

Abstract

In the last decade, there is a growing focus of health professionals on growth of children and their mode of feeding in the early age. According to the WHO global public health recommendation, infants should be exclusively breastfed for the first six months and thereafter should receive nutritionally adequate and safe complementary foods while breastfeeding continues up to two years or beyond. In 2006, the WHO published growth standards and recommended their using for the assessment of growth of children up to the age of 5 years. The Czech Republic has a long-term tradition of its own nation-wide anthropological surveys (CAS) which provide data for constructing reference growth charts to be used for evaluation of growth and thriving in children. Therefore, the WHO growth standards were not implemented automatically. First, the study on growth of Czech infants exclusively or predominantly breastfed for at least 4 months (n=960) was undertaken. The aim of the study was to evaluate whether Czech growth references or WHO growth standards are more appropriate for growth assessment of Czech children. The study monitored four basic body parameters – length, head circumference, weight and weight to length. The hypothesis that growth curves of Czech breastfed infants will correspond to the WHO growth standards was not proved. The analysis of Z-score values and comparison of percentile charts of Czech breastfed infants with the WHO standards showed significant differences – Czech breastfed infants were longer since birth and had bigger head circumference compared to the WHO standards. Besides that growth charts of Czech breastfed infants had similar, however not identical, course compared to Czech reference charts and they were closer to them than to the WHO standards. The minimal differences compared to Czech references were found in body length and head circumference, the biggest differences in weight. Czech paediatricians are instructed about different course of weight curves in breastfed infants, especially in the first months of life, compared to reference charts constructed on the data gained from the child population regardless their mode of feeding in the early age. The aim of the instruction is to minimize preliminary introduction of supplements or complementary foods in exclusively breastfed infants in the first six months. The conclusion of the study is the recommendation that Czech references based on the CAS 1991 and 2001 should be used further on for the assessment of growth of children in the Czech Republic.