

# Research Reviews

## Psychosocial & Nutritional Stress & Pregnancy

Hobel C, & Culhane J. (2003). Role of psychosocial and nutritional stress on poor pregnancy outcome. Nutrition, 133(5 Suppl 2):1709S-1717S.

Epidemiological evidence suggests that maternal psychosocial stress, strenuous physical activity and fasting are independent risk factors for preterm birth and low birth weight. Data from clinical studies consistently demonstrate that women in preterm labor have significantly elevated levels of stress sensitive corticotropin-releasing hormone. This may play a critical role in the physiological mediation among stressful experiences, work stress, fasting and the risk of preterm birth. In addition, it may have an effect such that women with high levels of corticotropin-releasing hormone may be more susceptible to infection or the pathological consequences of infection. This article reviews the epidemiological data linking maternal stress, physical strain and fasting to preterm birth and low birth weight and presents the plausible biological pathways through which these exposures may increase risk of preterm birth. The timing of these exposures is considered important. Future research and clinical programs addressing these exposures must consider assessments and interventions before pregnancy.