

ANALYSIS OF FRUIT INTAKE BY CHILDREN FROM A COUNTY IN THE STATE OF PARANÁ-BRAZIL USING MULTINOMIAL MODELS WITH RANDOM EFFECTS

Leticia de Viveiros INÁCIO¹
Andressa Avendaño FORBELLONE²
Cesar Augusto TACONELI³
Claudia Choma Bettega ALMEIDA⁴

- **ABSTRACT:** *The introduction of complementary foods to breast milk in children aged 6-24 months has fundamental importance to ensure a healthy, physical, suitable motor and intellectual growth. In this sense, the inclusion of fruits, in quantity and variety, adds a large number of nutrients, essential to the child's diet. This study aimed to identify demographic, socioeconomic and behavioral factors related to the variety of fruits consumed by children aged 6-24 months, attended by health units of Sistema Único de Saúde (SUS) in Guarapuava, Paraná (Brasil). Through application of mixed multinomial models, we found that the consumed variety of fruits is related to the mothers' education, their ages at the birth of first child and the number of meals provided to children. A random effect was incorporated referent to health units. Although not statistically significant, their inclusion identified groups under less varied fruit consumption.*
- **KEYWORDS:** *Categorical data; multinomial data; random effects; food intake; fruits.*

¹ Universidade Federal do Paraná, Caixa Postal: 190811, CEP: 81531-990, Curitiba, Paraná, Brasil E-mail: leticiaviveiros@gmail.com

² Universidade Federal do Paraná, Caixa Postal: 190811, CEP: 81531-990, Curitiba, Paraná, Brasil E-mail: andressa_forbellone@yahoo.com.br

³ Universidade Federal do Paraná, Departamento de Estatística, Caixa Postal: 190811, CEP: 81531-990, Curitiba, Paraná, Brasil. E-mail: taconeli@ufpr.br.

⁴ Universidade Federal do Paraná, Departamento de Nutrição, Caixa Postal: 190811, CEP: 81531-990, Curitiba E-mail: chomac@ufpr.br