ABSTRACT

The diet for 117 protein-energy-malnourished children admitted into the Mbooni Family Life Training Centre between November 1992 and March 1993, was supplemented with either tempe-yellow maize porridge (TYMP) or milk-yellow maize porridge (MYMP). Fifty-six malnourished children had their diet supplemented with TYMP. Another group of 61 children had theirs supplemented with MYMP. The growth rate (weight gain), duration of diarrhoeal episodes and rehabilitation period for each child was recorded and a comparison made between the two dietary groups. The TYMP group achieved a significantly (p < 0.05) higher growth rate (5.2 gm/kg body weight/day) compared to the MYMP whose growth rate was 2.2 gm/kg body weight/day. The mean daily protein and caloric consumption (per kg body weight) by the children in both groups (at 3.4 gm of proteins and 83 calories for the MYMP group and 3.9 gm of protein and 101 calories for the TYMP group) were not significantly different. The duration of diarrhoeal episodes for the MYMP group was significantly (P < 0.05) longer (4.6 diarrhoea days) than that of the TYMP group whose diarrhoeal episodes lasted 0.7 diarrhoea days. The rehabilitation period for the TYMP group (15 days) was significantly (p > 0.05) lower than that for the MYMP group which was 20 days. Furthermore, the cost of supplementing the diet for each child with the tempe-yellow maize porridge (KSh. 1625) was approximately 25% lower than that of supplementing it with milk-yellow maize porridge which was KSh. 2060. These results suggest that it may be more beneficial in terms of duration of both diarrhoeal episodes and rehabilitation period and overall institutional cost if malnourished children's diets are supplemented with tempe-yellow maize porridge.