

Nutrition support during pregnancy improves birth outcomes, global study finds

George Mason-led research finds that food-based prenatal supplements improve birth weights across Africa and South Asia.

FAIRFAX, VA, UNITED STATES, May 19, 2026 /EINPresswire.com/ -- In parts of the world where daily nutrition is unstable, pregnancy and newborn health are more precarious. A new study led by epidemiologist [Dongqing Wang](#) of the George Mason University College of Public Health adds to the evidence that improving maternal nutrition during pregnancy may be a key intervention to improve birth outcomes.



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Dongqing Wang, George Mason University College of Public Health

Looking across eight clinical trials across Africa and South Asia, the study finds that balanced energy and protein (BEP) supplements—food-based products like beverages or nutrient-dense pastes designed to increase calorie and protein intake—are associated with healthier birth weights and fewer high-risk newborns in low- and middle-income countries. [The findings were published in PLOS Medicine.](#)

"In settings where pregnant women can't access sufficient calories and protein, it is important to act early," said Wang, an assistant professor of epidemiology in the [Department of Global and Community Health](#). "Improving maternal nutrition can reduce the risk of vulnerable birth outcomes."

Why this matters

Maternal malnutrition puts infants at higher risk of death, illness, and developmental delays.

Interventions have often focused on micronutrient supplements, but this study shows that food-based approaches to increase calorie and protein intake may better support fetal growth. BEP supplements can also be delivered through existing maternal health programs, making them a practical solution to scale. Wang is also currently conducting further research in Ethiopia that examines the cost-effectiveness of different approaches to BEP supplementation.

Study details

Wang and his colleagues combined individual-level data from randomized controlled trials conducted in Nepal, The Gambia, Pakistan, and several other low- and middle-income settings. The team compared outcomes for pregnant individuals who received BEP supplements with those who did not.

Key findings include:

—BEP supplements were associated with higher birth weights and a lower risk of babies being born with low birth weight or small for their gestational age.

—The effects were particularly notable for babies small for their gestational age, a group with elevated risk of neonatal mortality.

—Benefits appeared stronger among women who began supplementation earlier in pregnancy, particularly before 20 weeks.

Wang worked with a global network of researchers from institutions including Harvard T.H. Chan School of Public Health, the Food and Agriculture Organization of the United Nations, Aga Khan University and partners across Europe, South Asia and Africa.

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The college enrolls more than 1,900 undergraduate and 1,300 graduate students in our

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