Section B

Factors That Impact Fertility
What Affects Female Fertility and Implantation?

- Recurrent pelvic inflammatory disease (PID) with scaring
- Endometriosis
- Quality of cervical mucus
- Regularity of cycles
- Chronic conditions
- Hormonal abnormalities
- Anatomical abnormalities
What Affects Female Fertility and Implantation?

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What Affects Male Fertility?

- Sperm production
- Sperm mobility
Maternal preconceptual and gestational nutritional status is critical. A fetus is a saprophyte—the homeostasis will protect the mother over the fetus.

Approximately 5 percent of infants born in the United States experience Intrauterine growth retardation or IUGR.

Maternal malnutrition or under-nutrition impacts placental growth in the peri-implantation period

Factors that impact maternal under-nutrition
- Severe nausea and vomiting
- Young maternal age
- Poor pre-conceptual nutrition status
- Narrow birth spacing
- Famine
- Anemia
- Malaria
What Affects Fetal Health and Development?

- Maternal over-nutrition impacts fetal growth
- The mechanism may be through imprint genes
Preterm Birth (<37 weeks)

- Spontaneous preterm labor
- Premature rupture of membranes
- Medical intervention
  - Maternal complications
  - Fetal distress
  - Infection
  - Bleeding
Factors That Impact IUGR

- Maternal under and over nutrition
- Infection
  - TORCH (Toxo, Other [hepatitis, syphilis, zoster, HIV], Rubella, Cytomegolovirus, Herpes)
  - Malaria
- Micronutrient deficiency: folate, vitamin A
- Behavioral factors: maternal smoking, alcohol use
- Maternal chronic conditions: hypertension, diabetes mellitus, renal disease