Height

The term *height* (or *stature*) refers to the measurement taken when a child is standing upright. Wall charts and flip-up horizontal bars (floppy-arm devices) mounted to weighing scales should not be used to measure the height of children (Foote, Brady, Burke, et al, 2014). These devices are not steady and do not maintain a right angle to the vertical ruler, preventing an accurate and reliable height. Measure height by having the child, with the shoes removed, stand as tall and straight as possible with the head in midline and the line of vision parallel to the ceiling and floor. Be certain the child's back is to the wall or other vertical flat surface, with the head, shoulder blades, buttocks, and heels touching the vertical surface (see Fig. 4-9, *B*). Check for and correct slumping of the shoulders, positional lordosis, bending of the knees, or raising of the heels.

Nursing Tip

Normally height is less if measured in the afternoon than in the morning. The time of day should be recorded when measurements are taken (Foote, Brady, Burke, et al, 2014). For children in whom there are concerns about growth, serial measurements should be taken at the same time of day, when possible, to establish an accurate growth velocity (see Evidence-Based Practice Box).

For the most accurate measurement, use a wall-mounted unit (**stadiometer**; see Fig. 4-9). To improvise a flat, vertical surface for measuring height, attach a paper or metal tape or yardstick to the wall, position the child adjacent to the tape, and place a three-dimensional object, such as a thick book or box, on top of the head. Rest the side of the object firmly against the wall to form a right angle. Measure length or stature to the nearest 1 mm or $\frac{1}{16}$ inch.

Weight

Weight is measured with an electronic or appropriately sized balance beam scale, which measures weight to the nearest 10 g (0.35 oz) for infants and 100 g (0.22 lb) for children. Before weighing the child, balance the scale by setting it at 0 and noting if the scale