

## THIS ISSUE

- ★ Gemini updates
- ★ Gemini in the Press
- ★ What to expect in 2019
- ★ Home Environment Research
- ★ New PhD student
- ★ Scientific Awards
- ★ Karate Twins
- ★ Growth charts

## NEWSLETTER

## GEMINI IN 2018



*Gemini Team (from left to right): Dr Alison Fildes, Dr Clare Llewellyn, Alice Kininmonth (PhD student), Dr Andrea Smith*

Welcome to the 11<sup>th</sup> Gemini newsletter

2018 has been another eventful year for the Gemini study, and for the Gemini families as well. With the twins turning 11 years old, 2018 has seen many of them make the momentous transition from primary to secondary school. Meanwhile, the Gemini study team has continued to develop and grow; fresh research plans are now underway with teams in Norway and the Netherlands, and we have welcomed new and enthusiastic research students into our fold (read more on page 2).

## Gemini in the press

If you follow our Twitter feed [@GeminiResearch](https://twitter.com/GeminiResearch) you may have seen the 2018 media coverage Gemini received. Drs Andrea Smith, Moritz Herle, Ali Fildes and Clare Llewellyn produced a podcast with the Association for Child & Adolescent Mental Health, about Gemini's research on fussy eating. They talk about what shapes it and what parents can do to help their fussy eaters try new foods (link: [bit.ly/2FTxRJp](https://bit.ly/2FTxRJp)).



Our Gemini Director, Dr Clare Llewellyn, has been exceptionally busy since, taking part in a podcast for the BBC World Service (link: [bbc.in/2E2aQIG](https://bbc.in/2E2aQIG)); producing a short video for the BBC titled 'Five tips for parents of fussy eaters', which ended up on the 'top stories' page of the BBC (link: [bbc.in/2r8aj9f](https://bbc.in/2r8aj9f)), and publishing her first book featuring Gemini research called 'Baby Food Matters' (read more on page 3).

## Gemini research

We have continued to publish important new scientific findings, including a powerful study in the top paediatric medical journal (JAMA Pediatrics) on how nature (genes) interacts with nurture (the home environment) to shape weight in early childhood. You can read more about this novel work and our award-winning team member Dr Andrea Smith on page 2.

## What's new?

Following the launch of our new logo and twitter account in 2017, we are currently re-vamping and updating the Gemini website which will provide lots more resources for both families and researchers. We are also planning a Gemini Facebook page to give families another way to keep up to date. We will be in touch to let you know when these go live in 2019.

## What next?

Gemini is now part of a large new research project funded by the EU, investigating how sugar and artificial sweeteners influence health. Our new PhD student, Judith Fortmann, discusses this work on page 3. We are also preparing our '11-year' questionnaires which we will be sending out in the New Year. This will be the first time we include questions for the twins themselves, as well as the parents. Please do send us any updated contact details (email, phone number or address) so we can include you in this important new phase of the study.

## CONTACT

## Gemini Research

Department of Behavioural Science and Health, University College London  
1-19 Torrington Place  
LONDON, WC1E 7HB, UK  
FREEPOST (BSH\_Gemini)

T: 020 7679 1263  
F: 020 7679 8354  
E: [Gemini@ucl.ac.uk](mailto:Gemini@ucl.ac.uk)



Keep up to date with us all year!

[@GeminiResearch](https://twitter.com/GeminiResearch)

# GENES AND THE EARLY HOME ENVIRONMENT INFLUENCE WEIGHT

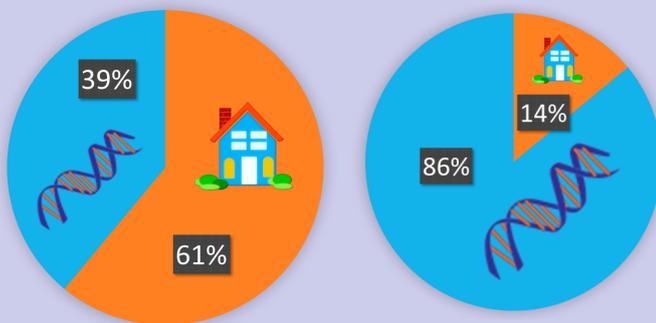
You may remember being interviewed by telephone about your home when your twins were 4 years old. We asked lots of questions about the food in your home, the opportunities for physical activity, and screen time. Thanks to your time and efforts, we were able to use this information to see if a **'healthy' home can override genetic influence on a child's weight**. We know from decades of research with twins that genetic influence on weight is actually quite strong, in both childhood and adulthood. We wanted to see if a 'healthy' home could override a child's natural tendency to develop overweight. We found that the genetic influence on weight was **not as strong** (39% compared to 86%) for children growing up in **healthier homes** with fewer 'junk' foods, more opportunities for physical activity, and more rules around screen time.



Dr Stephanie Schrepft

## HEALTHIER HOME

## LESS HEALTHY HOME



- Genetic influence
- Environmental influence

Our study is important because it shows that genes are not 'destiny' when it comes to a child's weight. We know from our previous Gemini studies that genes influence weight by making us want to eat when we see or smell delicious foods, such as food high in sugar and/or fat. While there is nothing people can do about their genes, people can decide what food they have in their homes, and what they give to their children. So, making sure your home is full of healthy options (such as fruit and vegetables), and not too full of less healthy snack foods/drinks (such as fizzy drinks), may protect children whose genes encourage them to overeat when given the opportunity to do so. This was work led by Dr Stephanie Schrepft during her PhD.

Our findings were published in **JAMA Pediatrics**. You can read more about the study here: [bit.ly/2KO3Fhk](https://bit.ly/2KO3Fhk)

## OUR AWARD WINNING TEAM

In January, **Dr Andrea Smith** passed her PhD examination with flying colours and remains a core part of the Gemini team as a post-doctoral researcher.

Andrea's fantastic contribution was further recognised when she won a Spirit of UCL School of Life and Medical Sciences award in **Scientific Excellence & Leadership** in October this year.

Read the online interview with Andrea here: [bit.ly/2EMjzcQ](https://bit.ly/2EMjzcQ)



Dr Clare Llewellyn & Dr Andrea Smith



# NEW GEMINI PHD STUDENT!

Hi! I am Judith Fortmann and I will be joining the Gemini team in January 2019 after working as a Research Assistant in the Department of Health and Behavioral Science at UCL. Before that I completed my Masters Degree in Health Psychology, also at UCL. I have always been fascinated by child health, and am keen to find ways to improve it. I'm very excited to find out more about the role that food and drink plays in shaping young children's later health.

## What will your research focus on?

My PhD research will focus on the role of sugar and artificial sweeteners (such as those that you can find in Diet Coke) in child health. In particular, I will use the food diaries and questionnaires you've been filling out over the years to understand how genes and the environment influence the amount of sugar and artificial sweeteners children consume, in toddlerhood and later childhood. I will also look at whether the amount of sugar and artificial sweeteners children eat and drink are related to their growth, weight, and food & drink preferences later on in life.



Judith Fortmann  
(Gemini PhD student)

## Why is this important?

At the moment we don't know if artificial sweeteners influence children's early growth and later food and drink preferences. All the information you have provided the Gemini team, about what your twins ate and drank when they were toddlers and children, will help us to understand why some children eat more sweet or artificially sweetened foods and drinks than others, and if this affects their growth and later food preferences. I'm very much looking forward to being part of the Gemini team!

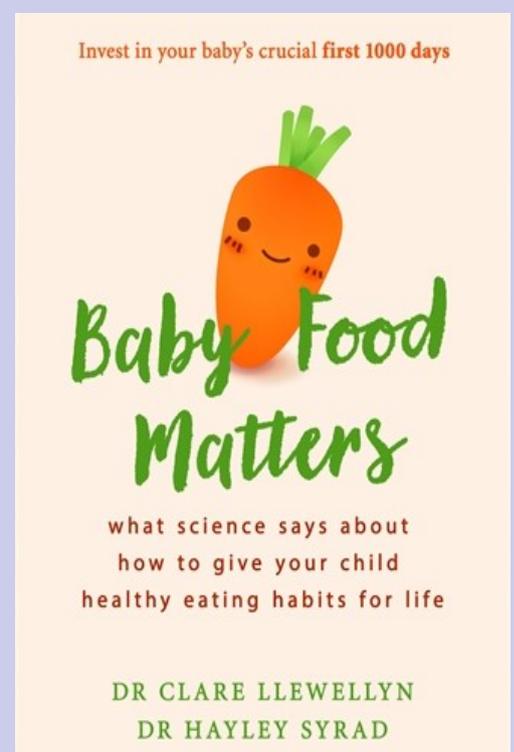


## ***Baby Food Matters***

In May this year, Dr Clare Llewellyn (Director of Gemini) and Dr Hayley Syrad (a previous Gemini PhD researcher) co-authored *Baby Food Matters*. This book would not have been possible without your continued support of Gemini and the information you have provided over the years.

*Baby Food Matters* translates 10 years of Gemini research (and other studies) into helpful, practical and evidence-based advice for parents on 'what' & 'how' to feed children during the first 1000 days of life (from conception up to their second birthday). The book is published by Yellow Kite and is available to purchase on Amazon and in all mainstream book stores (both online and in shops). The book has received great reviews (5\* on Amazon) and will soon be available to buy in both the US and Japan as well.

In an interview with Yellow Kite, Dr Llewellyn describes a typical day as a scientist in Gemini: [bit.ly/2DNEmKK](http://bit.ly/2DNEmKK)



# KUNG FU TWINS!

Meet 11-year-old Gemini twins Phoebe and Henry Greetham. They live in North Yorkshire with their parents, two older sisters, Millie & Chloe, and an energetic Beagle, Nelson.

**Hi there. Please could you briefly introduce yourself?**

*"Hi my name is Henry, I have been doing karate for 3.5 years. I love karate as it can help me defend myself and learn self-discipline at the same time."*

*"Hi, I'm Phoebe and I have been doing karate for 3 years. I really love it because you can make amazing new friends and go to many different places to compete."*

**We have heard 2018 has been a busy year for you both?**

*"That is true, 2018 has been a very exciting year! We joined the England Karate Federation Youth Squad and were selected to represent the UK at the Helsinki Karate Open Championship in August." After months of training, Phoebe proudly brought home a gold and Henry a silver medal.*



*Phoebe & Henry win gold & silver at the Helsinki Open Championship*

**How do people react when they find out that you are twins?**

*"When we were younger no one believed we were twins because we are a boy and a girl. Now, most people think Henry is much older as he is quite a bit taller, but actually the difference is only 2 minutes. Despite our very different personalities, we share our main interest, karate."*

**Any big plans for 2019?**

*"Our next big competition is the Kyu grade Nationals in January, which is the biggest junior competition in the UK. Karate will feature in the Olympic Games for the first time in Japan 2020 and, as part of the England Youth Team, we have the chance of becoming International Karate champions!"*



We are excited to launch our Gemini Facebook page. Please join the online group by searching for **'Gemini - Health and Development in Twins'** or **@GeminiResearch** on [www.facebook.com](http://www.facebook.com).

We will be using this platform to communicate updates with you, and we hope to create an engaged community of all the Gemini families - across the UK and the world!



## GROWTH CHART HEIGHT REMINDER!

We are continuing to collect height and weight information. Measuring the twins' heights and weights is an extremely important part of the study; it will allow us to explore growth patterns, and see how the information we collected between birth and 11 years relates to on-going growth and development.

Please do keep sending in any measurements that you can. You can use our online form to submit measurements: [www.geministudy.co.uk/gemweight](http://www.geministudy.co.uk/gemweight) or email them to us at: [gemini@ucl.ac.uk](mailto:gemini@ucl.ac.uk). Thank you all for your continued support and for providing us with regular measurements. Thank you!



## Season's Greetings From



