Abstract
Background: It has been reported that children nursed in orphanages loose one month of lineal growth for every three months they spend in the orphanage. Objective: The purpose of this study was to evaluate the daily variation of weight-for-length and length-for-age among infants under 24 months of age, living in a temporary public orphanage in Mexico. Methods: Ninety children from 0 to 24 months of age, who were institutionalized at an orphanage, were assessed during a three month period. Upon arrival their height and weight were measured daily, Monday through Friday. Daily growth velocity for weight and length was calculated. Length-for-age (LAZ) and weight-for-length (WHZ) age zscores were calculated based on WHO criteria. Risk of overweight (ROW) and overweight (OW) were classified using the WHO criteria. Results: The increments of daily weight were lower than the normal range (9 g daily), but the ROW and OW increased from 10% and 3% at the beginning of the study to 14% and 11% at the end. At the end of the follow-up, WHZ was inversely associated to length (cm/day) velocity ($r = -0.302$, $p < 0.01$). Although a significant increase in ROW and OW was observed, at the end of the study, 31% of the children showed signs of stunting (-2 SD in length/age) and 5% remained emaciated (-2 SD in weight/length). Conclusions: Children living in an orphanage showed reduced increments of weight and length-for-age, as well as a reduced length velocity and an increased ROW and OW.

Keywords
Obesity in lactancy, Catch-up growth, Delayed lineal growth, Mexican children, Orphanage.