

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).

A temperature range where the body can maintain a stable core temperature without having to use extra energy to stay hot or cold.

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

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