

Food and Beverage Policies and Public Health Ethics

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Abstract Government food and beverage policies can play an important role in promoting public health. Few people would question this assumption. Difficult questions can arise, however, when policymakers, public health officials, citizens, and businesses deliberate about food and beverage policies, because competing values may be at stake, such as public health, individual autonomy, personal responsibility, economic prosperity, and fairness. An ethically justified policy strikes a reasonable among competing values by meeting the following criteria: (1) the policy serves important social goal(s); (2) the policy is likely to be effective at achieving those goal(s); (3) less burdensome options are not likely to be effective at achieving the goals; (4) the policy is fair.

Keywords Food · Ethics · Policy · Public health · Paternalism · Justice

Introduction: New York's Sugared Drink Regulations

At the urging of Mayor Michael Bloomberg, New York City's public health department developed a plan to ban sugared drinks of more than 16 ounces sold by food service establishments to help combat the city's growing obesity problem, which has become a serious public health concern in many industrialized nations [21]. Obesity increases the risks of developing many serious diseases, including type II diabetes, heart disease, stroke, osteoarthritis, cancer, and is a major contributor to rising health care costs [7]. Evidence indicates that large portion sizes increase obesity [32]. New York City's ban would have covered pre-sweetened drinks with 25 calories or more per 8 ounces, including soft drinks, lemonade, sports drinks,

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energy drinks, fruit smoothies, coffees, and teas, but not including drinks containing 50 % or more of milk or 100 % fruit juices. The ban would have applied only to establishments regulated by the Health Department and would not include convenience marts, such as 7–11 s.

Polls showed that 60 % of city residents opposed the ban [21]. Businesses also objected to the ban and sued the city to stop it. Critics argued that the ban was an insult to individual autonomy and responsibility and an outrageous example of the “nanny state” in action [31]. On March 12, 2013, 1 day before the ban would have taken effect; State Supreme Court of Manhattan Judge Milton Tingling blocked it on the grounds that it was an arbitrary and capricious regulation. The city has appealed the ruling [25]. The large soft drink ban is not Mayor Bloomberg’s first attempt to regulate New Yorkers’ diets. In 2008, the city prohibited commercial food establishments from using artificial trans fats as ingredients in food or in food preparation. Trans fat bans have withstood several legal challenges [24].

While few people would challenge the state’s prerogative to protect and promote public health, soft drink bans and other food and beverage policies are very different from laws that prevent people from harming others, such as infectious disease control measures or prohibitions against smoking in public places, because individuals with infectious diseases and smokers place other people at risk, whereas soft drink consumers harm only their own health. While most people support public health measures designed to prevent the spread of infectious diseases or to reduce the impacts of second-hand smoke, there has been mixed support for increased government control of the human diet [31]. Food and beverage policies therefore raise important questions concerning the state’s authority to interfere with individual autonomy, and have implications for other values, such as personal responsibility and justice. This article will develop a framework for considering the ethical aspects of food and beverage policies and apply it to several cases.

Public Health Ethics

The World Health Organization [41] defines public health as “organized measures (whether public or private) to prevent disease, promote health, and prolong life among the population as a whole.” Individuals, public health and medical professionals, private organizations, and local and national governments all play an important role in promoting public health. Some public health policies adopted by governments include: measures to prevent the spread of infectious diseases, such as mandatory vaccinations, isolation and quarantine, disease surveillance, and investigation of disease outbreaks; testing of newborns for genetic diseases; occupational safety regulations; sanitation and hygiene; water safety and quality regulations; automobile safety regulations; rules concerning access to health care; regulations to control air and water pollution; and consumer education on smoking, nutrition, drug and alcohol use, sexual activity, contraception, exercise, and other lifestyle choices that affect health [35].

In the last decade, a number of different writers have explored ethical issues pertaining to public health practices and policies [2, 4, 9, 18–20, 23, 36]. The main

ethical justification for public health practices and policies is that they promote the social utility by preventing pain, suffering, disability, and death resulting from disease; promoting overall well-being; and reducing health care costs [19]. For example, administering the polio vaccine to children prevents them from contracting a disease that causes disability and suffering and often leads to death, and saves society the costs of treating the illness. A secondary justification for public health practices and policies is that they can promote social justice by reducing health inequalities [4]. For example, free medical clinics operated by local public health departments can help socioeconomically disadvantaged people get access to care. Workplace safety regulations can help factory workers avoid disability and loss of income resulting from occupational injuries.

Public health practices and policies can generate moral controversies when they conflict with other values, such as individual autonomy, personal responsibility, and economic prosperity. For example, mandatory smallpox vaccinations for health care workers have been controversial because they conflict with the individual's right to make autonomous choices concerning his or her body [30]; government funding for needle exchange programs have met political resistance because they may discourage addicts from taking personal responsibility for dealing with their drug addiction [10]; and business and industry groups have objected to stringent workplace safety and pollution standards because they drive up the costs of production and may harm the economy [11].

How should one decide whether a public health practice or policy is ethically justified? Ideally, a practice or policy should strike a reasonable balance among competing values in light of the scientific evidence and available options. To do this, decision-makers should consider the following criteria for assessing the merits of a public health practice or policy [9, 23]:

The Importance of the Goals of the Practice or Policy

Most public health practices and policies meet this standard because they are intended to promote public health and reduce health inequalities.

The Effectiveness of the Practice or Policy at Achieving its Goals

A practice or policy should not be implemented if it not likely to be effective. Effectiveness should be based on evidence from scientific research or practical experience.

The Availability of Less Burdensome Options Which are Effective at Achieving the Goals of the Practice or Policy

A practice or policy is burdensome to the extent that it mandates individual behavior or has negative social or economic impacts. To reduce value conflicts, burdensome

public health options should be pursued only if less burdensome options are not likely to be effective at meeting an important goal.

Fairness of the Practice or Policy

Fairness includes distributive and procedural aspects. Distributive fairness addresses the distribution of the benefits and burdens of the practice or policy, while procedural fairness deals with the decision-making process used to develop the practice or policy. Decision-making should include ample public debate in which different opinions from affected parties are heard and considered.

Ideally, a public health practice or policy should meet all four of these criteria. For example, one could argue that mandatory measles vaccinations are justified because (1) vaccines can prevent children from contracting this devastating disease; (2) evidence shows that measles vaccines are highly effective; (3) less burdensome policies, such as public education on the need to vaccination are not likely to be very effective at stopping measles; and (4) mandatory vaccinations are fair because they treat everyone equally and they have been adopted following public debate [5]. However, mandatory exercise programs for adults would not be justified. While such programs would probably be effective at promoting public health by helping people to control their weight, they would be highly burdensome because they would significantly interfere with individual autonomy. Additionally, such policies might be unfair because people who are physically disabled might not be able to participate in the same types of programs as those who are healthy.

Food and Beverage Policies

Societies have developed many different strategies for managing consumption of foods and beverages in order to protect or promote public health. In the U.S., federal, state, and local governments exert some control over foods and beverages. Government strategies for managing consumption of foods and beverages can be divided into six conceptually distinct categories (see Table 1):

Restrictions on Manufacturing, Distribution, Marketing, Commercialization, or Use

The soft drink and trans fat restrictions (mentioned earlier) would fall into this category. More extreme measures would include complete bans on a product. For example, the Food and Drug Administration (FDA) banned cyclamate (an artificial sweetener) in 1970 based on research showing that it could cause bladder cancer in experimental animals [15]. State and national governments have laws that limit the percentage of alcohol in specific beverages (such as beer or wine), ban the sale of alcoholic beverages to minors, and prohibit driving while under the influence of alcohol [1]. The FDA approves the health-related marketing statements made by food and beverage companies and only permits them to make specific types of claims backed by scientific evidence [16].

Table 1 Food and beverage policies

Type of policy	Burden	Example
Restrictions	High	Limits on the size of sugared drinks
Licensure/inspection	High	Restaurant safety inspections
Tort liability	Moderate	Lawsuits related to food poisoning
Taxation	Moderate	Taxes on alcoholic beverages
Required labeling	Low	Nutritional labeling on foods
Educational campaigns	Low	Dietary recommendations

Licensure and Inspection

Local health departments grant licenses to commercial food establishments and require them to comply with food and beverage regulations. They also conduct regular health inspections to ensure compliance with regulations and monitor food safety and quality. Restaurants that fail health inspections can lose their license [17]. The U.S. Department of Agriculture [37] inspects meat, poultry and eggs for safety and quality, and promulgates regulations. The agency can require products to be taken off the market that fail inspection, and impose fines on companies for not complying with regulations. Likewise, the FDA inspects dairy products, canned or packaged foods, fruits and vegetables, and other foods, and issues regulations. The FDA can require products to be taken off the market, announce food safety warnings, and fine companies for non-compliance [13].

Tort Liability

In most countries, food manufacturers and restaurants can be held liable in tort law for the acute, short-term harms (such as food poisoning) caused by their products. Consumers who are harmed by eating contaminated food can sue producers for negligence in food preparation or manufacturing, for example [27]. Tort liability can encourage companies to ensure the safety of their foods and beverages in order to avoid lawsuits from consumers. For the most part, the courts determine the extent of liability for food and beverage-related injuries, although governments can enact laws that limit liability. For example, the U.S. has laws that limit the liability for vaccine manufacturers [22]. Liability for chronic, long-term problems, such as obesity or diabetes, has been more controversial [26]. Obese teenagers sued McDonald's unsuccessfully, claiming that eating the restaurant's food over a period of time made them gain weight [40].

Taxation

State and local governments tax soft drinks, alcoholic beverages, and restaurant foods [17]. The Danish government imposed a tax on saturated fats in 2011 which it rescinded after 1 year due to unintended adverse effects. The tax was intended to impact "junk" foods like hot dogs and potato chips but impacted cheeses and other

“healthy” foods. The tax did not change eating habits and many Danish citizens also purchased food across the border to escape the tax (The Economist [34]).

Required Labeling

The FDA requires packaged and canned foods to be labeled with nutritional information, such as caloric and fat content, vitamins, minerals, and fiber. Foods must also include warnings if they contain specific allergens, such as phenylalanine [16].

Educational Campaigns

Various federal, state, and local governments have launched educational campaigns to inform consumers about healthy food and beverage choices and responsible alcohol use. For example, the U.S. Department of Agriculture and the World Health Organization have developed a “food pyramid” for recommended daily consumption of different food groups, such as fats, proteins, fruits, vegetables, grains, and dairy products [38].

These different policy categories impose different types of burdens on consumers, businesses, and society. The burdens of a food or beverage policy include its impact on individual autonomy or freedom of choice, as well as social and economic costs (utility). The freedom to choose what one eats has deep connections to the meaning and enjoyment of life for most people. Government actions that take away food choices interfere with autonomy and also undermine personal responsibility, since they shield consumers from the consequences of their decisions [36]. Food and beverage policies may also incur social and economic costs, such as the costs associated with oversight, enforcement and compliance; and the loss of economic activity if a product is removed from the market or its use is restricted. Since these burdens may be distributed unequally, fairness issues can arise.

Restrictions on foods and beverages tend to be the most burdensome type of policy because they interfere with the autonomy of consumers and producers. Restrictions may also result in significant costs if products with economic benefits are removed from the market. Licensure and inspection is somewhat less burdensome, since it does not impede consumer autonomy even though it restricts producer autonomy. Licensure and inspection can entail significant economic costs associated with compliance, oversight and enforcement [17]. Tort liability indirectly restricts producer autonomy by linking legal consequences to behavior. Tort liability can lead to significant economic costs related to litigation. Taxes tend to be less burdensome than licensure and inspection because they can shape the behavior of consumers and producers not by interfering with autonomy but by providing economic incentives. Consumers may reduce their consumption of a product in reaction to a tax. Food taxes can have regressive (i.e. unfair) impacts, however, because economically disadvantaged consumers tend to spend a higher proportion of their income on foods and beverages and thus bear a disproportionate burden of the tax. Required labeling is generally less burdensome than taxation because it does

not undermine consumer autonomy and has only a minimal impact on producers. Labeling can enhance consumer autonomy and responsibility by providing people with important information pertaining to food and beverage choices. Labeling may marginally increase the costs of food. Finally, educational campaigns tend to be the least burdensome option because they do not interfere with autonomy and they have minimal economic costs. Educational campaigns, like required labeling, can enhance consumer autonomy and responsibility [36].

Case Studies

I will now apply the insights from “[Public Health Ethics](#)” and “[Food and Beverage Policies](#)” sections to some specific food policies.

Food Safety Inspections

Food poisoning from improperly prepared or preserved food has a major impact on public health. Each year, there are approximately 50 million cases of foodborne illness in the U.S., which result in 128,000 hospitalizations and 3,000 deaths [6]. The public health impact of foodborne illnesses would be much worse without food safety inspections [17]. Food safety inspections clearly meet the five criteria described in section “[Public Health Ethics](#)”, because they are effective at achieving an important goal (i.e. reducing the impact of foodborne illnesses) and less burdensome means of achieving this goal, such as consumer education, are not likely to be very effective. Safety inspections are usually procedurally fair insofar as they result from public debate. One concern about food safety inspections, however, is that they might not be fair if not all types of commercial foods are inspected. For example, some food inspection policies exempt smaller producers. One way to deal with the fairness issue is to ensure that all commercial food with a substantial impact on public health is subject to inspection. However, increasing the types of food subject to inspection can increase the economic costs of oversight and inspection.

School Lunch Menus

Many school systems have redesigned the school lunch menu in the last decade or so to promote nutrition and combat obesity, and have restricted students’ ability to purchase calorie-rich “junk” foods and sugared beverages from snack and drink machines [33, 39]. One could argue that school policies are ethically justified because they serve an important goal (i.e. promoting children’s health), they are effective at achieving this goal, and less burdensome means (such as providing children with nutritional information) are not likely to be very effective. Although these policies significantly restrict children’s food and beverage choices, one could argue that this limitation on autonomy is warranted because children are not fully autonomous decision-makers, and their rights to autonomy may be limited appropriately [3]. These policies also are distributively fair, because they affect

all children who eat school lunches equally, and they are procedurally fair because they have been publicly debated, with input from parents, teachers, and other concerned parties [33].

Bans on Food and Color Additives

Food and color additives are chemicals or animal or vegetable materials that food producers use in cooking or preparation, or to improve the taste, texture, quality, or shelf-life of foods or beverages. The FDA requires manufacturers of food and color additives to provide the agency with evidence that their products are safe when used as intended. The FDA reviews this evidence to determine whether these products are safe enough for marketing. Some food and color additives that have been used for thousands of years, such as salt, yeast, and vegetable oil, are presumed to be safe, whereas, newer, manufactured chemicals, such as Red Dye 2 and saccharine, are not. The FDA can require a product to be taken off the market if evidence emerges that it is not safe [14]. One could argue that the FDA's cyclamate ban was justified because (a) it helped to protect the public from risks of bladder cancer associated with the chemical; (b) it was effective at achieving this goal; (c) less burdensome options, such as product labeling or consumer education campaigns, would not have been effective; (d) the ban was distributively fair because it impacted all consumers equally; and (e) the ban was procedurally fair because there was adequate public discussion and debate.

Trans Fat Bans

Though they are conceptually similar to bans on food and color additives, trans fat bans have generated considerably more controversy. Several problems with these bans tend to weaken their justification. First, although the risks of artificial trans fats in the diet are well-established, it is not clear that trans fat bans will significantly promote public health. Even if a ban on trans fats is able to reduce the percentage of these chemicals in the human diet, it is not known whether this will have a positive impact on human health, because there are many factors that contribute to cardiovascular disease other than trans fat consumption, such as high blood pressure, diabetes, smoking, stress, physical inactivity, obesity, and genetics [8]. Second, less burdensome methods, such as nutritional labeling and public education, may be just as effective at reducing the percentage of trans fats in the human diet. Indeed, many food producers have begun to voluntarily eliminate artificial trans fats from their products in response to consumer preferences [28]. Third, trans fat bans raise significant fairness issues, because consuming artificial trans fats may be no more risky than eating other foods linked to heart disease or cancer, such as processed meats and foods high in saturated animal fat. A commitment to fairness implies treating all foods equally with regard to risks: if artificial trans fats should be banned, then perhaps hot dogs, heavy cream, and other foods should be banned as well. Focusing on trans fats is arbitrary and unjustified, unless we are committed to extensive regulation of the human diet, a move that many people would oppose as a threat to human freedom and interference with personal responsibility.

Sugared Drink Regulations

While limitations on the size of sugared drinks, such as New York City's ban, are intended to serve important goals (e.g. preventing obesity and promoting public health) they have had several problems that tend to undermine their justification. First, while there is evidence that portion sizes contribute to obesity, there was little evidence that New York's soft drink regulation would have been effective at combating obesity, because sugared drinks constitute only a small percentage of total caloric intake (7 % or less), and individuals may continue to consume excess calories from other sources [12]. Additionally, food establishments could help consumers evade the rules by offering free refills or discounts [21]. Second, New York City's ban was distributively unfair, because it exempted sugared drinks sold by convenience stores. A person could buy a Big Gulp from a 7–11 but not the same size drink from a deli next door. Additionally, the regulation focused on soft drinks even though there is substantial evidence that food portion sizes in general contribute to obesity [32]. A fairer (and more comprehensive) regulation would have been one that addressed portion sizes in all restaurant food, not just the sizes of sugared drinks. However, this type of regulation would probably have been even more controversial than the sugared drink ban, because it would have involved extensive government control over the human diet. Third, the ban was procedurally unfair because it was imposed by the city government even though most residents opposed it. The ban probably would have failed if put to a vote [21].

Tort Liability

Tort liability for harms caused by the consumption of food can help promote public health by encouraging producers to take steps to ensure that their foods are safe and healthy, in order to avoid lawsuits. Tort liability for harms that are almost entirely the fault of the producer, such as food poisoning, would seem to meet the five criteria we described in section "[Public Health Ethics](#)". First, these lawsuits can be effective at promoting an important goal (i.e. food safety). Second, other, less burdensome means may not be as effective. Very often, the best way to encourage a company to behave responsibly is to make it legally liable for its actions. Third, one could argue that these lawsuits are distributively fair because they can make companies pay for the harms they have caused. According to compensatory justice, parties that cause harm should compensate injured parties: if I break your window, then I should pay for repairing it [29]. Fourth, one could argue that the lawsuits are procedurally fair if they occur within the context of a fair legal process in which defendants have the right to confront their accusers, obtain legal representation, question witnesses, and so on. Tort liability for harms that are not clearly the fault of producer, such as obesity, may not fulfill the criteria, however. Although this type of tort liability can be effective at promoting public health, it raises serious questions concerning fairness and personal responsibility. One could argue that it is unfair to require companies to provide compensation for harms that are largely the individual's fault. One could also argue that allowing obese individuals to win lawsuits against food and beverage companies undermines the widely held

conviction that one should be accountable for the consequences of one's own choices [36]. While the marketing and advertising conducted by food and beverage companies may encourage people to make unhealthy dietary decisions, individuals should still be held accountable for their own free choices.

Conclusion

Government food and beverage policies can play an important role in promoting public health. Few people would question this assumption. Difficult questions can arise, however, when policymakers, public health officials, citizens, and businesses deliberate about food and beverage policies, because competing values may be at stake, such as public health, individual autonomy, personal responsibility, fairness, and utility. An ethically justified policy strikes a reasonable among competing values by meeting the following criteria: (1) the policy serves important social goal(s); (2) the policy is likely to be effective at achieving those goal(s); (3) less burdensome options are not likely to be effective at achieving the goals; (4) the policy is fair. Government officials should consider these criteria when making decisions about food and beverage policies. Concerned citizens, businesses, and other affected parties may also appeal to these criteria when defending or critiquing food and beverage policies.

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