The Continuation and Expansion of Dietary Interventions of the Healthier Options for Public Schoolchildren (HOPS) Study: A School-Based Holistic Nutrition and Healthy Lifestyle Education Program for Elementary-Aged Children

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HOPS Results

HOPS Breakfast

In study year 3, the fiber content of HOPS breakfasts was 1.9 times higher than it was for study year 2 breakfast menus. Similarly, the grams of protein were 1.2 times higher in study year 3. During study year 2, breakfast menu calories reached 72% of the target United States Department of Agriculture (USDA) National School Lunch Program (NSLP) Recommended Daily Allowance (RDA) for calories. This gap was narrowed to 14% during study year 3, while maintaining approximately the same healthy levels of total and saturated fats. This was accomplished, in part, by serving fresh whole fruits everyday for breakfast and increasing the serving size of whole wheat toast slices during study year 3.

HOPS Lunch

During study year 3, the amount of dietary fiber in HOPS lunch menus increased by 30%, and the amount of saturated fat was reduced slightly, when compared to study year 2 lunch menus. The increase in fiber was accomplished, in part, by serving whole fresh fruits everyday during lunch. During study year 2, the HOPS lunch menu calories were at 87% of the target USDA NSLP RDA for calories. During study year 3, the HOPS lunch menu calories were at 91%, with a shortfall of only 58 calories.

Control Results

Control Breakfast

During study year 3, the amount of total fat in control breakfast menus increased slightly as compared to study year 2, while the amount of saturated fat decreased. The switch to 1% milk likely contributed to this decrease in saturated fat. The control school breakfast menus contained 2.9 times more fiber during study year 3 as compared to study year 2, mainly due to the increase in serving size of whole wheat toast from one slice to two slices, which also helped raise the calorie deficiency experienced in HOPS study year two control breakfast menus.

Control Lunch

During HOPS study year 2, the control school lunch menus analyzed averaged 33.9% total fat from calories – 3.9% over the maximum USDA NSLP RDA for children in grades K-5. During HOPS study year 3, the amount of total and saturated fats in control lunch menus was reduced significantly by 18.4% and 12.9%, respectively. Additionally, as the school foodservice department moved towards a HOPS philosophy district-wide, the amount of dietary fiber in control lunch menus was 20% higher in study year 3 as compared to study year 2.

Methodology

In order to examine whether HOPS nutritional gains achieved during HOPS study year 2 (2005-2006) were sustained and/or improved upon during HOPS study year 3 (2006-2007), four weeks of breakfast and lunch menus from HOPS intervention and control schools from HOPS study year 3 were analyzed and compared to results of analysis performed previously on HOPS study year 2 menus. Nutrisystem® software was used to analyze all menus for both study years.

Conclusion

The comparison of breakfast and lunch menus for HOPS intervention and control schools between study years 2 and 3 shows that HOPS intervention menus consistently are higher in dietary fiber and contain less total and saturated fats than the school district’s regular/control menu. However, because the district foodservice department has moved towards a HOPS philosophy for all schools in the district, nutrient analyses of both HOPS and control school menus showed nutritional improvements with respect to levels of fat and dietary fiber, while continuing to meet USDA NSLP requirements for vitamins, minerals, and calories when comparing study year 3 menus to study year 2 menus.

Purpose/Objective

The Healthier Options for Public Schoolchildren (HOPS) Study tests the feasibility of a holistic nutrition and healthy lifestyle education program in the elementary school setting. HOPS includes a rigorous dietary intervention that consists of rigorous modifications to school-based reimbursable meals and extended-day snack offerings that model the nutrition education taking place in the classrooms. This research examines the results of the dietary intervention as it varies over time of implementation, focusing specifically on the longitudinal effects of dietary interventions on the nutrition composition of HOPS menus (previously presented HOPS nutrition analyses showed 20% less fat and two times more fiber in HOPS versus control menus).1,2

Study Design

The study design included 17 public elementary schools (13 intervention and four control schools) – approximately 13,000 students aged 5-11. Intervention schools participate in nutrition and healthy lifestyle educational programming, as well as dietary and physical activity interventions, while control schools continue with traditional programming in these areas.

Dietary Intervention

The HOPS dietary interventions include modifications to breakfast, lunch, and extended-day snack menus resulting in the inclusion of more whole grains, less total and saturated fats, more fresh fruits and vegetables, and fewer schoologue menues. Menus modifications are made while staying within the confines of traditional school budgets and using existing food distribution networks, and all HOPS menus meet the USDA National School Lunch Program guidelines.

November 1, 2006 thru November 30, 2006 Spreadsheet - Portion Values

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Comparison of Leading Choices Menu Nutritional Content

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