The Food Industry and Self-Regulation: Standards to Promote Success and to Avoid Public Health Failures

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Threatened by possible government regulation and critical public opinion, industries often undertake self-regulatory actions, issue statements of concern for public welfare, and assert that self-regulation is sufficient to protect the public. The food industry has made highly visible pledges to curtail children's food marketing, sell fewer unhealthy products in schools, and label foods in responsible ways. Ceding regulation to industry carries opportunities but is highly risky. In some industries (e.g., tobacco), self-regulation has been an abject failure, but in others (e.g., forestry and marine fisheries), it has been more successful. We examined food industry self-regulation in the context of other self-regulatory successes and failures and defined 8 standards that should be met if self-regulation is to be effective. (*Am J Public Health.* 2010;100:240–246. doi:10.2105/AJPH.2009.160960)

Alarmed by links between poor diet and disease, as well as striking increases in obesity, policymakers, the public, and health professionals have challenged food industry practices.[1–3] Although many forces contribute to obesity and poor diet, food industry behaviors such as marketing unhealthy foods to children, promoting large portions and between-meal snacks, and exploiting schools for commercial gain have raised calls for government regulation and paved the path for actions such as requiring calorie labeling in restaurants.[4,5]

Industry practices affecting children have raised special concern, particularly regarding food marketing.[6] According to a recent report by the Federal Trade Commission (FTC), businesses spent $9.6 billion marketing food and beverages in 2007. Of this, nearly $1.7 billion was spent on marketing specifically targeted to children and adolescents, most of which promotes items such as sugared breakfast cereals, fast food, and soft drinks.[7] The average young person views more than 40 000 television advertisements per year. Young people are also exposed to promotional messages via the Internet, magazines, and video games.[8] This avalanche of marketing persuades children to prefer, request, and consume calorie-dense, nutrient-poor food and has triggered urgent calls for change.[9]

In response to public outcry and calls for government intervention, the major food industry players acted as other businesses have in the past: they pledged to adopt self-regulatory initiatives. Such voluntary actions are characteristic of threatened industries and typically involve promises to follow self-generated rules and standards. There is a long history of such pledges across industries as disparate as tobacco, alcohol, motion pictures, forestry, and marine fisheries. Self-regulatory pledges by the food industry are relatively new and may, as industry claims, benefit public health, or they may be self-serving and deceptive, stall needed government action, and protect business as usual.[10–14]

The food industry is in full self-regulatory mode and since 2006 has issued a series of highly publicized pledges. Both risks and opportunities are embedded in this environment, and much is at stake. It is instructive to examine how other industries have approached self-regulation and to define the conditions under which the public's interest is protected or harmed.

Here we discuss existing self-regulatory pledges made by the food industry, note their strengths and weaknesses, and evaluate successful and unsuccessful attempts at self-regulation in other industries. We examined self-regulation in 2 industries that, like the food industry, manufacture products whose consumption is linked to health concerns (tobacco and alcohol), along with 2 quite different industries (marine fisheries and forestry), which have developed extensive self-regulatory systems and addressed governance issues, with sufficient history to draw conclusions about impact.

We propose 8 standards for self-regulation that we believe the food industry must follow if their pledges (1) are to be considered good-faith efforts, (2) hold out hope for protecting the public's health, and (3) can be considered alternatives to government regulation. These standards, listed in Table 1, are derived from knowledge to date on food industry self-regulation and lessons learned from self-regulatory successes and failures in other industries. These standards are intended to maximize the likelihood that self-regulation will incorporate transparency, meaningful objectives and benchmarks, accountability and objective evaluation, and oversight.

HISTORY OF FOOD INDUSTRY SELF-REGULATION

To date, food industry self-regulation has comprised 4 main initiatives: 1 addresses beverages and foods in schools, 2 pertain to marketing to children, and 1 deals with menu labeling.

Beverages in Schools

In 2006, the Alliance for a Healthier Generation, a partnership between the William J. Clinton Foundation and the American Heart Association, worked with the soft drink industry through its trade association, the American Beverage Association, to release School Beverage Guidelines.[15] The guidelines were developed by the alliance in collaboration with industry, most notably the top 3 players (Coca-Cola, PepsiCo, and Cadbury Schweppes) and

TABLE 1—Proposed Standards for Self-Regulatory Activities of the Food Industry

Aim	Standard
Transparency	Transparent self-regulatory standards created by a combination of scientists (not paid by industry) and representatives of leading nongovernmental organizations, parties involved in global governance (e.g., World Health Organization, United Nations Food and Agriculture Organization), and industry
	No one party given disproportionate power or voting authority
Meaningful objectives and benchmarks	Specific codes of acceptable behaviors based on scientifically justified criteria
	Predefined benchmarks to ensure the success of self-regulation
Accountability and objective evaluation	Mandatory public reporting of adherence to codes, including progress toward achievement of full compliance with pledges and attainment of key benchmarks
	Built-in and transparent procedures for outside parties to register objections to self-regulatory standards or their enforcement
	Objective evaluation of self-regulatory benchmarks by credible outside groups not funded by industry to assess health, economic, and social outcomes
	Periodic assessments/audits to determine compliance and outcomes
Oversight	Possible oversight by an appropriate global regulatory or health body (e.g., World Health Organization)

generated considerable attention, attributable in part to former president Clinton's involvement in a press conference that introduced the guidelines.

The guidelines include industry promises to limit portion sizes of beverages and set standards for the caloric and nutritional content of beverages to be sold in schools, with greater restriction in elementary and middle schools than in high schools. The industry pledged to have the guidelines fully implemented prior to the 2009 to 2010 school year. The industry released reports on its progress in 2007 and 2008, noting, among other claims in its 2008 report, "After just two years of implementation, the guidelines have cut beverage calories shipped to schools by 58%."[15]

The potential benefit of these guidelines and participation by the major players could be considerable. Coca-Cola and PepsiCo alone control three quarters of the world beverage market, so their participation in meaningful self-regulation would have enormous reach. In addition, although beverage consumption in schools is only part of overall consumption of calories from beverages, schools are important

symbolically as safe or unsafe nutrition environments.[16]

The limitations of this pledge, however, create a strong need for our proposed standards (Table 1). The beverage industry has met 1 standard: periodic assessment to determine compliance (albeit funded by industry). The other key criteria have not been met. Most important, the process of establishing nutrition criteria was not transparent and did not involve objective input from the scientific community. An example of flawed criteria is that high schools, where much of the sugared-beverage intake occurs, are subject to far less restriction than are elementary schools, where little intake occurs.[17]

The pledge leaves several other concerns unaddressed: (1) predefined benchmarks (e.g., lowered sugar intake) were not established; (2) no evaluation has been undertaken by parties not funded by industry; (3) some problematic beverages are not regulated, such as calorie-dense sports drinks, diet drinks (which continue to offer branding opportunities), and new drink categories (e.g., energy drinks); (4) the long phase-in period does not require amending existing contracts; and (5) the requirement

for signatory companies to follow the guidelines is not binding.[11] In light of these concerns, the effectiveness of beverage industry self-regulation is uncertain.

Another key consideration is whether pledges extend beyond the United States. The global health consequences of poor diet are staggering,[18] so it is important that actions taken by industry apply across the world. This is the impetus for our suggestion that world bodies such as the World Health Organization be involved with input on self-regulatory actions and oversight of compliance and impact.

Children's Food Advertising

Another major self-regulatory move by industry is the 2007 Children's Food and Beverage Advertising Initiative, sponsored by the Council of Better Business Bureaus but with guidelines established by industry. The initiative is voluntary and outlines restrictions on the advertisement of food products to children younger than 12 years, with the goal of "shifting the mix of advertising messaging to children to encourage healthier dietary choices and healthy lifestyles."[19]

To date, 15 food and beverage companies have pledged to participate: Burger King, Cadbury Adams, Campbell Soup, Coca-Cola, ConAgra Foods, General Mills, Hershey, Kellogg, Kraft, Mars, McDonald's, PepsiCo, Nestlé USA, Dannon, and Unilever USA. Specific pledges vary by company; however, all signatory companies agreed to devote no less than 50% of their child-directed advertising to the promotion of "healthier dietary choices and/or to messages that encourage good nutrition or healthy lifestyles."[19] Companies also agreed to reduce or eliminate the use of third-party-licensed characters in advertising of unhealthy foods, not to seek product placement of unhealthy products, and not to use representations of unhealthy food products in interactive games targeted at children younger than 12 years. In addition, participating companies must not advertise food or beverage products in elementary schools, with the exception of "displays of food and beverage products, charitable fundraising activities, public service messaging, or items provided to school administrators."[19]

The strength of the Council of Better Business Bureaus guidelines lies in their laudable

stated goal and the fact that so many large companies are taking part, but many uncertainties remain. Will industry standards for healthy food be so lax as to require little change in marketing? Will industry comply? Will food companies do as the tobacco industry did and simply shift marketing dollars to other and perhaps more cost-effective means of marketing (e.g., from television to the Internet)? Will industry changes reduce overall exposure of children to marketing of calorie-dense foods? Will companies rely on 1 part of their pledge (use messages that "encourage good nutrition or healthy lifestyles") as justification for not acting on the other part (the promotion of healthier dietary choices)? Will depicting Ronald McDonald, Captain Crunch, or the Trix Rabbit being physically active make it permissible to promote unhealthy products to children? Each of these questions can and must be answered to determine whether these pledges will be effective. It will be especially important to track how variations in pledges and compliance with pledges change with time. Will the stronger actions of the more progressive companies pressure the laggards to improve, or will a lower common denominator prevail? Monitoring compliance is essential but at present has not occurred.

Like the Alliance for a Healthier Generation beverage pledge, the Children's Food and Beverage Advertising Initiative does not meet most of the standards described in Table 1. In addition to lacking transparency and objective scientific input, it provides for no benchmark to reduce children's exposure to marketing of calorie-dense foods, no mandatory public reporting, and no objective means for evaluating compliance and impact.

Character Licensing on Foods

Character licensing to promote food sales is the third arena for self-regulatory pledges. Disney[20] and Nickelodeon[21] promised to discontinue the use of their names and licensed characters on packaging for foods that do not meet their self-defined criteria for healthier food. For Disney, healthier food products are those that have less than 30% of calories from fat for meals and 35% for snacks; less than 10% of calories from saturated fat for meals and snacks; and less than 10% or 25% of calories from added sugar for meals and snacks, respectively.

Nickelodeon, on the other hand, only states that the use of licensed characters will be "limited to products that meet 'better for you' criteria"[21] and does not detail nutritional guidelines.

Changes for both companies were slated to go into effect in January 2009, once existing licensing agreements expired. An analysis of the cross-promotion of food products in supermarkets found that although character licensing had decreased, cross-promotions in general had doubled from 2006 to 2008, so vigilance is warranted.[22]

Smart Choices Food Labeling

A fourth and far-reaching effort pertains to package labeling and was announced in 2008 by the Keystone Center in collaboration with several major food companies. The Smart Choices Program involves the use of a green-and-white symbol with a check and the words "Smart Choices Program: Guiding Food Choices".[23] The symbol is to appear on designated foods, with the aim of creating a uniform system whereby food companies can indicate foods that represent more nutritious choices. The program has 2 main features: (1) indication on the front of the package of how many servings are in the container and the number of calories per serving and (2) the application of the Smart Choices symbol to foods that meet designated criteria.

One part of the Smart Choices approach, the labeling of servings and calories on the front of packages, is likely to be uncontroversial and helpful because it is factual, requires no standards or interpretation, and can be defended as a consumer's right to know.[24] The utility of the Smart Choices symbol designating healthier foods will depend on the strength of the standards, how consumers use the symbols, and whether diets actually improve. Detailed analyses of the standards have not been conducted, and to our knowledge there is no plan for global reach, global oversight, or objective evaluation of impact.

Information about at least 1 food category, cereals, gives cause for concern. Consumer Reports developed its own nutrition rating system and analyzed nutrients in the 27 leading breakfast cereals. Among the findings: 23 were rated only good or fair for nutrition, 11 had as much sugar as a glazed doughnut, 11 contained at least 40% sugar, 2 were more than 50% sugar, and some were high in salt or

contained no fiber.[25] Twenty-two of these 27 cereals qualified for the Smart Choices symbol.

These 4 self-regulatory efforts by the food industry address areas of major concern, such as marketing and labeling, and have the potential to benefit vast numbers of consumers. However, there is also a risk that the industry actions will undermine the public good if consumers are fooled or confused, if standards are weak enough to permit harmful industry practices, and if needed government action will be stalled or prevented.

SELF-REGULATION IN OTHER INDUSTRIES

Industry self-regulation is "a regulatory process whereby an industry-level organization sets rules and standards relating to the conduct of firms in the industry" and in which self-regulation and government regulation are not mutually exclusive but rather are part of a continuum.[26(p364–365)] By contrast to government-imposed laws, self-regulation is voluntary and is typically framed as a socially responsible industry practice that has consumer welfare as its central feature. A well-grounded self-regulatory system has distinct benefits: it conserves government resources and is less adversarial, more flexible, and timelier than government regulation.[27] Risk occurs when promises are not fulfilled because of weak standards or ineffective enforcement, allowing companies to continue to serve their own interests at the expense of consumers.

Motivation for Industry Self-Regulation

A variety of factors can motivate an industry to engage in self-regulation. The type of motivation may be a determinant of success. In some cases, an industry perceives that it must police itself because governments are involved too little, as was the case with forest and fisheries stewardship. For other industries, government intervention is perceived as a threat, and self-regulatory actions are a means to prevent or forestall outside regulation.

A catastrophic event can threaten an industry and motivate it to self-regulate. In 1984, more than 3800 people died in Bhopal, India, when toxic chemicals were released by a Union Carbide plant.[28] In response, the chemical industry created its Responsible Care program. Likewise, after the nuclear power

accident at Three Mile Island in 1979, the US nuclear industry created the Institute of Nuclear Power Operations to set guidelines for safe nuclear power plant operations.

Scarce natural resources can also be a strong motivator for self-regulation, as in the case of the marine fishery and forestry industries. Prompted by concerns about sustainability of the global seafood market, the fishing industry founded the Marine Stewardship Council in 1997 to promote sustainable practices. Similarly, growing concerns over deforestation and the inability of governments to agree on a global forest compact led to the founding of the Forest Stewardship Council in 1993.

More pertinent to the food industry is a third source of motivation, which involves various combinations of public relations threats and concern with both litigation exposure and legislative and regulatory action that could affect sales. Industries under attack for promoting harmful, dangerous, or exploitative products or practices (e.g., tobacco, alcohol, fashion) face negative public attitudes, a skeptical press, legislators calling for action, and the threat of lawsuits. Collectively, these reflect an erosion of trust. Self-regulatory actions can be undertaken to lower the threat of negative outcomes and to build trust. Danger arises if such practices protect business interests at consumer expense and forestall needed action with the appearance of good will.

Attempts at industry self-regulation are common and widespread in industries ranging from fisheries to fashion to higher education.[29] Although there is much to learn from all industry self-regulation endeavors, we analyzed the successes and failures of self-regulation in the forestry, fisheries, alcohol, and tobacco industries because they presented a diverse array of regulatory experiences that could be useful in understanding and evaluating self-regulation in the food industry.

Forestry

The Forest Stewardship Council (FSC) was founded in 1993 in response to the failure of governments to agree on a global forest compact for responsible management of the world's working forests at the 1992 Earth Summit. The independent, nonprofit FSC pursues its mission of promoting responsible management of the world's working forests through the

development of forest management standards, a voluntary certification system, and trademarks that provide recognition and value to products bearing the FSC label in the marketplace.[30]

Key to the FSC's structure is a tripartite governance system conferring equal authority on environmental, social, and economic stakeholders, ensuring parity in organizational decisions. To qualify for FSC certification, forest management companies must adhere to principles and criteria concerning legal rights of indigenous peoples, labor rights, and various environmental impacts related to forest management. In addition, the FSC requires certification of compliance with its standards by an FSC-certified independent third party and public reporting of evaluation reports, management plans, and results of periodic monitoring.[31] The FSC has been successful in some regards and not in others.[32]

In most countries where the FSC was established, environmental groups and ally organizations supported the program, while forest industry associations, landowners, and companies resisted, either withholding support for the FSC or creating rival certification programs.[32] In response to the FSC's formation in the United States, the American Forest and Paper Association, in conjunction with industry groups, created the Sustainable Forestry Initiative, a rival self-regulatory certification program with relaxed standards and limited oversight. The majority of industry players in the United States aligned themselves with the Sustainable Forestry Initiative, likely because of its less restrictive guidelines (including first-party certification and no requirement for public reporting), leaving the FSC with modest support in the United States.

In their book *Governing Through Markets*,[32] Cashore et al. argue that 3 features limited FSC adaptation in the United States: (1) the existence of a well-coordinated forestry industry trade association, (2) a production system in which forest companies owned a key share of forest lands but relied on many other organizations for supply, and (3) a high degree of vertical integration within the industry.[33] These factors parallel conditions affecting food industry self-regulation, including strong industry associations and vertical integration of businesses (e.g., Coca-Coca and PepsiCo control 75% of the world beverage market, and large agribusiness companies control products from the seed to the table). As a result of the FSC's

continued competition with the Sustainable Forestry Initiative and other rival programs, some environmental groups advocate coregulation of the forestry sector, whereby self-regulation would complement, but not replace, government regulation and legislation.[33]

Much can be learned from the FSC experience. First, for self-regulation to attract industry players, companies must perceive economic benefit. This can be achieved by improving market incentives (e.g., the threat of intensified boycotts as deterrents to resisting certification and strengthened market benefits as rewards for undertaking certification).[34] Big-box retailers such as Home Depot and Lowe's gave preference to suppliers of FSC-certified products; market pressure (in the form of real or anticipated demand from consumers) thus supported the organization.[35] A parallel food strategy would be for consumers to encourage retail giants such as Walmart to favor suppliers who attain certain nutrition standards.

Second, third-party certification and oversight coupled with public reporting are essential to ensure compliance with and adequate stringency of codes. Third, self-regulatory programs must take into account rival industry programs that emerge and must ensure that rule development is flexible enough to adjust to an inhospitable regulatory environment. To facilitate this flexibility, Cashore et al. advocate the use of moderate provisional standards of regulatory criteria in the initial phases of self-regulation, followed by a ratcheting up of standards once legitimacy is achieved. Through this method, self-regulatory systems can achieve maximum stringency of rules through the use of progressive, evolutionary logic.[34] Finally, governance involving the most important stakeholders but not dominated by any 1 party appears to be important to achieving meaningful standards and external credibility. This is of critical importance for food, because self-regulation thus far has been dominated or entirely controlled by industry.

Fisheries

The Marine Stewardship Council (MSC) was established in 1997 as a partnership between Unilever PLC and the World Wildlife Federation (also involved with the FSC) to address the problem of overfishing and to ensure the long-term sustainability of global fish stocks.[36]

Unlike with food industry self-regulation, the MSC functions through a balanced governance structure that includes international representatives from industry, environmental groups, and academia to ensure parity in decision making. The MSC's strength also lies in its adherence to the UN Food and Agriculture Organization standards for credible fishery certification and ecolabeling schemes. These standards include the use of objective third-party assessments based on scientific evidence, transparent processes with built-in stakeholder consultation and objection procedures, and guidelines that ensure the sustainability of target species, ecosystems, and management practices. These principles of transparency and objective evaluation have not occurred with food industry self-regulation.

Despite the balanced structure and laudable goals of the MSC, the impact of certification has been limited thus far; to date only 34 fisheries have attained full certification, with another 78 under assessment.[36] Unlike in forestry, where limited acceptance of the FSC was mainly the result of competing industry certification schemes, limited acceptance of the MSC program is attributable to logistic and social issues, including limited consumer interest in the sustainability of fisheries and the difficulty of monitoring quality assurance and compliance.[37]

The MSC experience highlights 2 important issues. First, it is important to engage the appropriate link in the supply chain to gain widespread acceptance. The MSC's misstep was focusing on consumers instead of engaging retailers, who are more directly concerned with marine sustainability for their financial livelihood. In the food industry, mounting public awareness about the dangers of unhealthy food may lead to consumer demands for healthier products and at some point may drive acceptance of certification programs.

Second, the MSC case substantiates the importance of monitoring to maintain public confidence in labeling schemes. The credibility of a labeling scheme lies in the governing bodies' ability to regularly monitor existing members, thoroughly review new entrants, and strictly enforce standards.[37] Although monitoring marine systems presents logistical challenges (e.g., nonselective harvest techniques and the migratory nature of marine resources), credible and feasible monitoring practices to ensure adherence of member organizations are

imperative. If consumers and other interested parties cannot be assured of a label's credibility, they will inevitably lose interest; on the other hand, failure to strictly enforce standards is deceptive to consumers purchasing what they believe to be socially responsible products. A food industry parallel is self-regulatory package-labeling schemes, such as Smart Choices, that designate products that are better or healthier. Consumer confidence will depend on the strength of the standards and the enforcement of their use.

Alcohol

Self-regulation of alcoholic beverage advertising is a classic example of an industry using voluntary codes in conjunction with government oversight to deflect government regulation. Although self-regulatory guidelines were developed originally by industry players, the FTC has been involved both formally and informally in the supervision of alcohol industry self-regulation. As part of its involvement, the FTC helps ensure that companies abide by codes, assists members on compliance issues, ensures rule enforcement, and suggests improvements. The FTC oversight system is efficient in that it allows industry to regulate itself through internal or third-party review boards. The board of the Distilled Spirits Council of the United States is internal, with a third-party board to break tie votes; the Wine Institute and the Beer Institute function exclusively through third-party review boards but hold members accountable via FTC oversight and audits.

As with forestry self-regulation, alcohol advertising standards are adaptable and flexible, allowing for more restrictive guidelines as knowledge about success and acceptance evolves. In response to a 1999 FTC report criticizing the industry's self-regulatory practices as too permissive, the 3 largest alcohol supplier trade associations—the Distilled Spirits Council, the Wine Institute, and the Beer Institute—pledged to adopt revised self-regulatory guidelines for advertising and marketing. The new codes regulated the content and placement of advertisements and marketing efforts, requiring that each advertisement be targeted to an audience in which at least 70% of viewers were of legal drinking age. Previous guidelines required only 50% of an advertisement's intended audience to be of legal drinking age.

In 2008 the FTC recommended further improvements to the codes, including new regulations for Internet and other digital advertising, sponsorships, product placement in films, expenditures to help others promote alcohol, external review of complaints, and youth access to alcohol, as well as a new system for monitoring that involves random, compulsory audits of member companies each year by the FTC.[27] There are, however, lingering concerns over enforcement of the Distilled Spirit Council's self-regulatory practices. Public watchdog groups have cited, among other concerns, a high degree of subjectivity in interpreting advertising content regulations and the lack of an independent third-party review board.[38] These issues demonstrate the power of industry to exert influence, even when government oversight exists, and underscore the importance of consistent monitoring and evaluation.

Tobacco

An example of toxic self-regulation is the tobacco industry's behavior, beginning with the 1954 "Frank Statement to Cigarette Smokers" published in 448 US newspapers. Over the signatures of the nation's top tobacco executives, Americans were assured, "We accept an interest in people's health as a basic responsibility, paramount to every other consideration in our business" and "We always have and always will cooperate closely with those whose task it is to safeguard the public's health."[39] A series of promises were made and broken, and the industry created the infamous Tobacco Institute, which for years worked hand-in-glove with tobacco companies to protect and defend practices that had catastrophic public health consequences.[40]

The tobacco industry's development of youth smoking prevention campaigns is arguably 1 of the most extreme examples of an industry abusing self-regulation to deflect legislative action. In response to public and government outcries over marketing to youths, the industry developed several youth smoking prevention programs in the early 1980s.[41] These included youth access initiatives (e.g., the Coalition for Responsible Tobacco Retailing's We Care, the Tobacco Institute's It's the Law, and Philip Morris's Action Against Access), sponsored educational programs (e.g., the Tobacco Institute's COURSE Consortium and RJ Reynolds's

Right Decisions Right Now), youth program partnerships (e.g., with the US Junior Chamber of Commerce and the National 4-H Council), and media campaigns (e.g., Philip Morris's Think. Don't Smoke.).

Analysis of publicly available tobacco industry documents indicates that industry executives used these programs to prevent and defend against government regulation that might lower company profits. Moreover, industry players were careful to design youth prevention programs that did not contradict existing tobacco advertising initiatives; not a single program included information on nicotine and addiction, the causal link between smoking and disease, or the large role of tobacco marketing in promoting smoking to youths.[41] Some evidence suggests that these programs actually encouraged young people to smoke more.[42] Tobacco industry programs also marginalized public health advocacy groups by creating competition with more reputable anti-smoking campaigns, such as the Truth campaign sponsored by the American Legacy Foundation.[43] Public health advocates have found no evidence that tobacco industry programs decrease the rate of youth smoking and have concluded that they do more harm than good.[41,42]

The tobacco industry's self-regulatory tactics illustrate the central danger of self-regulation: an industry can use programs and approaches that appear credible and are framed as in the public's interest but prevent legislation or regulation and damage public health. Some food industry behaviors are strikingly similar to those of the tobacco industry; it is essential that tobacco's history with self-regulation not be repeated.[40]

Lessons Learned From Self-Regulation History

The history of food industry self-regulation is being written now. Much can be gained by reviewing the history of self-regulation in other industries to help avoid pitfalls and adopt practices that maximize chances for success. These accounts reveal critical factors that bear on such questions as whether industry can be trusted, whether regulatory control should be ceded to industry, how criteria for evaluating self-regulation might be established, and what the overall goals might be.

An important factor is motivation for change. Industries protecting a dwindling resource face the internal threat of overuse and exploitation of the environment. They have incentives to regulate effectively and can behave in ways that benefit the public (e.g., reducing deforestation protects the environment). Governance, implementation, and basic strategy all present challenges, but the potential for good is considerable. Thus far, self-regulation by the food industry has not been motivated by concerns about dwindling resources, but it should be. Depleted and contaminated water resources, land loss, shrinking biodiversity, and the energy intensity of modern agriculture are serious problems that threaten basic business models and are likely to burst into public consciousness in ways that will pressure companies into selling products grown and raised, processed, and transported in sustainable ways.[44]

As with the tobacco and alcohol industries, food industry self-regulation appears to be motivated more by external threats: negative public attitudes, government action that restricts key business practices, and litigation. Where industry and public health objectives conflict, an industry has incentives to create a public image of concern and to promise change, but then to create weak standards with lax enforcement. The cynical practices of the tobacco industry, and to a lesser extent the alcohol industry, have shown how under the guise of self-regulation, public health problems can be increased (e.g., young people being encouraged to smoke more rather than less) and government action can be warded off.

Governance by all stakeholders, transparency in creating standards, and external, objective evaluation of impact appear to be at the heart of the self-regulatory successes seen in some industries. These conditions do not prevail in current food industry self-regulation. Such regulation could still be beneficial, but legitimate public health input in the planning and execution of regulations and ongoing objective evaluation are both crucial.

STANDARDS FOR SUCCESSFUL FOOD INDUSTRY SELF-REGULATION

Self-regulatory successes and failures across a variety of industries, current conditions facing the food industry, and self-regulation by the food industry thus far informed the development of the 8 standards we propose (Table 1). Our aim was to create guidelines that are attainable, take into account industry needs, and protect the public's health. These goals cannot be realized without transparency, meaningful objectives and benchmarks, accountability and objective evaluation, and oversight.

We do not yet know whether food industry self-regulation will be helpful or harmful, but allowing an industry to self-regulate without input from government, consumers, or public health advocates can have serious consequences. Self-regulation can become a public health failure when (1) leading companies fail to take part, (2) weak standards permit harmful practices,[12] (3) standards do not apply globally, (4) credibility is undermined by an absence of transparency and objective scientific input, and (4) a lack of benchmarks and objective evaluation leads to ambiguity in interpreting both compliance and impact. Weakness in any area can compromise impact, as with industry's Children's Advertising Review Unit, where even strong enforcement of weak standards has led to weak results.[13]

Successful self-regulation requires standards that industry can attain to earn the trust of the public, the public health community, and government. These conditions should create a floor for self-regulatory standards—conditions to be satisfied as the minimum. Attaining the standards shown in Table 1 would help the food industry earn trust for its self-regulatory efforts, but pitfalls must be avoided. Internal pressure to weaken standards, refuse to participate, or create rival guidelines and codes could sabotage these programs.

Encouraging all players to take part in constructive ways will require clear definition of the roles of public interest and industry watchdog groups, consumers, government, industry, and the scientific community. It may also be helpful to mobilize consumers, who can help generate market pressures by favoring companies that meet self-regulatory standards. Finally, to entice industry players, self-regulatory codes must be initiated with moderate, manageable requirements. Then, as proposed with forestry and fisheries self-regulation, regulations can be strengthened as acceptance and legitimacy of the program increase. ■

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