

Menu quality and food substitution in early care and education (ECE) programs: the FRESH study

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BEHAVIORAL NUTRITION & PHYSICAL ACTIVITY LABORATORY

Introduction

- Children consume two-third of dietary intake at Early Care and Education Programs
- Challenges: rural location and reduced food access



- Child and Adult Care Food Program (CACFP) reimburses providers for serving nutritious meals to children.



- Menu evaluation determines dietary quality of the food and opportunities for improvement in the Native American community

Purpose

Determine nutrient content, Child and Adult Care Food Program (CACFP) compliance, food substitution to assess menu quality in tribally-affiliated ECE programs.

Methods

- Baseline assessment in FRESH; menus and recipes collected from 9 sites
- Nutrient analyses was conducted and a quantitative index used for CACFP compliance score (0-100)
- Food substitutions: equivalent (equal nutrition quality), superior (higher quality) or inferior (lower quality) and summed.

Nutrient on menus	Mean nutrient content on menus
Fiber (g)	3.5 ± 0.5
Saturated fat (g)	10.5 ± 3.4
Energy (Kcals)	643.7 ± 106.6
Sodium (mg)	1046.53 + 255.8

Fig. 1 Compliance with the Child and Adult Care Food Program (CACFP)

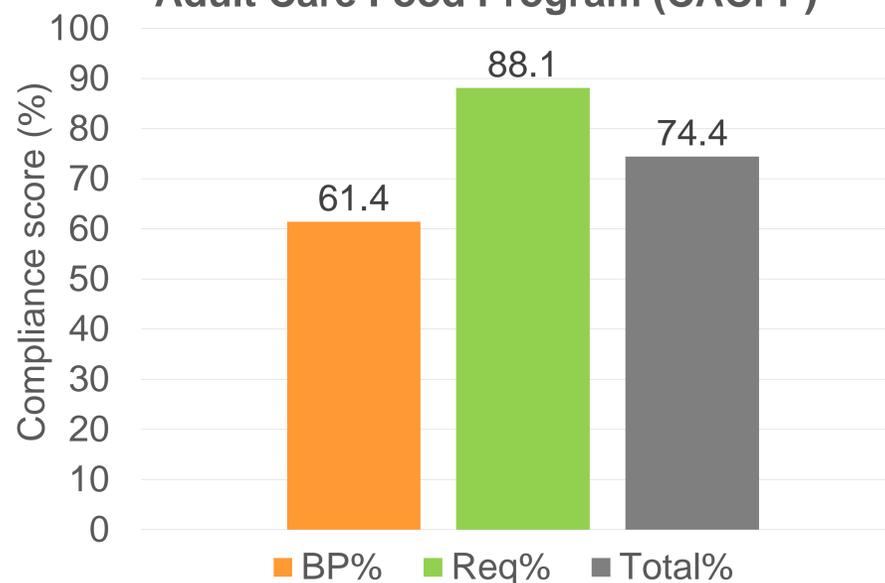
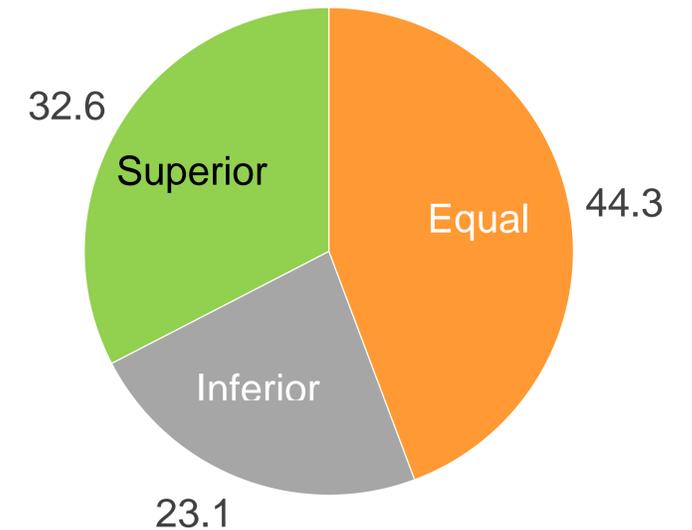


Fig.2 Substitution quality (%)



Conclusions

- Menus need to provide two-thirds of the daily requirement of fiber (12-16g) to match the CACFP guidelines.
- More than 10% of total calories came from saturated fat and menus did not provide two-thirds of total energy requirement (666-1067kcal).
- Sodium content was too high on the menus as compared to the recommendation (533-666mg).
- Menus were fairly compliant with the CACFP guidelines however, there is a room for improvement.
- Foodservice personnel training may enhance nutritional quality of meals and substitutions.

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