THE KÖRMEND GROWTH STUDY: HISTORICAL BACKGROUND AND SECULAR TRENDS AMONG CHILDREN AGED 3-18 YEARS

Abstract

Körmend is a small town in West-Hungary, Europe. The Körmend Growth Study, launched in 1958 by Dr. Ottó Eiben and, from that time on, was repeated in every 10th year, was the first to demonstrate the existence of secular trends in growth and maturation of children. This repeated cross-sectional growth study proved to be a suitable tool to investigate several aspects of secular trends as well as differences between generations. The last survey, performed in the autumn of 2008, covered 27 body measures, monitored the maturation and the inheritance of body measures and, additionally, analyzed the link between growth and sleep disorders. In this paper the authors present an overview of the five decades of the Körmend Growth Study. Over this half-century, Körmend developed from an agricultural village into a moderately industrialized town. Its population increased, and its infrastructure improved remarkably. The growth characteristics of children also changed during this period. There were observable trends in the data, some of them evoked our concern. The physique of Körmend children became more linear but a bit fatter. Age at menarche also changed. These changes were mostly due to environmental factors covered by the concept of secular trend. Growth of Körmend children, characterized through body measurements, followed the changes of environmental factors in a fast and sensitive way.

Keywords: growth, maturation, secular trend, Körmend