Findings from Project EAT

What is Project EAT?

Project EAT: Eating Among Teens came to your school during the 1998-1999 school year and surveyed 7th and/or 10th grade students in health or physical education classes. Project EAT visited a total of 31 schools in the metropolitan area and surveyed 4746 adolescents. The goals of Project EAT were to investigate the factors influencing the eating habits of adolescents, to determine if young people are meeting national nutrition recommendations, and to explore dieting and physical activity patterns among youth. Students completed three questionnaires, one covering social, personal and behavioral factors, one exploring physical activity participation, and one aimed at quantifying nutrient intake. Students also had their weight and height measured privately by project staff. We greatly appreciate your school's participation in the study and we would like to share some of our findings with you and your school staff. If you have any questions regarding the findings presented, please call Project EAT coordinator, Jillian Croll at 612.626.8602.

Who participated in Project EAT?

- 4746 students across 31 schools in Minneapolis, St. Paul, and Osseo School Districts
- 50% females, 50% males
- Grade level: 34% junior high and 66% high school students
- Mean age: 14.9 (range 11-18)
- Ethnicity: 49% Caucasian, 19% African American, 19% Asian American, 6% Hispanic, 3.5% Native American, 4% other/mixed.

Special points of interest:

- Only 29.5% of girls and 42.5% of boys are getting enough calcium.
- 44% of girls and 48% of boys surveyed were at or above the 85th % for weight.
- 85% of girls and 70% of boys have tried to lose weight or keep from gaining weight over the past year, with over 1/2 of girls and nearly 1/3 of boys using unhealthy weight control methods.
- Participation in family meals varies widely among youth and does seem to be related to improved nutrient consumption.
Are adolescents meeting nutrition recommendations?

Project EAT found there are large gaps between nutrition recommendations and actual nutrient intake among adolescents. Among students surveyed, only 30% of females and 42.5% of males consumed the recommended amount of calcium (1300 mg or more per day). Approximately 45% of both females and males ate more than 2 servings of fruit per day, while only about 16% ate more than 3 servings of vegetables per day. Only about 30% of teens met the “5 a day” nutrition recommendation for fruits and vegetables. Grain intake was also low, with only 36% of females and about 44% of males consuming 6 or more servings per day. Over half of the females and almost 45% of the males surveyed met the recommendations for a low fat diet (30% or less calories from fat).

Younger students (junior high) had higher calcium, fruit, vegetable, and grain intakes than older students. Fat intakes increased with age for females and remained relatively constant for males across ages.

Across ethnicity, nutrient intakes varied considerably. Fewer African-American and Native American females and African-American males met the recommendations for a low fat diet, as compared to their White, Asian-American, and Hispanic peers. Fewer Asian-American and Hispanic females met calcium intake recommendations compared to their peers. White males most frequently met calcium recommendations, while few Asian-American males met calcium recommendations. Asian-American and Hispanic youth most frequently met the “5 a day” fruit and vegetable recommendation.

Breakfast anyone?

During the past week of the survey, only 31% of students reported eating breakfast everyday. Nearly 15% of them never ate breakfast and 23% only ate breakfast 1 or 2 days during the week. Another 30% reported eating breakfast 3-6 days a week. Numerous studies have shown the benefits of breakfast to student learning, as well as the role of breakfast in contributing to maintenance of a healthy weight.

Overweight: A challenging problem

Obesity is a major public health problem, and adolescents are not immune. Project EAT found that approximately one-third of adolescents were at risk for becoming overweight (defined as at or above the 85th percentile but less than 95th percentile), while 12.5% of girls and almost 17% of boys were overweight (defined as at or above the 95th percentile). National public health initiatives aim to have only 5% of adolescents over the 95th percentile, so the current figures indicate much work is needed.

Females: For females, prevalence of overweight was highest among African American, Hispanic and Native American youth. In each group, more than 40% of these youth are at risk for becoming overweight, while 15-20% are currently overweight. Prevalence of overweight youth was considerably lower for Asian American and White females.

Males: The picture is similar for males, with over half of Native American and nearly 45% of Hispanic males at risk for becoming overweight. However, in males, African American youth have the lowest prevalence, with just over 25% at risk of becoming overweight. In contrast to females, Asian American males have a higher prevalence than White males. The figures for youth considered overweight echo those for youth at risk of becoming overweight, with more than 25% of Native American males and 20% of Hispanic males considered overweight.
Physical Activity and Inactivity

Students in Project EAT reported involvement in numerous sports and activities. Sixty-four percent of students reported being on one or more sports teams in the last year; 20% were on 3 or more teams over the year. Over 50% reported participating in strenuous and/or moderate activity for two and a half hours or more a week. While they are fairly active, students also reported watching TV and videos for an average of 2.6 hours per day on weekdays. Nearly 50% reported watching 3 or more hours of television or videos per day and 20% 5 or more hours! About 16% reported using a computer (not for homework) 3 or more hours a day. Despite large amounts of time in front of the television, youth do spend time on their homework. About 40% of students reported reading or doing homework for 3 or more hours per day, and 60% report doing homework or reading more than 2 or more hours per day. On weekends, television watching remains fairly constant with nearly 50% reporting 3 or more hours per day of television or video watching. Homework time decreases on weekends though, only 23% report doing homework or reading 3 + hours a day, and 40% report 2 + hours per day.

Vegetarianism: Who, what and why?

Vegetarianism was reported by about 6% of students, nearly 75% were females, and 75% had been so for longer than 1 year. Since there are a variety of types of vegetarianism, and some self-reported vegetarians are actually just non-red meat eaters, we asked students reporting vegetarianism if they ate chicken, fish, eggs, and dairy. Over half reported they did eat chicken, 41% reported eating fish, and over 75% reported including eggs and dairy in their diets. (Note: Those reporting eating meat would be more appropriately called "semi-vegetarians"). When asked why they were vegetarian, students reported the following top five reasons:

1. To lose or not gain weight (35%)
2. Do not want to kill animals (28%)
3. Don’t like the taste of meat (27%)
4. To have a healthier diet (25%)
5. To help the environment (17%)

Vegetarians were more likely to be involved in unhealthy weight control behaviors, particularly males reporting vegetarianism. Since vegetarianism seems to have interest and appeal to adolescents, education regarding healthy vegetarianism is critical to help prevent unhealthy weight control behaviors among youth.

Family Meals: Are they a thing of the past?

Family meals are a challenge given the busy schedules of adolescents and their parents, but they do occur and they are beneficial. Project EAT found that younger students ate with their families an average of 5.5 times per week and older students an average of 4 times a week. Adolescents eating regular family meals had higher fruit, vegetable, and calcium intakes than their peers not reporting regular family meals, and they drank significantly less soda pop. Major reasons for not having family meals included parent and teen schedules, teen desire for autonomy, dissatisfaction with family relationships, and dislike of foods served at family meals.

Most adolescents thought they probably would eat more healthfully if they ate more meals with their families. Family meals appeared to contribute to a more healthful diet if they included fruits, vegetables and dairy foods and if there were rules around mealtimes in terms of expectation of attendance and about eating what is served. There is great diversity in both quality and quantity of family meals among youth, but generally family meals can contribute positively to the establishment and maintenance of healthful eating.
Dieting and Weight Concerns

Dieting is common among adolescents, both females and males. Forty percent of students reported going on a diet in the past year. Eighty-five percent of female and 70% of male students reported moderate dieting behaviors such as eating less high-fat food, eating less sweets, and eating more fruits and vegetables over the past year. Quite concerning are the 56% of females and 32% of males reported unhealthy dieting behaviors such as skipping meals, using diet pills, and smoking more cigarettes, specifically to lose or control weight. A smaller but quite worrisome percentage of students, 12% of females and 4% of males, reported use of dangerous dieting behaviors such as taking laxatives or diuretics, vomiting after meals, or fasting. Approximately 3.5% students survey reported having a doctor tell them they have an eating disorder. Undoubtedly, the prevalence of overweight and obesity among youth is a major public health concern, but youth without a need to lose weight are dieting and trying to lose weight unnecessarily.

Implications

There is a compelling need for interventions aimed at prevention of obesity and unhealthy dieting. Schools may be able to help by promoting healthy eating behaviors through school meals and classroom education. Schools can also help by trying to decrease unhealthy behaviors and attitudes among students by changing the social environment of youth. This can be done by having school policies and practices that promote low tolerance of weight-related teasing, teaching children that weightism is prejudice, supporting accessible, affordable healthy eating, promoting student activism around weight stereotypes, both over and underweight, and by involving students and families in education around healthy eating and healthy weight maintenance.