Module WB2208

Objectives

- Identify the type of placental/fetal exchange mechanisms
- Review factors that affect maternofetal exchange
- Name the types of substances that transverse the placental exchange
- Explain the mechanism of respiratory gas exchange across the placenta
- Describe normal fetal oxygenation
- Outline fetal responses to acute hypoxia

Placental Function in Maternofetal Exchange and Fetal Oxygenation

Content Outline

1. Placental Function Maternofetal Exchange
   A. Nature of the placental exchange barrier
   B. Types of exchange mechanisms
   C. Factors affecting maternofetal exchange
   D. Transferred substances

2. Placental Respiratory Gas Exchange
   A. Oxygen uptake
   B. Normal Fetal Oxygenation
   C. Homeostatic control of fetal oxygenation

3. Responses to Acute Hypoxia

Reading Material Resources

Module WB2208: Placental Function in Maternofetal Exchange and Fetal Oxygenation is based on the resources listed below. A copy of each resource is included with the module.

Chapter 15 Placental Respiratory Gas Exchange and Fetal Oxygenation, Maternal Fetal Medicine, Resnik et al., Elsevier, 2019, 210-222

Chapter 8 Placental Function in Maternofetal Exchange, Fetal Medicine: Basic Science and Clinical Practice, Pandya, Pranov, Elsevier, 2020, 69-77