The flexed posture of the term infant decreases the surface area exposed to the environment, thereby reducing heat loss. Other newborn characteristics such as size, ratio of surface area to body weight, and age may also affect establishment of the NTE. The preterm small-for-gestational-age (SGA) newborn has less adipose tissue and is hypoflexed, and therefore requires higher environmental temperatures to achieve a thermal neutral environment. A larger, well-insulated newborn may be able to cope with lower environmental temperatures. If the environmental temperature falls below the lower limits of the NTE, the newborn responds with increased oxygen consumption and raised metabolism, which results in greater heat production. Prolonged exposure to the cold may result in depleted glycogen stores and acidosis. Oxygen consumption also increases if the environmental temperature is above the NTE.

**Heat Loss**

A newborn is at a distinct disadvantage in maintaining a normal temperature. With a large body surface in relation...