

**FIG 3-3** Changes in body proportions occur dramatically during childhood.

**TABLE 3-1**

**General Trends in Height and Weight Gain during Childhood**

Age Group	Weight*	Height*
Birth to 6 months old	Weekly gain: 140 to 200 g (5 to 7 oz) Birth weight doubles by end of first 4 to 7 months <sup>†</sup>	Monthly gain: 2.5 cm (1 inch)
6 to 12 months old	Weight gain: 85 to 140 g (3 to 5 ounces) Birth weight triples by end of first year	Monthly gain: 1.25 cm (0.5 inch) Birth length increases by ≈50% by end of first year
Toddlers	Birth weight quadruples by age 2½ years	Height at age 2 years is ≈50% of eventual adult height Gain during second year: About 12 cm (4.7 inches) Gain during third year: About 6 to 8 cm (2.4 to 3.1 inches)
Preschoolers	Yearly gain: 2 to 3 kg (4.5 to 6.5 pounds)	Birth length doubles by 4 years old Yearly gain: 5 to 7.5 cm (2 to 3 inches)
School-age children	Yearly gain: 2 to 3 kg (4.5 to 6.5 pounds)	Yearly gain after age 7 years: 5 cm (2 inches) Birth length triples by about 13 years old
<b>Pubertal Growth Spurt</b>		
Females: 10 to 14 years	Weight gain: 7 to 25 kg (15.5 to 55 pounds) Mean: 17.5 kg (38.5 pounds)	Height gain: 5 to 25 cm (2 to 10 inches); ≈95% of mature height achieved by onset of menarche or skeletal age of 13 years old Mean: 20.5 cm (8 inches)
Males: 11 to 16 years	Weight gain: 7 to 30 kg (15.5 to 66 pounds) Mean: 23.7 kg (52.2 pounds)	Height gain: 10 to 30 cm (4 to 12 inches); ≈95% of mature height achieved by skeletal age of 15 years old Mean: 27.5 cm (11 inches)

\*Yearly height and weight gains for each age group represent averaged estimates from a variety of sources.

<sup>†</sup>Jung FE, Czajka-Narins DM: Birth weight doubling and tripling times: an updated look at the effects of birth weight, sex, race, and type of feeding, *Am J Clin Nutr* 42(2):182–189, 1985.

**Linear growth, or height,** occurs almost entirely as a result of skeletal growth and is considered a stable measurement of general growth. Growth in height is not uniform throughout life but ceases when maturation of the skeleton is complete. The maximum rate of growth in length occurs before birth, but newborns continue to grow at a rapid, although slower, rate.