

## ***KidsHealth KidsPoll—Nutrition Poll: Summary of Findings***

KidsHealth KidsPoll is collaboration among the Nemours Foundation/KidsHealth, the Department of Health Education and Recreation at Southern Illinois University Carbondale, the National Association of Health Education Centers, and participating health education centers. The purpose is to gather information (opinions, attitudes, and feelings etc.) about current health issues from children. The information is gathered using handheld data collection devices from children ages 9 to 13 as they attend classes in the health education centers. The information is shared with educators, caregivers, healthcare organizations, the media and other interested parties at the national and local levels. The goal is to provide insightful information that will enable them to develop programs to help children to make healthy life decisions, prevent disease and injury, and understand their bodies. This poll focused on issues related to nutrition.

### **Individual Demographics**

Individual-level information was collected anonymously from each child who participated.

- 959 children
- 50% boys, 50% girls
- 9 to 13 (average age 10.3)
- 8 centers participated in this poll:
  - Children’s Health Education Center – Milwaukee, WI
  - HealthWorks! Kids Museum – South Bend, IN
  - Health World Children’s Museum – Barrington, IL
  - Robert Crown Center for Health Education – Hinsdale, IL
  - Ruth Lilly Health Education Center – Indianapolis, IN
  - Saint Joseph Mercy Health Exploration Station – Canton, MI
  - Susan P. Byrnes Health Education Center – York, PA
  - Weller Health Education Center – Easton, PA

### **School Demographics**

School-level information was not collected from each child but is based on statistics for the schools.

- 29 schools
- The schools participating averaged: 66% White, 13% Black, 16% Hispanic, 5% Asian/Pacific, 1% Native American:
  - 69% of the schools had student bodies that were 0% to 33% Black/Hispanic/Asian/Native American combined
  - 5% of the schools had student bodies that were 33% to 67% of these groups
  - 26% of the schools had student bodies that were 67% to 100% of these groups
- 37% students in participating schools qualified for free or reduced lunch:
  - 65% of the schools had 0% to 33% of their student body qualifying for free or reduced lunch
  - 6% of the schools had 33% to 67% of their student body qualifying for free or reduced lunch
  - 29% of the schools had 67% to 100% of their student body qualifying for free or reduced lunch

*The U.S. Census Bureau and the U.S. Dept of Education use a measure of city size and location called a Metropolitan Statistical Area (MSA). The categories for MSA are:*

- *Large city center = center of a MSA city with population >250,000*
  - *Midsized city center = center of a MSA city with a population <250,000*
  - *Large city fringe = urban fringe of a large MSA city*
  - *Midsized city fringe = urban fringe of a midsized MSA city*
  - *Large town = not within a MSA with a population >25,000*
  - *Small town = not within an MSA with a population 2,500-25,000*
  - *Rural outside = not within an MSA with a population <2,500*
- Of the participating schools: 21% large city center, 20% mid-size city center, 26% large city fringe, and 33% rural.
  - Average school size: 486
    - 18% enrollment of  $0 < X < 300$
    - 65% enrollment of  $300 < X < 600$
    - 10% enrollment of  $600 < X < 900$
    - 7% enrollment of  $\geq 900$

### **Significant Demographic Associations**

- There was a high correlation between proportion of schools with more non-white students and proportion receiving lunch assistance ( $r = 0.94$ ).

### **Statistically Significant Findings – Overall**

- 1 Yesterday, how many times did you eat a vegetable?
  - A. None
  - B. One
  - C. Two
  - D. Three or more
- 2 Yesterday, how many times did you eat fruit or drink 100% fruit juice?
  - A. None
  - B. One
  - C. Two
  - D. Three or more

These questions used wording similar to that found in the Youth Risk Behavior Survey (YRBS), except that vegetable and fruit consumption are combined in one question in the YRBS. One third of the respondents reported no vegetable consumption the previous day followed by 25% who said one and 16% reported two; only 26% met the Healthy People 2010 (HP2010) objectives of three or more servings of vegetables per day. A larger percentage (56%) of students met the HP2010 objective of two servings of fruit per day. Thirty-nine percent said three or more, 17% reported two, 24% one, and 20% none. Combined\*\*, a little more than one third (38%) are meeting the 5-a-Day recommendations for fruits plus vegetables. Another 7% reported four fruits and vegetables, and between 12% to 17% chose each response “none” through “three.”

Children whose families speak to them about nutrition often are more likely to say they meet the recommendations for vegetable consumption (never talk=20%, once-in-a-while=21%, monthly talks=27%, weekly talks=35%), fruit consumption (never talk=41%, once-in-a-while=46%, talk monthly=67%, talk weekly=68%), and 5-a-Day consumption (never talk=28%, once-in-a-while=30%, monthly talks=43%, weekly talks=51). There were no differences by gender, age, or who chooses a child's food.

*[\*\* students who marketed "three or more" on one of the individual questions, were not included in the combined analysis]*

3 If you had the following choices, which would you choose to drink?

- A. Water
- B. Soda/pop or fruit flavored drink
- C. Fruit juice (100%)
- D. Milk
- E. Sports drink (like Gatorade)

Over half the respondents chose empty sugar choices; 26% sports drink, and 25% soda or fruit drink. These were followed by water (21%), fruit juice (14%), and milk (14%). Boys preferred soda/fruit drink (29% v. 22%) and sports drink (30% v. 23%), while girls had a higher preference for water (25% v. 16%). Older children had a strong preference for soda/fruit drink (9=19%, 10=22%, 11=29%, and 12/13=37%); and a lower preference for water (9=29%, 10=20%, 11=17%, 12/13=13%). Those whose parents never or infrequently talk to them about nutrition had a greater preference for soda/fruit drinks and sports drinks and a lower preference for water. There were no significant differences by who chooses a child's food.

4 What do you usually do for breakfast?

- A. I usually do not eat breakfast
- B. I eat breakfast at home
- C. I eat breakfast at school
- D. Something else

Nearly two thirds eat breakfast at home with another 9% eating at school and 7% doing something else for breakfast. One in five (19%) say they usually skip breakfast. Older children are more likely to say they skip breakfast (9=12%, 10=18%, 11=20%, 12/13=31%). Those whose parents infrequently talk about nutrition are also more apt to report skipping breakfast (never=30%, once-in-a-while=21%, monthly=12%, weekly=15%). There were no differences by gender or who chooses a child's food.

5 I try to eat healthy:

- A. All the time
- B. Most of the time
- C. Sometimes
- D. Once in a while
- E. Never

This question was designed not to measure actual eating behaviors but attitude toward healthy eating. Nearly two thirds (61%) of the respondents claim they try to eat healthy all or most of the time. Girls (69% v. 52%) and younger children (9=67%, 10=63%, 11=60%, 12/13=44%) are more apt to report they try to eat healthy all or most of the time. Frequency of family discussion

of nutrition also is related to healthy-eating claims (never=41%, once-in-a-while=59%, monthly=73%, weekly=66%). There were no differences by who choose a child's food.

We can also look at patterns among the predictor variables:

- 6 Where do you get most of your information about eating healthy?
  - A. A family member
  - B. School
  - C. A nurse or doctor
  - D. Television or the Internet
  - E. Somewhere else

The most popular sources were family (36%), school (28%), and nurse/dr (19%). Only 7% said TV/internet and 10% said somewhere else. Girls were more likely to say a family member (41% v 32%) and boys were more apt to name TV/internet (10% v. 3%). Younger children were more likely to report nurse/dr (9=22%, 10=21%, 11=17%, 12/13=10%). Other age differences were not linear. Children who say they usually choose their own food were more likely to name school (31% v. 24%) and TV/internet (9% v. 3%) and less likely to name family (30% v. 46%). There were no statistically significant differences related to how often the family talks about nutrition.

- 7 How often does your family talk to you about eating healthy?
  - A. Never
  - B. Once in a while – but not every month
  - C. Every month – but not every week
  - D. Every week

Fifty-four percent said never or once-in-a-while, 17% monthly, and 29% weekly. Boys were more likely to say never (19% v. 10%). The youngest (9) and oldest (12/13) were the most likely to say their families never or only once in a while talk to them about eating healthy (see table). There were no significant patterns by who chooses a child's food.

- 8 Most of the time, who chooses the food you eat?
  - A. My father
  - B. My mother
  - C. I do
  - D. Someone else

More than half (58%) said they choose their own food most of the time; this was followed by mother (31%). Only 6% said father and 5% someone else. Boys were more likely to say father (9% v. 2%) or self (60% v 56%), whereas girls were more apt to name mother (37% v. 26%). There were no significant patterns by age or frequency of family talks about healthy eating.

### **Other Findings Worth Highlighting**

Another way of looking at the data is to calculate odds ratios for outcomes based on the predictive variables. To control for overlapping effects, the odds ratios were adjusted by including all the variables simultaneously in a logistic regression model. For ease of interpretation, all the outcome variables and two of the predictor variables (*who chooses food* and *how often family talks about nutrition*) were collapsed into dichotomous variables. Each level of each variable has a comparison level. For example, kids whose families frequently talk

to them often about nutrition are 1.4 times more likely than kids whose families don't talk to them to say that they ate three or more vegetables the previous day.

	OUTCOMES			
	3+ Veggies Yesterday	3+ Fruit Yesterday	5+ Veggies and/or Fruit Yesterday	Usually Eat Breakfast
Girl	1.2x	0.9x	1.2x	0.9x
Boy	comparison level	comparison level	comparison level	comparison level
12/13 years old	0.8x	1.5x	1.4x	0.2x*
11 years old	0.7x	1.4x	1.1x	0.4x*
10 years old	0.8x	1.2x	1.0x	0.5x*
9 years old	comparison level	comparison level	comparison level	comparison level
Child chooses food most the time	0.9x	1.0x	1.1x	1.4x
A parent chooses	comparison level	comparison level	comparison level	comparison level
Family talks at least monthly	1.4x*	1.6x*	1.9x*	1.8x*
Never or only once-in-a-while	comparison level	comparison level	comparison level	comparison level
Get nutrition info from school	0.7x	0.8x	0.6x	0.8x
From a doctor or nurse	0.7x	1.1x	0.8x	1.0x
From TV or the Internet	0.7x	1.0x	0.9x	1.1x
From other sources	0.8x	1.0x	1.0x	0.7x
From family	comparison level	comparison level	comparison level	comparison level

\* odds ratio statistically significant at  $p < 0.05$

From these odds ratios, it can be noted that frequent family discussion of healthy eating has the most consistent impact on reported eating behaviors. Age is also a significant predictor of breakfast behavior; as children age, they are much less likely to eat breakfast.

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