

Margaret H. Rollins School of Nursing
N201- Special Populations
Ticket to Enter – High-Risk Newborn: Thermoregulation

1. Why is the preterm infant at risk for hypothermia?
 - A. Amount of brown fat greater than at term
 - B. Decreased amount of subcutaneous fat
 - C. Less skin surface exposed
 - D. Position of flexion

2. Where is brown fat commonly located? Select all that apply.
 - A. Bilateral axillary areas
 - B. Buttocks and abdomen
 - C. Near large intestines
 - D. Near kidneys and adrenals

3. What is a complication of brown fat metabolism?
 - A. Hyperglycemia
 - B. Hyperthermia
 - C. Hypoxia
 - D. Metabolic alkalosis

4. What is a consequence of hypothermia in the high-risk infant?
 - A. Decreased respiratory rate
 - B. Increased surfactant production
 - C. Pulmonary vasodilation
 - D. Weight loss or failure to gain weight

5. Define Neutral Thermal Environment (NTE).

An NTE is an environment where the body temperature is maintained at a level where oxygen use and energy expenditure are minimized. The air temperature surrounding the baby supports the maintenance of a neutral thermal body temperature.

Match the following strategies to the mechanism of heat loss (conduction, convection, evaporation, or radiation) that each intervention addresses.

6. Open the incubator/isolette porthole and doors only when necessary. **Convection**
7. Avoid placement of infant beds near windows, doors, or walls. **Radiation**
8. Place a cloth on the infant scale before weighing the newborn. **Conduction**
9. Warm inspired oxygen when administering to the neonate. **Convection**
10. Always dry the infant immediately after bathing. **Evaporation**