## **RHIO**

Participant information

Respiratory Health in Childhood (RHIO)

Long-term follow-up questionnaire for Baby Biome Study participants

You are invited to participate in RHIO, a follow-up questionnaire for Baby Biome Study participants. Before you decide, we want to briefly explain about this research and what you need to do. Please take time to read the following information.

Why are we contacting you?

We are contacting you because you and your child took part in Baby Biome Study in 2016 or 2017, and at that time agreed to be followed up so that we could collect information about child health. We hope you might still be happy to help us with this.

Now that your child is older, we want to collect information on their health and well-being. To do this, we would like you to answer a short questionnaire about your child and their health, including questions about breathing problems, and some questions about you and your household.

What do I need to do?

Please complete the questionnaire either using your phone to scan the QR code provided in the letter, or a computer by typing in the link provided in the letter. The questionnaire should not take more than 10 minutes to complete.

What is the Baby Biome Study?

The Baby Biome Study aims to understand how the gut microbiome (bugs) in very early life may influence a baby's immune system and their health and wellbeing later in life. We recruited around 7,000 mothers and babies in 2016 and 2017 and nearly everyone agreed to be followed up.

Who is doing this research?

This study will be undertaken by Cristina Garcia-Mauriño Alcazar, Paediatrician and epidemiologist, who is part of the Baby Biome study team. She is undertaking her PhD, under the supervision of Professor Nigel Field, and both work at the UCL Institute for Global Health. The Baby Biome Study was funded by the Wellcome Trust and Cristina's PhD is funded by a Institute for Global Health Fellowship.

What has the study found so far?

The stool (poo) samples we collected in 2016 and 2017 have already been incredibly helpful. We discovered that babies born vaginally have different gut bacteria to those delivered by Caesarean section. These findings were published in the Nature medical journal on 18th September 2019. However, we don't know if these differences will have any effect on later health. You can access the original publication as well as the press release and more information on the Baby Biome Study website https://www.ucl.ac.uk/global-health/research/a-z/baby-biome-study

Are there any benefits of taking part?

There are no direct benefits to you or your baby, but the information you provide will help researchers and doctors to understand more about human health and the development of the immune system and disease. We hope this will help many other parents and their babies in the future.

Your data and confidentiality: How will we use information about you?

We value the contribution you make by sharing your information with us and we are very careful to keep all of your information confidential and secure.

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When we receive your answers, your name, address and contact details (personal identifiers) will be replaced with a unique study number to identify questionnaire responses from you, before any analyses are undertaken. Personal identifiers will be kept separately and securely. All analyses of the data and dissemination of the findings will be anonymous. Nothing that will be published or disseminated will identify you.

All the information we collect will automatically be stored and held securely at UCL in accordance with data protection laws General Data Protection Regulation (GDPR 2018).

How long will we keep your information for?We will store data in a pseudo-anonymised way for at least ten years.

How can you find out about the results of the research? All the findings from the Baby Biome Study, including those from RHIO, will be available on our website [https://www.ucl.ac.uk/global-health/research/a-z/baby-biome-study], you can also sign up to receive updates on our important findings about child health.

Do I have to take part? No, you do not have to take part. You can choose whether you want to take part, or not. If you decide to take part, and then change your mind and would like to withdraw so that we don't use the information you provided for RHIO, please let us know [cristina.alcazar.19@ucl.ac.uk or nigel.field@ucl.ac.uk].

Where can I find out more about how my information is used?You can email us directly [cristina.alcazar.19@ucl.ac.uk or nigel.field@ucl.ac.uk] or you can contact UCL's Data protection office on data-protection@ucl.ac.uk

Keeping in touchWith your permission we would like to stay in touch with you in the future and may ask you to take part in future Baby Biome Study activities. When we get in touch, we'll send you information about these activities. Of course, it's up to you whether you answer our questions or agree to participate further.

Ethical approvalThis work has been approved by the NHS Proportionate Review Sub-committee of the Whales REC 6 (REC reference 22/WA/0287)

Link to UCL privacy notice:

https://www.ucl.ac.uk/legal-services/privacy/ucl-general-privacy-notice-participants-and-researchers-health-and-care-research-studies

## **CONSENT**

CONCENT

Thank you for agreeing to participate in this confidential questionnaire. It will take you approximately 10 minutes to complete. Please answer all the questions as fully as you can. You are free to leave out any questions you don't want to answer, although we hope that you will answer all those that apply to you. Please indicate you agree to the following three questions to join the RHIO study. If you have further questions, you want to know more about how your information is used, or have any other questions you can always contact us via e-mail to get more information [cristina.alcazar.19@ucl.ac.uk].

RHIO 151286, IRAS 305551, Participant information sheet, Version 1.0, 11/07/2022

	CONSENT	
L	I confirm that I am the mother, father or other primary carer of the child enrolled in Baby Biome Study, and am filling in the questionnaire about them	<ul><li>☐ Mother</li><li>☐ Father</li><li>☐ Primary carer</li></ul>
2	I have read and understood the information provided about the RHIO study	○ Yes
3	I agree to participate in the RHIO study	○ Yes

## **Demographic information** Please understand that all the questions refer to your child enrolled in Baby Biome Study What is your name? (person filling in the questionnaire) What is your surname? What is your child's first name? What is your child's surname? What is your child's date of birth? Please check this is the correct age for you child. If not, please check the date of birth is entered correctly. What is your child's ethnic group? Please choose one ○ White English/Welsh/Scottish/Northen Irish/British group that best describes your child's ethnic group or ○ White Irish background ○ White Gypsy or Irish Traveller Any other white background

Mixed/multiple: White and Black CaribbeanMixed/multiple: White and Black African

Any other Mixed/multiple ethnic background

Any other Black/African/Caribbean background

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Mixed/multiple: White and Asian

○ Asian/Asian British: Indian
 ○ Asian/Asian British: Pakistani
 ○ Asian/Asian British: Bangladeshi
 ○ Any other Asian background
 ○ Black/Black British: African
 ○ Black/Black British: Caribbean

Other ethnic group: ArabAny other ethnic groupPrefer not to say

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	General questions about your child		
11	Were there any other children (under 16) staying regularly overnight in your household during the first six months of your child's life?	<ul><li>Yes</li><li>No</li><li>I'm not sure</li></ul>	
12	Has your child ever attended child care regularly outside your home (at least once a week)?	<ul><li>Yes</li><li>No</li><li>I'm not sure</li></ul>	
12.1	How old was your child when they FIRST attended child care? (If you don't remember the exact age please fill in an approximate age)		
	<pre>&lt; 6 months</pre>		
12.2	Does you child currently attend child care outside your home ?		
	<ul><li>○ Yes</li><li>○ No</li></ul>		
12.3	How old was your child when they LAST attended child care?	<pre>     &lt; 6 months</pre>	
13	Has your child received their routine childhood vaccines?	<ul> <li>Yes</li> <li>Some</li> <li>No</li> <li>I'm not sure</li> </ul>	
14	Did your baby in their first six months of life ever take nutritional supplements called probiotics or prebiotics?	<ul><li>Yes</li><li>No</li><li>I'm not sure</li></ul>	
15	Were there any pets at home or at any other houses your baby visited regularly (3 or more times a week) in the first six months of their life?	<ul><li>Yes</li><li>No</li><li>I'm not sure</li></ul>	
15.1	What kind of pets? Please tick all that apply	☐ Dog ☐ Cat ☐ Birds ☐ Guinea pig, rabbit, mouse, rat,hamster ☐ Other	

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## Your child's health. In this section we ask questions about health conditions or symptoms your child may have had. Please select all that apply. Yes 16 Has a doctor or any other health professional ever $\bigcirc \ \mathsf{No}$ told you that your child has asthma? () I'm not sure 16.1 How old was your child when you were FIRST told they $\bigcirc$ < 2 years had asthma? ○ 2-5 years More than 5 years 16.2 Has your child ever been admitted to hospital (stayed Yes ∴ overnight) because of asthma? $\bigcirc$ No () I'm not sure 16.2. How many times have they been admitted to hospital because of asthma? 16.2. Blow old was your child when they were FIRST admitted $\bigcirc$ < 2 years to hospital because of asthma? 2- 5 years More than 5 years Has your child ever had bronchiolitis? Yes $\bigcirc$ No This is a term used for a cold that progresses to () I'm not sure difficulty in breathing and other symptoms such as intense cough and/or refusal to eat or drink enough in children under 2 years of age. 17.1 How old was your child when they FIRST had ○ 0-6 months bronchiolitis? 7-11 months 1-2 years 17.2 Has your child ever been admitted to hospital (stayed Yes ○ No overnight) because of bronchiolitis? ○ I'm not sure 17.2. How many times have they been admitted to hospital because of bronchiolitis? O-6 months 17.2. Dow old was you child when they were FIRST admitted to ○ 7-11 months hospital because of bronchiolitis? 18 Has your child ever had wheezing on the chest? $\bigcirc$ No Please answer yes if this applies to your child, ○ I'm not sure independent of whether you answered yes or no to the previous questions about asthma or bronchiolitis. 18.1 How old was your child when they had their FIRST $\bigcirc$ < 1 year $\bigcirc$ 1-2 years wheezing episode? $\bigcirc$ 3-5 years



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More than 5 years

18.2	How many wheezing episodes has your child had in their life?	<ul><li>○ 1</li><li>○ 2-3</li><li>○ 4 or more</li></ul>
18.3	Has your child ever been admitted to hospital (stayed overnight) because of wheezing?	<ul><li>○ Yes</li><li>○ No</li><li>○ I'm not sure</li></ul>
18.3	B. Bow many times has your child been admitted to hospital because of wheezing?	
18.3	8. Dow old was your child when they were FIRST admitted to hospital because of wheezing?	<pre> &lt; 1 years</pre>
19	Has your child ever taken any of the following medications? Please tick all that apply	☐ Salbutamol inhalers (like Ventolin for example) ☐ Steroid inhalers ☐ Oral steroids ☐ Montelukast ☐ None ☐ I'm not sure
20	Has your child ever had eczema?  Eczema is an itchy rash which comes and goes for at least six months. It usually affects the elbows, behind the knees, in front of the ankles, under the buttocks or around the neck,ears or eyes).	<ul><li>Yes</li><li>No</li><li>I'm not sure</li></ul>
20.1	. At what age did this itchy rash (eczema) FIRST occur?	<ul><li>○ Under 2</li><li>○ 2 to 5</li><li>○ More than 5 years</li></ul>
21	Has a doctor or any other health professional ever told you that your child has allergies?	<ul><li>○ Yes</li><li>○ No</li><li>○ I'm not sure</li></ul>
21.1	. What is/was your child allergic to? Please tick all that apply	☐ Pollen ☐ Dust ☐ Insect bites or stings ☐ Milk ☐ Foods ☐ Animals/birds ☐ Other
21.1	Please specify	

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	Family history and general questions		
22	Has the mother or father of the child ever been diagnosed with asthma? Please select all that apply	<ul><li>☐ Mother</li><li>☐ Father</li><li>☐ None</li><li>☐ I'm not sure</li></ul>	
22.1	Is the mother currently using asthma medication?	<ul><li>Never</li><li>Rarely</li><li>Quite often</li><li>Regularly</li><li>I'm not sure</li></ul>	
22.2	Is the father currently using asthma medication?	<ul><li>Never</li><li>Rarely</li><li>Quite often</li><li>Regularly</li><li>I'm not sure</li></ul>	
23	During the first 6 months of life of [child_name], did anyone in your household smoke ?	<ul><li>Yes</li><li>No</li><li>Prefer not to say</li></ul>	
23.1	Did anyone smoke inside?	<ul><li>Yes</li><li>No</li><li>I'm not sure</li></ul>	
24	Do you have enough money to cover your basic needs (food, heating etc)?	<ul><li>Yes, all the time</li><li>Yes, most of the time</li><li>Yes, some of the time</li><li>No</li><li>Prefer not to say</li></ul>	
25	Did the mother during [child_name]'s pregnancy ever take any nutritional supplements called probiotics or prebiotics?		
26	Is there anything else you want to tell us?		

