

## Nutrition and the Developing Brain

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### Case Presentation

A 37-year-old African American woman presents 7 weeks after her last menstrual period, and after a positive home pregnancy test, for a prenatal exam. At her last checkup 1 year ago, her BMI was 26, she was borderline hypertensive (124 systolic/82 diastolic), and prediabetic (fasting glucose 118 mg/dL). She stopped smoking during her first pregnancy, which ended when she delivered a healthy, term, baby 5 years ago.

### Discussion Items

- What nutritional risks would you consider this fetus to be at risk for during the prenatal period? What risks would this infant be at during the post-natal period?
- Do you have a plan for managing obesity in pregnant women?
- Do you have a plan for controlling hypertension or diabetes/prediabetes discovered during pregnancy?
- What criteria do you use to evaluate pregnant women for possible micronutrient deficiencies?
- Do you have a protocol for assessing and correcting nutritional deficiencies that are specific for preterm infants?
- What nutritional supplements do you plan on providing for preterm infants who cannot be breast-fed?

### Suggested Readings and Resources

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16. Terrin G, et al. Zinc in early life: A key element in the fetus and preterm neonate. *Nutrients*. 2015;7(12):10427-10446.