virus or bacteria (this is called immunisation or vaccination). The antibodies against the dead virus or bacteria will attack the live virus or bacteria if they were to get into the body at a later time, so we do not become ill.

Once we have had any infection, or a jab, the antibodies that are made go round in the blood for a long time afterwards. We can measure antibodies in the blood, and this gives a picture of all the infections we have had, and the “jabs” we may have had as a small child.

The antibodies also get into our saliva where they can help to attack some viruses or bacteria even before they get inside the body. This means we can also get a picture of what infections someone has had if we collect saliva, which is quite easy to collect.

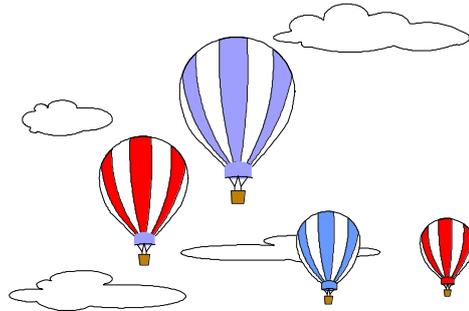
Saliva can be useful for measuring other things, for example, some hormones (the body's chemical messengers), and we will keep some of the saliva for these other measurements.

If you are happy to give us some of your saliva, the person in the measuring session will explain how to collect it.

**Thank you for helping
us!**

V1 21.03.02

CHILDREN OF THE 90s



Focus10+

24 Tyndall Avenue
Bristol BS8 1TQ
(correspondence only)

Tel: 0117 928 8900 There is an answerphone on this line.
e-mail: focus-admin@bristol.ac.uk

Saliva

The saliva sample has no name attached to it. It will be stored for future analysis. Results will be used for statistical purposes only and not linked to named children. If you require more information, ring 0117 928 8900 and ask to be put in touch with Richard Jones.

PARENTAL CONSENT

The purposes and possible risks of taking a saliva sample have been explained to me.

I agree to my child giving a saliva sample for analysis for the 'Children of the 90s' study. I am his/her parent (or guardian).

Signed:

Date:

Child agreed to sample (please tick)

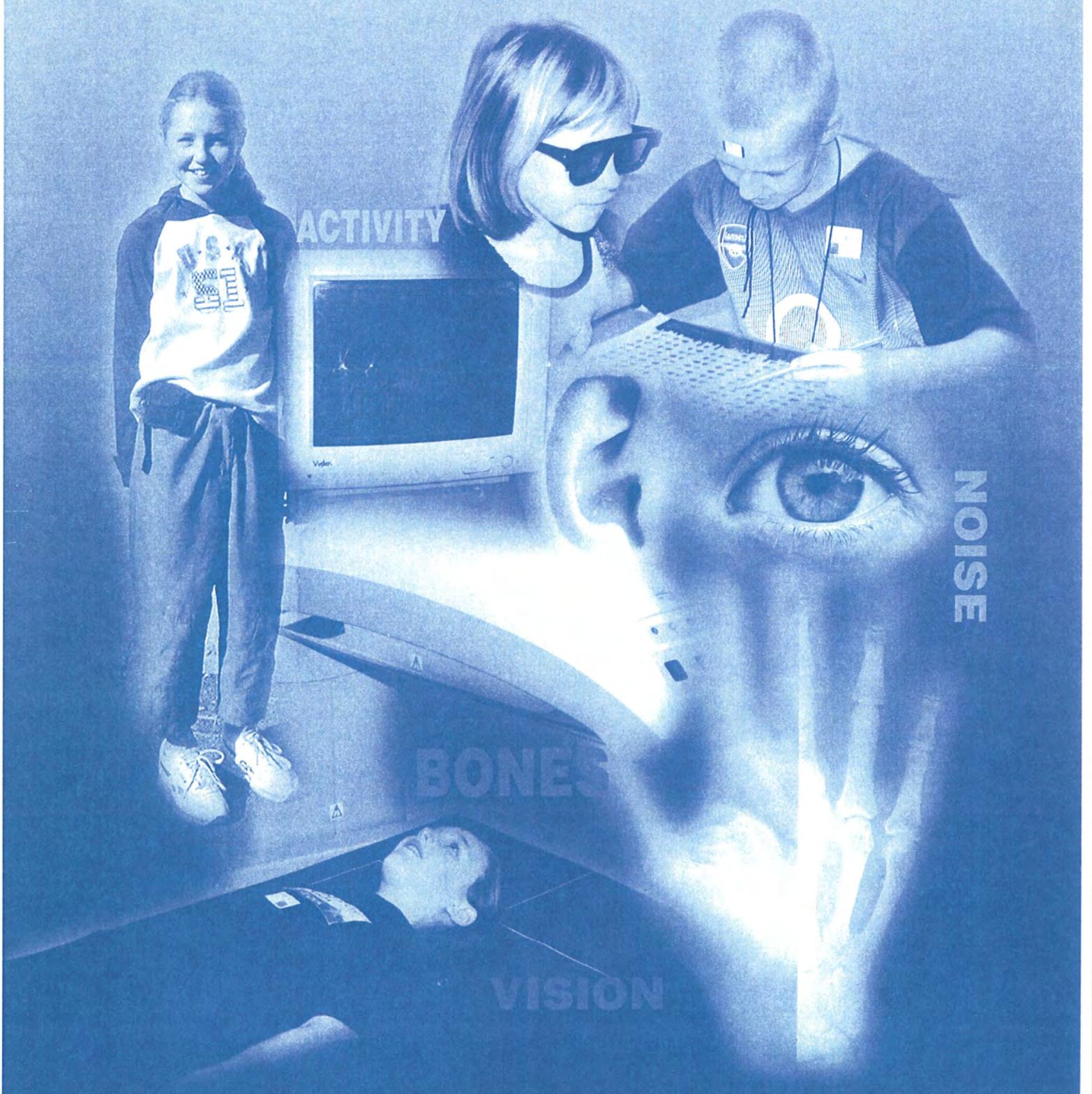
Name (PLEASE PRINT)..... (Parent or Guardian)

Name (PLEASE PRINT)..... (Study child)

Focus10+ is covered by the University of Bristol's insurance scheme.



Focus11+



WHAT'S HAPPENING AT FOCUS11+?

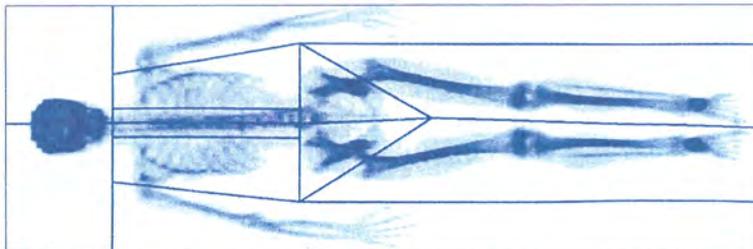
Some of these activities, like the bone scan, you may have done at earlier visits. We are repeating them to see how our Children of the 90s are changing. Others are exciting new things like the activity monitor. We would like you to try everything at F11+ but don't forget you can say no to anything that you don't want to do

Bones and Growth

We will measure you and see how you are growing. We need to find out how children's bones change as they grow older. This means we'll offer you another picture of your skeleton. If you have one from Focus@9 you will be able to see how much it has changed.

The scanner uses tiny doses of X-rays, similar to the amount you would get just from being outside in the Bristol area for the afternoon.

We will ask you to wear a patch on your forehead for an hour. This tells us about how your skin is changing as you get older.



Hearing

We want to find out how well you can hear at the moment and if your hearing changes as you get older. We do this by asking you to listen to high and low pitched noises and see if you can hear them when they are very quiet. We will tell you if your hearing is okay or if there are signs of any possible problems.

We also rest soft probes just inside the opening of the ear. The machine attached to them is called a tympanometer and tells us how springy the eardrum is. Another machine sends sounds to the inner part of the ear. This bounces them back and shows how that part of the ear is working. This is called otoacoustic emissions.

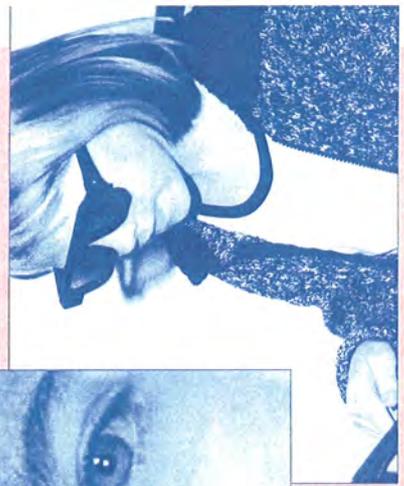
We also want to find out how much noise you listen to. We'll ask you to think about how often you listen to things like music and television, and how loud you like to turn them up. You can listen to some music and tell us how loud you normally like it.



Eye Spy

We will be checking your sight again, as we did at Focus@7. However, we can now carry out some extra tests to see how your brain uses the information that your eyes send to it. We will ask you to read down a letter chart, with your glasses if you wear them, and we will check whether you are long or short-sighted, as we have done before. In addition, we will show you some new pictures with colours, or "3-D shapes" or outlines hidden in a background, and see which are the easiest for you to recognise.

If we suspect that you have a problem with your eyes or your sight, we will give you a letter to take to your optician, but everyone can fill in their books showing what their eyes spied!



Samples and Blood Pressure

We would like to see if blood pressure changes as children get older. We want to find out what is most important in deciding the level of your blood pressure. Things that may affect it are your genes, how large you were at birth, your diet and your lifestyle.

We will ask if you would like to give us a saliva sample this time, so that among other things, we can measure antibodies and work out what infections children get as they grow up. We'd also like a blood sample to help us find out about things like hormones which change as children get older. We have made cell lines for DNA from many of you but there are lots of other things we can find out from the blood. For example we used it recently to see how much fat there is in children's blood. As before we will use 'magic cream' and you will be able to watch a video. Most of you seem happy to give samples but remember you can say no to anything you don't want to do at Focus11+.



Physical Activity

We have some exciting physical activity monitors. These are small and light (about the size of a matchbox). You may be asked to take one home and wear it round your waist for 5-7 days to record your movements. You keep a record of the times you put the monitor on and take it off as well, and then send the monitor and record sheet straight back to us. This will help us find out how active children are - and in the future show how activity and inactivity may affect health.



You and Your Friends

As children grow up and get older, they enjoy doing different things. We'll be asking about the things you like doing in your spare time, how you're getting along with your friends and how your friendships might be changing. Part of these changes may be your moods and the way you are feeling about things. So we will ask about your moods and how they have made you feel, think, behave and get on with others. We're also interested in why some children find it easy to concentrate on some

things, while for others it's hard work. There will be pictures to study and sounds to listen to, sometimes at the same time, and a picture trail to follow.



Are you in the
Discovery Club?

As one of the Children of the 90s
you can join.

Just ask one of the staff for a form
to fill in when you come to Focus11+
or write to us and we'll
do the rest.



Your visit will last for about
3 hours and you will need to
have an adult with you.

You will get a booklet to bring
with you with lots of puzzles
and things to do. When you
leave we will give you a little
present and a voucher worth £5 to say
"Thank You" for visiting Focus11+!

To contact Focus11+ call: 0117 928 8266

If you have access to the Internet, either at
school or at home, why not visit our website - it's great fun and full of information,
with pages just for you. www.alspac.bris.ac.uk/discovery



UNIVERSITY
of BRISTOL



University of Bristol

24 Tyndall Avenue Bristol BS8 1TQ

Telephone: 0117 928 8266 Fax: 0117 928 8138

email: focus-admin@bris.ac.uk www.alspac.bris.ac.uk/discovery

ALSPAC is a research initiative of the Unit of Paediatric & Perinatal Epidemiology, Institute of Child Health, University of Bristol

PARENTAL CONSENT FOR EMLA

Has your child ever had a bad reaction to local anaesthetics? Y/N

Has your child recently used or been given a local anaesthetic? Y/N

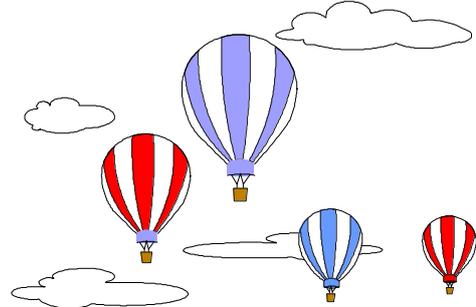
Is your child taking any medication containing sulphonamides, eg Flagyl? Y/N

Is your child anaemic? Y/N

Does your child suffer from any clotting or bleeding disorders ? Y/N

Signed.....

Date.....



Focus11+

24 Tyndall Avenue
Bristol BS8 1TQ
(correspondence only)

Tel: 0117 928 8266 There is an answer phone on this line.
e-mail: focus-admin@bristol.ac.uk

Permission to use blood samples

If sample 1 has been taken, you will be informed if it shows that your child is anaemic*. After that analysis the name will be taken off the blood samples. They will be stored for future analyses. The blood samples will have no names attached to them. Results will be used for statistical purposes only and not linked to named children.

PARENTAL CONSENT

The purposes and possible risks in having blood taken have been explained to me.

I agree to my son/daughter having blood samples taken for analyses for the 'Children of the 90s' study:

- 1. Heparin sample for biochemical tests

I am his/her parent (or guardian) or have parent's permission to give consent.

Signed:

Date:

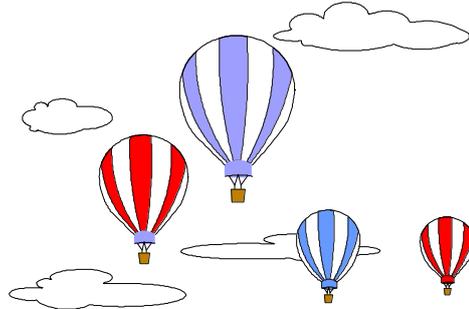
Child agreed to sample (please tick)

Name (PLEASE PRINT).....
(Parent/Guardian or representative)

Name (PLEASE PRINT)..... (Study child)

- **Hb below 9g/dl.**

Focus11+ is covered by the University of Bristol's insurance scheme



Focus11+

24 Tyndall Avenue
Bristol BS8 1TQ
(correspondence only)

Tel: 0117 928 8266 There is an answer phone on this line.
e-mail: focus-admin@bristol.ac.uk

Saliva

The saliva sample has no name attached to it. It will be stored for future analysis. Results will be used for statistical purposes only and not linked to named children. If you have any questions, please ask to be put in touch with Richard Jones.

PARENTAL CONSENT

The purposes and possible risks of taking a saliva sample have been explained to me.

I agree to my child giving a saliva sample for analysis for the 'Children of the 90s' study. I am his/her parent (or guardian) or have parent's permission to give consent.

Signed:

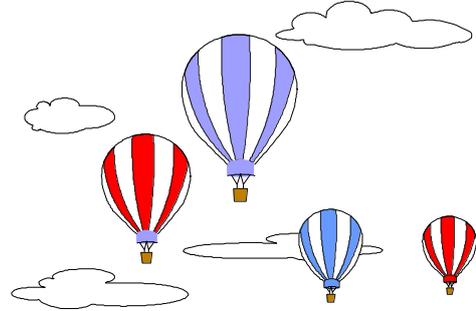
Date:

Child agreed to sample (please tick)

Name (PLEASE PRINT).....
(Parent/Guardian or representative)

Name (PLEASE PRINT)..... (Study child)

Focus11+ is covered by the University of Bristol's insurance scheme



Focus11+

24 Tyndall Avenue
Bristol BS8 1TQ
(correspondence only)

Tel: 0117 928 8266 There is an answer phone on this line.
e-mail: focus-admin@bristol.ac.uk

Permission to use blood sample for cell lines

After processing the name will be taken off the blood samples. The cell lines and DNA samples will be stored with no names attached to them. Results will be used for statistical purposes only and not linked to named children.

PARENTAL CONSENT

The purposes and possible risks in having blood taken have been explained to me.

I agree to my son/daughter having the following blood samples taken for analyses for the 'Children of the 90s' study:

- 1. ACD sample for cell lines ('immortalised' DNA) }
- 2. ACD sample for DNA only } *delete as applicable*

I am his/her parent (or guardian)/have parent's permission to give consent.

Signed:

Date:

Child agreed to sample (please tick)

Name (PLEASE PRINT).....
(Parent/Guardian or representative)

Name (PLEASE PRINT)..... (Study child)

Focus11+ is covered by the University of Bristol's insurance scheme



Why are we collecting saliva samples at TeenFocus1?

The immune system guards and protects the body against infection. The way this works is that when we catch a cold, or any other infection, the immune system detects that something foreign has got into the body. In the case of a cold this is a virus, but it could be bacteria, or pollen or something in our food. Once the immune system has detected these foreign objects, it makes antibodies which attack them. This is how we get better after any infection.

Sometimes we can teach the body to protect against an infection by giving people a “jab” of dead virus or bacteria (this is called immunisation or vaccination). The antibodies against the dead virus or bacteria will attack the live virus or bacteria if they were to get into the body at a later time, so we do not become ill.

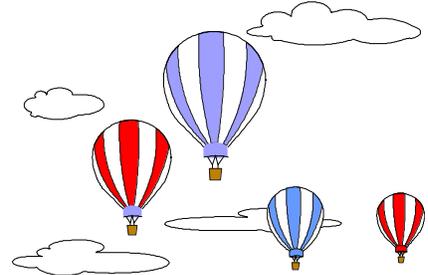
Once we have had any infection, or a jab, the antibodies that are made go round in the blood for a long time afterwards. We can measure antibodies in the blood, and this gives a picture of all the infections we have had, and the “jabs” we may have had as a small child.

The antibodies also get into our saliva where they can help to attack some viruses or bacteria even before they get inside the body. This means we can also get a picture of what infections someone has had if we look at their saliva, which is quite easy to collect.

Saliva can be useful for measuring other things, for example, some hormones (the body’s chemical messengers), and we will keep some of the saliva for these other measurements. It is very useful to repeat these samples over time, as during adolescence the amounts of hormones vary a great deal.

If you are happy to give us some of your saliva, the person in the measurement session will explain how to collect it.

Thank you for helping us!



TeenFocus 1

24 Tyndall Avenue
Bristol BS8 1TQ
(correspondence only)

Tel: 0117 928 8900 There is an answerphone on this line.
e-mail: focus-admin@bristol.ac.uk

Saliva

The saliva sample has no name attached to it. It will be stored for future analysis. Results will be used for statistical purposes only and not linked to named children. If you have any questions, please ask to be put in touch with Dr Richard Jones.

PARENTAL CONSENT

The purposes and possible risks of taking a saliva sample have been explained to me.

I agree to my child giving a saliva sample for analysis for the 'Children of the 90s' study. I am his/her parent (or guardian) or have parent's permission to give consent.

Signed:

Date: Child agreed to saliva sample (child please tick)

and sign

Name (PLEASE PRINT)..... (Parent or Carer)

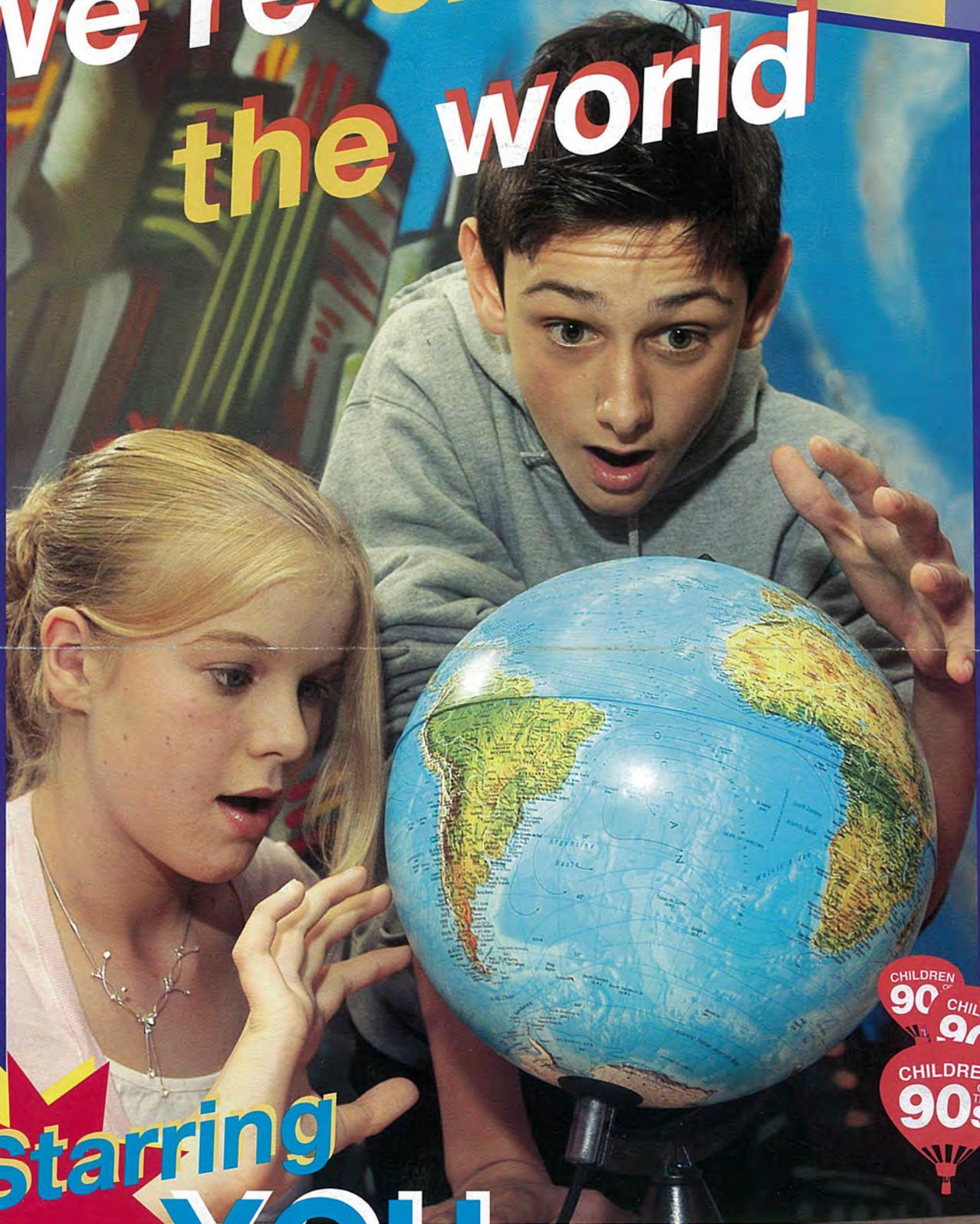
Name (PLEASE PRINT)..... (Study child)

TeenFocus 1 is covered by the University of Bristol's insurance scheme

ALSPAC Avon Longitudinal Study of Parents and Children CHILDREN OF THE 90s

ASPAC is a research initiative of the Unit of Paediatric & Perinatal Epidemiology, Institute of Child Health, University of Bristol

We're changing the world



CHILDREN
OF THE
90s

CHILDREN
OF THE
90s

CHILDREN
OF THE
90s

Starring
YOU

and a cast of thousands....

at **STEAMBOATS**

Reception area:

Battle the aliens on our new space invaders machine.

Day in the life

As soon as they arrive, Reuben and Kez can see that Focus is going to be fun



Hmmm.... it's looking good!!!

Measuring: You will be able to see how your skeleton is. Also, for the first time we will also be looking at...

Kez sees herself in a totally new way



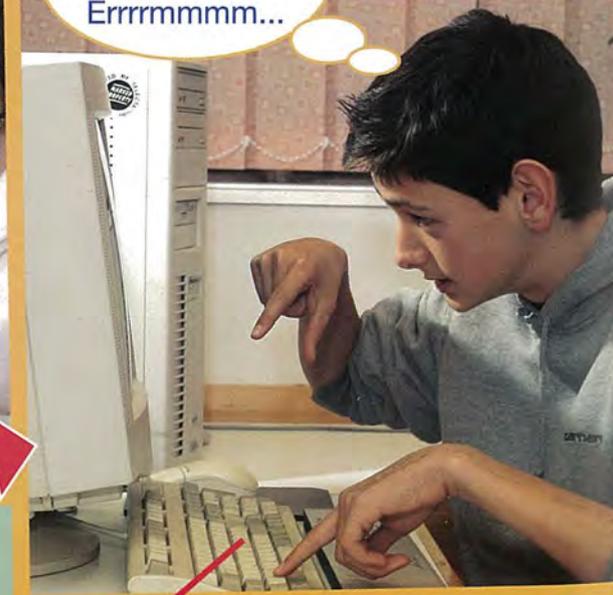
Oh no, they can see right through me!



I've never seen a heart beat so fast

It asks, "Are you decisive?" Errrrrrmmmm...

Reuben is determined to beat the computer



but Kez has spotted her heart-throb on the Wall of Fame

Blood pressure:

We'd like to check your blood pressure to see if it is changing as you get older.

Computer sessions:

We will be asking about your life and about your friends on the computer. There are some games to play too.

Diet:

How has what you eat since you were 10+? The forms you fill in help us to do 13-14 year olds' diets

of TEENFOCUS2

Fitness:
We want to see how fit you are and whether this has changed since you were 9+.

is developing again with our special low dose scanner.
flexible some of your joints are.

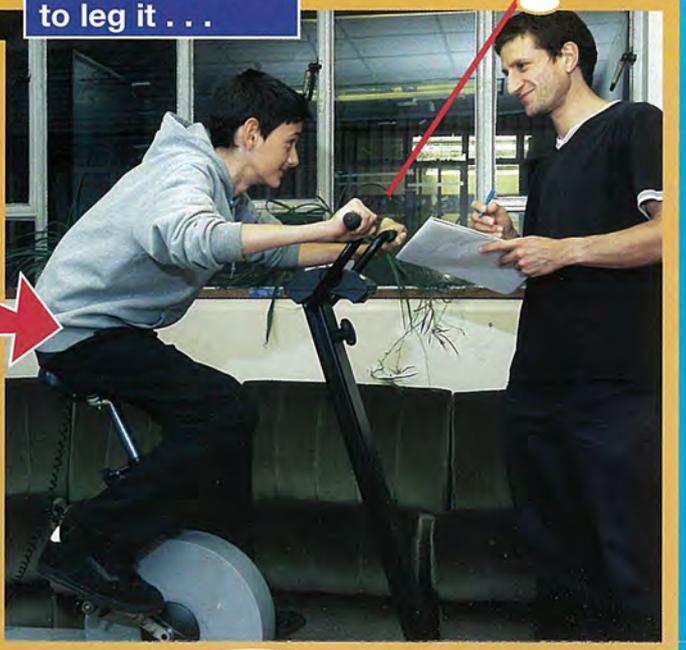
This guy should go in for the Olympics!

Then things get even weirder . . .

Reuben decides to leg it . . .



Are we going round the bend?



I've had enough excitement for one day

ned
ter...

Carrot stick or 6-pack of doughnuts? It's so hard to decide . . .



While Kez confides in her dietary diary . . .



Better not over-do it . . .

. . . and they both test out their activity monitors

Activity monitors:

The monitors that you wore at 11+ are producing excellent information in relation to diet, blood pressure, height, weight and so on. We need to see how these things change as you get older.

NOW! Turn the page to find out more...

and drink changed dietary diaries over what we like today.



WHAT YOU CAN EXPECT AT...

TeenFocus2



You may feel that lots of things are changing in your life - at school, with your friendships, tastes and attitudes, abilities and interests. We want to monitor those changes and describe, in scientific papers, what it means to be growing towards adulthood in the first decade of the 21st Century.

That's why your visit and the information you give are so important. It's also why some of the

measures and questions are apparently the same as before. The results may be very different this time, because you are older.

You can say no, or stop if there is anything you don't want to do or answer. All the information you give us is stored anonymously. We are sorry that we can't feed back to you all your own results, but we can give you height, weight, and blood pressure measurements.

You're changing the world!

Because of you and all the children of the 90s, people across the globe can look forward to happier and healthier lives. So, as a symbol, we're creating a picture of the world, made up of your faces which will become a poster for the Focus Centre. We'll be sure to have a magnifying glass on hand too so that you can spot your friends.

Measuring

Are you happy for us to measure your height, weight, arm and hip circumferences and the straightness of your back? If so please wear clothes you're happy to be measured in. We'll be doing an additional scan of one hip (see picture). This is something that is usually done when people have a scan of their whole body.



● To contact
TeenFocus2

call: 0117-928 8266

Interview and Computer session

We want to see how things in your life are changing as you get older. We are interested in the moods and feelings that you have and what sort of person you think you are.

Blood pressure and sample

Would you like to give blood and saliva samples this time? We know we ask you frequently but these samples are so valuable. They answer so many questions especially about things like hormones and antibodies to infection which change over time. Like everything at the visit it's entirely voluntary so you can always say no.

Fitness

To test your fitness, we may ask you to do a basketball task instead of cycling, (pictured).



Parents

Don't feel left out! You often tell us that you want to be involved and we plan to ask if you would be willing to give us a blood sample and if time to have your height, weight and blood pressure measured. As always at these visits everything is voluntary and if you can help us with these things it is a bonus. As you can see from the picture here we had a bit of fun 'sizing up' a 6ft 5in study dad!



... and if you have time to spare at TeenFocus2 there's the Exploratory to explore again - you may find some different things there this time!

◆ Log on to your Children of the 90s website for the latest competitions, games and news
www.alspac.bris.ac.uk/discovery



PARENTAL CONSENT FOR EMLA

Has your child ever had a bad reaction to local anaesthetics? Y/N

Has your child recently used or been given a local anaesthetic? Y/N

Is your child taking any medication containing sulphonamides? Y/N

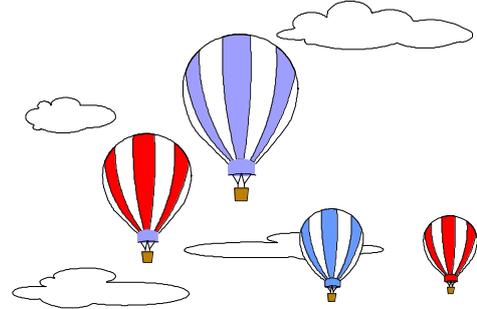
.....
Is your child anaemic? Y/N

Does your child suffer from any clotting or bleeding disorders ? Y/N

Signed.....

Date.....

CHILDREN OF THE 90s



TeenFocus2

24 Tyndall Avenue
Bristol BS8 1TQ
(correspondence only)

Tel: 0117 928 8266 There is an answer phone on this line.
e-mail: focus-admin@bristol.ac.uk

Permission to use blood samples

Once the sample has been taken, you will be informed within a few days if it shows that your child may have a low haemoglobin (below 9g/dl). After that analysis the name will be taken off the blood samples and they will be stored for future analyses. The blood samples will have no names attached to them. Results will be used for statistical purposes only and not linked to named children.

PARENTAL CONSENT

The purposes and possible risks in my child having blood taken have been explained to me. I understand that donated blood will be considered a gift but I will have the right to withdraw permission for analysis.

I agree to my son/daughter having blood samples taken for analyses for the 'Children of the 90s' study:

I am his/her parent (or guardian) or have parent's permission to give consent.

Signed:

Date:

Name (PLEASE PRINT).....
(Parent/Guardian or representative)

STUDY CHILD CONSENT

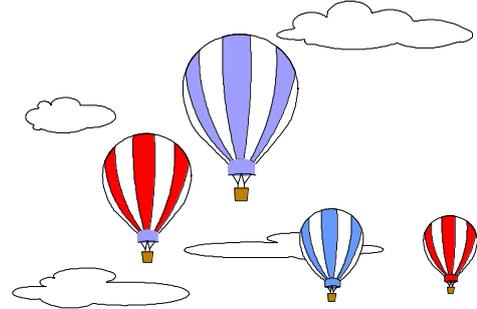
I am the young person participating in the study.

Signed: (Study child)

Name (PLEASE PRINT)..... (Study child)

The University of Bristol holds legal liability insurance in the event that any participant is injured due to any negligence on the part of the University.

CHILDREN OF THE 90s



TeenFocus2

24 Tyndall Avenue
Bristol BS8 1TQ
(correspondence only)

Tel: 0117 928 8266 There is an answer phone on this line.
e-mail: focus-admin@bristol.ac.uk

Permission to use blood sample for cell lines

After processing the name will be taken off the blood samples. The cell lines and DNA samples will be stored with no names attached to them. Results will be used for statistical purposes only and not linked to named children.

PARENTAL CONSENT

The purposes and possible risks in having blood taken have been explained to me. I understand that donated blood will be considered a gift but I will have the right to withdraw permission for analysis.

I agree to my son/daughter having the following blood samples taken for analyses for the 'Children of the 90s' study:

- 1. A sample for cell lines ('immortalised' DNA) }
- 2. A sample for DNA only } *delete as applicable*

I am his/her parent (or guardian) or have parent's permission to give consent.

Signed: Date:

Name (PLEASE PRINT).....
(Parent/Guardian or representative)

STUDY CHILD CONSENT

I am the young person participating in the study.

Signed: (Study child)

Name (PLEASE PRINT)..... (Study child)

The University of Bristol holds legal liability insurance in the event that any participant is injured due to any negligence on the part of the University.

DATE STUDY

24 Tyndall Avenue

Bristol BS8 1TQ

(correspondence only)

Tel: 0117 3311731

e-mail: louise.glynn@bristol.ac.uk



INFORMATION SHEET

Why are we doing the DATE study?

When we do research it is very important to make sure that the measurements we make are really accurate. We actually need to be able to prove that they are! To do that we need some volunteer study members who will do some of the measures again for us to compare our results with.

Why are we measuring diet and activity again?

In this study we are looking at diet and activity so we need you to wear an activity monitor for 3 days and record what you eat and drink for the same 3 days. We will ask you to do this for 3 different seasons; each season is 3 months apart. We have previously asked you to fill in a food diary, and wear an activity monitor, but not at the same time. Diet and activity go together so in this study we want to measure them at the same time.

In order for your body to work it needs to get energy from food and drink which it uses up during the day doing various activities. Your food and drink diary will help us work out how much energy you get from your food and drink every day and wearing the activity monitor will help us to work out how much energy you have used that day. Measuring them at the same time will allow us to assess if there is a relationship between the two.

Why are we measuring diet and activity in the various seasons?

What you eat and how active you are might vary from season to season. They may also vary between school time and holidays. In this study as well as checking that our measurements for diet and activity are accurate, we are investigating if the season of the year affects what you eat and your activity levels.

Why are we collecting urine samples?

In addition to measuring diet and activity we would also like you to collect 3 overnight urine samples each season. This is because by-products of the food you eat are present in your urine; these natural chemicals can give us more information about your diet that we cannot find out from your food records alone. Therefore it would be really useful if you could collect samples of your urine.

What will happen if I agree to take part?

If you decide to take part in the study, you will be contacted by phone to arrange a time when one of the study team can come to your home. One of the research team will bring the DATE study pack, to your home and talk to you and your parents/guardians about the study and ask for consent. The pack contains

- A food diary and questionnaire
- A physical activity kit
- A urine kit

Each season you will be asked to choose 3 days on which to record what you eat and drink in the food diary, preferably two weekdays and one weekend day. For these three days we shall also ask you to wear the activity monitor called an actigraph, and collect overnight urine samples on those three days. The actigraph is a little plastic box that you wear around your waist; it measures your physical activity by recording all of your movements. You will be asked to send your urine samples back to us in the post, in special tubes and envelopes provided by us. After you have completed the food diary one of the researchers will visit you at home and check through the diary with you and your parent/guardian. The researcher will measure your height and weight. They will leave you a pack (without the actigraph which will be posted to you) for the next season. We will telephone in three months time to remind you to do the various measures, and to arrange a suitable time for another home visit. This is when we will post the actigraph out to you.

There will be no risk or benefit to you from taking part in this study. All of the results will be kept confidential. This study has received ethical approval.

You can stop the study at any time if you wish. We will bring your voucher when we visit after each season.

Thanks again for your help.

