

gemini

health and development in twins



THE GEMINI TEAM

(from left to right): Chiara Gericke, Gaby Heuchan, Dr Clare Llewellyn, Dr Zeynep Nas, Lisa Heggie, Dr Ali Fildes, Dr Rana Conway, Dr Alice Kininmonth, & (not pictured: Dr Andrea Smith, Kristiane Tommerup, Emma Young & Dr Ivonne Derks and Dr Moritz Herle)

WELCOME TO THE 16TH GEMINI NEWSLETTER!

2023 has been another busy year for the Gemini team and the Gemini families. Our 16th Newsletter provides us with the opportunity to thank you for your continued participation, and to keep you up to date with all the important research that couldn't happen without your fantastic support. Please follow our social media accounts below, we love to stay in touch with you throughout the year!

New Faces in the Gemini Team

This year we have welcomed two new PhD researchers, Chiara Gericke and Emma Young, who have joined our growing Gemini PhD student cohort, which includes Gaby Heuchan, Lisa Heggie and Kristiane Tommerup. You can read about Chiara's and Emma's research on page 2. Congratulations to Dr Alice Kininmonth who took on a new role as a Research Fellow in Appetite Research at the University of Leeds in July. Alice continues to be an important member of the Gemini family and you can read about her Gemini research into caregiver feeding practices and children's eating behaviours on page 3.

Celebrating Success

Throughout 2023, Gemini researchers have presented research findings at scientific meetings in Spain, Sweden, Ireland and throughout the UK. Lisa Heggie recently travelled to Belgrade in Serbia as part of an important symposium on the relationship between artificial sweeteners and health. Lisa presented findings from her research using information from diet diaries completed by Gemini families when the twins were two and seven years old. Lisa's work is vital for informing policy aiming to reduce children's sugar intake. By presenting Gemini findings across the world, the information you have given can be used to support advances for children's health and development globally.

Sweet Sixteen

It has been a milestone year for the Gemini twins who turned 16 in 2023. A snapshot of these achievements are celebrated on page 4. Adolescence is an important transition from childhood to adulthood. During this time, many develop healthy eating habits and feel good about their body, but some struggle. We don't know much about why this happens. Next year, we will therefore be inviting the twins to take part in a new study to find out more about adolescents' eating habits and well-being. As part of this, we will be asking for the twins' own contact details. Please keep an eye out for this new study.



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Gemini-Health and
Development in Twins

Chiara Gericke

Hello! My name is Chiara. I am a behavioural scientist and PhD student at UCL, funded by the UK's Medical Research Council. Before starting my PhD, I completed an MSc in Psychology at UCL, and worked as a researcher on Gemini, investigating how adolescents respond to pictures of appetising and bland food, in an online game.

What will your research focus on?

My PhD will explore how the built neighbourhood food environment (e.g. the number of fast food outlets), together with genetics, influences physical health. I will be using a combination of different research methods from geography, to behavioural science and epidemiology, to study this.

Why is this important?

We know very little about how the neighbourhood food environment influences physical health in young people. Developments in technology have made it possible to map the food environment in detail. I will use this data to study how access to different types of food outlets influences health, and suggest recommendations for health policy.



Emma Young

Hi, I'm Emma, a PhD student at the University of Leeds. I completed my BSc Psychology degree at the University of Leeds in 2022, and worked as a research assistant at the University of Bradford in the field of childhood physical activity, before joining Gemini in October 2023.

What will your research focus on?

My PhD aims to understand the interplay between psychological wellbeing and growth across childhood and adolescence. Gemini's fantastic twin design means I can explore whether the environmental and genetic influences on growth are the same as those for psychological wellbeing.

Why is this important?

While we think that growth and psychological wellbeing are linked, we don't really know why. Finding out more about this will help us better understand how to support children to develop into healthy adults, both physically and psychologically.

Caregiver feeding practices and children's eating behaviours

When your twins were toddlers and starting primary school, you may remember answering questions about the way you fed your children and their eating behaviours. We recently used this information to try to understand the direction of relationships between caregiver feeding practices (such as use of food as a reward) and eating behaviours (such as emotional eating).

We found that parents use certain feeding practices (e.g. offering food as a reward) as a 'natural' response to their child expressing a greater interest in, and enthusiasm for, food. At the same time, some feeding practices (e.g. using food to soothe or calm an upset toddler) encourage children to use food to self soothe, in the preschool years. Our findings were published in the *Journal of Child Psychology and Psychiatry* earlier this year and you can read the article at: tinyurl.com/bdhwa9he

We also explored how often parents of twins use different feeding practices with each twin during toddlerhood and the preschool years, and why. We found that parents tended to use the same feeding practices with both of their twins.



The only feeding practice that often differed between two twins in a pair was pressure to eat.

We found that parents used more pressure with their twin who had a smaller appetite, lower interest in food, and who was a pickier eater. Our findings were published in the *International Journal of Behavioral Nutrition and Physical Activity* earlier this year. You can read the article at: <https://tinyurl.com/bsuy72jp>.

Our findings provide important insights and could be used to guide interventions seeking to support parents in feeding their children in a way that nurtures the development of healthy eating behaviours.

This research would not have been possible without the time and dedication of the Gemini families. Thank you for your continued support!



Written by Dr Alice Kininmonth, Research Fellow in Appetite Research at the University of Leeds.

UPDATES FROM YOU

This year, the Gemini twins celebrated significant milestones, including academic achievements, birthdays, concerts, prom nights, and new family additions. Evie & Madeleine, Amelia & Alisha, and Sophie & Freya marked their 16th birthdays by successfully passing their GCSE exams and transitioning to new academic stages. Amelia & Alisha secured college spots for psychology, sociology, criminology, and English studies, while Sophie & Freya excelled in their GCSEs and pursued joint studies in Animal Management. In 2023, the twins made lasting memories at their prom nights, with Rosie & Miles adding charm with the arrival of two adorable puppies. These shared experiences highlight the diverse and rich journeys of the Gemini twins, blending academic triumphs with joyful celebrations and personal growth. Congratulations to you all! Please continue sharing your photos and news with us via email or social media.



GEMINI IN THE MEDIA

In May 2023, Dr Clare Llewellyn was invited to speak on BBC Radio 4's The Food Programme about feeding children. She talked about how parents can help their child feel more confident about trying new foods, and how to encourage young children to eat more fruits and vegetables. If you would like to listen to the full episode, follow this link: <https://www.bbc.co.uk/programmes/m001mst8>. In March, Dr Ali Fildes was a guest on episode 22 of 'Pressure Cooker', an award-winning US podcast series about parenthood and feeding kids. Ali discussed how genetics play a role in children's food preferences, and why parents are not to blame for fussy eating, drawing on over a decade's worth of scientific evidence from Gemini. You can listen to the podcast through streaming services or via the Pressure Cooker website: <https://www.pressurecooker.fm/>.

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Happy Holidays!

FROM THE GEMINI TEAM

