

A new study has shown that women who eat a nutrient poor diet before becoming pregnant have a higher risk of preterm birth than women who eat a healthy diet.

Diet and risk of preterm birth

Preterm birth (defined as delivery before 37 weeks of gestation) is associated with significant short and long-term adverse-health outcomes including death. Infants born preterm are more likely than infants born full term to die during the neonatal period (first 28 days) and infancy (first year), and mortality rates increase proportionally with decreasing gestational age or birth weight.

Previous research has shown a positive correlation between the maternal diet, preterm birth, infant birth weight and healthy infants. A new study has found that eating habits before conception may also play a role in preterm birth and healthy infants.

The results of a new study published in the *Journal of Nutrition* has shown that women who consistently eat a diet rich in lean protein, fruit, vegetables and some whole grains before and during pregnancy have a decreased risk of preterm birth.

The study, conducted by researchers from the University of Adelaide, investigated the dietary habits of over 300 Australian women, at least 18 years in age, before pregnancy and followed them through the birth of their infant. This small cohort was part of a larger prospective study that assessed the effects of asthma during pregnancy. Dietary patterns were assessed and categorized into three groups: high-protein/fruit, high-fat/high-sugar/fast food, and vegetarian. Women with higher scores on the high-protein/ fruit pattern were less likely to have babies born preterm, while the women with higher scores for the high-fat/high-sugar/fast food diet were more a risk to deliver babies preterm.

These findings are important and suggest that preterm delivery might actually be modified by maternal diet. Eating a healthy diet that includes lean protein, fruits, vegetables and whole grains before pregnancy is important for a healthy pregnancy and the long-term health of the child.

Grieger JA, Grzeskowiak LE, Clifton VL. Preconception Dietary Patterns in Human Pregnancies Are Associated with Preterm Delivery. *J Nutr.* 2014 Apr 30.