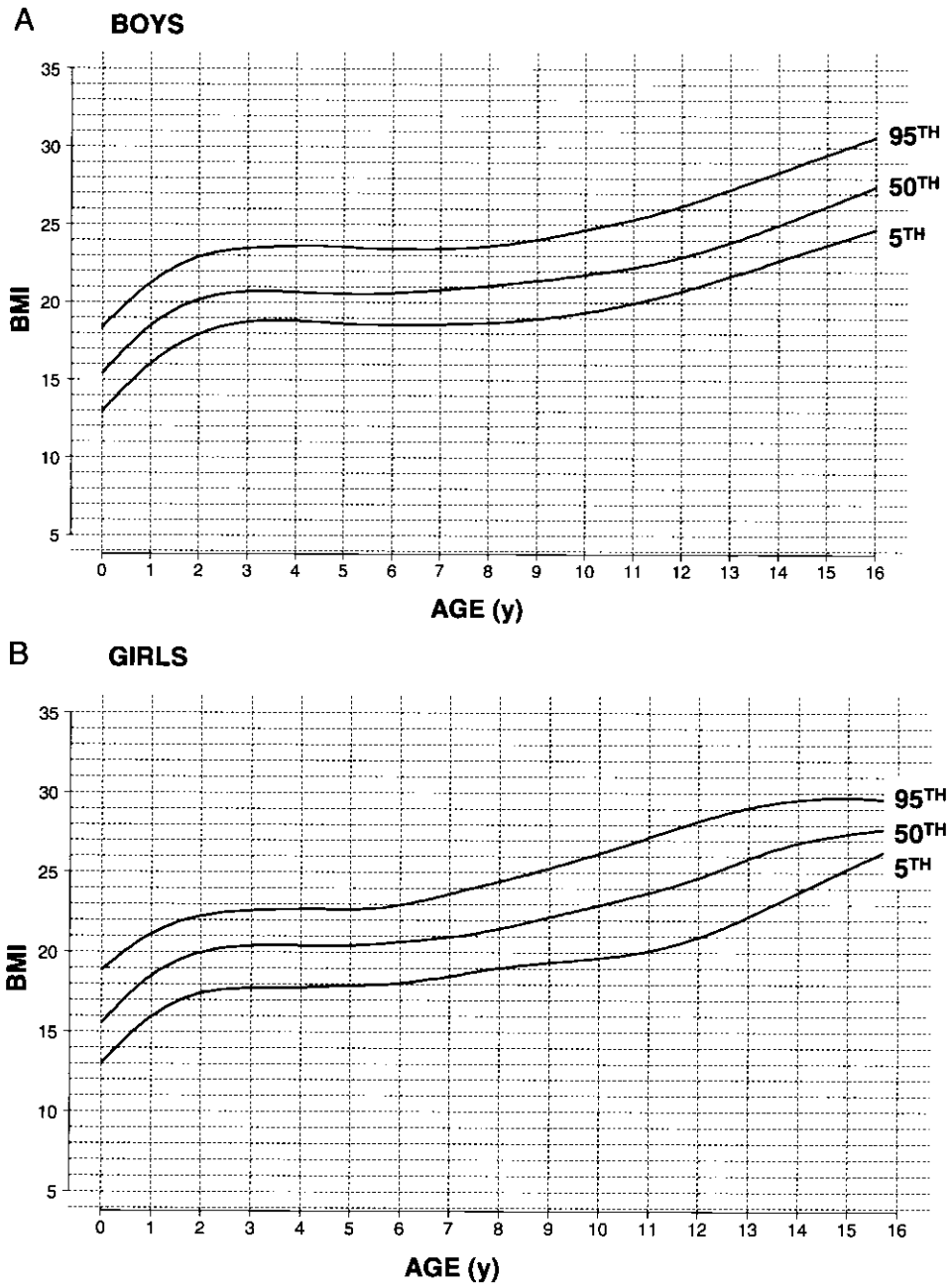

FIGURE 1. BMI curves (5th, 50th, and 95th percentiles) from 0 to 16 y of age in boys and girls with achondroplasia.

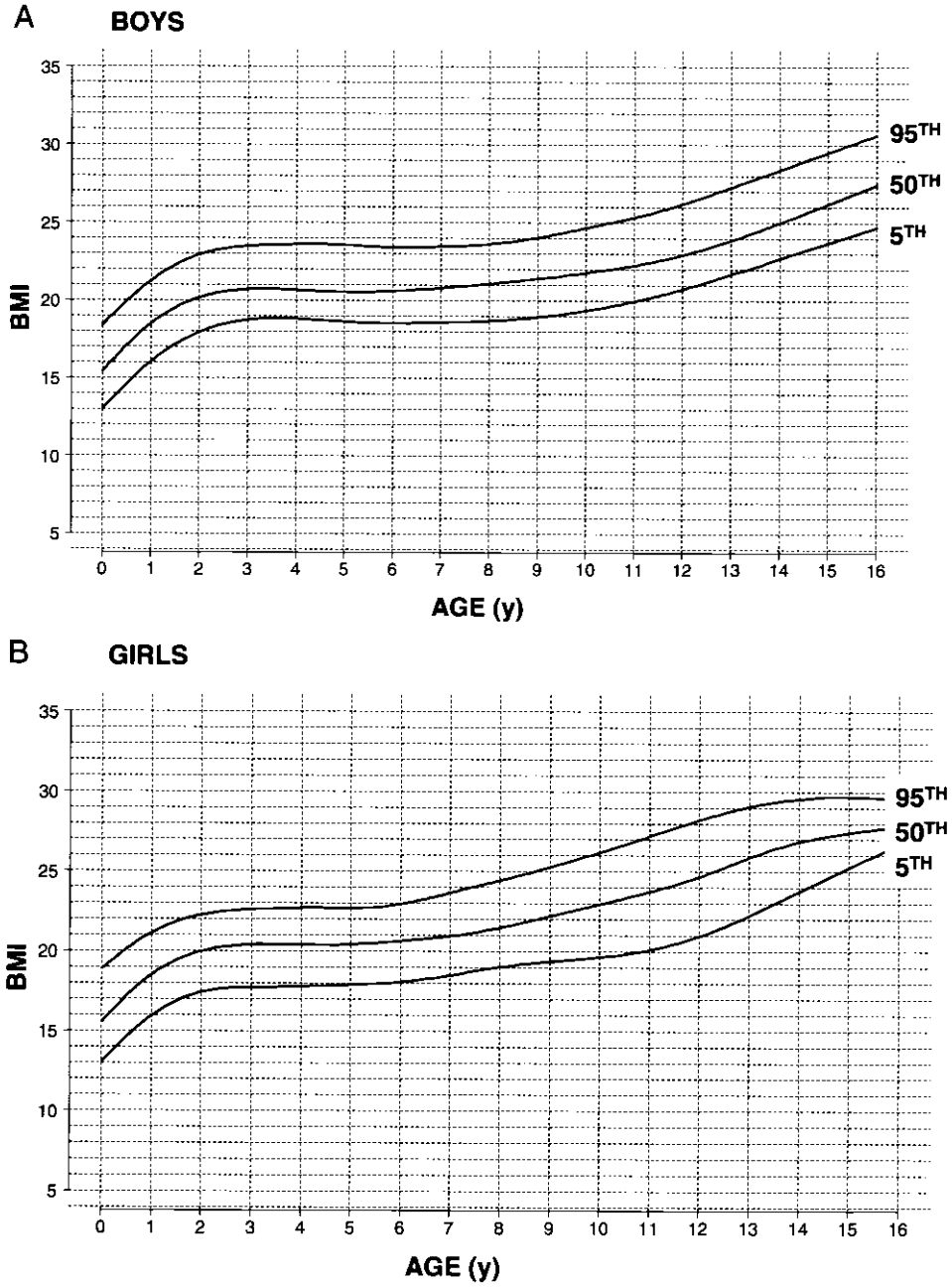

FIGURE 1. BMI curves (5th, 50th, and 95th percentiles) from 0 to 16 y of age in boys and girls with achondroplasia.

term infants of average stature (9). After infancy, the 95th percentile of weight in achondroplastic children appears comparable with the median weight-for-age in children of average stature, and the median weight-for-age in achondroplastic children is similar to the 5th percentile in peers of average stature. This overlap in weight between our achondroplastic cohort and average-stature norms remains over this entire distribution. Thus, ≈50% of the children with achondroplasia have body weights comparable with the lower 50% of their average-stature peers from birth through 16 y of age.

Height, however, differs substantially between children with achondroplasia and those of average stature from birth through 16 y of age for both boys and girls (Figure 3). Despite the appearance in Figure 3 that the mean birth length of the term individuals in our achondroplasia cohort is quite similar to that of infants of average stature, there is a statistically significant difference ($P < 0.0001$) in birth length between achondroplastic infants (47.4 ± 0.2 cm; $n = 242$) and term infants of average stature (48.5 ± 0.1; $n = 595$) (26). From birth, infants of average stature experience much more rapid linear growth than do achondroplastic infants, with no overlap in height distributions after 6 mo of age. The disparity in height between individuals of average stature and those with achondroplasia becomes more pronounced in both sexes as both approach the pubertal years.

Distinct patterns of linear growth are driven by differences in height velocity between achondroplasia and average stature children, as shown in **Figure 4**. Differences in height velocity are particularly apparent during infancy and puberty, both of which