

Does Obesity Prevention Cause Eating Disorders?

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The problem of childhood obesity has captured the nation's attention. Health professionals, school administrators, child advocates, and state and federal policymakers have mobilized to stem the tide of this health crisis. Because the diagnosis of childhood obesity does not have one easily identifiable etiology, myriad prevention and intervention strategies have been considered to influence children's eating and physical activity. Unlike other public health problems like smoking, where the goal is to get people to stop a behavior entirely, healthy eating and physical activity exist on a behavioral continuum that may be unhealthy at either extreme. This has led to a tug-of-war among health professionals. On one side, some are promoting dramatic environmental and policy changes to decrease overeating and inactivity, such as banning junk food from schools, mandating menu calorie labeling, sending home body mass index (BMI) reports to parents, requiring daily physical education, and taxing soft drinks. On the other side, other professionals are concerned that such changes may lead to an increase in our societal preoccupation with dietary restraint and worsening body image, thereby increasing the incidence of eating disorders.¹⁻³ Some argue that even labeling obesity as "a public health problem" promotes the idea that overweight bodies are undesirable, unacceptable, and even diseased.¹ These concerns raise important empirical and ethical questions for proponents of obesity prevention. The aim of this article is to examine this tension and outline the need to move the field toward unity through research on clear and specific health-promoting messages.

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To understand the concern that obesity prevention may be iatrogenic, it is necessary to appreciate the complex etiology of eating disorders. Dozens of risk factors have been identified; among these are biological characteristics (e.g., carrying specific genes), temperamental traits (e.g., perfectionism, negative affect), family and peer values (e.g., appearance orientation, appearance-related teasing), and social factors (e.g., activities like ballet, gymnastics).⁴ Furthermore, "eating disorders" represents a heterogeneous diagnostic category that includes anorexia nervosa, bulimia nervosa, and eating disorder not otherwise specified (which includes binge eating disorder). Research on whether obesity prevention causes eating disorders should assess the range of clinical disorders as well as sub-clinical behaviors (e.g., vomiting, laxative use, skipping meals).

There are data to suggest that our recent societal focus on obesity prevention has not led to a discernable increase in eating disordered behavior. Overall trends measured by the Centers for Disease Control and Prevention's National Youth Risk Behavior Survey indicate that there has been no significant change over time from 1995 to 2005 in the percentage of high school students who took laxatives, diet pills, powders, and liquids or vomited to lose weight or prevent weight gain. Although the prevalence rates are concerning (i.e., 4.5%–6% for vomiting and laxative use, 6.3%–9.2% for diet supplements), there is no evidence that increased media and professional discussions about childhood obesity have been associated with a concomitant increase in pathological findings.

Further data comes from the evaluation of Arkansas' statewide multicomponent effort to reduce childhood obesity, which included BMI reports.⁵ Three-year follow-up data indicate that BMI has leveled off, and there has been no increase in youth reports of taking diet pills, exercising excessively, starting diets, or weight-based teasing. This suggests that large-scale policies can be implemented responsibly and successfully prevent a BMI increase without unintended consequences.

A handful of controlled trials have also addressed this issue. Schwartz and colleagues⁶ evaluated a school intervention implementing nutrition guidelines for snack sales in middle schools. Students were assessed for eating behaviors, desire to lose weight, and dieting behavior before and after intervention.

Student nutrition at school improved in only the intervention schools, but body dissatisfaction in both conditions increased over time. Because the intervention and comparison schools did not differ, it is unlikely that the changes in food policy played a causal role in this increase. These findings do, however, highlight the ongoing problem of body dissatisfaction among middle school students.

Very strong evidence that eating disorder and obesity prevention can be done together comes from Austin and colleagues,⁷ who have demonstrated that broad-based obesity prevention programs can actually be helpful in efforts to decrease eating pathology. The Planet Health study was designed to promote nutrition and physical activity and decrease television viewing in 10 middle schools. The 5-2-1 Go! study aimed to promote nutrition and physical activity and decrease overweight in 13 middle schools.⁸ Both studies assessed disordered weight-control behaviors, such as dieting to lose weight, self-induced vomiting, laxative use, and taking diet pills. In both programs, girls in the intervention schools were less likely to engage in these behaviors at follow-up than were girls in the control schools.

THE IMPORTANCE OF CREATING CONSISTENT PUBLIC HEALTH MESSAGES

Eating disorder and obesity prevention efforts have the potential to be complementary. However, as noted by Neumark-Sztainer,^{2,3} we need to reconcile our public health messages. There is general agreement on promoting frequent family meals, enjoyable physical activity, a positive body image, and decreasing media exposure. Below, we address some of the more controversial issues.

THERE ARE NO GOOD OR BAD FOODS, AND EVERYTHING IS OK IN MODERATION

The message that there are no good or bad foods seems reasonable at first, but this mantra interferes with making real changes to the obesogenic environment. Policies that set nutrition standards for foods sold in schools, nutrition standards for foods companies can market to children, or even foods that should be taxed must first identify the target foods. We believe it is reasonable to call a food “bad” if it predominantly consists of ingredients associated with disease (such as sugar, trans fats, or saturated fats) and contributes nothing of value to the diet. A more acceptable way to semantically categorize foods may be as foods to “promote” versus foods to “limit.” However, this raises questions: how much is a limited amount, and what is moderation? Without a quantitative value, a moderate amount of everything can add up to a lot of empty calories. A useful concept is “discretionary calories,” as defined in *mypyramid.gov*. Health

professionals can teach families how to translate that number (which is typically around 200) into a meaningful guideline, such as having the equivalent of one small ice cream sandwich or one small bag of chips per day. Research is needed to test this strategy in comparison with the message that all foods are fine in moderation.

CHILDREN SHOULD NEVER BE ENCOURAGED TO DIET

The question of whether obesity prevention leads to dieting, what dieting is, and whether it is a good or bad thing deserves closer attention and clarification. The research on dieting, binge eating, and weight gain has yielded inconsistent results. First, a body of prospective research shows a positive link between dieting and risk for bulimic symptoms and weight gain, and this is cited frequently as evidence against the practice of recommending caloric restriction to overweight youth.¹ In contrast, randomized trials have demonstrated that weight loss or weight maintenance diets can improve binge eating and weight status.⁹ Stice and colleagues⁹ have clarified this apparent contradiction by demonstrating the poor validity of many dietary restraint measures. In other words, high scores on “dietary restraint” measures does not necessarily mean one is actually engaging in dietary restraint and eating fewer calories. It seems that successfully engaging in dietary restraint is associated with better outcomes, whereas perceived deprivation is linked to problematic eating. So, how do you define and promote successful dietary restraint without increasing feelings of deprivation?

We suggest avoiding the word *diet* and instead defining “healthy restraint” for the public. Recommendations to “limit portion size” need to be further elaborated and defined, acknowledging that limiting portion size may involve reading labels, tracking calories, and weighing and measuring food. This starts to sound like dieting, so combining this with an antidieting message will be confusing. Research is needed to examine the comparative effectiveness of providing detailed information on appropriate portion sizes versus the directive to limit or pay attention to portion size on both actual dietary restraint and perceived deprivation.

CHILDREN ARE GOING TO BECOME OBSESSED WITH WHAT THEY ARE EATING

Another construct that is not well understood by the public is overconcern or preoccupation with food and eating. Some worry that removing vending machines from schools or placing calories on restaurant or school menus may lead children to become obsessed with eating only healthy foods. Like other behaviors, vigilance in monitoring food intake occurs on a continuum. Whereas individuals with eating

disorders have a preoccupation with food, eating, and calories that interferes with their ability to concentrate on other things, at the other extreme is the phenomenon of “mindless eating” documented by Wansink and colleagues. It is interesting to consider that other reasons for vigilance in eating are acceptable, such as someone with a peanut allergy scrupulously reading ingredients or someone who keeps Kosher asking if a meat product was prepared with milk, but this same level of attention can be considered too much if the reason is weight related. Most people do not know how many calories they should eat or they have eaten per day. We believe that some degree of vigilance in monitoring and limiting food intake is necessary for weight management in an environment where poor choices are easily available, inexpensive, and heavily marketed. Research is needed to learn when vigilance becomes pathological and what the impact is of more explicit calorie information.

TRUST INTERNAL CUES FOR HUNGER AND SATIETY

Neumark-Sztainer² writes that both eating disorder and obesity professionals can agree on the message that people should use internal cues for hunger and satiety. We agree it is desirable to rely on internal hunger and satiety cues, but our current environment drowns out these cues. People may not be intentionally ignoring internal cues as much as they are unable to distinguish them from external cues, such as the amount of food in a serving or television commercials for food. We believe that research is needed on the best way to educate youths to defend against all of the ways in which internal cues can be distorted and undermined.

OBESITY PREVENTION WILL INCREASE BODY DISSATISFACTION

Body dissatisfaction rates are high; one study found that 40% of 9- to 11-year-old girls are worried they are fat or will become fat. Although disturbing, the truth is that many of them may be right. We must simultaneously encourage children to engage in health-promoting behaviors while also protecting their positive feelings about their bodies. Promoting dietary changes in school or community policies may be less likely to make individual children feel stigmatized or punished.⁶ Early evidence suggests that even school BMI screening can be done in a private and sensitive manner and is not associated with an increase in weight-related teasing.⁴ It is important that school districts interested in implementing such a program do so with great care and consideration of the privacy of students and their families.

CHILDHOOD OBESITY IS THE MAIN PROBLEM

Obesity prevention efforts exist because of the striking increase in childhood obesity; however, the root problem is poor diet and inactivity among American children. We suggest reframing the current public health efforts of obesity prevention into health promotion for all children. This would address one of the key obstacles to implementing new policies—the belief that children who are not overweight do not have to worry about improving eating or activity levels.

Continued open dialogue is needed among eating disorder and obesity professionals to create complementary, rather than contradictory, public health messages. Researchers evaluating both obesity prevention and eating disorder prevention programs must examine potential iatrogenic effects as standard protocol. We believe that the most productive obesity prevention policies will be those at the institutional, state, or federal level that improve the food environment for everyone. The best obesity prevention program is the one that occurs quietly in the background: unhealthy foods are removed, nutritious choices are available, marketing junk food is prohibited, and children are surrounded by health-promoting foods.

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