

Effects of a school feeding intervention on school attendance rates among elementary schoolchildren in rural Kenya.

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Abstract

OBJECTIVE:

A randomized controlled school feeding intervention offered an opportunity to determine whether school feeding resulted in improved school attendance among elementary schoolchildren in a rural district of Kenya.

METHODS:

Twelve schools with a total of 554 children in the 1998 first-grade cohort were randomly assigned to four research groups, three of which received a fortified local staple-based snack (Githeri meal) at morning recess. The groups--designated as Meat-Githeri, Milk-Githeri, and Energy-Githeri--received a recess meal that provided 240 kcal in the first school year and 313 kcal for the remainder of study period. The intervention study covered the second school term of 1998 through the second school term of 2000. Assessment for all indexed children included baseline assessment of anthropometric measures of height-for-weight, weight-for-age, and height-for-age, and socioeconomic status at baseline, as well as daily school attendance for each of the school terms. Analysis included descriptive statistics, partial correlations statistics, regression analysis, χ^2 , and General Linear Model (GLM) repeated measures analysis. In all the analyses, $P < 0.05$ was used as the criterion of statistical significance.

RESULTS:

Baseline regression analysis for the overall study sample population showed that age-dependent anthropometric measures of nutritional status were statistically significant predictors of school attendance rates. Partial correlation analysis evidenced a statistically significant positive association between baseline attendance rates and the measures of socioeconomic status and the age-dependent anthropometric measures. The intervention groups performed better than the control group on the repeated measure of school attendance.