NUTRITIENT ASSISTANT APPLICATION

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LITERATURE SURVEY

Effects of Food Assistance and Nutrition Programs on Nutrition and Health

This report provides a comprehensive review and synthesis of published research on the impact of USDA's domestic food and nutrition assistance programs on participants' nutrition and health outcomes. The outcome measures reviewed include food expenditures, household nutrient availability, dietary intake, other measures of nutrition status, food security, birth outcomes, breastfeeding behaviors, immunization rates, use and cost of health care services, and selected non health outcomes, such as academic achievement and school performance (children) and social isolation (elderly).

The review examines the research on 15 USDA food assistance programs but tends to focus on the largest ones for which more research is available: food stamps, school feeding programs, and the Special Supplemental Nutrition Program for Women, Infants, and Children (WIC). Over half of USDA's budget—\$41.6 billion in fiscal year 2003—was devoted to food assistance and nutrition programs that provide low-income families and children with access to a healthy diet.

Participation in a food assistance program and excessive weight gain

Based on a probability sample of manufacturing workers in Brazil obtained by stratified two-stage sampling, comparative between WFP and non-WFP participating companies. Body mass index (BMI), waist circumference (WC), and nutrient consumption (24-hour recall) were collected by trained nutritionists. Statistical analysis was done separately in each sex with mixed effects multilevel linear regression model including sampling weights and covariate adjustment. The issue of food and nutrition has mobilized organizations and countries to create and implement public policies aimed at guaranteeing and enforcing the Human Right to Adequate Food (HRAF), with emphasis on Food and Nutrition Security (FNS) actions in its several dimensions: availability, access, consumption, production and biological use of food.

In Brazil, the Federal Constitution warrants the HRAF, through which the Brazilian State has the obligations to respect, protect, promote and provide food for the population while, in turn, the population has the right to demand that their rights be assured through enforceability mechanisms

The main meals must contain 30-40% of the daily total energy with the following distribution of nutrients: carbohydrate 60%, protein 15%, total fat 25%, saturated fats: < 10, fibre 7-10 g, and sodium 720-960 mg [$\underline{10}$]. In addition, other studies have found a positive association between participation in the WFP and increased weight gain [$\underline{15}$, $\underline{16}$], higher prevalence of overweight and obesity [$\underline{17}$] and greater obesity-related cardiovascular risk [$\underline{18}$]. These do not seem to be isolated findings related to the WFP, since similar results have been described in evaluations of food assistance programs for low-income people in the United States as well as in other countries around the world