

ABSTRACT

A cross-sectional survey was conducted on 240 households containing pre-school aged children and women of reproductive age, in Kingston and St. Andrew, to determine intake patterns with respect to cornmeal and wheatflour, the vehicles proposed for iron fortification. Stratified cluster sampling was used to identify the study population. Food frequencies provided information on households while women's and children's diets were examined from 24 hour recalls.

Cornmeal and wheatflour were important dietary items in both urban and rural areas. Use of both cereals was positively related to the numbers of pre-school aged children, adults and elderly members of the household, and negatively related to the type of fuel used.

A mean of 3.1 (\pm 2.6)lbs of cornmeal was purchased per household. If the Government of Jamaica's proposal to add 40mg iron/lb to cornmeal were adopted, it is estimated that median dietary iron intake plus fortification iron would supply 7.9mg/day and 9.2mg/day in children under 2 years old and 2-5 years old, respectively. Adult women would consume

14.6mg iron/day.

If wheatflour was fortified at 20mg iron/day, total dietary iron intake would be 6.7 mg iron/day and 8.8 mg iron/day in children 0-2 years and 2-5 years old, respectively. In women fortification of wheatflour would increase intakes to 15.6 mg iron/day.

Annual per capita cost of fortification is estimated at J\$1.28 (US\$0.23) at 1987 prices.

Single 24 hour recall assessments however, may not be representative of usual diet, hence estimations of available iron must be viewed with caution.

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