

Skipping breakfast is associated with lower diet quality in young US children

Ramsay SA, Bloch TA, Marriage B, Shriver LH, Spees CK, Taylor CA
European Journal of Clinical Nutrition 2018; 72:548-556

Background

Eating breakfast supports good health and has been shown to contribute to the consumption of greater amounts of daily nutrients for adults, adolescents, and children. It is particularly important for children to eat breakfast, because adequate daily intake of both macro- and micronutrients is key to achieving optimal short- and long-term health outcomes.

Objective

To analyze food group and nutrient intake along with the overall diet quality of US children ages 2 to 5 and 6 to 12 years, comparing children who skip breakfast with those who eat breakfast.

Methods

Data from the 2005-2012 National Health and Nutrition Examination Survey (NHANES) for US Children, 2-5 years of age (n=3,443) and 6-12 years of age (n=5,147) were analyzed. Files from the website of the Center for Disease Control and Prevention National Center for Health Statistics were also used for analyses.

Results

Breakfast skippers

Of the total number of children ages 2-5 years, 4% skipped breakfast while 14% of children ages 6-12 years missed breakfast. On the days that breakfast was missed, children had significantly lower energy intakes for the total day and greater energy intakes from non-breakfast meals and snacks. Children of all ages who skipped breakfast consumed less energy, protein, carbohydrate, fat, and vitamin A, and had significantly lower intakes of fiber, folate, iron, and calcium. Younger children obtained more total energy from added sugars throughout the day.

Despite increased nutrient intake in non-breakfast meals, the amount of nutrients consumed were insufficient to meet the equivalent amount of nutrients consumed by children who ate breakfast. Children who skipped breakfast were also more likely to miss other meals during the day.

Breakfast eaters

Children who ate breakfast had significantly higher Healthy Eating Index 2010 (HEI) scores (95% confidence intervals) with significantly better HEI scores for fruit, whole fruit, whole grains, dairy, and empty calorie categories.

Discussion

Insufficient nutrient intakes in children can affect growth and development and can negatively impact long-term health. Children who skipped breakfast had a lower HEI and consumed greater amounts of added sugars, which could increase the likelihood of becoming overweight later in life. Nutrition education is needed to highlight the importance of breakfast for children every morning to support their intake of essential nutrients, reduce intake of added sugars, and support healthy long-term growth and development.

Conclusion

In this analysis, children who missed breakfast had lower overall diet quality (lower HEI) with lower intake of total energy, protein, fiber and key micronutrients (folate, calcium, iron). Eating breakfast each morning is important to support healthy growth and development.

The complete study may be accessed at:
<https://pubmed.ncbi.nlm.nih.gov/29367733/>