

and may finish sooner or later than other children. Gender is an influential factor because girls seem to be more advanced in physiologic growth at all ages.

## **Biologic Growth and Physical Development**

As children grow, their external dimensions change. These changes are accompanied by corresponding alterations in structure and function of internal organs and tissues that reflect the gradual acquisition of physiologic competence. Each part has its own rate of growth, which may be directly related to alterations in the size of the child (e.g., the heart rate). Skeletal muscle growth approximates whole body growth; brain, lymphoid, adrenal, and reproductive tissues follow distinct and individual patterns (Fig. 3-2). When growth deficiency has a secondary cause, such as severe illness or acute malnutrition, recovery from the illness or the establishment of an adequate diet will produce a dramatic acceleration of the growth rate that usually continues until the child's individual growth pattern is resumed.