The law is now firmly established as a powerful instrument of public health. Some of the most important public health victories in the United States in the past century — declining lead exposure, reduced rates of smoking, improvements in workplace and motor vehicle safety, and increased vaccination rates — are the result of new legislation, heightened regulatory enforcement, litigation, or a combination of the three.

With each victory, confidence mounts in the capacity of legal tools to be used in combating serious health threats. One of the newest targets of public health law is obesity. The past few years have brought a flurry of legislative initiatives aimed at improving nutrition and physical activity among children and adults, highly publicized personal-injury lawsuits against food and beverage companies,6,7 and new activities on the part of federal regulators.8 Related initiatives in other countries and at the World Health Organization signal growing international interest.

This new frontier of public health law is welcomed by many health activists, but it has also provoked criticism. A backlash from the food industry is already evident, and rights-oriented consumer groups have decried some measures because they impinge on civil liberties.10 Tensions exist between these interventions and the freedoms of choice, speech, and contract. In this article, we review the rationale for regulatory action to combat obesity, examine legal issues raised by initiatives to date, and comment on the prospects for public health law in this area.

TIME FOR LEGAL ACTION?

The public health law approach posits that the law can be used to create conditions that allow people to lead healthier lives and that the government has both the power and the duty to regulate private behavior in order to promote public health. The constitutional source of this authority is the police power, which encompasses both directly coercive interventions and policies such as taxes and subsidies that shape behavior by altering the costs of certain choices. States also enjoy broad powers with respect to taxation of goods and services.

Several factors have led to a reexamination of the historical view that food consumption and physical activity are inappropriate subjects for government regulation. Among the “triggers to action” that have catalyzed government intervention in other areas of private behavior, such as alcohol and tobacco use, are the development of a scientific base and social disapproval.11 Both these triggers are now in play with regard to obesity.

The accumulation of an evidence base is particularly important. Emerging research results about the economic and human costs of obesity12 have galvanized interest in greater governmental involvement by medicalizing the problem (witness the Medicare program’s decision to classify obesity as a disease13) and by demonstrating the stake that each employer and taxpayer has in it. A growing literature also links exposure to the advertising of unhealthful foods to decisions about consumption and to overweight and obesity. American children are exposed to approximately 40,000 food advertisements per year, 72 percent of which are for candy, cereal, and fast food.14 Empirical studies, including recent reviews by the American Psychological Association15 and the Institute of Medicine (IOM),16 show that advertisements achieve their intended effects on children — that is, they shape product preferences and eating habits.17-21 Moreover, children younger than eight years of age are generally unable to understand the persuasive intent of advertising and to view it critically.15
The publication of the Surgeon General’s report on obesity in 2001 brought the research base to a wider audience and raised the public profile of the obesity epidemic. Popular books and movies also have educated the public, especially about the food industry. The results of recent opinion polls indicate that a majority of Americans believe that the government should be involved in fighting obesity, particularly by regulating the marketing of “junk foods” to children.

Nonetheless, antiobesity laws encounter strong opposition from some quarters on the grounds that they constitute paternalistic intervention into lifestyle choices and enfeeble the notion of personal responsibility. Such arguments echo those made in the early days of tobacco regulation. There are important differences between foods that are not nutritious and tobacco: people cannot abstain from eating; high-calorie foods may be beneficial to some people and harmful to others; there is no food-related equivalent to harm from secondhand smoke; and no one has shown that foods have physically addictive properties, much less that food companies manipulate their addictive content to encourage dependence. However, a key similarity that undercuts the antipaternalism argument is the use of these products by children, who are highly vulnerable to advertising and marketing and whose eating habits tend to persist over the life span.

Ideological battles are currently playing out at both the state and federal levels as regulators seek an appropriate balance between private liberty and public health. Table 1 lists the key regulatory targets and tools.

<table>
<thead>
<tr>
<th>Activity in the States</th>
</tr>
</thead>
<tbody>
<tr>
<td>Within state courts and legislatures and local governments, there has been an outpouring of legal initiatives to address obesity. Litigation is a strategy that we have discussed elsewhere. The past four years have brought a spate of highly publicized personal-injury lawsuits against food companies by obese persons seeking compensation for obesity-related health problems. The most highly publicized of these lawsuits has been the off-again, on-again suit against McDonald’s brought by obese children in New York. This suit alleges that foods from McDonald’s were dangerous beyond the extent ordinarily understood by consumers, that McDonald’s negligent...</td>
</tr>
</tbody>
</table>

### Table 1. Key Regulatory Targets and Examples of Approaches to Obesity in Public Health Law.

<table>
<thead>
<tr>
<th>Target</th>
<th>Legislation</th>
<th>Administrative Regulations</th>
<th>Litigation</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Food environment</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Schools</td>
<td>Nutrition standards for school lunch programs</td>
<td>School-district policy banning sugar-sweetened beverages from school vending machines</td>
<td>Suits against school boards that permit schools to accept money from soft-drink companies in exchange for exclusive vending rights</td>
</tr>
<tr>
<td>Community</td>
<td>Taxation of non-nutritious foods</td>
<td>Restrictions on use of food stamps to purchase non-nutritious foods</td>
<td>Claims against manufacturers of non-nutritious foods for product defects and unfair business practices</td>
</tr>
<tr>
<td></td>
<td>Subsidies for producers or buyers of nutritious foods</td>
<td>Requirements for nutrition labels on food products</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Expansion of Federal Trade Commission’s authority to regulate food advertising</td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Physical activity</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Schools</td>
<td>Physical-education requirements in public schools</td>
<td>School-district policy that implements a program to increase after-school physical activity</td>
<td>Suits against education officials who cut physical education from public-school curriculum</td>
</tr>
<tr>
<td>Community</td>
<td>Funding for walking and bicycle trails</td>
<td>Residential subdivision regulations requiring bicycle paths, sidewalks, and parks</td>
<td>Suits against developers who do not provide adequate recreational facilities</td>
</tr>
<tr>
<td><strong>Insurance coverage</strong></td>
<td>Mandated coverage of weight-loss treatments by private health plans</td>
<td>Reimbursement of health care expenses because of Medicare’s determination that obesity is an illness</td>
<td>Suits against health plans for not covering medically necessary weight-loss treatments</td>
</tr>
</tbody>
</table>
ly failed to warn consumers of the risks, and that the company’s marketing constituted deceptive business practices under the state’s consumer-protection laws. Similar claims have been threatened against soft-drink companies.\textsuperscript{32}

Obesity-related lawsuits face substantial legal hurdles. Plaintiffs must prove that the food or corporate practice actually caused injury and that the dangers were not “open and obvious” to the ordinary consumer.\textsuperscript{6,33} Moreover, 21 states have enacted “personal responsibility” laws that immunize fast-food companies from obesity-related tort claims.\textsuperscript{34} The lawsuits attract attention, however, and may have contributed to the decision by some food companies to provide more healthful product offerings.

With regard to state legislative and local regulatory activity, much of the focus has been on schools. The policies of school districts have been criticized for contributing to what researchers describe as a “toxic environment” for children\textsuperscript{35}: about 60 percent of U.S. middle schools and high schools sell soft drinks from vending machines on campus,\textsuperscript{36} although this is likely to change under guidelines recently established by the beverage industry to curtail such sales by 2010\textsuperscript{37}; in most schools, meals prepared under the National School Lunch Program exceed federal limits on total and saturated fats\textsuperscript{38}; and only 28 percent of high-school students participate in daily physical-education classes.\textsuperscript{39} In response to these issues, states and school boards have crafted policies to reduce students’ access to foods that are not nutritious and to boost their physical activity (Fig. 1).\textsuperscript{40} Measures include laws restricting competitive food sales (the sale of foods that compete with school lunch programs). Other measures include closed-campus policies that keep students at school for lunch and the requirement for more and better physical education. Notwithstanding its interest in the success of the National School Lunch Program, the federal government has promulgated no rules concerning the sale of competitive foods in public schools, although the IOM is currently studying the issue under a congressional mandate.\textsuperscript{41}

Some states also have attempted to improve nutrition and fitness beyond the school gates (Fig. 2)\textsuperscript{42} by creating safe and attractive places to enjoy outdoor exercise. Another, more controversial approach is to tax junk foods, typically by excluding them from the general exemption of foods from state sales taxes. As of 2000, 19 states taxed foods that are not nutritious (such as soft drinks and candy). Several other states had such taxes, but repealed them in the 1990s because of pressure from the affected industries and difficulties administering them (for example, some states had difficulty determining which foods met the definition of a taxable item).\textsuperscript{42}

Economic and political barriers hinder more widespread adoption of many of these state initiatives. (Unlike taxes, most measures require revenue outlays.) The evidence base is also thin.

\begin{figure}
\centering
\includegraphics[width=\textwidth]{figure1}
\caption{State Legislative Initiatives to Combat Obesity in Schools, 1998–2005.}
\textit{Data are from the Health Promotion Program state legislation and statute database of the National Conference of State Legislatures.}\textsuperscript{40}
\end{figure}
To our knowledge, most initiatives have not yet been evaluated. There is no direct evidence that taxes on food affect rates of obesity, but studies have linked food pricing with consumption patterns and cigarette taxes with tobacco use. A commitment by state governments and research sponsors to evaluate the effect of policy interventions on key outcome measures such as consumption of junk foods in schools, children’s body-mass-index values, and physical activity levels will be necessary to construct and justify a strategy to use public health law to reduce rates of obesity.

**Activity at the Federal Level**

At the federal level, regulatory initiatives face similar political, economic, and evidentiary issues. Legal barriers arise as well; these barriers center on the federal government’s authority to regulate the commercial activities of the food industry.

There are increasing calls to regulate the advertising of unhealthful foods to children. Many foreign governments prohibit or restrict advertising during television programs that target young children, and the IOM recently recommended restrictions on television advertising if the food and beverage industries do not voluntarily shift their advertising emphasis away from products that are not nutritious.

The most common proposals are to restrict the quantity and content of advertisements during children’s television programs and to require that broadcasters provide equal time for messages that promote good nutrition and physical activity. Regulation also could target print media, the Internet, in-store promotional campaigns, and product tie-ins to children’s television programs. In addition, 19 states have legal restrictions on commercial marketing activities in public schools. Most of these laws are not comprehensive, however, and commercial activities in public schools remain widespread and are candidates for federal regulation.

**The Federal Trade Commission**

Federal responsibility for the regulation of advertising lies mainly with the Federal Trade Commission (FTC). By agreement with the Food and Drug Administration (FDA), the FTC has primary authority over food advertising, whereas the FDA regulates food labeling. Under the Federal Trade Commission for a specific study, Taxation of non-nutritious foods, Improved safety for walking and biking, Attractive places for outdoor exercise, Advertising restrictions, Community fitness campaigns, Workplace fitness initiatives, Insurance-coverage mandates, Other public-education initiatives.
Commission Act, the FTC may regulate “unfair or deceptive” business practices, including advertising.50 “Unfair” practices are those that may cause substantial, unavoidable injury to consumers that is not outweighed by offsetting consumer or competitive benefits. Advertising is “deceptive” if it is likely to mislead consumers in a way that is material — that is, if it is likely to influence misleadingly their decisions regarding the product.

The FTC’s regulatory interest in and authority over child-oriented advertising has been curtailed by a bruising history with such efforts. In 1978, the commission initiated an effort known as the Children’s Advertising Rulemaking, or “kidvid,” to regulate television advertising of foods with high sugar content to children.51 The commission asserted that advertising to young children is unfair and deceptive because they lack the cognitive ability to understand the bias inherent in advertising.

The proposal drew wide public ire and a vigorous response by the food, toy, broadcasting, and advertising industries.52 Three insurmountable obstacles eventually blocked the FTC’s effort.52,53 The first was political. Industry had raised an unprecedented amount of money — $16 million — to fight the proposed rules, and public opinion was unfavorably disposed to the FTC’s acting as a “national nanny.”54 A responsive Congress temporarily suspended all funding for the agency, restoring it only after passing legislation that narrowed the FTC’s authority to regulate children’s television advertising.55

The second barrier was practical: regulators could not find a way to tailor the rules narrowly to the objective. Banning all advertisements aimed at young children, for example, was problematic because it cannot be proved that young children make up the majority of any television show’s audience. The third problem was evidentiary: the regulators could not produce sufficient evidence that linked food advertising to long-term eating habits. In 1981, the FTC abandoned the rules but extensively documented its findings about the effects of advertising targeted to children in a staff report designed to serve as a “message in a bottle”56 to future regulators.

Today the FTC is empowered to regulate food advertising only if the agency finds that it is deceptive. Child-oriented advertising is evaluated in light of how it is understood by the target age group. Studies have found that children who watch more television than do other children are more likely to identify incorrectly which of two foods is more healthful.56 Studies also have found that about half of all nutrition-related information in television advertisements is misleading or inaccurate.58 Personal-injury lawsuits against food companies, including the McDonald’s case, have described examples of promotional materials that are arguably deceptive even to adults.

Thus, there may be room within the FTC’s existing legal authority to move against advertising to children. The practical and evidentiary problems associated with kidvid might well reappear, but the evidence accumulated over the past 30 years is likely to strengthen the FTC’s hand. For example, there would be less difficulty today in establishing an association between food advertising and children’s eating habits and obesity. Technological advances such as the V-chip and digital video recorders provide new ways of ensuring that restricted advertising does not reach young children but can reach interested older viewers.52 Also, a workable definition of “children’s television programming” has been developed for purposes of regulation under the Children’s Television Act.59

Despite these developments and its general interest in the policy problem of childhood obesity,60 the FTC appears to be ideologically disinclined at present to pursue regulation in this area. Its approach to advertising “favors requiring more information over banning information, and avoids broad restrictions limiting both deceptive and non-deceptive speech.”61 The notion that consumers, young and old, can choose freely from a marketplace of ideas remains strongly rooted.

THE COURTS

An alternative to probing the limits of administrative rule-making is to enact legislation that expands the FTC’s role in regulating advertising of food to children. However, the legislative path has difficulties of its own, the most considerable of which is the constitutional protection of free speech.

The First Amendment shelters “commercial speech” — expression that is related solely to the economic interests of the speaker and audience. The rationale is that even speech of relatively low value, such as advertising, may carry
important information to the public. Indeed, some of the earliest cases regarding commercial speech had to do with the advertising of contraceptives and prescription drugs.\textsuperscript{62-64}

Over the past three decades, the Supreme Court has been expanding the protection of commercial speech, which historically was narrow.\textsuperscript{65} Its decisions have favored the free flow of information even in cases in which the advertised products were acknowledged to pose hazards to public health.\textsuperscript{66} In the case of Lorillard Tobacco Co. v. Reilly,\textsuperscript{67} for example, the Court struck down Massachusetts regulations restricting outdoor and point-of-sale advertising of tobacco products within 1000 ft of schools. Although the Court readily accepted the general proposition that restricting advertising near schools would reduce youths’ demand for tobacco products, it questioned the effectiveness of the specific regulations and ruled that they restricted more speech than necessary.

\textit{Lorillard} elucidates the legal hurdles that regulators of food advertising must overcome. They must show that restrictions are tailored to advertising that is directed to children and that these restrictions will be effective in reducing the incidence of youth obesity. To prove that the regulation is narrowly tailored, they must show that it will not unduly restrict advertisers’ ability to communicate with adults.\textsuperscript{67} This proof will remain challenging, but at a minimum, “opt-in” schemes using V-chip or other forms of blocking technology would withstand constitutional challenge.\textsuperscript{68} To prove effectiveness, the government must offer evidence that demonstrates the magnitude of advertising’s contribution to youth obesity, relative to other factors such as physical inactivity. To do so, it must distinguish the contributions of television watching in general from those of the viewing of advertisements specifically.\textsuperscript{69} Regulators must also show that the regulation is not irrational in its restrictions on some products but not on others or on advertising in some ways but not in others. These major challenges will require careful rule-making and marshaling of relevant research.

\textbf{THE FOOD AND DRUG ADMINISTRATION}
The FDA has broad authority to regulate food labels under the Food, Drug, and Cosmetic Act (FDCA) of 1938. The FDCA requires that food labels be truthful and not misleading and that they reveal all facts that are material to their representations and to the possible adverse consequences of consuming the product.\textsuperscript{70} It also requires food manufacturers to include certain disclosures on food labels.

In 1973, the FDA began to expand its regulation of food labels under a voluntary program. In 1994, under the Nutrition Labeling and Education Act (NLEA),\textsuperscript{71} the FDA began to require a “nutrition facts” label on most food products. This label provides information about fat, cholesterol, sodium, carbohydrate, sugar, and other content. (Restaurant food is excluded from the mandate except when the restaurant makes health claims about an item.) The FDA may add nutrients to this label if it determines that the information would help consumers maintain healthful dietary practices.

Because consumers give more credence to nutritional information in product labels than in advertising,\textsuperscript{72} labels may help to counteract the consumption impulses wrought by advertising. Reviewing the findings of empirical studies, the FDA recently concluded that only a small percentage of consumers use nutrition labels for weight-control purposes, but label use is associated with more healthful food choices.\textsuperscript{8} Findings of studies of product sales after the introduction of labeling requirements point to the same conclusion.\textsuperscript{73}

The FDA has historically exercised its authority to require food labels lightly under the assumption that too much information may overwhelm consumers.\textsuperscript{74} Recently, however, the agency has invigorated its labeling regulations to address obesity. In July 2003, the FDA implemented a rule requiring food manufacturers to list the trans fat content on product nutrition labels by 2006.\textsuperscript{75} In addition, it convened an Obesity Working Group. In 2004 this group recommended that the FDA evaluate how the nutrition facts panel might better emphasize caloric values. It also advised the FDA to do the following: consider the authorization of health claims on reduced-calorie or low-calorie foods, encourage manufacturers to make dietary guidance statements and comparative labeling statements to encourage healthful food substitutions, seek restaurants’ cooperation in a voluntary program of standardized nutritional information for restaurant food, and enforce the requirement that the serving sizes listed on nutrition labels be appropriate.\textsuperscript{8}
The last recommendation was implemented immediately. In April 2005, the FDA issued notices of proposed rules regarding information about caloric content and serving size on nutrition labels.

The exemption of restaurants from labeling requirements merits reexamination. The exemption has been based on the belief that it is too difficult, given variations in how restaurant food is prepared, to provide accurate information on caloric or nutritional content. However, fast food, a major contributor to obesity, is highly standardized. Many fast-food restaurants now provide nutritional information on in-store posters and Web sites (some pursuant to an agreement with state attorneys general), although these posters are often difficult to find. For other restaurants that do not sell fast food, a limited disclosure — for example, a range of calories for each item — would be feasible.

The FDA’s authority to regulate food labeling appears to be broader than the FTC’s ability to restrict food advertising. However, the FDA is still subject to the commercial speech doctrine, which the Supreme Court has held applies to “compelled speech.” Thus, labeling regulations must be tailored to advance materially the government’s interest in the prevention of obesity. However, this requirement will be met more easily by a mandated labeling disclosure than by a restriction on advertising. Mandatory disclosures bring more, not less, speech into the information marketplace and thus are viewed as the less restrictive alternative. By providing consumers with the information needed to make well-informed decisions, labeling requirements that focus on preventing deception are especially likely to withstand constitutional scrutiny.

DEFINING A WORKABLE STRATEGY

Several themes emerge from this review of legal strategies to combat obesity. First, initiatives are most likely to gain acceptance if they focus on children and adolescents. Young people are especially vulnerable to advertising, and there is greater political tolerance for legal interventions on their behalf — this is a clear lesson from the history of tobacco control. Second, the states are living up to their reputation as laboratories, with a variety of innovative initiatives under way. However, a laboratory’s mission is to test, prove, and disprove. Careful evaluation of state initiatives is needed.

Third, restrictions on food advertising to children will be difficult to impose in the current legal and political environment. Additional research on advertising and obesity may help build the case for regulation. An alternative is to develop counter-advertising campaigns that encourage better nutrition and alert young consumers to their potential for manipulation by food advertisements. Well-crafted antitobacco advertisements have had considerable effects on youths’ tobacco use and attitudes. However, whereas settlement funds from tobacco lawsuits were available to pay for those advertisements, counteradvertising campaigns to encourage better nutrition would require public funding.

Fourth, the success of government regulation of the food industry will probably fall short of what industry could accomplish alone if it were strongly motivated to do so. Efforts to encourage self-regulation and corporate responsibility could go far toward improving the healthfulness of foods sold, provided the industry responses heed the limits of antitrust law and do not displace meaningful external regulation.

Finally, the initial regulatory strategy should concentrate on improving public awareness of the role of the food industry and the food environment — the social, physical, and economic conditions that affect access to healthful and unhealthful foods — in contributing to the nation’s obesity problem. Measures aimed at improving consumer information in order to facilitate informed decision making — rather than at limiting the flow of information into the marketplace — are most likely to gain early acceptance. Over time, a greater understanding of the environmental influences on food choices should create the ideological conditions for further regulation. The law is slow to recognize that choices in the marketplace may not be totally free; the burden will be on researchers to demonstrate that some forms of communication may impede rather than facilitate informed choices.

We have focused on affirmative measures that the government could take to curb obesity, but the removal of existing policy incentives that operate to the detriment of this goal may also be effective. A large body of literature discusses the role that agricultural subsidies play in shaping the nation’s food supply and the prices of foods...
with high sugar content relative to more healthful foods.8,4,84 Removing these subsidies is politically problematic, but doing so could alter the food environment considerably.

This exploration of the frontier of laws to fight obesity illustrates the dynamic nature of the relationship between public health law and the broader cultural and public health environment.8 There are many historical examples of the law’s driving social change; however, progressive laws are unlikely to be implemented until the dominant cultural mores are sufficiently favorable. Progress in policy to address obesity will be and should be incremental. It should respond to and drive shifts in ideological, political, health, and economic conditions. At present, these conditions appear to be converging toward the support of a broader public policy approach to obesity, albeit one that focuses primarily on informing personal choices rather than restricting them.85 Crafting a regulatory strategy that within the strictures of the Constitution responds to evolving knowledge about obesity and its prevention may be the single most important challenge for public health law in the 21st century.

Supported by general institutional funds.

No potential conflict of interest relevant to this article was reported.

We are indebted to Ama Boah, Rebecca Haffajee, and Bryan Lee for research assistance.

From the Department of Health Policy and Management, Harvard School of Public Health, Boston (M.M.M., D.M.S.); and Aetna, Hartford, Conn. (T.A.B.).


Copyright © 2006 Massachusetts Medical Society.