

S U M M A R Y

The nutritional values of a traditional banana porridge and a new commercially produced porridge, Cerex, were compared in a feeding trial. The banana porridge contained banana flour, wheat flour, condensed milk and water. Cerex porridge was made from Cerex (corn, rice, soya and fortified skimmed milk powders) made isocaloric to the banana porridge (100 Kcal/100g) with the addition of oil, sugar and water. The porridges were fed at libitum as the only source of nutrients to 8 children recovering from malnutrition for 10 days on each porridge in a cross over design. There were 5 girls and 3 boys, aged 6-16 months, all of whom were about 80% weight for height at the start of the study. Anthropometric measurements and the intakes of porridges were recorded. The protein and energy content of the porridges as fed were measured.

The children gained weight at the same rate on both porridges: a rate comparable to that achieved on "high calorie milk" used as a routine for treating malnutrition in TMRU. The mean rate of weight gain on cerex porridge was 13.1 ± 6.3 (SD) g/kg/d, for banana porridge 12.5 ± 5.2 (SD) g/kg/d. This is 3 times as fast as a normal child of the same average weight and 13 times as fast as a normal child of the same average age.

The mean food intakes of cerex (147 ± 19 (SD) g/kg/d) and banana (156 ± 16 (SD) g/kg/d) porridges were not significantly different nor

was there a statistical difference in the mean energy intakes between cerex (159 Kcal/kg/d) and banana (161 Kcal/kg/d) porridges. Although cerex porridge provided more protein ($5.39 > 3.73\text{g/kg/d}, p < 0.05$), the protein in green banana porridge was more efficiently utilized for balanced weight gain as the energy cost of weight gain was the same on both porridges.

At the projected retail price for cerex, that porridge provides more energy/dollar than green banana flour porridge based on the actual retail price of banana flour. However the difference is outweighed by the advantage of utilizing a locally produced food, if the total cost from production at the farm, through cost to national budget, to cost to consumer is considered. The advantage of being able to grow the food in a backyard or small farm is considered for the rural population.

We conclude that the traditional banana porridge when prepared to the appropriate energy density is of as good nutritional value as cerex porridge. When suitably prepared, traditional porridges may be useful for the nutritional rehabilitation of malnourished children. Socially the traditional porridge should be acceptable and economically the use of indigenous foodstuff is desirable.