Policies for Healthier Communities: Historical, Legal, and Practical Elements of the Obesity Prevention Movement

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Abstract

The U.S. population is facing an obesity crisis wrought with severe health and economic costs. Because social and environmental factors have a powerful influence over lifestyle choices, a national obesity prevention strategy must involve population-based interventions targeted at the places where people live, study, work, shop, and play. This means that policy, in addition to personal responsibility, must be part of the solution. This article first describes the emergence of and theory behind the obesity prevention movement. It then explains how government at all levels is empowered to develop obesity prevention policy. Finally, it explores eight attributes of a promising state or local obesity prevention policy and sets the obesity prevention movement in the context of a larger movement to promote healthy communities and prevent chronic disease.

INTRODUCTION

In 2010, a powerful group of concerned citizens called on Congress to address the nation's childhood obesity crisis by passing a robust school meals bill. Many in the public health field had been pressing for changes to the Child Nutrition Act for years. What made this new call to action particularly resonant was that it came from an unexpected source: retired military leaders who see the obesity epidemic as a threat to national security (60, 61). These generals and admirals amplified the urgency of the problem and acknowledged that policy strategies, in addition to personal responsibility, must be part of the solution.

Over the past several decades, obesity rates in the United States have increased dramatically because the collective rise in caloric intake has far outpaced the calories burned (12, 53). Two-thirds of adults (31) and nearly one-third of youths ages 2–19 are currently overweight or obese (68). Obese children and adults are at increased risk of heart disease, diabetes, and other life-threatening health problems (66), and medical expenditures on obesity-related illnesses have climbed to nearly $150 billion per year (30). Obesity has a major disproportionate impact on racial and ethnic minorities and people with lower incomes and less education (44, 52, 65, 70).

Given the powerful influence that social and environmental factors have on the lifestyle choices that are available to individuals, a critical component of a national obesity prevention strategy must involve policy interventions targeted at the places where people live, learn, work, shop, and play (4). For example, neighborhoods that have safe walking and biking paths, along with parks and recreation centers, provide residents with more opportunities to be physically active (71). And for children and their families to consume more fresh fruits and vegetables and less processed foods, they need access to affordable, healthy fare in local markets, restaurants, and schools (62). In short, it must become easier to make healthy choices.

This article begins by describing the emergence of and theory behind the obesity prevention movement. It then explains how government at the federal, state, and local levels is empowered to engage in obesity prevention policy development. Finally, it explores eight attributes of a promising state or local obesity prevention policy and sets the obesity prevention movement in the context of a larger movement to promote healthy communities and prevent chronic disease.

EMERGENCE OF THE OBESITY PREVENTION MOVEMENT

Many trace the roots of the obesity prevention movement to social justice efforts to improve food security in low-income communities and communities of color. The 1968 report *Hunger U.S.A.* shone a spotlight on the existence of starvation and malnutrition in America (16). The U.S. Senate Select Committee on Nutrition and Human Needs, formed in the wake of the report, began holding hearings on the issue of food scarcity. By the mid-1970s, the committee expanded its scope to cover not only hunger but also nutrition policy. The committee issued Dietary Goals for Americans in 1977, for the first time recommending limiting people's intake of carbohydrates, fats, sugar, and salt (90).

As politicians and regulators moved to improve Americans' diet through nutrient guidelines, scientists began documenting an extraordinary rise in obesity rates across the country and pointing to environmental factors as a key driver (36). By the 1990s, researchers were recommending efforts such as reduced television viewing, increased physical activity, and increased fruit and vegetable consumption to stem the rise in obesity rates (46).

During this same time period, public health agencies began focusing not only on nutrients needed to meet daily health requirements, but also on foods and food groups (32). They hoped to popularize fruits and vegetables as essential components of a healthful diet (32). In 1996, the Surgeon General released the first *Physical Activity and Health: A Report of the Surgeon*

General report based on input from many federal and membership organizations (89).

Building on this momentum, social scientists began to assess the lessons learned from the successful tobacco control, seat belt, breastfeeding, and recycling movements, extrapolating strategies to spur an equally successful obesity prevention movement (26). "Because our current social landscape fails to promote healthy eating and active living," researchers reasoned, "we must fight our public health crisis with a reactive and powerful social change" (26, p. S40).

Nutrition and social scientists found immediate allies in social justice advocates who had long been involved in promoting access to healthful and affordable foods for low-income Americans. The food security movement easily recognized the irony of the malnutrition documented in *Hunger U.S.A.* on the one hand and the obesity documented in the public health literature on the other (1). It was clear that at the root of both problems was the absence of supermarkets in poor areas, the consolidation of the food industry, and the need to link local farmers and sustainable food practices to underserved communities (1).

In 2004, the Institute of Medicine, following a congressional request to create an action plan for preventing childhood obesity, released *Preventing Childhood Obesity: Health in the Balance* (47). The report further encouraged government agencies and others to focus on the health and economic implications of the obesity epidemic—and the philanthropic sector also took heed. In 2007, the Robert Wood Johnson Foundation (RWJF) announced a $500 million commitment to reverse the childhood obesity epidemic by 2015. With the current generation of children at risk of being the first to "live sicker and die younger than the generation before them" (50), RWJF President and CEO Risa Lavizzo-Mourey called this public health challenge a "difference-making opportunity of a lifetime" (51, p. 21).

Multisectoral collaboration has been critical to the initial policy successes of the obesity prevention movement. For example, RWJF, the W.K. Kellogg Foundation, The California Endowment, Kaiser Permanente, the Nemours Foundation, The Kresge Foundation, and the U.S. Centers for Disease Control and Prevention (CDC) came together to create the Convergence Partnership to coordinate funding efforts. In addition, many early policy victories came out of the coordinated efforts of the more than 300 organizational members of the National Alliance for Nutrition and Activity Coalition (NANA) (64). With a sharp focus on increasing government involvement in reversing the obesity epidemic, NANA has won legislative battles to require wellness policies in nearly all schools, nutritional standards for foods served or sold in schools, and funding for Safe Routes to School programs.

Public health agencies, philanthropies, researchers, and advocates diligently built the infrastructure and credibility of the obesity prevention movement, so the time was ripe when First Lady Michelle Obama amplified the issue in early 2010 by launching the Let's Move! campaign, a comprehensive initiative aimed at solving the problem of obesity within a generation (92). A concurrent presidential memorandum instructed 12 federal agencies to form a governmental Task Force on Childhood Obesity (93), which 90 days later presented a pivotal report recommending specific steps the public and private sectors can take to turn the tide on obesity rates (94). The presidential memorandum also established the Partnership for a Healthier America, a nonprofit organization that coordinates and accelerates the collective work of key stakeholders.

The movement continues to evolve. The CDC's Communities Putting Prevention to Work (CPPW) initiative has provided $650 million to states and localities to employ public policy tools to prevent chronic disease (11). And, assuming it survives congressional budget cuts, the Prevention and Public Health Fund created by the Patient Protection and Affordable Care Act [Pub. L. 111–148 (2010)] will continue providing this type of support to jurisdictions across the nation through Community Transformation Grants.

OBESITY PREVENTION AND SOCIAL NORM CHANGE

Social norm change movement: movement to create a social environment and legal climate that discourages harmful conduct and makes healthier conduct the norm

In the United States, the most effective efforts to address major public health concerns such as tobacco control and obesity have taken a comprehensive approach, recognizing the many factors that shape our health (9). Individuals undoubtedly bear responsibility for their actions, but medical interventions and educational endeavors alone will not affect individual behaviors enough to solve a public health problem (20). Learning about the dangers of drunk driving, how to quit smoking, or how to eat a balanced diet might motivate some people to take different actions. But shifting the daily norms of a critical mass of the population requires what is described as social norm change (79, 97).

The goal of a social norm change movement is to influence behavior indirectly by creating a social environment and legal climate in which harmful conduct becomes less desirable, acceptable, and attainable, and healthful conduct becomes the norm (97). Education is an important component of social norm change. Health care providers, public service advertising campaigns, schools, and other educational channels can empower people with information about making decisions that promote well-being. But education alone is unlikely to result in population-wide shifts in social norms (79). Policy innovation is crucial to social norm change movements because laws and regulations shape the context for how people live their lives, often providing the choices and setting the defaults (38). Policy interventions result in enforceable mandates, including statutes enacted by legislators and rules and regulations implemented by executive agencies. Enforceable mandates have an advantage over customs and informal codes of conduct because the government can compel compliance.

The obesity prevention movement is drawing on lessons learned from more established social norm change campaigns, such as tobacco control (8, 45). Not long ago, nobody thought twice about lighting a cigarette in an airplane, a restaurant, or a staff meeting. That was before a well-organized movement used policy tools to shift expectations and behaviors.

This played out early in California (79). In November 1988, California voters approved a ballot initiative known as Proposition 99, which imposed a cigarette tax of 25 cents per pack, established the California Tobacco Control Program (CTCP) in the state health department, and earmarked 20% of the new revenues for tobacco control activities [Calif. Health Saf. Code §§ 104350–104480, 104500–104545 (2010); Calif. Revenue Tax. Code §§ 30122(a)(1), 30123(a), 30124(b)(1) (2010)]. With support from the CTCP, RWJF, and other funders—and bolstered by solid scientific research—advocates began pursuing cutting-edge state and local laws (34). California has since passed laws aimed at limiting secondhand smoke exposure [Calif. Labor Code § 6404.5 (2010)], sales to youth [Calif. Bus. Prof. Code § 22963 (2010), Calif. Penal Code § 308(a) (2010)], and tobacco marketing [Calif. Bus. Prof. Code §§ 22950–22962 (2010)]. Localities have plugged loopholes in the state laws, restricting smoking in multiunit residences, recreation and dining areas, and sidewalks, bus stops, and entryways (14). As a result, the state cut smoking rates by 35% in 20 years and saved $86 billion in health care costs from 1989 to 2004 (54, 79). California helped inspire an international movement to denormalize tobacco use. Government, foundations, researchers, and advocates have collaborated to create a "critical mass of concerted action" (78, p. 34), resulting in the steady evolution of new social norms.

Although the basic principles of social norm change apply equally to the tobacco control and obesity prevention movements, the former has been a more straightforward effort on several fronts (38). There is no equivalent in the obesity context to the damage bystanders suffer from secondhand smoke. Tobacco is addictive and harmful when used in any amount, whereas identifying unhealthful food is a matter of degree. Tobacco companies are vilified in the lexicon of tobacco control, whereas leaders in the obesity prevention movement have

diverse views about whether, and if so how, to partner with industry. And scientific knowledge is much more developed on the triggers and consequences of tobacco use than those of obesity. Therefore, while borrowing lessons from the fight against tobacco, the obesity prevention movement must engage with more ambiguity and complexity in its effort to shift social norms.

GOVERNMENTAL POWERS TO SHAPE OBESITY PREVENTION POLICY

From Congress and the White House to small-town city councils and mayors, all levels of government are responding to the nation's obesity crisis. The obesity prevention movement is pursuing interventions at the federal, state, and local levels because different governmental bodies have the power to make an impact in different ways.

Federal Powers

Technically, the federal government has limited authority over public health because it may exercise only the enumerated powers listed in the U.S. Constitution (U.S. Const. art. I, § 1). But these powers have been interpreted broadly, so in practice, the federal government has purview over policies such as the Farm Bill (Food, Conservation, and Energy Act of 2008, Pub. L. 110–234), the National School Lunch Program (Healthy, Hunger-Free Kids Act of 2010, Pub. L. 111–296), and the Transportation Bill [Safe, Account., Flex., Effic. Transp. Equity Act: A Legacy for Users, Pub. L. 109–59 (2005)], which play a massive role in shaping the food economy and physical activity infrastructure.

Because the federal government has jurisdiction over television, the Internet, and other media that cross state lines, initiatives to reduce calorie-dense, nutrient-poor food marketing to children have had a uniquely federal focus, in large part honed at the Federal Trade Commission (FTC). In the late 1970s, the FTC attempted to pass rules aimed at protecting young children from advertising for sugary food (the concern then was cavities) (91). This "Kid Vid" effort generated enormous controversy and was ultimately quashed by a shifting political tide that resulted in Congress's diminution of the FTC's rulemaking authority (91). Given epidemic obesity rates, the FTC returned to the problem of food and beverage advertising in the early 2000s. It has since hosted workshops and issued reports, including a path-breaking study of food and beverage industry expenditures, revealing detailed information about the more than $2 billion spent on marketing to children in 2006 (28). The FTC has also brought several enforcement actions against food marketers

Enumerated powers: powers granted to the federal government in the U.S. Constitution that limit federal authority but have been interpreted broadly

LITIGATION AS AN OBESITY PREVENTION TOOL

Strategic litigation by government and private attorneys—especially regarding food marketing—is playing a role in the obesity prevention movement. This type of litigation or threats thereof almost never get resolved in trial but instead serve to draw public attention to a problem, fuel policy development, and spur industry to change its practices voluntarily.

A group of state attorneys general (AGs) known as the "food cops" sued several food companies in the 1980s alleging phrases such as "real cheese" and "lean meal" were false and misleading (76). These cases inspired the passage of the 1990 federal Nutrition Labeling and Education Act, which regulates health claims and requires the Nutrition Facts Panel on packaged foods [21 U.S.C. § 343–1 (2010)].

In 2006, the Center for Science in the Public Interest threatened to sue Kellogg's for unfair and deceptive marketing practices. In response, Kellogg's implemented nutrition standards for food marketed to children and became a founder of the Children's Food and Beverage Advertising Initiative, an industry self-regulatory regime (**http://www.bbb.org/us/children-food-beverage-advertising-initiative**).

The Connecticut AG announced in 2009 that he was investigating an industry-sponsored program allowing "better for you" packaged food—including Froot Loops and Frosted Flakes—to be signified by a Smart Choices logo. After this announcement, the U.S. Food and Drug Administration declared it was also going to investigate, and the program was suspended (73).

Bill of Rights and Fourteenth Amendment: Amendments to the U.S. Constitution protecting civil rights such as free speech, equal protection, and due process

Police power: inherent authority of states to act in the interest of the health, safety, and welfare of the public

Home rule: authority granted by most states to their municipalities allowing for (in contrast to Dillon's Rule) wide-ranging local law-making

Rational basis review: judicial standard of review requiring that a regulation bear a rational relationship to a legitimate government purpose

Preemption: invalidation of the law of one jurisdiction by the law of a higher jurisdiction

for making misleading claims to consumers about the healthfulness of their products (27, 29). In 2009, Congress directed the FTC to lead a quartet of federal agencies (including the CDC, the U.S. Department of Agriculture, and the Food and Drug Administration) in developing recommendations for industry about which foods are appropriate to market to children ages 2–17 (41). The FTC released draft recommendations in April 2011 setting a high bar (43), and industry launched an aggressive campaign for the recommendations to be drastically weakened or revoked entirely. The final recommendations were expected to be released in late 2011, but industry will not be obliged to follow them; it is not clear whether the specter of possible future regulation will motivate voluntary compliance.

Where regulation is concerned, the Constitution does limit the reach of the federal government (as well as lower levels of government) into the private domain. The Bill of Rights and the Fourteenth Amendment protect civil rights in clauses regarding free speech (U.S. Const. amend. I), due process (U.S. Const. amend. V, U.S. Const. amend. XIV), equal protection (U.S. Const. amend. XIV), property ownership (U.S. Const. amend. V), and other personal liberties (59). Courts have interpreted these clauses to prohibit government from passing laws that infringe too greatly on the freedom and self-determination of individual citizens.

State and Local Powers

Before the constitutional compact, each colony possessed the police power: the inherent authority to act in the interest of the health, safety, and welfare of the public. When the Union was formed, the states retained the police power, yielding only specific enumerated powers to the federal government (U.S. Const. amend. X; 37). Because these enumerated powers have been construed over time to give the federal government broad regulatory leeway, there is often concurrent national and state regulation of public health (37). Local governments exist at the will of their states. Most states grant cities and counties some form of home rule, allowing for wide-ranging local lawmaking (24). A smaller cadre of "Dillon's Rule" states delegate only a narrow and distinct set of powers, making it difficult for localities to adopt creative solutions to public health problems (24).

Safeguarding public health is a classic police power function [*Patrick v. Riley*, 209 Cal. 350, 354 (1930)], so states (and localities with delegated police power) have the presumptive authority to pass public health laws. If challenged in court on constitutional grounds, a typical public health law governing, say, zoning, licensing, or retail operations will generally be subject to rational basis review—a legal standard that is very deferential to the government. The regulation need only bear a rational relationship to a legitimate government purpose [*Consol. Rock Prod v. City of Los Angel.*, 57 Cal.2d 515, 522 (1962)]. The government does not have to cite scientific studies to establish this relationship; it only has to articulate a plausible argument that the intervention is justified [*Fed. Commun. Comm. v. Beach Comm. Inc.*, 508 U.S. 307, 315 (1993)].

Some types of police power laws are more vulnerable to judicial invalidation. A court will apply a much stricter standard than rational basis review to a law that implicates the freedom of speech [*Lorillard Tob. Co. v. Reilly*, 533 U.S. 525 (2001); *Va. State Board of Pharm. v. Va. Citiz. Consum. Counc., Inc.*, 425 U.S. 748 (1976)], violates peoples' bodily integrity [*Jacobson v. Mass.*, 197 U.S. 11 (1905); *Washington v. Harper*, 494 U.S. 210 (1990)], discriminates against certain racial groups [*Johnson v. Calif.*, 543 U.S. 499 (2005); *Loving v. Va.*, 399 U.S. 1 (1967)], or infringes on other constitutionally protected interests [*Loving v. Va.*, 399 U.S. 1 (1967); *Skinner v. Okla.*, 316 U.S. 535 (1942)]. A law will likely be struck down if it discriminates against out-of-state players in favor of in-state players [*City of Philadelphia v. New Jersey*, 437 U.S. 617 (1978)]. Another constraint on the police power is preemption, the invalidation of the law of one jurisdiction by the law of a higher jurisdiction. Federal law is the supreme law of the land (U.S. Const. art. VI),

so when a state law conflicts with a federal law, the federal law trumps. Federal and state laws negate conflicting local laws in the same way.

Preemption has been used to undermine state and local public health law campaigns—most notoriously by the tobacco industry (40, 82). As one former tobacco lobbyist explained, when community members who live next door to the mayor or who are related to a city councilman are the local health advocates pushing for a bill, tobacco companies "get killed"; therefore, big tobacco's "first priority has always been to preempt the field, preferably to put it all on the federal level, but if they can't do that, at least on the state level, because the health advocates can't compete" there (83).

Preemption is not unique to tobacco control. For example, in 2010, two local California jurisdictions enacted ordinances prohibiting the distribution of toys with restaurant meals that fail to meet specified nutritional standards [San Franc., Calif., Health Code § 471 (2010); Santa Clara County, Calif., Code of Ord. §§ A18-350–A18-356 (2010)]. Soon after, Arizona, Florida, and Ohio passed legislation prohibiting municipalities from restricting toys or games offered with children's meals [Ariz. Revis. Stat. § 44–1380 (2011), Fla. Stat. § 509.032 (2009), Ohio Revis. Code § 3717.53 (2011)]. Ohio's preemptive legislation also contains a broad provision banning local regulation of food service operations "based on the existence or nonexistence of food-based health disparities" [Ohio Revis. Code § 3717.53 (2011)].

EARLY LESSONS FROM STATE AND LOCAL OBESITY PREVENTION CAMPAIGNS

The philanthropies and government agencies investing in obesity prevention have placed a major focus on state and local policy change. They recognize that states and localities wield power over how schools are run, how land is used, how retailers and restaurants operate, how transit is laid out, and how many other details of the built and social environment are designed. Moreover, as Supreme Court Justice Louis Brandeis famously observed, "It is one of the happy incidents of the federal system that a single courageous state may, if its citizens choose, serve as a laboratory; and try novel social and economic experiments without risk to the rest of the country" [*New State Ice Co. v. Liebmann*, 285 U.S. 262, 311 (1932) (J. Brandeis, dissenting)]. As exemplified by the tobacco control movement, states and their subdivisions are often at the cutting edge of policy innovation, testing and evaluating new solutions to societal problems and disseminating successful strategies across the nation and beyond.

States and localities have pioneered a wide range of obesity prevention policy strategies generally aimed at one of three goals: making it easier to buy, cook, or grow healthful food; making unhealthful foods and beverages less desirable or accessible; or making physical activity more attainable (5). To increase access to healthful food, for instance, North Carolina enacted a bill creating a position in the state agriculture department dedicated to operating a farm to school program [House Bill 1832, 2009 Gen. Assem., Regul. Sess. (N.C. 2010)], and New York City implemented a package of zoning and financial incentives to attract healthful retail to underserved communities (19). Examples of policies discouraging unhealthful food include a Colorado state ban on selling sodas in schools (21) and a Los Angeles prohibition on new stand-alone fast-food restaurants in three communities that are already saturated with fast-food restaurants (56). As for increasing opportunities to engage in physical activity, Tacoma, Washington, requires daily recess in elementary schools (88), and Kansas City, Missouri, passed a "complete streets" policy to ensure that roadways are designed with all users—not just drivers—in mind (22).

To support obesity prevention policy development at the state and local levels, RWJF invested in Public Health Law & Policy (PHLP) to create the National Policy & Legal Analysis Network to Prevent Childhood Obesity (NPLAN). PHLP's multidisciplinary team of attorneys, planners, and policy analysts has served advocates and policy makers in

Public health program: system or a plan that an agency implements to provide a service

Public health policy: an enforceable law, regulation, or rule creating conditions for healthy behavior

Voluntary policy: policy adopted by a public or private organization that contains no codified consequences for retractions or violations

hundreds of jurisdictions working on social norm change strategies to increase access to healthful foods and physical activity. In the course of this work, PHLP has observed that the most promising state and local obesity prevention policies incorporate certain foundational criteria, namely that they are: policies, not programs; evidence-based or evidence-generating; legally feasible; financially viable; responsive to health inequities; practical to implement and enforce; targeted at changing social norms; and part of a bigger plan.

Policies, Not Programs

Policies are often confused with programs. PHLP identifies a public health program to be a system or a plan that an agency implements to provide a service. For instance, a public health department might run a bicycle safety program for children, offering classes and other educational resources. A public health policy, on the other hand, generally refers to a government law, regulation, rule, or contract establishing some kind of standard or requirement (37). An example would be a bicycle master plan, which provides guidance on how local streets are designed and where new infrastructure or facilities are needed to promote active transportation, recreation, and safety.

Policies are generally more influential than programs (75). They have broad applicability and are implemented upstream, setting the course within which people and programs must navigate. In addition, policies tend to last longer than programs because they codify change and survive individual leadership transitions. Also, the government can mandate compliance with a policy and, if need be, take appropriate enforcement measures.

Consider the bicycle safety example: A program would serve only children who attend, and these children would still encounter dangerous situations, such as fast-moving cars, as they ride around their neighborhoods. The master plan, by contrast, would apply to the entire municipality and could include policies to slow traffic and make streets and trails safer. Even if the program's funding were cut, the policy would still be in effect and would continue to improve bicycling conditions for the community.

Often a public or private organization will adopt a voluntary policy, announcing its commitment to improve public health conditions in some way—for example, Walmart's pledge (inspired by Let's Move!) to reduce sodium and sugar in its products and to lower the prices of healthful foods (85). Voluntary policies are less potent than official government policies because there are no codified consequences for retractions or violations. But in some situations, a voluntary policy might be the only viable option, perhaps because a regulation would not be politically or legally feasible. In this case, the strongest tool advocates generally have is to hold voluntary policy adopters publicly accountable for their promises.

Evidence-Based or Evidence-Generating

Ideally, every obesity prevention policy would be backed by strong scientific evidence, and many are. For example, a growing body of research indicates that youth who consistently walk or bike to and from school are more physically active at higher intensities and have better cardiovascular health than do those who are driven to school (23, 58). This research can bolster efforts to adopt Safe Routes to Schools policies, which make it safer and more appealing for children to walk or bike to and from school. Policy makers who want to restrict access to sugar-sweetened beverages can point to a trove of longitudinal studies documenting an association between sugar-sweetened beverages and increased body fat (7, 10, 25, 87). Policy proposals aimed at making healthful food more affordable or raising the cost of unhealthful food can cite research on how pricing affects consumption (39). Healthful zoning policies can draw from literature on how community design influences active transportation or how the location of restaurants and grocery stores affects diet and health (49, 63).

Given that the obesity prevention movement is relatively nascent, however, some policy

strategies are being tested before the science has confirmed their effectiveness. Notably, our legal system accommodates the reality that public health interventions evolve in concert with our understanding of public health problems. As described above, so long as a police power enactment does not infringe too greatly on constitutionally recognized individual liberties, there generally need only be a rational basis for the law [*Williamson v. Lee Opt. Okla.*, 348 U.S. 483, 486–87 (1955)], rather than scientific consensus. This means that policy makers can take action to prevent obesity before the scientific community coalesces around the most effective interventions. Meanwhile, states and localities can contribute to the obesity prevention evidence base by working closely with researchers to evaluate the health effects of novel policies (42). As Justice Brandeis posited, states should serve as laboratories for new ideas in a federal system [*New State Ice Co. v. Liebmann*, 285 U.S. 262, 311 (1932) (J. Brandeis, dissenting)].

A final point about policy research is that what is measured does not always reveal what is successful. Evaluating government interventions one by one can obscure the whole idea of a social norm change approach. There is no single solution to the obesity problem, so interventions must be multifactorial (94). Moreover, evaluating one effect of a particular policy can miss important side effects. For example, early studies of the impact of state and local menu-labeling laws were mixed about whether calorie information influenced people's choices (48). But menu labeling must be assessed in the context of a long-term advocacy effort aimed to pressure industry to improve its products and practices. The passage of state and local menu-labeling laws enabled public officials to send a message of commitment to the obesity prevention cause, eventually inspiring the federal government to pass a menu-labeling law that applies nationwide [Patient Prot. Afford. Care Act, Pub. L. 111–148 (2010)]. It also invited restaurants to join in the effort to promote better health—an invitation that they have been ready to accept. For example, soon after New York City adopted its menu-labeling law [New York, NY, Health Code § 81.50 (2006)], Starbucks introduced the Vivanno line of lower-calorie products (84).

Legally Feasible

Political feasibility tends to be in the forefront of the minds of advocates and policy makers vetting obesity prevention strategies. This makes sense because if a policy has no chance of actually being adopted, it is probably not worth pursuing unless it will cast a public spotlight on an important or emerging issue. Legal feasibility often receives less attention than other factors in the policy development stage, but it is a critical consideration because the ultimate viability of a policy proposal turns on whether it could withstand a legal challenge.

Assessing legal feasibility involves several steps. First, the particular government body must have the authority to pass a given policy. Because states do not have the authority to discriminate against, or unreasonably burden, interstate commerce through regulation, a state could not enact a law forbidding in-state restaurants from purchasing produce grown out-of-state [*City of Philadelphia v. New Jersey*, 437 U.S. 617 (1978)]. And because a locality in a Dillon's Rule state does not have general police power authority, it could not pass a law restricting fast-food restaurants from locating near schools unless the state explicitly permitted it to do so (24).

Second, if a policy proposal is preempted by the law of a higher jurisdiction, it would be invalid if enacted by a lower jurisdiction. A section of the 2010 health care reform law requires chain restaurants with 20 or more locations (hereinafter, "large chains") to provide nutritional information to customers [Patient Prot. Afford. Care Act, Pub. L. 111–148 (2010)]. State and local laws are preempted if they impose on large chains additional nutrition disclosure requirements of the type required by federal law [Patient Prot. Afford. Care Act, Pub. L. 111–148 (2010)]. The federal law does not require large chains to post information about saturated fat on menu boards, so states and localities are barred from doing so.

Third, the policy proposal must not infringe on a constitutionally protected liberty interest. Policies that seem straightforward may, in fact, raise complicated constitutional issues. For example, many cities have considered trying to ban billboards for nonnutritious foods near schools. But this type of policy is likely to encounter significant constitutional problems because, under the First Amendment, advertising is considered a form of speech entitled to significant protection from government regulation [*Va. State Board of Pharm. v. Va. Citiz. Consum. Counc., Inc.*, 425 U.S. 748 (1976)]. In fact, the U.S. Supreme Court struck down a statewide prohibition on tobacco billboards within 1,000 feet of schools because the ban eliminated too much advertising directed at adults about a legal product [*Lorillard Tob. Co. v. Reilly*, 533 U.S. 525 (2001)].

A final factor regarding legal feasibility is the prospect that a new policy will expose the jurisdiction to increased liability. This comes up most frequently around policies aimed to promote physical activity through, for example, implementing a Safe Routes to School policy, opening school facilities to the community after school hours, or allowing access to stairwells in public buildings as an alternative to elevators. The mere mention of liability can stop a conversation about a potential policy before actual risks, and ways to manage those risks, are evaluated. In practice, liability risks are often overstated, and there are many steps public entities can take to minimize their risks (6).

Financially Viable

The current fiscal climate poses a challenge to policymaking generally, and obesity prevention policy is no exception. However, financially constrained state and local governments have cost-effective options that require little to no public expenditure, capitalize on existing funding streams, or generate new revenue themselves.

Some policies are relatively low cost. In communities that lack safe and well-maintained places to play, local governments are partnering with school districts to open school gyms, fields, tracks, and other facilities to the public after school hours (69). The costs associated with building or maintaining parks and open spaces are often prohibitive—especially in low-income communities and built-out urban areas. A partnership between two public entities, generally formalized by a joint-use agreement, can maximize the efficient use of financial and physical public resources (77). State legislation can support joint-use agreements, as illustrated by a North Carolina law directing the State Board of Education to encourage local boards of education to enter into agreements with local governments and other entities to expand access to facilities for physical activity [House Bill 1471, 2009 Gen. Assem., Reg. Sess. (N.C. 2009)]. Between 2009 and 2010, at least six states considered, and four passed, legislation promoting joint use of school facilities, thus creating favorable conditions for local joint-use agreements (95).

Another cost-effective policy approach involves redirecting dollars already spent by government agencies—for example, from public assistance programs, local government loans, or community economic development funds—to improve public health. Public agencies can also establish new criteria for goods they purchase, such as New York City's nutrition standards for food and beverages bought and served by the city, which are based on the U.S. Department of Agriculture's 2005 Dietary Guidelines for Americans (18). Government leveraging its power of the purse results in a win-win: By leading through example, the public sector can influence industry and private actors, and those who participate in publicly funded programs have the opportunity to realize better health.

Policies that generate revenue are another option. Many cities impose impact fees on developers, which are designed to pay for public facilities and infrastructure (such as sewers) associated with needs generated by a new development. Revenue from impact fees can also be applied to fund park and

playground development to create new places for residents to exercise and play (74).

The movement to pass state and local taxes on sugar-sweetened beverages is gaining traction across the country. If there had been a penny-per-ounce sugar-sweetened beverage tax in 2010, Florida could have raised $899 million in new revenue, Texas almost $1.1 billion, and California more than $1.1 billion—all in one year. At the city level, Philadelphia could have generated almost $59 million, Chicago $133 million, and New York City $348 million (3). Some public health and civil rights advocates criticize soda taxes because, assuming the price hikes are passed on to consumers, low-income communities and communities of color will end up bearing a disproportionate burden (33). Then again, these communities are disproportionately affected by the obesity epidemic (57, 70, 81)—not to mention that certain ethnic minority groups are disproportionately targeted with advertisements for sugary drinks (72, 96). One way to address the equity concerns that arise around soda taxes is to ensure that at least a portion of the revenue derived from these taxes is earmarked for obesity prevention and other public health programs in low-income communities and communities of color.

Responsive to Health Inequities

Lower-income communities and communities of color are plagued by high obesity rates and other health disparities caused by serious inequities in finances, education, and access to health care. A core goal of the obesity prevention movement is addressing these disparities—either by ensuring that existing policies are implemented with substantial resources directed to the most underserved populations or by pursuing policies specifically designed to reduce health disparities.

The city of Rancho Cucamonga in Southern California recently updated its general plan, a land use policy document guiding the long-term physical and economic growth of a community (19a). The update incorporated policies promoting active mobility and increased access to healthy food. The policies apply citywide, but implementation is focused on a predominantly Latino community with high rates of obesity. In that neighborhood, the city has a special initiative to extend a local rail-to-trail project, as well as to develop community gardens, farmers' markets, and joint-use agreements.

Policies that address disparities head-on can be controversial. In Los Angeles, the city council imposed a moratorium on new fast-food restaurants that applied only to South Los Angeles, where options for purchasing daily fare consist primarily of chain restaurants and liquor stores (55). Meanwhile, the city and the local redevelopment agency promoted a package of incentives to attract new full-service grocery stores and sit-down restaurants (17). On the basis of these efforts, three new development projects, including a full-service supermarket, were scheduled to open in 2010 (35). This targeted strategy caused controversy: It was designed to improve a food environment most in need of change and to counter the disproportionate quantity of fast-food marketing in Hispanic and African American communities (80, 96). But some observers criticized what they perceived as a nanny state approach (86). The South Los Angeles residents lobbied hard in favor of this package of regulations; the policy strategy was grounded in community support. In the end, Los Angeles policy makers weighed the merits and concerns and determined that a targeted approach was necessary to address the disparities in access to healthful food.

Practical to Implement and Enforce

Sometimes implementation and enforcement language have to be left out to garner enough political support for a policy. But often, policies that propose community-wide change are less effective than they might be because implementation and enforcement considerations were not taken into account.

A policy that includes an implementation plan can provide stakeholders and decision makers with clear guidance about how the policy goals will actually be achieved. Consider

two different cities that introduced a complete streets policy to ensure that roadways are designed with all users in mind, including bicyclists, public transit, and pedestrians of all ages and abilities. One resolution committed the city to ensure the accommodation of travel by pedestrians, bicyclists, public transit, and motorized vehicles and their passengers as a regular part of the permitting process for public projects (15). The other stated that the city would establish a steering committee to develop a complete streets policy, implement a sustainable complete streets program, and propose complete streets legislation (67). The policies both reflect a commitment to complete streets, but only one gives direction about which steps must be taken to carry out this commitment.

Another important implementation consideration is cultural competence; a policy will not reach all its intended beneficiaries if it is designed with only one culture in mind. As such, in 2008 Minnesota updated the allowable foods in its Women, Infants, and Children program to include tofu and East African injera bread (94a).

Enforcement language, though frequently overlooked, is what separates policy aspirations from policy outcomes. For example, in 2007, New York City's Board of Health adopted regulations requiring licensed group day care programs to promote physical activity and drinking water, to limit television viewing and consumption of unhealthful foods, and to require the distribution of nutrition guidelines to parents [New York, NY, Health Code §§ 47.61, 47.71 (2008)]. The day care licensing scheme incorporates these regulations, so noncompliant child care providers risk losing their licenses. The main strength of this enforcement mechanism is its efficiency. It builds on the existing licensing infrastructure; the only added costs are training up day care providers and city inspectors (13). The weakness is that inspections generally happen only once per year unless violations are reported (13).

Targeted at Changing Social Norms

A powerful policy can change the way people think and talk about obesity prevention, expanding public understanding about the causes of the epidemic and moving what was once a controversial idea into one that is politically feasible. Take the issue of the 1.2 billion restaurant meals sold each year packaged with a toy—meals that are generally high in calories, fat, and sodium (28). Santa Clara County, California, attracted international attention when it adopted legislation setting minimum nutritional requirements for children's fast-food meals packaged with toy giveaways [Code of Ord. §§ A18-350–A18-356 (2010)]. Supervisor Ken Yeager, who introduced the ordinance, framed the strategy as a way to stop restaurants from "preying on children's love of toys to peddle [unhealthful] kid's meals" (2). Some obesity prevention advocates were disappointed by the degree and vehemence of negative coverage in the traditional press and the blogosphere, but no one could dispute that Santa Clara had sparked a worldwide conversation about an age-old fast-food practice many consumers never thought to question.

Part of a Bigger Plan

Obesity—like diabetes, asthma, traffic injuries, and pollution—is a symptom of dire problems in our culture and environment, and any obesity prevention policy should be part of a larger plan for community change. Opening school sports fields and gymnasiums to the public will not ensure that children get sufficient exercise. Levying a 12-cent tax on a can of soda will not send every teenager in search of the nearest water fountain. Separating toys from the unhealthiest fast-food meals will not single-handedly cause children to lose weight. But together, policies aimed to change individuals' behavior will reinforce one another, creating new environments and social norms that support healthful, active living.

LOOKING FORWARD

It took decades to institutionalize the food and land use policies that have created an American landscape where unhealthful choices are often the default. It will take decades to

transform this infrastructure to establish communities where it is safer and easier for individuals to make healthful choices.

Reversing obesity trends will require a comprehensive, coordinated approach that reflects the expertise government agencies, foundations, researchers, and advocates each bring to the effort—whether it is a deep understanding of local needs and political will, technical knowledge and experience pertaining to particular strategies, or data indicating whether certain policy interventions are effective or warranted. Within state and local government, many departments—including public health, parks and recreation, planning and redevelopment, and education—can work together to strategize ways to put public resources to the most efficient uses. Ultimately, the obesity prevention movement is embedded in a larger chronic disease prevention movement and aligned with an environmental movement that together can spur a systemic shift of major proportions, creating communities where healthful choices are easier at every turn.

SUMMARY POINTS

1. Policy strategies are essential to reversing the obesity epidemic.
2. The obesity prevention movement has its roots in efforts to improve food security in underserved communities, and it takes a comprehensive social norm change approach.
3. The U.S. Constitution establishes the power of government to make policy and also sets limits on that power.
4. States and most localities have broad authority to enact innovative public health policies, but preemption can undermine state and local policy initiatives.
5. States and localities have pioneered a wide range of obesity prevention policy strategies generally aimed at one of three goals: (*a*) making it easier to buy, cook, or grow healthy food; (*b*) making unhealthy foods and beverages less desirable or accessible; or (*c*) making physical activity more attainable.
6. Most promising state and local obesity prevention policies incorporate certain foundational criteria: that they are policies, not programs; evidence-based or evidence-generating; legally feasible; financially viable; responsive to health inequities; practical to implement and enforce; targeted at changing social norms; and part of a bigger plan.

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LITERATURE CITED

1. Ahn C. 2004. Breaking ground: the community food security movement. *Backgrounder*. Vol. 10. **http://www.foodfirst.org/node/46**
2. Allen N. 2010. McDonald's "Happy Meals" with toys banned to fight childhood obesity. *The Telegraph*, Apr. 28. **http://www.telegraph.co.uk/news/worldnews/northamerica/usa/7647021/McDonalds-Happy-Meals-with-toys-banned-to-fight-childhood-obesity.html**
3. Andreyeva T, Chaloupka FJ, Brownell KD. 2011. Estimating the potential of taxes on sugar-sweetened beverages to reduce consumption and generate revenue. *Prev. Med.* 6:413–16
4. Arkin E, DeForge D, Rosen AM. 2009. *Breaking Through on the Social Determinants of Health and Health Disparities: An Approach to Message Translation*. Princeton, NJ: Robert Wood Johnson Found. **http://www.rwjf.org/files/research/72051.tobaccocampaigns.050311.pdf**
5. Ashe M, Graff S, Spector C. 2011. Changing places: policies to make a healthy choice the easy choice. *Public Health* 125(12):889–95
6. Baker T, Masud H. 2010. Liability risks for after hours use of public school property to reduce obesity: a 50 state survey. *J. Sch. Health* 80:508–13
7. Berkey CS, Rockett HRH, Field AE, Gillman MW, Colditz GA. 2004. Sugar-added beverages and adolescent weight change. *Obes. Res.* 12:778–88
8. Brownell KD, Warner KE. 2009. The perils of ignoring history: Big Tobacco played dirty and millions died. How Similar is Big Food? *Milbank Q.* 87:259–94
9. Cent. Dis. Control Prev. 2007. *Best Practices for Comprehensive Tobacco Control Programs.* Atlanta, GA: US Dep. Health Hum. Serv. **http://www.cdc.gov/tobacco/stateandcommunity/best_practices/pdfs/2007/bestpractices_complete.pdf**
10. Cent. Dis. Control Prev. 2010. *Strategies to Prevent Obesity and Other Chronic Diseases: The CDC Guide to Strategies to Decrease the Consumption of Sugar-Sweetened Beverages.* Atlanta, GA: US Dep. Health Hum. Serv. **http://www.montananapa.org/docs/2010/State_Plan/Strategies%20to%20Decrease%20SSB.PDF**
11. Cent. Dis. Control Prev. 2011. *Communities Putting Prevention to Work: About Communities Putting Prevention to Work.* Atlanta, GA: US Dep. Health Hum. Serv. **http://www.cdc.gov/CommunitiesPutting-PreventiontoWork/about/index.htm**
12. Cent. Dis. Control Prev. 2011. *Overweight and Obesity: Causes and Consequences.* Atlanta, GA: US Dep. Health Hum. Serv. **http://www.cdc.gov/obesity/causes/index.html**
13. Cent. Excell. Train. Res. Transl. 2010. *Policy Regulations for Day Care in New York City* (Art. 47). Chapel Hill: Univ. N.C. Cent. Health Promot. Dis. Prev. **http://www.center-trt.org/downloads/obesity_prevention/interventions/nyc/NYC_Childcare_Policy_Template.pdf**
14. Cent. Tob. Policy Organ. 2011. *CA local policies & issues.* **http://www.center4tobaccopolicy.org/localpolicies**
15. Charlest. City Counc. 2008. *Resolution to Adopt a Complete Streets Policy, RS2008-12.* **http://www.charleston-sc.gov/shared/docs/0/complete_sts_res_2008-012.pdf**
16. Citizens' Board of Inquiry into Hunger and Malnutrition in the United States. 1968. *Hunger, U.S.A.: A Report by the Citizens' Board of Inquiry into Hunger and Malnutrition in the United States.* Boston: Beacon. 100 pp.
17. City Los Angel. 2008. *Market Opportunities: Incentives for Food Retailers*. Los Angeles: Community Redevelopment Agency. **http://www.crala.org/internet-site/Development/upload/Market_Opportunities_08.pdf**
18. City N. Y. 2008. *Executive order no. 122.* **http://www.cspinet.org/new/pdf/nyc_food_standards_executive_order.pdf**
19. City N. Y. 2009. *Food retail expansion to support health program*. **http://www.nyc.gov/html/misc/html/2009/fresh.shtml**

19a. City Rancho Cucamonga. 2010. *Rancho Cucamonga General Plan.* **http://www.cityofrc.us/cityhall/planning/genplan.asp**

20. Cohen L, Swift S. 1999. The spectrum of prevention: developing a comprehensive approach to injury prevention. *Injury Prev.* 5:203–7

20. Provides the elements of an effective prevention campaign that can be applied to almost any public health problem.

21. Colo. Dep. Educ. 2008. *Rules for the administration of the Healthy Beverages Policy, no. 1 CCR 301-79.* **http://www.cde.state.co.us/cdenutritran/download/pdf/HEALTHY%20BEVERAGE%20POLICY%20RULES%20FINAL.pdf**
22. Counc. Kansas City. 2011. *Resolution no. 110069.* **http://cityclerk.kcmo.org/liveweb/Documents/Document.aspx?q=NqJpNXtnk1JvB%2FxWC5843a%2F8iRslPm%2B%2FRgAgRmcSSA4tznDk%2FcMjkkg0ymAfSFJL**
23. Davison KK, Werder JL, Lawson CT. 2008. Children's active commuting to school: current knowledge and future directions. *Prev. Chronic Dis.* 5:A100
24. Diller PA, Graff S. 2011. Regulating food retail for obesity prevention: How far can cities go? *J. Law Med. Ethics* 39:89–93
25. Dubois L, Farmer A, Girard M, Peterson K. 2007. Regular sugar-sweetened beverage consumption between meals increases risk of overweight among preschool-aged children. *J. Am. Diet. Assoc.* 107:924–34
26. Economos CD, Brownson RC, DeAngelis MA, Foerster SB, Foreman CT, et al. 2001. What lessons have been learned from other attempts to guide social change? *Nutr. Rev.* 59:S40–56
27. Fed. Trade Comm. (FTC). 2004. *In the matter of KFC Corporation*. Docket no. C-4118. **http://www.ftc.gov/os/caselist/0423033/0423033.shtm**
28. Fed. Trade Comm. (FTC). 2008. *Marketing Food to Children and Adolescents: A Review of Industry Expenditures, Activities, and Self-Regulation*. Washington, DC: Fed. Trade Comm. **http://www.ftc.gov/os/2008/07/P064504foodmktingreport.pdf**
29. Fed. Trade Comm. (FTC). 2010. *In the matter of Kellogg Company*. Docket no. C-4262. **http://www.ftc.gov/os/caselist/0823145/100602kelloggstatement.pdf**
30. Finkelstein EA, Trogdon JG, Cohen JW, Dietz W. 2009. Annual medical spending attributable to obesity: payer-and-service-specific estimates. *Health Aff.* 28:w822–31
31. Flegal KM, Carroll MD, Ogden CL, Curtin LR. 2010. Prevalence and trends in obesity among US adults, 1999–2008. *JAMA* 303:235–41
32. Foerster SB, Kizer KW, Disogra LK, Bal DG, Krieg BF, Bunch KL. 1995. California's "5 a day—for better health!" campaign: an innovative population-based effort to effect large-scale dietary change. *Am. J. Prev. Med.* 11:124–31
33. Food Bank for New York City. 2010. *Testimony prepared by Triada Stampas for the State Senate Committee on Health on Food Policy in New York State*. New York: Food Bank for N. Y. City. **http://www.foodbanknyc.org/files//dmfile/FoodPolicyHearing1.22.10ImpactofSodaTax.pdf**
34. Francis JA, Abramsohn EM, Park HY. 2010. Policy-driven tobacco control. *Tob. Control* 19:i16–20
35. Gold S, 2009. Central Avenue is dreaming again. *Los Angeles Times*, Sept. 25. **http://articles.latimes.com/2009/sep/25/local/me-southla-centralave25**
36. Gortmaker SL, Dietz WH, Sobol AM, Wehler CA. 1987. Increasing pediatric obesity in the United States. *Am. J. Dis. Child.* 141:535–40
37. **Gostin LO. 2008. *Public Health Law: Power, Duty, Restraint*. Berkeley: Univ. Calif. Press. 800 pp. 2nd ed.**
38. Graff S, Ackerman J. 2009. A special role for lawyers in a social norm change movement: from tobacco control to childhood obesity prevention. *Prev. Chronic Dis.* 6:A95
39. Healthy Eat. Res. 2010. *Pricing and economics.* **http://www.healthyeatingresearch.org/publications-mainmenu-111/bibliography-mainmenu-153/pricing-and-economics-mainmenu-156**
40. Hobart R. 2003. *Preemption: Taking the Local Out of Tobacco Control*. Chicago: Am. Med. Assoc. **http://www.rwjf.org/newsroom/SLSPreemption2003.pdf**
41. House Appropr. Comm. 2009. *Explanatory Statement Regarding Omnibus Appropriations Act of 2009 983–84.* H.R. 1105, 11th Congr.
42. Inst. Med. 2010. *Bridging the Evidence Gap in Obesity Prevention: A Framework to Inform Decision Making.* Washington, DC: Natl. Acad. Sci. **http://iom.edu/Reports/2010/Bridging-the-Evidence-Gap-in-Obesity-Prevention-A-Framework-to-Inform-Decision-Making.aspx**
43. Interag. Work. Group Food Mark. Children. 2011. *Preliminary Proposed Nutrition Principles to Guide Industry Self-Regulatory Efforts: Request for Comments.* Washington, DC: Fed. Trade Comm. (FTC). **http://www.ftc.gov/os/2011/04/110428foodmarketproposedguide.pdf**

37. The foundational public health law textbook.

44. Jackson MY. 1993. Height, weight, and body mass index of American Indian schoolchildren, 1990–1991. *J. Am. Diet. Assoc.* 93:1136–40
45. Kline R, Graff S, Zellers L, Ashe M. 2005. Beyond advertising controls: influencing junk-food marketing and consumption with policy innovations developed in tobacco control. *Loyola Los Angel. Law Rev.* 39:603–46
46. Koplan JP, Dietz WH. 1999. Caloric imbalance and public health policy. *JAMA* 282:1579–81

47. A seminal report that raised the profile of the obesity crisis and helped fuel the obesity prevention movement.

47. Koplan JP, Liverman CT, Kraak VI, eds. 2005. *Preventing Childhood Obesity: Health in the Balance*. Washington, DC: Natl. Acad. Press. 436 pp.

48. Larson N, Story M. 2009. *Menu Labeling: Does Providing Nutrition Information at the Point of Purchase Affect Consumer Behavior?* Minneapolis: Healthy Eating Res. **http://www.healthyeatingresearch.org/images/stories/her_research_briefs/her_menu_labeling_brief_06_29_09_final.pdf**
49. Larson N, Story M, Nelson MC. 2008. *Restaurant Realities: Inequalities in Access to Healthy Restaurant Choices*. Minneapolis: Healthy Eating Res. **http://www.healthyeatingresearch.org/images/stories/her_research_briefs/her%20restaurant%20realities_7–2008.pdf**
50. Lavizzo-Mourey R. 2006. *Statement from Risa Lavizzo-Mourey, M.D., M.B.A., Robert Wood Johnson Foundation President and CEO, Regarding Release of Institute of Medicine "Progress in Preventing Childhood Obesity" Report.* Washington, DC: Robert Wood Johnson Found. **http://www.rwjf.org/childhoodobesity/product.jsp?id=21856**
51. Lavizzo-Mourey R. 2007. *We Will Reverse the Epidemic of Childhood Obesity: President's Message from the Robert Wood Johnson Foundation 2006 Annual Report*. Princeton, NJ: Robert Wood Johnson Found. **http://www.rwjf.org/files/publications/other/RWJF_ar2006_presidentsMessage.pdf**
52. Leadersh. Healthy Communities. 2010. *Overweight and Obesity Among American Indian and Alaska Native Youths.* Washington, DC: Leadersh. Healthy Communities. **http://www.leadershipforhealthycommunities.org/images/stories/lhc_factsheet_amer-indian_rev_3.pdf**

53. Paints a full picture of obesity trends in the United States and assesses obesity prevention policies.

53. Levi J, Vinter S, St. Laurent R, Segal LM. 2010. *F as in Fat: 2010, How Obesity Threatens America's Future*. Washington, DC: Trust for America's Health. http://healthyamericans.org/reports/obesity2010/Obesity2010Report.pdf

54. Lightwood JM, Dinno A, Glantz SA. 2008. Effect of the California Tobacco Control Program on personal health care expenditures. *PLoS Med.* 5:e178
55. Los Angel. City Counc. 2008. *Council file no. 07-1658.* **http://cityclerk.lacity.org/lacityclerkconnect/index.cfm?fa=ccfi.viewrecord&cfnumber=07-1658**
56. Los Angeles City Counc. 2010. *Council file no. 10-1843.* **http://cityclerk.lacity.org/lacityclerkconnect/index.cfm?fa=ccfi.viewrecord&cfnumber=10-1843**
57. McLaren L. 2007. Socioeconomic status and obesity. *Epidemiol. Rev.* 29:29–48
58. McMillan TE. 2009. *Research Brief: Walking and Biking to School, Physical Activity and Health Outcomes*. San Diego: Active Living Res. **http://www.activelivingresearch.org/files/ALR_Brief_ActiveTransport.pdf**

59. Distills the constitutional concepts most relevant to formulating obesity prevention policies.

59. Mermin SE, Graff SK. 2009. A legal primer for the obesity prevention movement. *Am. J. Public Health* 99:1799–805

60. Mission: Readiness. 2011. *Retired Generals Issue Warning: Childhood Obesity Endangers National Security.* Washington, DC: Mission: Readiness. **http://www.missionreadiness.org/wp-content/uploads/KYPR1.pdf**
61. Mission: Readiness. 2011. *Too Fat to Fight: A Brief on Kentucky.* Washington, DC: Mission: Readiness. **http://www.missionreadiness.org/wp-content/uploads/KY_Too_Fat_To_Fight_Report.pdf**
62. Moore LV, Diez Roux AV. 2006. Associations of neighborhood characteristics with the location and type of food stores. *Am. J. Public Health* 96:325–31
63. Mowen AJ. 2010. *Research Synthesis: Parks, Playgrounds and Active Living.* San Diego: Active Living Res. **http://www.activelivingresearch.org/files/Synthesis_Mowen_Feb2010.pdf**
64. Natl. Alliance Nutr. Act. 2011. *Nutrition Policy.* Washington, DC: Cent. Sci. Public Interest. **http://www.cspinet.org/nutritionpolicy/nana.html**
65. Natl. Cent. Health Stat. 2011. *Health, United States, 2010: With Special Feature on Death and Dying.* Hyattsville, MD: Natl. Cent. Health Stat. **http://www.cdc.gov/nchs/data/hus/hus10.pdf**

66. Natl. Heart, Lung, Blood Inst. 1998. *Clinical Guidelines on the Identification, Evaluation, and Treatment of Overweight and Obesity in Adults: The Evidence Report*. Bethesda, MD: Natl. Heart, Lung, Blood Inst. **http://www.nhlbi.nih.gov/guidelines/obesity/ob_gdlns.pdf**
67. New Haven Board of Aldermen. 2008. *Proposed order of the Board of Aldermen establishing a steering committee to develop a complete streets policy for New Haven, implement a sustainable complete streets program for the city, and propose complete streets legislation based on these principles*. New Haven Safe Streets Coalition. **http://www.newhavensafestreets.org/2008/08/proposed-new-haven-complete-streets.html**
68. Ogden CL, Carroll MD, Curtin LR, Lamb MM, Flegal KM. 2010. Prevalence of high body mass index in US children and adolescents, 2007–2008. *JAMA* 303:242–49
69. Ogilvie RS, Zimmerman J. 2010. *Opening School Grounds to the Community After Hours: A Toolkit for Increasing Physical Activity Through Joint Use Agreements*. Oakland, CA: Planning for Healthy Places. **http://www.phlpnet.org/sites/phlpnet.org/files/Joint_Use_Toolkit_FINAL_web_2010.01.28.pdf**
70. Pan L, Galuska DA, Sherry B, Hunter AS, Rutledge GE, et al. 2009. Differences in prevalence of obesity among black, white, and Hispanic adults—United States, 2006–2008. *MMWR* 58:740–44
71. Powell LM, Slater S, Chaloupka FJ. 2004. The relationship between community physical activity settings and race, ethnicity and socioeconomic status. *Evid.-Based Prev. Med.* 1:135–44
72. Powell LM, Szczypka BA, Chaloupka FJ. 2010. Trends in exposure to television food advertisements among children and adolescents in the United States. *Arch. Pediatr. Adolesc. Med.* 164:794–802
73. PR Newswire. 2009. Smart Choices Program postpones active operations. *PR Newswire News Releases*, Oct. 23. **http://www.prnewswire.com/news-releases/smart-choices-program-postpones-active-operations-65809752.html**
74. Pratt M, Macera CA, Sallis JF, O'Donnell M, Frank LD. 2004. Economic interventions to promote physical activity: application of the SLOTH model. *Am. J. Prev. Med.* 27:136–45
75. Prev. Inst. 1999. *The Spectrum of Prevention: Developing a Comprehensive Approach to Injury Prevention*. Oakland, CA: Prev. Inst. **http://www.preventioninstitute.org/component/jlibrary/article/id-105/127.html**
76. Pridgen MD, Alderman RM. 2009. *Consumer Protection and the Law, Vols. 1, 2*. Eagan, MN: Thomson West. 2009–2010 ed.
77. Public Health Law & Policy. 2009. *Model agreements: joint use in California*. **http://www.phlpnet.org/healthy-planning/products/california-joint-use-agreements**
78. Robert Wood Johnson Found. 2011. *The Tobacco Campaigns of the Robert Wood Johnson Foundation and Collaborators, 1991–2010*. Princeton, NJ: Robert Wood Johnson Found. **http://www.rwjf.org/files/research/72051.tobaccocampaigns.050311.pdf**
79. Roeseler A, Burns D. 2010. The quarter that changed the world. *Tob. Control* 19:i3–15
80. Severson K. 2008. Los Angeles stages a fast food intervention. *New York Times*, Aug. 13, p. F1. **http://www.nytimes.com/2008/08/13/dining/13calo.html?pagewanted=all**
81. Shrewsbury V, Wardle J. 2008. Socioeconomic status and adiposity in childhood: a systematic review of cross-sectional studies 1990–2005. *Obes. Res.* 16:275–84
82. Siegel M, Carol J, Jordan J, Hobart R, Schoenmarklin S et al. 1997. Preemption in tobacco control: review of an emerging public health problem. *JAMA* 278:858–63
83. Skolnick AA. 1995. Cancer converts tobacco lobbyist: Victor L. Crawford goes on the record. *JAMA* 274:199–202
84. Starbucks Newsroom. 2008. *Starbucks launches Vivanno™ nourishing blends*. **http://news.starbucks.com/article_display.cfm?article_id=36**
85. Stolberg SG. 2011. Wal-Mart shifts strategy to promote healthy foods. *New York Times*, Jan. 20, p. B1. **http://www.nytimes.com/2011/01/20/business/20walmart.html?pagewanted=all**
86. Stossel J. 2007. Opinion: No French fries for you. *ABC News 20/20 Online*, Sept. 10. **http://abcnews.go.com/2020/Stossel/story?id=3582442&page=1**
87. Striegel-Moore RH, Thompson D, Affenito SG, Franko DL, Obarzanek E, et al. 2006. Correlates of beverage intake in adolescent girls: the National Heart, Lung, and Blood Institute Growth and Health Study. *J. Pediatr.* 148:183–87
88. Tacoma School Board. 2008. *Recess policy, policy no. 2146*. **http://www0.tacoma.k12.wa.us/schoolboard/policies/2146.pdf**

89. U.S. Dep. Health Hum. Serv. (DHHS) 1996. *Physical Activity and Health: A Report of the Surgeon General*. Atlanta: US DHHS. **http://www.cdc.gov/nccdphp/sgr/pdf/sgrfull.pdf**
90. U.S. Senate Select Comm. Nutr. Hum. Needs. 1977. *Dietary Goals for the United States.* Washington, DC: U.S. Gov. Print. Off. **http://zerodisease.com/archive/Dietary_Goals_For_The_United_States.pdf**
91. Westen T. 2006. Government regulation of food marketing to children: the Federal Trade Commission and the Kid-Vid controversy. *Loyola Los Angel. Law Rev.* 39:79–92
92. White House, Off. First Lady. 2010. *First Lady Michelle Obama launches Let's Move: America's move to raise a healthier generation of kids.* Washington, DC. **http://www.whitehouse.gov/the-press-office/first-lady-michelle-obama-launches-lets-move-americas-move-raise-a-healthier-genera**
93. White House, Off. Press Secr. 2010. *Presidential memorandum—Establishing a Task Force on Childhood Obesity.* Washington, DC. **http://www.whitehouse.gov/the-press-office/presidential-memorandum-establishing-a-task-force-childhood-obesity**

94. Sets out recommendations for action by the public and private sectors.

94. White House Task Force on Childhood Obesity. 2010. *Solving the Problem of Childhood Obesity Within A Generation*. Washington, DC. http://www.letsmove.gov/sites/letsmove.gov/files/TaskForce_on_Childhood_Obesity_May2010_FullReport.pdf

94a. WIC. 2010. *Allowed Food Guide 2011–2012.* **http://www.health.state.mn.us/divs/fh/wic/vendor/fpchng/cashier.pdf**
95. Winterfeld A. 2011. *Tapping School Facilities for Community Health: Joint-Use Agreements*. Denver: Natl. Conf. State Legis.
96. Yancey AK, Cole BL, Brown R, Williams JD, Hiller A, et al. 2009. A cross-sectional prevalence study of ethnically targeted and general audience outdoor obesity-related advertising. *Milbank Q.* 87:155–84
97. Zhang X, Cowling DW, Tang H. 2010. The impact of social norm change strategies on smokers' quitting behaviours. *Tob. Control* 19:i51–55

RELATED RESOURCES

Active Living Research's Web site (**http://www.activelivingresearch.org/**). Features extensive research on environmental factors and policies that influence physical activity.

Healthy Eating Research's Web site (**http://www.healthyeatingresearch.org/**). Features extensive research on environmental factors and policies that affect access to healthy food.

Public Health Law & Policy's Web site (**http://www.healthyeatingresearch.org/**). Provides model policies and other resources to promote healthy communities.