umbilical cord is still attached, making measurements across the umbilicus too variable in newborns. Measuring the abdominal circumference below the umbilical region is unsuitable because bladder status may affect the reading.

Head-to-heel length is also measured. Because of the usual flexed position of infants, it is important to extend the legs completely when measuring total body length. The average length of newborns is 48 to 53 cm (19 to 21 inches) (Fig. 7-3). Foote, Brady, Burke, et al (2011) have developed an evidence-based practice guideline for measuring length in infants and children.

FIG 7-3 Measurement of infant length.

Body weight should be measured soon after birth because weight loss occurs fairly rapidly. Normally, neonates lose about 10% of their birth weight by 3 to 4 days of age because of loss of extracellular fluid and meconium, as well as limited food intake, especially in breastfed infants. The birth weight is usually regained by the tenth to fourteenth day of life. Most newborns weigh 2700 to 4000 g (6 to 9 pounds), the average weight being about 3400 g (7.5 pounds). Accurate birth weights and lengths are important because they provide a baseline for assessment of future growth.

Another category of measurements is vital signs. Axillary temperatures are taken because insertion of a thermometer into the rectum can potentially cause perforation of the mucosa if performed incorrectly (see Table 7-3 and Fig. 7-4). Core body temperature varies according to the periods of reactivity but is