encompass and criticize the first two of these regulatory foci. Here, he is in good company among the analysts of regulatory failure, but I do have a small bone (maybe just a nit!) to pick about this, which is that the performance regulation that he prefers is in fact a form of CAC. The significant point is not that PBR is not CAC, but that PBR is indeed a form of CAC that is more likely to be the *kind* of CAC that will succeed in achieving the regulator's objective. My pointing to the breadth of CAC regulation, including PBR, is no mere cavil. Agencies often—probably *most* often—reject any type of CAC. They decide not to issue rules at all but self-consciously rely instead on some combination of domestic and foreign competition—that is, markets—to achieve the desired social outcome.

Terminology aside, Sugarman is surely correct in preferring PBR to CAC as a general matter. In his seminal, co-authored 2007 article in the *Duke Law Journal* on regulatory approaches to child obesity and related conditions, he presents illuminating examples of actual or imagined CAC approaches to these specific regulatory targets: (1) eliminating certain food items from school vending machines; (2) requiring schools and workplaces to include healthier menu items; (3) sharply restricting the inclusion of trans fats in foods prepared by food service establishments; (4) limiting the density of fast-food restaurants near facilities where children gather; (5) forbidding the retail sale of certain junk food to children; (6) eliminating the advertising of sweet or high fat foods in connection with children's television programs; (7) upgrading school lunches so that they are healthier; (8) requiring cities to subsidize grocery stores that sell fresh fruits and vegetables in low-income areas; (9) assuring all children safe access to parks and bicycle paths; and (10) requiring schools to

^{7.} See, e.g., Sugarman & Sandman, Fighting Childhood Obesity, supra note 6, at 1411–13; Stephen D. Sugarman, No More Business as Usual: Enticing Companies to Sharply Lower the Public Health Costs of the Products They Sell, 123 PUB. HEALTH 275, 276 (2009) [hereinafter Sugarman, No More Business as Usual]; Sugarman, Performance-Based Regulation, supra note 6, passim; Sugarman, Salt, supra note 6, at 91; Jennifer L. Pomeranz, Stephen P. Teret, Stephen D. Sugarman, Lainie Rutkow & Kelly D. Brownell, Innovative Legal Approaches to Address Obesity, 87 MILBANK Q. 185, 200–01 (2009); Sugarman, Enticing Business, supra note 6, at 94–95.

^{8.} I believe, further, that this tripartite classification of regulations—input, process, and performance—provides a bit more focus on and critical leverage to the analysis of specific regulatory technique. Each of the three foci has distinctive advantages and disadvantages. For example, a process rule is generally clear about how the regulated entity must go about meeting the agency's requirements: it must use the more or less specific process that the agency has mandated, and if it does so, it knows that it is in full compliance. The characteristic disadvantages of a process rule, however, are considerable: the agency may mandate a wrong or excessively costly process; its specification of the required process may be too vague, too specific, or out of date. Moreover, the process's relationship to the agency's ultimate substantive, regulatory goal may be tenuous or even perverse. An input rule has most, perhaps all, of the disadvantages of a process rule but may bring the process rule a bit closer to the desired outcome or performance. The gap, however, is still very wide and risks regulatory failure. The outcome or performance rule is what Sugarman prefers and analyzes most extensively.

^{9.} His co-author is Nirit Sandman, a mathematically trained lawyer. Purely for simplicity's sake, I shall refer to the author as Sugarman.

increase the duration and intensity of physical education.¹⁰ Sugarman points to the conviction that underlies such CAC-form requirements: "Proposals like these rest on the belief that professional public health experts know how the regulated parties should behave, and so the point of regulation is both to spell out that behavior and enforce effectively the specified obligations."¹¹

The problems with CAC regulation, Sugarman shows, are many. Perhaps the most important problem is the agency's ignorance of how best to achieve its regulatory objectives. ¹² This ignorance is virtually impossible to dispel in a timely manner, given the cost of trying to centralize the almost infinitely dispersed information, the rapidity with which that information changes under dynamic market conditions, and the decentralization and indeed secrecy of many technological advances. ¹³

Sugarman rightly explains that PBR cannot solve this problem of regulatory ignorance and inability to grapple quickly with change. Hu what PBR can do, he argues, is identify which outside actors can best come up with the answers to these questions and then impose on those actors a legal responsibility to address the challenges. He concedes, of course, that PBR is not a panacea. It rests on the plausible but unproven assumption "that the regulated party can either use its repository of information and experience, or draw on that of others, to develop the cheapest, most efficient, and most effective way to accomplish the regulator's goal." But PBR does not wait for the market to bring about that change:

Instead, PBR selects the party it thinks is responsible for the problem and well situated to solve it, and then imposes on that party the obligation to do so. PBR is not simple. It requires deciding who the appropriate subject of regulation is and what level of performance is necessary. On top of that, it is also necessary to figure out how to measure compliance and what penalties to impose for noncompliance.¹⁷

I would add that even the most careful PBR does not solve certain informational problems that still face the most scrupulous PB regulator: how to

^{10.} Sugarman & Sandman, Fighting Childhood Obesity, supra note 6, at 1409–10.

^{11.} Id. at 1410.

^{12.} See id. at 1413.

^{13.} See id. The classic statement of this problem is F. A. Hayek, The Use of Knowledge in Society, 35 AM. ECON. REV. 519 (1945):

The peculiar character of the problem of a rational economic order is determined precisely by the fact that the knowledge of the circumstances of which we must make use never exists in concentrated or integrated form, but solely as the dispersed bits of incomplete and frequently contradictory knowledge which all the separate individuals possess.

Id. at 519.

^{14.} See Sugarman & Sandman, Fighting Childhood Obesity, supra note 6, at 1413.

^{15.} *Id*.

^{16.} *Id*.

^{17.} Id.

accumulate and analyze the information needed by even the most technically sophisticated regulator to decide whether and how to regulate particular health conditions in the first place. This question itself depends on the answer to highly elusive factual and normative issues—for example, how serious is the childhood obesity problem? How serious must it be to justify regulatory intervention? Should solutions be left to state and local agencies, public health organizations in the private sector, individual families, or some combination of these? Sugarman acknowledges that "PBR is not simple" and proceeds to squarely confront these threshold, pre-regulation questions.

In this area of his work, Sugarman is at pains to compare PBR not only to CAC regulation but also to two other forms of regulation: (1) tort law and (2) subsidies and taxes.¹⁸ No torts scholar has attended more scrupulously to the disadvantages of tort law as a public policy mechanism than Sugarman, who, as noted earlier, has advocated "doing away" with it in favor of other, more self-consciously regulatory forms. ¹⁹ Even so, he recognizes certain attractive features of tort law, such as its being victim initiated rather than depending on the government to play the active, prosecuting role.²⁰

II.

PUBLIC HEALTH: TOBACCO, ALCOHOL, AND UNHEALTHY FOODS

Sugarman's analysis and comparison of various possible modes of public health regulation is merely his opening move. His preference for PBR is fairly standard among sophisticated regulatory policy analysts. The same cannot be said of regulators themselves, who continue to favor the CAC approach for reasons that Sugarman's analysis recognizes, such as its greater determinacy and easier enforceability. After all, checking off lists of specific, agencymandated input and process requirements is an easier way to enforce and defend against certain political attacks.

What is most admirable about Sugarman's policy work, however, is his dogged, workmanlike determination to advance a fully elaborated, carefully designed regulatory proposal to target the social ill (here, childhood obesity). He does this systematically: defining the important terms; anticipating and meeting likely objections; canvassing plausible alternatives to his own favored approach; laying out each element of his proposal; candidly noting the soft spots in the data relevant to his proposal; acknowledging the tradeoffs and risks entailed by his favored approach; considering the practical and political impediments to his plan; specifying formal definitions for characterizing key

^{18.} *Id.* at 1416–22. I do not discuss his "participatory regulation," a more specific form of what he calls management-based regulation, *see id.* at 1413–16, which is akin to what I call "input" and "process" regulation, *see supra* note 8.

^{19.} See supra note 1 and accompanying text.

^{20.} Sugarman & Sandman, Fighting Childhood Obesity, supra note 6, at 1417.

^{21.} See id. at 1411–13.

variables; and discussing reasons why it might fail or achieve only limited effectiveness, including its unanticipated effects and the types of evasions it would engender. It is only a slight exaggeration to say that he leaves no analytical stone unturned. Along the way, however, he rests on certain premises that, while plausible, are also contestable. For example, that children eat junk food not out of free will or parental permissiveness but because they and their parents are unduly influenced by food industry advertising.²² His candor here is admirable, as he tries not to claim greater certainty than evidence warrants.

Sugarman's proposal to use PBR to significantly reduce childhood obesity is a complicated one. Summarized in his own words:

[L]arge firms selling food and drink that is high in sugar or fat will be assigned the responsibility of reducing obesity rates in a specific pool of children. A firm's share of the overall responsibility will be based on its share of the "bad" food market, and the children assigned to it will be organized by geographically proximate schools where obesity rates are currently above the plan's nationwide target rate of 8 percent (the actual childhood obesity rate today is approximately 16 percent). Firms that fail to achieve their goals will be subject to serious financial penalties.²³

For all the proposal's cleverness, it has enough moving parts, interdependencies, and powerful opponents that it would not be easy to legislate or enforce. Another possible objection to his plan, which he recognizes and clarifies, is that its "performance" would be gauged not by attainment of the ultimate objective (reduced obesity) but instead by a precursor causal measure (less sugar in regulated foods) that the proposal assumes to be highly correlated with that objective. This problem is common. Measuring a scheme's success often requires using such a proxy measure; hopefully, the proxy is close enough to the desired outcome—an empirical question—to justify this tradeoff. Whether or not readers are convinced by Sugarman's proposed solution, they learn an enormous amount about the problem and its possible remedies along the way. One cannot ask more of a scholar seeking to take on a problem of this magnitude, complexity, and public health significance.

In the years following his early work on childhood obesity, Sugarman published a number of articles applying the same PBR, incentives-based approach, *mutatis mutandis*, to other urgent public health problems, including smoking, alcohol-related injuries and deaths, motor vehicle accidents causing

^{22.} See id. at 1431-32.

^{23.} Id. at 1404.

^{24.} Email from Stephen D. Sugarman to author (Aug. 11, 2020) (on file with author).

such losses, excessive salt intake, and medically caused injuries.²⁵ But he also sees a role for CAC approaches in certain situations.

Sugarman's article, Compelling Product Sellers to Transmit Government Public Health Messages, is an important example. Here, he considers laws requiring private businesses to display what the law considers government speech that takes judgmental positions on still-controversial issues like gun use, food nutrition, chlorinated water, and the like. Where public health objectives are concerned, Sugarman argues that the government may use text, graphics, and other persuasive media to do so over the First Amendment objections of businesses required to display them—not only in the case of uncontested facts (e.g., a food item has X calories) but also with opinions designed to shape consumers' preferences (e.g., sugared beverages may increase obesity). He concludes that "compelled speech" jurisprudence should allow the government to require sellers to post their message so long as the message's size relative to the product's size is not excessive and the message is clearly that of the government, not of the product seller.

Here, I think Sugarman's public health advocacy may take him too far. In harder cases than the ones he posits, the lines between fact and opinion (so elusive in defamation tort cases) and between public health promotion and political/ideological advocacy are murky. There is also the risk that the factual assumptions underlying a policy may turn out to be erroneous or even perverse—a possibility that Sugarman spins out in a short comment on tobacco taxes.²⁹

Suppose a state requires abortifacients or other related products to carry the following message: "The State of X, out of concern for women's health, discourages abortions in almost all circumstances." This officious message, to which both Sugarman and I would object as a policy matter, seems to satisfy Sugarman's doctrinal criteria. Would he uphold it against a challenge by the product manufacturer or by a pro-choice group? As a limit, he favorably cites a 1977 Supreme Court case barring New Hampshire's "Live Free or Die"

^{25.} See generally Stephen D. Sugarman, Should We Use Regulation to Demand Improved Public Health Outcomes from Industry? Yes, 337 BMJ 1200 (2008) (arguing in favor of regulating smoking, drunk driving and automotive safety, child food consumption, and carbon emissions); Stephen D. Sugarman, Outcome-Based Regulatory Strategies for Promoting Greater Patient Safety, 15 THEORETICAL INQUIRIES L. 573 (2014); Sugarman, Enticing Business, supra note 6; Stephen D. Sugarman, Using Outcome Regulation to Contend with Lifestyle Risks in Europe: Tobacco, Unhealthy Diets, and Alcohol, in REGULATING LIFESTYLE RISKS 332 (Alberto Alemanno & Amandine Garde eds., 2015); Sugarman, Performance-Based Regulation, supra note 6; Sugarman, Salt, supra note 6; Pomeranz et al., supra note 7; Sugarman, No More Business as Usual, supra note 7.

^{26.} Stephen D. Sugarman, Compelling Product Sellers to Transmit Government Public Health Messages, 29 J.L. & Pol. 557, 557–59 (2014).

^{27.} *Id.* at 560–62.

^{28.} Id. at 567, 575.

^{29.} See Stephen D. Sugarman, A Balanced Tobacco Control Policy, 93 Am. J. Pub. Health 416, 417 (2003).