FALL 2023

IN THIS ISSUE:



Celebrating Project Viva's 25th Birthday (p. 2)



Current Visit Timepoints (p. 2)



ECHO Results Return Workshop (p. 3)



Fathers'/Parental Figures' Contact Info (p. 3)



Participate in Project Viva From Your Phone! (p. 3)



Featured Finding: Maternal Stress Magnifies Impact of Prenatal Diet on Child Body Composition (p. 4)



A Note From Our Co-Principal Investigator

Fall is a time to get back into our routines and prepare for another year to come. At Project Viva, we are excited to really dive into the Young Adult Visit 1 and continue the Women's Health Visit 1. You might be wondering why we are calling these "Visit 1" even though we are now 25 years into Viva. That is because these are the first visits that are entirely separate for moms and "kids," starting our new chapter.

Viva Viens

If you have not been contacted yet for these visits, you should be hearing from us soon. We hope you know that you can participate in many different ways, whether that be coming to our office, working with us virtually via a video call, completing online surveys, or having someone visit you at home for some of the in-person measures. If there is one thing we learned during the pandemic it is how to be flexible, and we want to make sure you participate in the way that is most preferable for you!

We are also expanding our assessments for young adult data collection using a new mobile phone app called "Beiwe" (see more details below). We feel this new way of interacting with you will help us understand you "in the moment," about when and how you live your life, and how it can affect your health.

While the Project Viva team prepares and conducts visits, our investigators continue to lead research studies leveraging all the information you have provided over the last 25 years to better understand the health of women and growing children, all the way to adulthood now! So many people recognize the high-quality data that Project Viva has collected and the immense value of having information from pregnancy to early adulthood (for children) and midlife (for women). We are welcoming students and collaborating with investigators from all around the US and the world to answer scientific questions related to how prenatal and early life factors may affect health during childhood and adolescence (see a recent publication summary below), as well as women's health. We are excited to continue this work in the coming years!

We wish you a happy fall season and we hope you enjoy reading this edition of Viva Views!

Warmly, **Marie-France Hivert** Co-Principal Investigator, Project Viva



Celebrating Project Viva's 25th Birthday

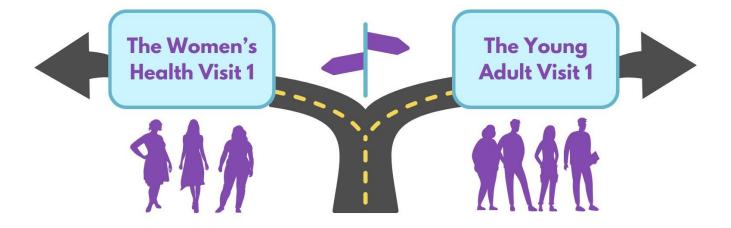
By now, you should have received a copy of our <u>25th anniversary report</u>. We are so proud of what we have accomplished over the last 25 years, and this would not have been possible without you! This report is meant to share highlights from across the years, including reflections from investigators, colleagues, and participants. It also includes a full timeline of Project Viva from 1998 to present, selected findings, and Project Viva's impact on health policy and practice. Thank you all for a great first 25 years!

Current Visit Timepoints: The Women's Health Visit 1 and the Young Adult Visit 1

Many of you ask us, "how much longer is Project Viva going on for?" and the answer is that Project Viva will continue as long as we have the funding and the support of Viva participants like you! Some of the most beneficial health findings come from long-term follow-up.

At this point, all Project Viva children are over 21 years old, meaning they are considered legal adults and can consent to participate in the study for themselves. We launched <u>the Women's Health Visit 1</u> in the spring of 2022 and <u>the Young Adult Visit 1</u> in the spring of 2023. Both visit timepoints are ongoing, so if you have not participated in one of these visits yet and would like to, <u>please let us know</u>. We offer visits at our office in Boston, at your home, or fully online through remote visits. So far, we have completed over 375 visits with mom participants and 45 visits with young adult participants.

Many components of our study visits have stayed the same over the years, but new components have been added to reflect Project Viva's expanded focus on a wider range of life experiences that can influence health, extending into midlife for mothers and young adulthood for their children. You may notice during visits and on surveys that health exposures of interest include not only diet, but also physical activity, sleep, environmental chemicals, stressors, social experiences, mental health, and more.



"Some of the most beneficial health findings come from long-term follow-up."



ECHO Results Return Workshop

Earlier this year, Project Viva staff members attended an <u>Environmental influences on Child Health Outcomes (ECHO)</u> results return workshop. This was <u>a virtual workshop</u> that focused on identifying best practices for large-sample studies to ethically and feasibly return individual research results to participants. Speakers at the workshop emphasized the importance of considering language, culture, and background knowledge of each participant when returning results, and demonstrated how we could facilitate equity by defining and assessing community needs and inviting diverse co-creators.

One of the highlights of the workshop was a panel that

invited ECHO participants from across the country to share their experiences and preferences for results return. Participants reported that they preferred their results to be given with context, and researchers should help participants understand their results or guide them to others who can. They also wanted actionable guidance, referral for care and treatment, and follow up resources to accompany their results whenever possible.

Project Viva hopes to build from the information we learned at this workshop in our results return processes. If you have questions or would like to provide input on your Project Viva results, <u>please reach</u> <u>out to us</u>!

Fathers'/Parental Figures' Contact Info

Thank you to everyone who provided contact information for your (or your Viva young adult's) biological father or other parental figure. While we had hoped that this might be an interesting new opportunity for Project Viva, the feedback that you provided suggested that many of you had some concerns about this idea. We heard you, and we have decided not to move forward with contacting the fathers and other parental figures. Thank you again to all of you who took the time to give us this information, and who thoughtfully shared your concerns. We always appreciate hearing your feedback.



Participate in Project Viva From Your Phone!

We are excited to announce that a new smartphone app, Beiwe (pronounced "bee-wee"), is now being piloted among a group of young adults in Project Viva! Beiwe offers a convenient way for participants to answer survey questions and share their sleep patterns, movement, and activity data. The feedback we will receive during the trial phase will help determine whether Beiwe will become available for all participants in Project Viva in the future. If you have any questions, <u>please contact us</u>!



FEATURED FINDING 🎾

Maternal Stress Magnifies Impact of Prenatal Diet on Child Body Composition



Until recently, stress and diet during pregnancy had mainly been studied as separate factors that influence a child's growth, but these two factors are closely connected. Stress and diet can be linked both internally (stress can cause food cravings) and externally (e.g., residents of low resource neighborhoods may find it harder to get access to healthy foods, which in turn causes stress). Project Viva researchers examined how prenatal stress and diet *combine* to impact a child's growth and body composition outcomes from day care to middle school.

For our measure of diet quality during pregnancy, we used the "Dietary Inflammatory Index." This measure tallies up how much one's diet can contribute to inflammation in the body. Highly inflammatory foods include foods that are fried and processed, red meat, and refined grains. Prior studies, <u>including in</u> <u>Project Viva</u>, have found that a more proinflammatory diet during pregnancy is associated with higher risks for obesity in childhood. We used two measures of

stress – maternal depression symptoms in pregnancy, and neighborhood characteristics as summarized in the Center for Disease Control and Prevention's "<u>Social Vulnerability Index</u>."

In this study, we found that a proinflammatory diet, combined with higher maternal depression symptoms and neighborhood vulnerability during pregnancy, was associated with greater adiposity (fat tissue on the body) in kids from childhood through adolescence. These findings suggest that the effects of maternal diet may appear later and last longer than previously understood. This means that reducing neighborhood vulnerability, as well as improving the mental health and diet quality of expectant mothers, may lead to long-lasting improvements in the cardiometabolic health of the next generation.

To read more Viva findings, visit our website.

Thank you for Reading!



Email: project_viva@hphci.harvard.edu | Call: 617-867-4251 | Text: 617-553-6698 Visit us at projectviva.org Follow us on Twitter/X @ProjectViva_DPM