



## Life Study

An overview for the Health & Wellbeing Board

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http://www.lifestudy.ac.uk/





#### Life Study

- aims to become a world-leading research study used to understand and improve the lives of children and their families
- is large in scale and innovative in design
- will follow children through to adult life starting in pregnancy with a strong focus on the first year of life
- will provide insights into pathways leading to life long health and well being and the interplay between biology, behaviour and the broader social, physical and economic environment
- will inform health and social policies in areas of major importance to the lives of UK children now



### **Context: UK Birth Cohorts**



	Study	1946 NSHD	1958 NCDS	1970 BCS70	1991 ALSPA0	2000-1 MCS	2007-10 BiB
A.	Births recruited (n)	5,362	17,773	16,135	14,541	18,819	13,818
\\.	Pregnancy				•		
nae j	Birth	•	•		•		
	4 & 8 wks						
	6 & 8 mos				••		
	9 mos						
76	1 year						

### Life Study – part of a powerful legacy



Study	1946 NSHD	1958 NCDS	1970 BCS70	1991 ALSPAC	2000-1 MCS	2007-10 BiB	2014-18 Life Study
Period of recruitment	1 week	1 week	1 week	21 months	16 months	43 months	c. 48 months
Births recruited (n)	5,362	17,773	16,135	14,541	18,819	13,818	> 80,000
Pregnancy				•		•	1
Birth			•	•			•
4 & 8 wks				••			
6 & 8 mos				••			•
9 mos					•		
1 year							ı

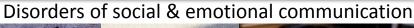
<sup>&</sup>lt;sup>1</sup>birth sample not included in pregnancy visit

# Context: complex pathways & childhood outcomes



Infections, immunity, asthma & allergies: the 'hygiene hypothesis'











Obesity, activity, sedentary behaviours









Cognitive

development

#### Low iodine may lead to literacy problems

Hannah Devlin Science Editor

Babies whose mothers have low levels of iodine during pregnancy have worse literacy skills in childhood, scientists have found.

At nine years old, children who did not receive enough iodine in the womb performed worse than their peers in reading and spelling tests.

reading and spelling tests.

"Our research found children may continue to experience the effects of insufficient iodine for years after birth," said Kristen Hynes, a public health specialist at the University of Tasmania in Australia, who led the study. "Al-

though the participants' diet was fortified with iodine during childhood, later supplementation was not enough to reverse the impact of the deficiency during the method:

Verse the impact of the defineers, uning the mother's pregnancy."

Britain has one of the worst rates of female iodine deficiency in the developed world. A study of 193 countries placed the UK among the ten countries with the greatest number of school-age children with insufficient iodine intake

lodine is absorbed from food and plays an important role in brain development, but previously it was not clear what level of deficiency was needed to

have an impact. The study of 228 children in Tasmania suggests that even a mild deficiency has an effect. Milk is the most common source of

dietary iodine, other sources include seaweed and sea fish. Since 1993 the World Health Organisation (WHO) has conducted a global program as a lide of the seaweed and the seaweed salt iodisation to prevent deficiency and salt iodisation to prevent deficiency and salt iodisation to prevent deficiency salt iodisation to prevent deficiency salt programme and the seaweed seaweed seaw



#### Who can join Life Study, how many and how?



- More than 60,000 mothers and their partners will take part in Life Study starting during their pregnancy
- Another 20,000 mothers and their partners living across the United Kingdom are being contacted after their baby is born
- We hope to have more than 200,000 people in our study eventually
   this will take 4-5 years just to enrol this number
- BHRUT is the first NHS Trust to join Life Study and a special Life Study clinic is opening at King George's Hospital
- We see babies twice in their first year and will stay in touch as they grow up to learn more about the special early years of life

#### What kinds of information are we interested in?





- Identity
- Health
- Lifestyle
- Education
- Employment
- Income

**Parents** 

- Relationships
- Pregnancy and birth



- Health
- Growth
- Development
- Sleeping and crying
- Feeding

Infants

- Parenting
- Childcare



- Housing
- Social networks
- Neighbourhoods
- Environmental pollutants

The environment

#### Why King George's and Queen's Hospital?



- BHRUT is committed to excellence in women and children's health, to research and to developing health and social care services for the wider community
- Life Study focuses on many health, social and other issues of concern to the local population
- By working together we can develop Life Study in Barking Havering and Redbridge through childhood and into adolescence
- This will create a valuable resource of information for the local community and for Life Study

Find out more on our website!

Barking, Havering and Redbridge University Hospitals







## Life Study:

understanding lives now and for the future

Scientific Director: Professor Carol Dezateux

http://www.lifestudy.ac.uk



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