Countermarketing Alcohol and Unhealthy Food: An Effective Strategy for Preventing Noncommunicable Diseases? Lessons from Tobacco

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Abstract

Countermarketing campaigns use health communications to reduce the demand for unhealthy products by exposing motives and undermining marketing practices of producers. These campaigns can contribute to the prevention of noncommunicable diseases by denormalizing the marketing of tobacco, alcohol, and unhealthy food. By portraying these activities as outside the boundaries of civilized corporate behavior, countermarketing can reduce the demand for unhealthy products and lead to changes in industry marketing practices. Countermarketing blends consumer protection, media advocacy, and health education with the demand for corporate accountability. Countermarketing campaigns have been demonstrated to be an effective component of comprehensive tobacco control. This review describes common elements of tobacco countermarketing such as describing adverse health consequences, appealing to negative emotions, highlighting industry manipulation of consumers, and engaging users in the design or implementation of campaigns. It then assesses the potential for using these elements to reduce consumption of alcohol and unhealthy foods.

INTRODUCTION

The World Health Organization has identified tobacco, alcohol, and processed food as leading causes of noncommunicable diseases (144) and the primary contributors to global premature deaths, preventable illnesses, and national and international inequalities in health (149). Each year, the tobacco, alcohol, and food industries spend billions of dollars marketing their products (103), which increases the number of people who consume these products and the amount of product they consume (65, 136).

Public health professionals have used multiple strategies, including taxation, product reformulation, mandates, regulation, and public education, to reduce the consumption of tobacco, alcohol, and unhealthy food and beverages (14, 20, 103). Although these interventions have been effective, they often encounter powerful industry opposition. Evidence-based strategies that educate people about the harms of specific products and the practices involved in marketing them can enhance the impact of comprehensive approaches to reducing the consumption of these harmful products (77).

In this review, we examine the potential for countermarketing (CM) to reduce the consumption of alcohol and unhealthy food products (including beverages), drawing on lessons learned from tobacco control. Although CM has been used in the public health literature to define a wide range of activities, from risk reduction education (33) to organized boycotts of selected products (7), we define CM as communications strategies designed to reduce the consumption of unhealthy products by exposing the motives of and denormalizing marketing activities initiated by the producers of these products (69). In tobacco, denormalization has been defined as activities that "shift the focus from individual smokers' judgment to corporate misbehavior showing how the industry has 'operated outside the boundaries of civilized corporate behavior' by marketing a deadly product" (96, p. 5).

Thirty years of research has shown that mass-media campaigns that rely on CM have been effective in reducing tobacco use (5, 22, 27, 28, 51, 109, 130, 140). Although public health and advocacy groups have launched various initiatives to apply the CM approach to alcohol and unhealthy food, no systematic evaluations of such campaigns have been reported. In this article, we identify eight key components of successful tobacco CM campaigns and assess their relevance for campaigns against alcohol and unhealthy food and beverages. Our broader goal is to advance public health practice and research on CM.

Toward a Common Understanding of Countermarketing

The term demarketing was first introduced by Kotler & Levy (88) in 1971 to define how marketing firms can discourage the demand for their own products. The term has subsequently been used in behavioral economics and social marketing to describe strategies for reducing consumption to achieve a social good, such as energy conservation or reduced illicit drug use (91). Our definition of CM distinguishes it from demarketing (23, 91) by its specific intention to expose and thus counter the practices that marketers use to sell unhealthy products. Exposing the

DEFINITION OF COUNTERMARKETING

Countermarketing campaigns use health communications strategies to reduce the demand for unhealthy products by exposing the motives of their producers and portraying their marketing activities as outside the boundaries of civilized corporate behavior.

marketing of unhealthy products as irresponsible has also been referred to as "adbusting" (67) and "counter-advertising" (45, 66).

Precursors of CM

As mass media began to play a stronger role in society early in the twentieth century, several public concerns about corporate influence over community well-being served as precursors for CM. In the 1920s and 1930s, various federal laws set standards for corporate broadcasters to operate in the public interest (92, 99). In 1949, the Federal Communications Commission (FCC) required broadcasters to cover controversial issues of public importance in a fair and balanced manner (129). The Fairness Doctrine required TV stations to give equal time to political candidates from different parties and was one of the few limitations placed over the power that corporations had to shape public culture (129).

In 1967, the FCC ruled that the Fairness Doctrine applied to cigarette advertising, thus requiring radio and television stations that ran cigarette commercials to donate airtime to antismoking messages in order to balance coverage (29, 117, 143). This regulation ended with the ban of radio and television cigarette advertisements in 1971. As an early precursor to CM, antitobacco ads reduced the rates of smoking in the United States more than tobacco advertising increased them (68). Soon after, Supreme Court rulings tilted speech rights back toward advertisers and called into question the constitutionality of the Fairness Doctrine (129). By 1987, the Fairness Doctrine was eliminated completely and in 2011 the FCC formally withdrew it (129).

During the 1960s and 1970s, a rising consumer movement argued that government efforts to regulate advertising were not sufficient to protect health and safety (63, 107). Citizen organizations explored their role in countering an underregulated corporate environment. Rising consumer (97), environmental (105), and social (81) movements addressed the role of advertising and marketing in health and social equity. As the government withdrew public protections against the unscrupulous marketing of harmful products, citizen groups began to take on responsibilities that governments were forfeiting (39).

In 1974, a British citizen organization published "The Baby Killer," a pamphlet that documented Swiss-based food company Nestlé's aggressive international marketing of powdered milk as a substitute for breastfeeding (119). This effort led to a worldwide campaign in 1977 to boycott Nestlé products (119). Global boycotts thus became a new tactic within the evolving practice of CM.

The early 1990s saw the rise of "culture jamming" (26), a practice of transforming corporate advertising through parodying advertisements and hijacking billboards in order to transform the messages on these advertisements (87). The practice captured an emerging anticorporate attitude among young activists who used CM to fuel their outrage, "targeting transnational corporations particularly those with very high brand-name recognition" (87, p. ii). Billboard Utilising Graffitists Against Unhealthy Promotions, an Australian-based graffiti movement, used this approach by removing or defacing billboards for tobacco, alcohol, and unhealthy food products (34). In the United States, African American community and church group leaders also defaced or removed billboard alcohol ads, arguing that targeted marketing of unhealthy products to their communities constitutes another form of racism (72).

CM and Tobacco: From California to Truth

In 1990, the California Department of Health Services Tobacco Control Program launched a 14-month $28.6 million tobacco education campaign funded by a statewide tobacco tax (135). The advertising campaign directly attacked the tobacco industry on the basis of its planners'

understanding of the role of advertising in promoting tobacco use. This campaign was credited with contributing to tripling the rate of decline of cigarette consumption in California over the next eight years (116).

In 1997, the state of Florida received an $11.3 billion settlement from the tobacco industry, allocating $200 million for antitobacco youth education. In 1998, the state of Florida launched the first statewide Truth pilot (75). On the basis of state-level success and using available funding through the Master Settlement Agreement, the American Legacy Foundation launched a national Truth campaign in 2000. Truth sought to elicit angry emotions triggered when personal freedom is seen to be threatened by corporate industry manipulation or deception. This was a central and consistent messaging strategy of the Truth campaign from the beginning (75).

Commercial marketers have long known that the goal of any campaign is to engage emotions (40, 46). Tobacco companies elicited the desires for socialization and rebelliousness in order to market cigarettes to young people and women (8, 67, 93, 139). The Truth campaign sought to engage these same feelings by exposing industry efforts to manipulate emotions and deceive consumers. The campaign consciously sought to engage the same emotions, such as rebelliousness, that tobacco companies were using to sell their products to young people (74, 75).

In fiscal year 2001–2002, funding appropriated from the Master Settlement Agreement for tobacco control in California was eliminated when the funds were securitized to address a state budget deficit, a trend followed in other states (125). Nevertheless the success of the California Department of Health Services and the subsequent Truth campaigns in using CM to reduce youth smoking rates raises the question of whether this strategy may be applied to other products such as alcohol and the unhealthy food and beverages that also contribute to noncommunicable disease.

The Rise of Digital and Social Media

The emergence and growth of digital and social media in the 2000s created new opportunities for marketers of tobacco, alcohol, and unhealthy food—and also for CM. For decades, tobacco marketing drew from research indicating that social environments encouraged cigarette consumption (93). Compared with traditional mass media, these new media offered several advantages in shaping these environments: They were less expensive, more suitable for market segmentation and targeted marketing, easier to use to interact with potential consumers, and more immune to parental supervision and government oversight (55). Consequently, social media have been used to market tobacco (124), alcohol (35, 112, 147), food (37, 102), and sugary beverages (43). Moreover, research shows that well-funded industry marketing campaigns designed to create and engage new users reach many more consumers than do health promotion messages that seek to counter the effects of these industry campaigns (24).

Nevertheless, social media provide opportunities for CM to gain access to social networks and disseminate messages that challenge industry marketing practices. Millions of viewers have watched videos that are critical of food industry practices (106), as social media enable individuals to share their disapproval of corporate practices (86). Social media have also played an important role in the new politics of dissent as seen in movements such as the Arab Spring, Occupy Wall Street, and Black Lives Matter. Online platforms provide opportunities for like-minded groups and large populations who are skeptical of corporate hegemony to congregate and communicate across the globe (59, 60, 138).

Media Advocacy and Media Literacy

CM can be used to reach individual consumers and also regulators, influencers of public policy, journalists, investors, and corporate executives. In this way, CM can intersect with media advocacy

and campaigns to hold corporations accountable. Media advocacy, the strategic use of mass media to support community organizing and advance healthy public policy (141), seeks to shift the locus of intervention upstream from individual behaviors to social policies. Consistent with Beauchamp's (16) formulation of public health as social justice, media advocacy aims to strengthen community organizing efforts by creating news around core issues that identifies public officials or bodies responsible for enacting or enforcing relevant policies and using the influence of the media to hold decision makers accountable for creating healthier, more equitable environments (18).

Media advocacy, like CM, seeks to reframe public perceptions of issues so that the public health perspective is evident. It thus shares with CM the goal of exposing the role of corporations and their allies in marketing unhealthy products (44). CM strategies can intersect with media advocacy to generate news coverage and reach the general public (142). Successful tobacco CM campaigns suggest that media advocacy may complement campaigns aimed primarily at individual behavioral change (123).

Promoting media literacy, the capacity to critically analyze and understand media (17), can also intersect with CM as media literacy programs educate youth about the media's influence on knowledge and attitudes (61). Media literacy has been used effectively as a public health strategy for reducing tobacco and alcohol use (13) where it can provide young people with a sense of agency (120, 126). Because media literacy helps youth to question the social norms portrayed in media, these programs may serve as effective components of a comprehensive CM strategy.

Race and Ethnicity-Specific Countermarketing Campaigns

Because tobacco, alcohol, and unhealthy food and beverage marketers target their advertising campaigns at specific population segments (65), some CM campaigns have used the same strategy to undermine these targeted appeals (141). Recent research has already demonstrated that informational campaigns exposing embedded racism in communities of color have resulted in improved health outcomes within those communities (89). This success indicates that exposing racially targeted marketing campaigns may be a promising avenue for CM. The national debate on racism and racial profiling provoked by the police shootings of unarmed African Americans brought to light by the Black Lives Matter movement in the United States (58) may indicate an interest in CM campaigns that describe targeted marketing of unhealthy products to specific vulnerable populations as a type of ethnic profiling. In the 1990s, a successful effort by the Stop Uptown Coalition to block RJ Reynolds from test marketing a new brand of mentholated cigarettes to African Americans in Philadelphia shows the potential for mobilizing communities to resist commercial exploitation of racial identities (12). African Americans in the United States have also led a prolonged campaign to eliminate menthol flavoring for tobacco, built on considerable evidence that compared with unflavored cigarettes, mentholated ones are more addictive and harmful for African Americans (36). More recently, Puerto Rican groups in New York protested the use of ethnic imagery when Coors Beer used the Puerto Rican flag on its beer cans as part of a promotional campaign linked to the Puerto Rican Day Parade (98).

METHODS

To chart developments and identify emerging opportunities in research and practice on CM, we conducted a systematic review of peer-reviewed and other sources to identify descriptions, evaluations, or planning studies for CM initiatives on tobacco, alcohol, or unhealthy food. Because several previous reviews have evaluated the quality of the evidence for the use of CM in tobacco control communications campaigns and established its effectiveness as one component of

comprehensive tobacco control, particularly for youth and young adults (5, 22, 27, 28, 51, 109, 130, 140), this review assesses the relevance of this body of work to CM for alcohol and unhealthy food.

Search Strategy

Our search starts with the first reports of the California tobacco CM and the Truth campaign in Florida in 1998, and it ends with reports published by June 2016. We included articles that provided empirical evidence on the design, planning, implementation, or evaluation of CM initiatives for tobacco, alcohol, and unhealthy food in the United States and other English-speaking countries. We searched PubMed, SCOPUS, Google, and Google Scholar using a variety of search terms, including each product category (i.e., tobacco, alcohol, food and beverages), and variants of the following words: counter-marketing, counter advertising, demarketing, social marketing, and health advocacy.

Our initial screen yielded 87 articles that warranted further review. An examination of references of the included articles yielded another 10 relevant studies. Of the 94 studies, 57 focused on tobacco, 19 on alcohol, and 18 on food. These are listed in **Supplement 1** (follow the **Supplemental Material link** from the Annual Reviews home page at **http://www.annualreviews.org**). Of the 94 articles, 41 were empirical studies: 35 for tobacco, 2 for alcohol, and 4 for food. The alcohol and food empirical studies were needs assessments, elicitation research, or experimental studies and not evaluation studies of field-based CM campaigns.

Supplemental Material

On the basis of the lack of empirical evaluations of CM campaigns for alcohol and unhealthy food, we expanded our search to look for descriptions of CM activities on alcohol or food using such search engines as Google and Lexis/Nexis as well as communications with colleagues working in the field. We included projects for which sufficient information was available to determine whether activities met our definition of CM, identifying 7 projects on alcohol and 9 on food. Our aim was to assess whether the evidence-based practices identified in the evaluation studies of tobacco CM could generate additional practice-based evidence that could advance the study of CM for alcohol and unhealthy food (62).

Characteristics Associated with Success

From the reviews of tobacco communications campaigns we identified common characteristics of CM campaigns that were associated with success, as listed in **Table 1**; the sources for this table are available in **Supplement 2** (follow the **Supplemental Material link** from the Annual Reviews home page at **http://www.annualreviews.org**). We define below each of these characteristics and assess their use in the major tobacco CM campaigns.

In the second part of our review, we determine whether the projects that used CM to counter alcohol and food marketing included these eight key elements of the tobacco CM initiatives. Our main goal was to explore the extent to which lessons learned in CM tobacco were applied to CM projects targeting other products. Our findings are shown in **Table 2.**

FINDINGS

Key Components of Tobacco CM Campaigns

Our process for identifying recurring themes from tobacco CM studies is consistent with our definition of CM. The criteria for our eight common elements of antitobacco campaigns are defined below (see **Table 1**). Not every campaign included all eight elements, but together these characteristics define CM and distinguish it from other approaches to tobacco communication.

Table 1 Characteristics of Major Tobacco Countermarketing Campaigns

Name of campaign/ intervention	Health consequences	Industry manipulation of consumers	Appeals to negative emotions	Campaign disparages existing brand	Campaign tailored			Campaign created its own brand	Campaign criticized industry-targeted marketing	Participants engaged in campaign design, as spokesperson, and/or in message delivery	References (available in Supplement 2)
					By race/ ethnicity	By gender	By age				
National Truth campaign	Yes	Yes	Yes	Yes	Yes	No	Yes	Yes	No	Spokesperson and message delivery	National Truth 1–18
Florida Truth campaign	No	Yes	Yes	Yes	No	No	Yes	Yes	Yes	All	Florida Truth 1–7
California Tobacco Control Program	No	Yes	Yes	No	No	No	Yes	Yes	Yes	Spokesperson and message delivery	California 1–3
Massachusetts	Yes	Yes	Yes	Unclear	No	No	No	Yes	Unclear	Spokesperson and message delivery	Massachusetts 1–3
Mixed markets in multiple states	Yes	Yes	Yes	Yes	No	Yes	Yes	Yes	Yes	Spokesperson and message delivery	Mixed markets 1
Commune	Yes	Yes	Yes	Yes	No	Yes	Yes	Yes	Yes	Spokesperson and message delivery	Commune 1
Total with Characteristic	4/6	6/6	6/6	4/6	1/6	2/6	5/6	6/6	4/6	Design [1] Spokesperson [6] Message delivery [6]	

Table 2 Characteristics of alcohol and food and beverage countermarketing campaigns

Practice-based alcohol countermarketing interventions												
			Intervention included elements on this theme: Yes, No, Insufficient information									
						Campaign tailored						
Organization (Citation)	Campaign	Description	Health consequences	Industry manipulation of consumers	Appeals to emotions	By race/ethnicity	By gender	By age	Criticism of industry targeting by demographics	Campaign disparages existing brand	Campaign created its own brand	Audience engaged in design, as spokesperson, and/or in message delivery
Center for Social Change at the Maryland Institute College of Art, Baltimore Youth and Oliver Youth Counter Ad Group (US) (101)	Beer and Alcohol Ruins Futures (BARF) and #Sippen-Stupid	New media and social media campaigns design and achieve behavioral change through peer-to-peer education	Yes	Yes	Yes	Yes	No	Yes	Insufficient information	Yes	Yes	All
Center for Science in the Public Interest (US) (30)	Campaign for Alcohol-Free Sports TV	Policy-driven campaign that concentrates on removal of alcohol ads from college sports	Yes	Yes	Yes	No	No	Yes	Yes	No	Yes	Insufficient information
Alcohol Concern and Youth Alcohol Advertising Council (UK) (2)	It's The Drink Talking	Youth, 13–24 years, lead new media campaigns to regulate alcohol marketing through policy change	Yes	Yes	Yes	No	No	Yes	Yes	Insufficient information	Yes	All
Alcohol Justice (US) (3)	Stop AlcoPops	Counter-marketing youth movement that dedicates efforts to banning the sales and marketing of AlcoPops	No	Yes	Yes	No	Yes	Yes	Yes	Yes	Yes	All

The American Medical Association Alcohol Policy (6)	Girlie Drinks	Poster campaign that exposes the alcohol industry deliberate marketing to young girls with "girlie drinks" and "alcopops." The poster message targets parents who can advocate for alcohol marketing policy change	Yes	Yes	Yes	No	Yes	Yes	Yes	Yes	Yes	Design and message delivery
Balance (UK) (11)	Minimum Unit Price	Video campaign and petition seeks an increase of alcohol MUP; and regulates the price and promotion of alcohol.	Yes	Yes	Yes	No	No	Yes	Yes	No	Yes	Message delivery
Balance (UK) (10)	See What Sam Sees	Photography and video campaign that presents the alcohol marketing environment from a youth vantage point. The campaign targets adults who can advocate for alcohol marketing policy change	Yes	Yes	Yes	No	No	Yes	Yes	No	Yes	Message delivery

(*Continued*)

Table 2 (*Continued*)

Practice-based food and beverage countermarketing interventions											
			Intervention included elements on this theme: Yes, No, Insufficient information								
Organization (Citation)	Campaign	Description	Health consequences	Industry manipulation of consumers	Appeals to emotions	Campaign tailored			Criticism of industry targeting by demographics	Campaign disparages existing brand	Campaign created its own brand	Audience engaged in design, as spokesperson, and/or in message delivery
						By race/ethnicity	By gender	By age				
University of California San Francisco Center for Vulnerable Populations at San Francisco General Hospital and collaboration with Youth Speaks, a nonprofit San Francisco–based organization (150)	The Bigger Picture	Mixed-media campaign that educates youth on social and environmental factors contributing to type 2 diabetes and encourages consumption behavior change. Short films call attention to industry profits from unhealthy products	Yes	Yes	Yes	Yes	No	Yes	Yes	Yes	No	All
Center for Science in the Public Interest (32)	Change the Tune	Music video with an adapted Coca-Cola jingle that counters Coca-Cola's "Soda is Happiness" message. The video calls attention to consumption behavior change	Yes	Yes	Yes	No	No	No	No	Yes	No	None

Founded by pediatrician Kevin Strong (Maine) (47)	Dunk the Junk	A multimedia campaign drawing on popular culture introduces the slogan "Defeat Soda Tron," the evil soda monster, and encourages youth to rebel against unhealthy foods and beverages	Yes	Yes	No	No	No	Yes	No	Yes	Yes	All
Cancer Council NSW (Australia) (25)	Junk Busters	Multimedia campaign educates parents to take action against unhealthy food marketing that targets children. The overarching goal is increased regulation of unhealthy food marketing	Yes	Yes	Yes	No	No	Yes	Yes	Yes	No	Message delivery
California Center for Public Health Advocacy (84)	Kick the Can	Website provides information on national campaigns that advocate for reduction of sugar-sweetened beverage consumption and counter beverage industry tactics	Yes	Yes	Yes	No	No	No	Yes	Yes	No	None

(*Continued*)

Table 2 (*Continued*)

Practice-based food and beverage countermarketing interventions												
			Intervention included elements on this theme: Yes, No, Insufficient information									
Organization (Citation)	Campaign	Description	Health consequences	Industry manipulation of consumers	Appeals to emotions	Campaign tailored			Criticism of industry targeting by demographics	Campaign disparages existing brand	Campaign created its own brand	Audience engaged in design, as spokesperson, and/or in message delivery
						By race/ethnicity	By gender	By age				
Dewey & Associates in collaboration with public schools (Tampa Bay, FL) (85)	Kidz Bite Back	Designs youth-led countermarketing campaigns with brand appeal that emphasizes consumption behavior change.	Yes	Yes	No	No	No	Yes	Yes	Yes	Yes	All
Shape Up San Francisco (114)	Open Truth	Multimedia campaign exposes soda industry marketing tactics aimed toward youth and communities of color. Open Truth promotes change of consumption behavior and industry marketing policy	Yes	Yes	Yes	Yes	No	Yes	Yes	Yes	No	Spokesperson

Center for Science in the Public Interest (31)	The Real Bears	Animated health satire of Coca-Cola's polar bears that reveals long-term health consequences of drinking soda. Theme song "Sugar" is performed by popular artists Jason Mraz and MC Flow	Yes	Yes	Yes	No	No	No	Yes	Yes	Yes	None
Prevention Institute (121)	We're Not Buying It	Multimedia campaign that reveals deceptive marketing to children, exposes industry counter claims, and provides facts with intentions of changing consumption behavior and policy	Yes	Yes	No	No	No	No	Yes	Yes	No	None

(*Continued*)

Table 2 (*Continued*)

Practice-based food and beverage countermarketing interventions												
			Intervention included elements on this theme: Yes, No, Insufficient information									
Organization (Citation)	Campaign	Description	Health consequences	Industry manipulation of consumers	Appeals to emotions	Campaign tailored			Criticism of industry targeting by demographics	Campaign disparages existing brand	Campaign created its own brand	Audience engaged in design, as spokesperson, and/or in message delivery
						By race/ethnicity	By gender	By age				
Alcohol totals			6/7	7/7	7/7	1/7	2/7	7/7	6/7	3/7	7/7	Audience engaged in design [4/7], as spokesperson [3/7], and in message delivery [6/7]
Food and beverage totals			9/9	9/9	6/9	2/9	0/9	5/9	7/9	9/9	3/9	Audience engaged in design [3/9], as spokesperson [4/9], and in message delivery [4/9]

Communicating the adverse health consequences of smoking. Evaluations of public education campaigns from as far back as 1967 have demonstrated the effectiveness of highlighting the health consequences of tobacco use (79). Although the core messaging strategy of the California Department of Health Services and Florida Truth campaigns was to expose deception and manipulation by the tobacco industry (73), subsequent CM campaigns in tobacco, notably the nationwide Truth campaign, clearly communicated the health consequences of smoking within an anti-industry context. The Truth television advertisement featuring body bags being deposited outside tobacco company headquarters and the Marlboro label substituting for a corpse toe tag in a magazine ad illustrate this theme.

Industry manipulation of consumers. Messages that highlight deceptive or predatory tobacco industry practices are central to the CM campaigns and have been shown to reduce smoking intentions and behaviors (74). Practices that CM campaigns have targeted include industry denial that tobacco is addictive, distortion or obfuscation of scientific findings on the harms of tobacco, and targeted marketing to youth and other vulnerable populations. The early Truth billboard that read "No wonder tobacco executives hide behind sexy models" and featured a tobacco executive wearing a bikini illustrated this industry manipulation message.

Appeal to negative emotions. Seeking to elicit emotions such as outrage and resistance to manipulation has been a successful component of CM tobacco campaigns, especially those focusing on youth (19). Truth magazine ads showing stitched eyes, ears, and mouths of youth convey the message that tobacco companies seek to prevent young people from seeing, hearing, and telling the truth about industry marketing practices.

Disparagement of specific brands. Campaigns used messages and images that challenged, mocked, or undermined corporate brand images. A post–Master Settlement Agreement ad run by the California Department of Health Services in 1998 featured one Marlboro Man telling the other, "Bob, I've got emphysema." Another showed the Marlboro Man's horse dead from exposure to secondhand smoke.

Tailoring campaigns by demographics or psychographics. Substantial empirical evidence indicates that tailoring campaigns by race and ethnicity (5) and "peer crowd" (49, p. 79) can be effective in reaching population segments. The Commune campaign, which reduced smoking among young-adult hipsters in San Diego, is an example of successful psychographic tailoring to reach a segmented audience (94).

Criticizing industry targeting of vulnerable populations. Some campaigns highlight marketing that targets vulnerable populations such as children, Blacks, or immigrants. For example, Truth ads stated that "[t]obacco gives black males 50% more lung cancer than white males."

Establishment of CM campaign brand. Some CM includes design elements such as a logo, which differentiates the brand from its competitors (48). The Truth campaign featured a clear and deliberate strategy to market its antismoking anti-industry message as a brand with a logo and specific color schemes (50). Postcampaign reviews have listed Nike (51), Abercrombie (75), Sprite (50), and Burton Snowboards (51) as models for the Truth brand. Although there are no universally accepted criteria for what constitutes a brand, one simple measure is whether the campaign has been given a name, such as for Truth and recent Commune and HAVOC (49).

Engaging users in all phases of the campaign. Evidence from tobacco CM studies indicates that target audience engagement through all phases of a campaign may contribute to success. Three stages of engagement are described: (*a*) meaningful input on campaign design, (*b*) peers as spokespeople for the campaign, and (*c*) interactive peer participation in message delivery. Social-cognitive theory, which places a strong value on self-concept and social influence, specifically connects the role of peer influence on transitions in smoking behavior (132). However, the Truth and Commune campaigns went beyond merely showcasing youth and young adults in their campaigns by engaging their audiences throughout campaign development and execution (50, 75, 94, 113, 133).

As shown in **Table 1**, each of the major tobacco CM campaigns used four of these eight elements (industry manipulation of consumers appeals to negative emotions, creation of its own brand, and engagement of users in the campaign) and five of six also tailored the campaign by age. These five elements constituted core components of the major tobacco CM campaigns. On average, these six campaigns employed 6.8 of the 8 elements.

Use of Key Elements from Tobacco CM in Projects to Address Alcohol and Unhealthy Food and Beverages

The second step of our review considered CM projects that targeted alcohol and unhealthy food and beverages. For the projects that we identified, we evaluated for the presence of the eight key elements from our review of the tobacco CM literature. As shown in **Table 2**, we found that many of these projects implemented key elements of the tobacco CM campaigns.

Alcohol Countermarketing

A 2002 review of counteradvertising for alcohol found some evidence of effectiveness, although some alcohol industry–sponsored public service announcements designed to reduce youth drinking were found to encourage risky drinking (1). In general, the studies described in this review did not meet our definition for CM because they did not expose or seek to denormalize industry marketing practices. Two studies examined alcohol industry marketing practices to inform future alcohol CM campaigns. The first analyzed internal alcohol industry marketing documents to identify ways that alcohol advertising in the United Kingdom violated industry codes, e.g., by implicitly promoting drunkenness or targeting young girls (71). As with tobacco, these insights provide possible targets for denormalization. The second study examined the role of alcohol industry messages on social media, finding that intentions to share alcohol industry messages predicted intentions to consume alcohol, suggesting possible intervention points for social media alcohol CM (4).

As shown in **Table 2**, all alcohol CM campaigns employed at least four of the successful elements identified from tobacco CM campaigns.

Food and Beverage Countermarketing

Supplemental Material

Most of the peer-reviewed studies on food and beverages we identified described food industry marketing, not CM (see **Supplement 1**; follow the **Supplemental Material link** from the Annual Reviews home page at **http://www.annualreviews.org**). Two experimental studies assessed whether exposure to counteradvertising messages could reduce the susceptibility of Australian children (mean age 11) (41) and parents of Australian children aged 5–12 (42) to front-of-package promotions of unhealthy food. The authors found that both children and parents rated the promotional messages as less believable and the product as less healthy after

viewing the counteradvertising message. However, children who misunderstood the counter messages rated the unhealthy product more favorably after viewing the counter ads, which suggests that misunderstood ads may have unintended negative consequences.

Two other studies sought to expose food industry use of social media to promote unhealthy food. They found that children and youth were highly engaged with these advertisements (78, 145), suggesting, as with alcohol, that CM campaigns for unhealthy food that disrupt engagement may reduce the influence of such advertising.

Of the nine food and beverage CM projects (8 in the United States and 1 in Australia) shown in **Table 2**, all employed 3 of the 8 key elements from tobacco CM campaigns and 3–7 projects included the other 4 elements. Insufficient information was available to assess whether these projects targeted by race/ethnicity, age, or gender, although most seemed aimed at either youth or parents. These projects included, on average, 5.3 of the 8 key elements we assessed.

Implications of Lessons from Tobacco CM for Food and Alcohol

Because there is no universally recognized database of all food and alcohol CM campaigns, the projects we reviewed may not be representative of all CM initiatives on alcohol or food. Nevertheless, this dissemination of elements of evidence-based practice into other domains suggests that those working to reduce the consumption of tobacco, alcohol, and unhealthy food are exchanging information on CM. Similar exchanges among those using strategies such as regulation, taxes, and litigation have also been documented (20, 56, 103).

Several decades of evaluation—and advocacy—have established tobacco CM campaigns as an evidence-based practice. By systematically studying unhealthy food and alcohol CM and integrating evidence-based practice and practice-based evidence, those in public health may be able to accelerate the translation of these strategies into interventions that can reduce the burdens of noncommunicable diseases.

Our review of CM activities for tobacco, alcohol, and unhealthy food showed important similarities and differences described here for each of the essential elements.

Addressing health consequences. Before the Florida Truth campaign, formative research indicated that knowledge levels among youth about the dangers of tobacco were high (75). This preknowledge allowed the campaign to leverage that understanding into messages that unveiled, vilified, and otherwise undermined industry practices.

Later tobacco CM campaigns incorporated the health effects of smoking into messages about the manipulation of cigarette production to include ammonia and concealment of knowledge about nicotine addiction. Dissemination of these facts informed the call to action among youth to rebel against and resist deceptive tobacco industry messages and practices (51).

Can these processes be applied to campaigns for unhealthy food and beverages? Surveys show that levels of understanding of the dangers of binge drinking and unhealthy foods and beverages vary considerably among different population groups (66, 83, 115, 127), which suggests the importance of population-specific tailoring. For tobacco, public understanding of the harmful effects of the product took place over decades. The levels of knowledge among children and youth about unhealthy food and beverages are not now at the levels that they were for tobacco when Truth was introduced (41, 50, 75). However, increased media coverage of the harmful effects of sugary beverages and the role of the soda industry in distorting and manipulating science (82, 111) may set the stage for effective CM campaigns. More research on the associations between health literacy and receptivity to specific anti-industry messages may inform effective CM campaigns for unhealthy food.

Some analysts have argued that criticizing the food or alcohol industries is more challenging than criticizing the tobacco industry (100, 137). Food and alcohol are ubiquitous in our society and are perceived to have health benefits; however, messages highlighting adverse health consequences of alcohol have been shown to reduce urges to drink alcohol among young people (134).

Further research is necessary to determine whether CM campaigns will be more effective than traditional health campaigns that target individual behavioral change. Given the intense and variable relationships that individuals, families, and cultures have with alcohol and food, participatory research is warranted (100). In general, CM campaigns that rely on eliciting fears about the health consequences of using a particular product must take into account the population's level of knowledge about its health effects. Elicitation research that maps the beliefs of various populations is a critical formative research area for food and alcohol CM.

Criticism of industry manipulation. Criticism of industry practices is a fundamental component of CM campaigns in tobacco that has been used in several alcohol and food and beverage CM projects. Research should assess whether anti-industry messages enhance positive health behavior change as has been demonstrated with tobacco (74) for alcohol and unhealthy food and beverages. Although such research has been conducted in the realm of sugar-sweetened beverage policy change (80), studies of the effects of such messaging on health behavior are less developed.

Appeals to emotions. Although Truth and its successors appealed to youths' need to assert their independence and individuality by triggering rebelliousness, other CM campaigns can engage different types of emotions. For example, emotions related to young women's desire not to be gender stereotyped or parents' fears for their children's well-being can be activated in CM campaigns that challenge marketing of alcohol to girls or manipulation of children to influence their desire for sugary breakfast cereals.

Although the research that led to Truth was specific to tobacco (75), the success of these campaigns in reclaiming the same emotions used by tobacco companies to engage with potential consumers may guide countermarketers of alcohol and unhealthy food. By providing alternative means to fulfill similar psychosocial needs, CM can appeal to values such as rebelliousness and socialization but also friendship (CM for alcohol), community (for alcohol and unhealthy food), or aspirations for being a good parent (for unhealthy food) (8). Emotions relating to pride and heritage frequently used by soda companies to market to Latinos, for example, can also be used for CM campaigns to expose and undermine these industry practices.

Tailoring and segmentation. Market segmentation or specifically tailoring campaign elements to subpopulations (9, 64, 90) has shown promise in some tobacco CM that includes messages on industry manipulation (50, 94). The national Truth campaign evolved into a multiethnic campaign with special components tailored to appeal to African American, Latino, and Asian youth, a characteristic identified as a key to its success (50). However, some research has suggested that Truth did not speak clearly to Latino youth (52). Given that patterns of alcohol and unhealthy food consumption vary by class, race/ethnicity (57), gender (146), and other characteristics, CM can enhance effectiveness by tailoring messaging to subpopulations.

Campaigns may also need to be segmented by other characteristics, including psychographic and cultural factors such as values, activities, aspirations, or lifestyle (49). Recent success using components of CM strategies to reduce smoking rates among the young adult hipster population (94) indicates that psychographic segmentation is a promising area for tobacco CM and perhaps alcohol and food as well.

Criticizing industry demographic targeting. The exposure of racial and ethnic targeting is a current area of focus for CM campaigns about sugar-sweetened beverages (70, 110). For example, upon passage in 2016 of a 1.5-cent-per-ounce increase on sugar-sweetened beverages in Philadelphia, when the industry contended that the tax disproportionately affects poorer people, the mayor stated that these arguments were "hypocritical frankly because big soda companies have been marketing to poor neighborhoods for generations" (54).

Disparaging specific brands. Because people are often more likely to be aware of the corporation behind well-known brands, CM efforts should look for opportunities for increasing the vulnerability of unhealthy consumer brands. Our review of recent food and alcohol campaigns found that this was a common practice especially for those campaigns seeking to reduce individual consumption.

Creation of a countermarketing brand. Because brands seek to build relationships with individuals, peer-to-peer identity can be an important component of any brand, as Truth demonstrates. In fact, evidence from Truth (54, 75, 113, 133) and more recently Commune (94) tobacco control campaigns indicates that a brand with a strong peer-driven focus may contribute to these campaigns' success in reducing smoking rates. In recent years, tobacco, alcohol, and food marketers have used social media, viral marketing and other strategies to create "brand ambassadors" (102) and "brand communities" (53). These users view themselves as a tribe of consumers organized around the lifestyle and ethos of the brand and a hashtag. For marketers, the rationale is that brand community members buy more, remain loyal, and reduce marketing costs through word-of-mouth support. To what extent and in what ways CM campaigns on alcohol and food can offer alternative communities with as much or greater appeal will require additional research and field tests. Similarly, research will need to determine whether public criticism of industry efforts to create "brand communities" around products associated with premature death and preventable illness can generate the outrage that was an important part of Truth's appeal (50).

User engagement. The peer-driven component of Truth reflects evidence from both commercial marketing (15) and demarketing of alcohol (21) that peer-to-peer communication is a critical component of successful CM. Because peer influence is greater in products with high social involvement, the role of relatable peers as part of the brand can be a critical influence over the brand's effectiveness (38, 118, 148). Strong peer-to-peer components within a branded food or alcohol CM campaign may contribute to its success, a process that warrants further research.

Meaningful audience interaction throughout the campaign can play an essential role in peer-to-peer CM engagement processes. With Truth, this included such tactics as the "truth truck" (75) engaging with youth at concerts. The Commune campaign featured events with significant local artist involvement and brand ambassadors who interacted directly with their audiences (94).

CONCLUSIONS

Upstream interventions affecting health environments can be regarded as prerequisites for a society replete with healthy choices (76). Indeed, CM campaigns may be most effective if they consider both individual and policy-level interventions. In some cases, individual interventions may not be warranted. For example, in the United Kingdom, research indicates that responsible drinking campaigns are inherently ineffective, given the existing marketing and policy environment (137). While CM may be able to modify that, a policy approach might be the more effective approach.

By integrating CM with other public health strategies and expanding potential audiences to include policy makers and advocates as well as consumers, this strategy may make multiple contributions to health (128). For alcohol, for example, a regulatory-based campaign directed at policy makers to communicate the dangers of binge drinking and the potential for policies to restrict industry marketing and retail practices may be an effective approach. For food CM efforts, parents of young children vulnerable to the harms of these products may constitute the most receptive audience.

Media advocacy represents a promising area for CM where the goal is not just individual behavior change but also regulation or policy change. Through the use of earned media, this strategy can be a critical method to overcome this financial barrier to fair and balanced health communication. A recent example is the incorporation of the message into news stories reporting that soda companies such as Coca-Cola are "Hispandering," targeting Hispanics, in their advertisements (104).

For tobacco control, denormalization of the health-damaging practices of the industry helped to change public opinion and set the stage for wider policy changes to support prevention (69, 96). By shifting public opinion on the acceptability of the food and alcohol industries' targeted marketing, appeals to children and youth, and obstruction of public health regulation, alcohol and food countermarketers may similarly be able to accelerate reforms in other prevention policy domains such as taxation, limits on advertising, and pricing.

CM efforts in tobacco, alcohol, and food face several challenges. One of these is the phenomenon of corporate social responsibility campaigns, which serve as a countervailing force to the promise of CM. From the Nestlé boycott during the 1970s and 1980s (131) to the tobacco reduction campaigns before, during, and after Truth (24), industry opposition to CM has been aggressive, sustained, and creative. One component of the industry's strategy has been corporate social responsibility campaigns used to oppose tobacco regulation and CM and now widely used by processed food and beverage companies to influence public opinion and government policy away from policies such as taxes, warning labels, and procurement regulations (43). An important goal of these industry campaigns, one that could be contested by CM, is to reframe the public debate, e.g., the soda industry's efforts to downplay the role of soda in obesity and diabetes while emphasizing the importance of physical activity.

Despite the promise that social media holds for community-organized and peer-driven campaigns, research indicates that alcohol, tobacco, and processed food companies often have a reach that far exceeds the capacity of community-organized grassroots health-focused social media (24). Campaigns such as "Defeat SodaTron" and "Dunk the Junk" center on YouTube videos with views that number in the hundreds, whereas corporate food company commercials often generate millions of viewers.

Perhaps the most significant challenge for alcohol and food CM is the issue of scale. Numerous analyses have indicated that the success of Truth would not have been possible without "real money," i.e., the two-year $200 million advertising campaign employed in Florida beginning in 1998 and the Master Settlement Agreement funds used for the national Truth campaign (75). Whether the public health community and elected officials will be able to generate the resources needed to bring CM to scale remains an open question. In some jurisdictions, local officials are using revenues from soda taxes to fund public education campaigns as a possible strategy for the future (95). Others have proposed a prevention fund with multiple streams of support as a possible revenue source (122).

CM campaigns on alcohol and food can reach scale when they are part of organized multisectoral efforts, including those of government agencies, community organizations, and advocacy groups that seek to shape and sustain responses to the threat of unhealthy industry practices, a

goal achieved with tobacco during the 1990s and early 2000s. The American Stop Smoking Intervention Study for Cancer Prevention (ASSIST) program, a partnership between the National Cancer Institute and the American Cancer Society, which supported tobacco control for 17 state health departments, is an example of the coordinated effort that occurred around tobacco control (108).

Our review has shown that food and alcohol CM campaigns can apply the lessons learned in tobacco control. To sustain and expand these efforts, these campaigns will need to coordinate more seamlessly with upstream policy efforts. To achieve their full potential, they must be integrated with sustained and coordinated multisectoral efforts to reduce and counter the marketing of alcohol and unhealthy food, which are among the primary contributors to global premature deaths, preventable illnesses, and national and international inequalities in health.

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