



## Is Physical Activity By Itself the Answer?

It is clear that youth face a dual-sided problem: consuming excess calories and engaging inadequate levels of physical activity. The result is weight gain. Some groups opposed to setting nutrients standards for school foods argue that youth face a more significant problem with physical inactivity than with the proliferation of unhealthy foods. This argument is misleading because it suggests that if youth exercised enough, they could eat any type of food regardless of its calorie content and nutritional value. The scientific community, however, still widely believes that the most powerful formula for maintaining health and a healthy weight is the combination of healthy food choices and physical activity. Youth need environments that make it easy for them to choose both.

California youth, like their peers across the country, continue to face a nutrition and physical activity crisis. Today's youth generally fail to meet the *2000 Dietary Guidelines for Americans* that recommend children two years and older eat a diet which is low in fat, sugar, and sodium, and eat a variety of fruits, vegetables, and whole grains. A 2003 study of California high schools found that more than 70 percent of the responding districts reported selling pizza, chips, cookies, and soda as a la carte items.<sup>(1)</sup> The *2000 Dietary Guidelines for Americans* also recommend that children two years and older be physically active at least one hour each day. However, a California study found that only two percent of teenagers met all five diet and physical activity recommendations.<sup>(2)</sup> Among youth in grades five, seven, and nine who were tested with California's mandated physical fitness test in 2003, 75 percent failed to meet the state's fitness standards and more than one-quarter were overweight.<sup>(3)</sup>

### Energy Balance

If a child eats more calories than the body needs to perform daily activities, the body will store the excess calories as fat. For example, a 15-year old girl who is moderately physically active requires approximately 2000 calories per day. About 60 percent of the calories are used to support basic body functions, like digestion, breathing, blinking, and smiling. The other 40 percent are used for

voluntary daily activities like exercise. Any additional calories consumed beyond these needs may be stored as fat and result in weight gain. It takes about 3,500 unexpended calories to gain one pound of fat.

### Energy Balance Can Be Difficult

Is it realistic to assume that most youth can increase their physical activity levels enough to counteract the extra calories added to their diets from items like sodas, cookies, and large-sized portions? Recent national surveys indicate that youth are eating more calories in today's super-sized society and are getting fatter.<sup>(4)</sup> One study found that between 1989 and 1996, children consumed an extra 80 to 230 calories per day.<sup>(5)</sup> Increased physical activity is usually inadequate to compensate for the increased calories being taken in from ever-expanding portion sizes, super-sized candy bars and fountain drinks, and fast food value meal deals. For example, 20-ounce sodas sold in high school vending machines contain, on average, 250 calories. If a high school student added just one 20-ounce soda to a diet that already supplied their calorie needs, the student would have to do an additional two hours of moderate walking to burn off the calories from just that one soda. Drinking two or three 20-ounce sodas per day would require four to six additional hours of walking to burn the extra calories and counteract the inevitable weight gain if other food choices and calorie intakes remained the same. In addition, studies suggest the body does not adequately adjust for calories from sweetened drinks, such as soda.<sup>(6)</sup>

### Average Calories of Typical Youth Foods:

20 oz. cola soda	=	250 calories
Large fast food fries	=	470 calories
Large chocolate chip cookie	=	210 calories
Specialty fast food hamburger	=	600 calories
Six inch turkey sub	=	330 calories
Medium apple	=	81 calories

Source: The Nutribase Complete Book of Food Counts, 2001.

## Average Calories Used By Physical Activity:\*

1 hour moderate walking	=	200 calories
1 hour dancing	=	240 calories
1 hour running	=	499 calories
1 hour shooting baskets	=	272 calories
1 hour mowing lawn (power mower)	=	333 calories

\*Approximate, based on a 125-lb. person

Source: ILSI Medicine & Science in Sports & Exercise, Vol.32; No. 9; 9/2002.

## Promising Policy Directions

Physical activity is very important for youth. Some of the benefits include higher self-esteem, lower stress and anxiety, and the prevention of chronic disease.<sup>(7)</sup> Although physical activity has many very important benefits for youth, simply telling youth to exercise more without creating healthy food environments will not be adequate to address the obesity crisis. Youth need environments that make it easy for them to be physically active and make healthy food choices.

The growing epidemic of obesity calls for a broad approach including increased attention to policy and environmental changes that promote healthy eating and increased physical activity in youth. Because the public school system plays a significant role in providing food and physical activity opportunities for youth and in shaping children's lifetime dietary and physical activity habits, it is an important point for intervention. The following are recommended strategies for creating healthy nutrition and physical activity environments at school:

1. **Eliminate the sale of foods and beverages that do not meet the nutrient standards outlined in the Pupil Nutrition, Health, and Achievement Act of 2001 (Chapter 913, Statutes of 2001, Escutia) (SB 19) and the California Childhood Obesity Prevention Act (Chapter 415, Statutes of 2003, Ortiz) (SB 677) at all California elementary, middle, and high schools.**
  - Provide modified food items, such as pizza with lower-fat cheese and vegetable toppings, at school that meet the recommended standards.
  - Identify and promote healthy options that are popular with students. Work with students to identify these foods and beverages and to promote them to their peers.

2. **Establish school policies that promote lifelong physical activity habits among all young people and provide physical and social environments that encourage and enable safe and enjoyable physical activity.**
  - Provide increased opportunities for physical activity and physical education in grades pre-kindergarten through 12.
  - Physical education curricula should emphasize skills needed for lifetime physical activity such as dance, strength training, jogging, swimming, bicycling, cross country skiing, walking, and hiking.

## References

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