

Growth of Immigrant Children in the Newcomer Schools of San Francisco

This study evaluated the effects of migration and nutritional change on the heights and growth velocities of four groups of immigrant children (Chinese, Filipino, Hispanic, Southeast Asian) who were 5 to 12 years of age when they enrolled in one of three San Francisco schools. A low score on an English-language achievement test was the criterion for study entry. Education regarding nutrition was provided during the study.

At the initial examination, all four groups had mean heights and weights between the fifth and 25th percentiles, as calculated by United States reference population growth curves. In general, the Hispanic and Filipino children were above the mean when weight was compared to height ($>50\%$ of children exceeded the mean), and the majority of the Chinese and Southeast Asian children were underweight for their height. During 12 months of observation, the children in all groups showed catch-up growth, with the growth velocities being above the 50th

percentile of the Fels longitudinal growth velocity curves for U.S. children.

The authors concluded that the catch-up growth indicated a growth deficit as a direct consequence of their previous environment and that they were malnourished (see editor's comment). The authors also noted that interpreting these data was difficult because they knew little about these children prior to their arrival in the U.S. For example, many of the Southeast Asian children had been in refugee camps where they may have received only minimal food and medical care.

Schumacher LB, Pawson IG, Kretchmer N. *Pediatrics* 1987; 80:861-868.

Editor's comment—*Readers are strongly encouraged to read the article entitled "Malnutrition: Definition, Incidence, and Effect on Growth" by Dr. David Seckler (Growth, Genetics, and Hormones, Volume 1, Number 2). After reading Dr. Seckler's article, readers may question, as I do, whether the conclusion of Schumacher et al that these immigrant children were malnourished is necessarily correct. Dr. Seckler suggests that children grow in accordance with their nutritional intake, but that bigger is not necessarily better. The implications of Seckler's article may have gone unnoticed by many. If so, that is unfortunate since that article is extremely pertinent to our concepts of growth and nutrition.*

Schumacher et al may be right in concluding that malnutrition was responsible for the short stature of the patients evaluated in their study, but if so, the malnutrition had to be one that was related to a specific factor or factors and not to calories alone, since the Hispanic and Filipino children were overweight for height. The Hispanic and Filipino population negated that consideration.

Robert M. Blizzard, M.D.