



Leveraging corporate social responsibility to improve consumer safety of dietary supplements sold for weight loss and muscle building

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Abstract

The potential dangers associated with dietary supplements sold for weight loss and muscle building are well documented and increasingly garnering the attention of the media, public, and government leaders. Public health professionals have an opportunity to improve population health in the context of dietary supplement use by translating scientific evidence into action. In this commentary, we discuss the potential to motivate corporate social responsibility (CSR) among manufacturers and retailers of dietary supplements sold for weight loss and muscle building. We examine levers available to public health professionals for generating voluntary corporate self-regulation by reviewing examples from successful CSR initiatives in other domains of public health and offering recommendations highlighting effective advocacy strategies. We encourage public health professionals to use one or multiple advocacy strategies to improve consumer protections for dietary supplements sold for weight loss and muscle building.

Keywords

Corporate social responsibility, CSR, Dietary supplements, Weight loss, Muscle building, Public health campaigns

INTRODUCTION

In early 2015, the New York attorney general's office accused several companies, including Target[®], GNC[®], Walgreens[®], and Walmart[®], of selling fraudulent and harmful herbal supplements and demanded removal of these products from their shelves [1]. Two months later, the attorneys general of New York, Connecticut, District of Columbia, Hawaii, Idaho, Indiana, Iowa, Kentucky, Massachusetts, Mississippi, New Hampshire, Northern Mariana Islands, Pennsylvania, and Rhode Island sent a letter to US Congress members calling for increased action on herbal supplements and increased authority for the Food and Drug Administration (FDA) to regulate supplements [2]. Then in November 2015, the US Justice Department filed criminal charges against the manufacturer of the muscle-building supplements Jack3d and OxyElite Pro for adulterating its products with dangerous ingredients and arrested several company employees [3].

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Implications

Practice: Public health professionals who are concerned about the risk that inadequately regulated dietary supplements sold for weight loss and muscle building pose to the health and safety of youth and other vulnerable consumers should consider working in coalition with community stakeholders advocating for improved corporate social responsibility regarding the advertising and sale of these products.

Policy: The persuasive power of campaigns to motivate corporate social responsibility to improve safety of dietary supplements will be strengthened if similar efforts for change are pursued simultaneously in the legislative and executive branches of government, such as in state legislatures, offices of state attorneys general, and agencies with jurisdiction over consumer protections.

Research: Policy and organizational research will be needed to evaluate campaigns designed to motivate corporate social responsibility for dietary supplements and identify the most effective strategies for catalyzing changes that improve consumer safety.

These recent actions reflect the growing momentum to protect consumers from the dangers of inadequately regulated dietary supplements.

Dietary supplements include a broad category of products, but we have focused exclusively on supplements sold for weight loss and muscle building in this paper because of their widespread availability and use, inefficacy, well-documented harm to consumers, deceptive marketing, and potential for abuse by vulnerable populations [4–6]. These supplements, including those containing laxatives and diuretics, are sold online, in health and fitness stores, and at major retail pharmacies [7] and are appealing to consumers because they often claim to offer fast, healthy, and easy results. However, experimental studies have found no significant association between the majority of

supplements and sustainable weight loss [5]. Serious health consequences can result from use of some supplements, including myocardial infarction, stroke, gastrointestinal impairment, organ damage, and death [6]. Long-term use of muscle-building supplements may increase risk of developing testicular germ cell cancer [8], and excess protein intake is associated with damage to the bones, liver, and kidneys [9]. A recent Centers for Disease Control and Prevention study estimated that over 23,000 emergency room visits per year in the USA are associated with adverse experiences due to supplement use [10]. Use of these products is prevalent across genders, racial/ethnic groups, and socioeconomic strata and is especially concerning for adolescents and individuals with eating disorders, body dysmorphic disorder, or other problems with body image [11–13].

Despite the well-documented dangers of these products, the sale of dietary supplements of all types exceeded \$30 billion in 2011 in the USA [14]. Since the passage of the 1994 Dietary Supplement Health and Education Act (DSHEA), the existing federal regulatory process is largely reactive in that the FDA does not have the authority to prescreen supplements before sale [7]. Concurrently, self-assessment and self-regulation on the part of the manufacturers have not proven to be effective. A 2014 study of 27 dietary supplements banned by the FDA between 2009 and 2012 revealed that 67 % of products tested still contained banned substances a mean of 11.5 months after the substances were recalled by the FDA [15]. In addition, independent laboratory researchers have revealed false labeling of supplement ingredients, misreporting of caffeine quantities [16], and presence of steroids and heavy metals [17], and analogs of banned compounds. [18].

Given the associated risks and the current regulatory landscape, it is important to consider incentivizing corporations to be more socially conscious in their manufacturing and sale of these products. The recent heightened public scrutiny of the industry presents an opportune moment for public health professionals to improve population health by promoting corporate social responsibility (CSR). CSR refers to the idea that corporations should impact social, environmental, and economic spheres of society in positive and sustainable ways [19]. Action by health professionals can induce CSR directly through advocating for legal mandates or can work through changing the balance of economic and ethical incentives such that corporations have greater motivation to voluntarily change their practices in the absence of a legal mandate.

In this paper, we give examples of actions that can be taken to induce CSR for supplements sold for weight loss and muscle building. A mixture of legislative tactics, legal action, community advocacy, and strategic communications can serve to create economic and ethical incentives for corporations to change their practices to be more socially conscious.

We conducted field visits to major dietary supplement retailers and consulted with 13 experts from various fields. Our experts included four academics

working in public health, business, and medicine; three pharmacists, including one with research and professional specialization in herbal supplements; one registered dietician; four advocates, two from eating disorder advocacy organizations and two from nonprofit organizations specializing in consumer rights; and an executive of a major retail pharmacy. The experts were invited for interviews based on their significant contributions to their respective fields. Each of these fields addresses the issue of leveraging CSR from a different academic, research, advocacy, or policy perspective. Our paper draws on their input and existing literature to review the lessons learned from CSR in other sectors and then offers recommendations for increasing CSR in the context of dietary supplements sold for weight loss and muscle building.

Lessons learned about CSR

Case studies from various sectors including tobacco [20], food [21], and the environment [22] highlight CSR's potential for positive impact. In some cases, corporations self-regulated to stave off legislative action or public censure. For example, chemical companies in the 1970s released their own policies on waste removal and environmental protection before a regulatory framework was drafted [22]. Legislative advocacy also can lead to voluntary changes in industry standards above and beyond what may be mandated through legislation. For example, in 2014, pharmacy retailer CVS Health[®] announced that it would ban the sale of tobacco products nationwide in its retail outlets. Notably, this announcement by CVS Health[®] occurred after local activism in a number of municipalities across the United States had achieved success in prompting legislative bans on cigarette sales in pharmacies and set the precedent for bans in larger municipalities and states [23].

Self-regulation is likely to be more meaningful when it is motivated by more than public relations desires and is integral to an organization's branding and mission. CVS Health's[®] decision to ban the sale of tobacco products is expected to be costly upfront: tobacco sales comprise up to \$1.5 billion of the company's annual revenue [20]. However, the banning of tobacco products was an important facet of the company's rebranding strategy as it moved away from CVS Caremark[®] to CVS Health[®] and sought to present itself as an important health care provider.

Critics of CSR would certainly highlight the delayed response by corporations and lack of accountability and transparency [22] associated with corporate self-regulation. For example, CSR in the food industry has been criticized as not being robust enough to meaningfully improve population health. These challenges are important to anticipate, and a balance must be struck in pressuring corporations to change and collaborating with them for transparency. The recommendations below draw from these lessons, and the views of experts consulted to further discuss strategies through which positive CSR can be achieved in the

context of dietary supplements sold for weight loss and muscle building.

RECOMMENDATIONS

We recommend that public health professionals use a multi-pronged approach and collaborate with a diverse group of stakeholders to promote CSR to improve consumer protections against dietary supplements sold for weight loss and muscle building.

Legislation

The experts we consulted highlighted how legislative advocacy by health professionals can help induce changes in corporate practices. Legislative tactics can be varied and creative, using federal and state lobby days to involve consumers in educating lawmakers, allying with “champion” legislators to file bills, and persuading lawmakers to write “Dear Colleague” letters to the attorney general or other offices in the executive branch of government, such as the FDA, with jurisdiction over the issue. Public health professionals should work closely with health law specialists to identify viable legislative strategies informed by expert knowledge of legal precedent through statute and case law and appropriate jurisdiction of government agencies. Legal scholars have offered a range of viable strategies for addressing the problems posed by underregulation of dietary supplements, and one such report [5] directly spurred successful public health efforts to introduce new legislation in Massachusetts. In January 2015, Rep. Kay Khan filed a bill in the Massachusetts State Legislature to ban the sale of supplements sold for weight loss and muscle building to minors and require the products to be moved behind the counter in all retail establishments (<https://malegislature.gov/Bills/189/House/H3471>).

Clinicians

Clinicians can help to shift the balance of economic and ethical conditions to incentivize CSR through issuing expert position statements and participating in legislative advocacy via professional organizations, through connecting patients with adverse event reporting systems, and through collaborating with consumer rights networks. Clinicians, though, are not uniformly knowledgeable about dietary supplements. In a recent study of community pharmacists’ therapeutic knowledge of dietary supplements, the average percent correct on a standardized test was only 64 % [24]. Still, it is not uncommon for pharmacists and dietitians to have to consider the adverse effects and interactions of dietary supplements when consulted by consumers. Therefore, it is important for health professionals to educate themselves about the potential dangers of dietary supplements, especially those sold for weight loss and muscle building, due to inadequate regulation and to educate consumers and government officials, such as lawmakers and attorneys general.

Advocacy through clinical professional societies is a powerful means for clinicians to exert influence. For instance, in addition to engaging in legislative advocacy via their professional societies, public health professionals can publish expert position statements on the issues via professional societies. Organizations that may have an interest in advancing position statements on the problems posed by underregulation of dietary supplements may include the Academy for Eating Disorders, American Academy of Child and Adolescent Psychiatry, American Academy of Family Physicians, American Academy of Pediatrics, American Medical Association, American Pharmacists Association, American Public Health Association, Society for Adolescent Health and Medicine, Society of Behavioral Medicine, and among others. All of these strategies listed above available to clinicians have the potential to help incentivize CSR to improve consumer safety in the dietary supplement industry.

Consumer rights advocates

Consumer rights advocates are deeply involved with ground-level work and may be connected to communities, individuals, and their families negatively affected by dietary supplements sold for weight loss and muscle building. They can garner testimonials and facilitate community buy-in so that advocacy efforts are not exclusive to academics or health professionals. Examples of relevant advocacy groups include organizations concerned with eating disorders (e.g., Eating Disorders Coalition, Multi-Service Eating Disorder Association, National Eating Disorder Association), groups concerned with consumer safety and product misuse or abuse (e.g., Center for Science in the Public Interest, National Advisory Council on Drug Abuse, Virtual Liver Network), and groups concerned with child and adolescent health (e.g., Children’s Alliance, Children’s Defense Fund). Groups like these can mobilize civic engagement by hosting petitions or demonstrations. Public health professionals can strengthen the lobbying efforts of advocates by sharing the latest research on dietary supplement advertising, use, product composition, and adverse effects.

State attorneys general

Attorneys general at the state level are tasked with protecting and advocating on behalf of consumers. US state attorneys general have already taken important steps to strengthen their efforts to enforce regulation pertinent to the supplements industry. State attorneys general have authority to collect consumer claims and pursue action even if legislative bodies do not [7]. They can serve as powerful legal pressures on corporations to self-regulate, as illustrated by GNC[®]’s recent decision to strengthen its testing procedures in response to the New York attorney general’s investigation of the company’s products [1]. Clinicians and consumer rights advocates can empower and refer patients to state attorney general offices to file complaints and share their experiences with supplement

use. The momentum generated by the ongoing actions of attorneys general can be leveraged by advocates to lobby for legislation and increased scrutiny of the dietary supplement industry.

Corporations

Even in the context of increasing regulatory action and enforcement by the government, advocacy campaigns must be open to inviting supplement manufacturers and retailers to the discussion table. Such collaboration has the advantage of involving all relevant stakeholders and gives corporations the opportunity to improve their public perception, amid public scrutiny, and potentially maintain their customer base and profits.

Furthermore, corporations can promote their own CSR strategies as distinctive and superior to those of their competitors' or collectively take on socially conscious policies through industry associations. Examples of the latter include the health, safety, and environmental regulations adopted by the ocean cruise industry [25], regulations on food advertising and labeling agreed upon by various food production companies [21], and a recent initiative by six major candy corporations (including the brands Brach's Lemonhead, Ghirardelli, Jelly Belly, Peeps, Mike and Ike, and Welch's Fruit Snacks) that agreed in March 2016 to stop advertising candy to children under the age of 12 years [26].

From the perspective of public health professionals and other community stakeholders, collaboration with corporations has the potential to produce greater corporate transparency and accountability and also public input into the corporate practices adopted in the name of CSR.

Media

Another important strategy for shifting the balance of economic and ethical conditions to incentivize CSR is to influence consumer attitudes and behavior towards a corporation's or industry's products and the attitudes and behavior of policymakers towards improving regulations. Media messaging can inform consumers and policymakers of the poor efficacy and potential harm of dietary supplements for weight loss and muscle building and shift social norms against a product. For media messaging to be effective, it must be clear, accurate, and salient, and it must come from a reputable source and use persuasive framing [27–29]. An example of compelling messaging is the Friends Don't Let Friends Drive Drunk Campaign, with which 90 % of Americans are now familiar 20 years after its introduction [30]. Furthermore, while there is a vast body of evidence that demonstrates the inefficacy and potential harm associated with weight-loss and muscle-building supplements, statistics alone are not sufficient for increasing CSR or for shifting consumer attitudes and behavior. The most common recommendation from our experts was for bringing forth more personal testimonials. These stories must be presented

strategically. For campaigns advocating for better regulation of weight-loss or muscle-building supplements, experts noted that key “asks” could involve increased FDA regulation, banning sales to minors, or banning such products altogether. In addition, personal testimonials can be strategically used to raise consumers' suspicions about the safety and efficacy of the products with a goal of reducing consumer demand for the products [27–29]. However, these asks are distinct from one another and campaigns may wish to focus on one or two such goals to make their messaging most impactful. Social media, especially, can be leveraged in disseminating advocacy campaigns. For example, online platforms such as [Change.org](#) can serve as powerful tools: Users can create petitions and amass support to compel legislation or legal action and CSR to improve consumer protections. Relevant examples include successful petitions that prompted the teen magazine *Seventeen* to limit the use of digitally altered images of models [31] and Facebook's retraction of the “feeling fat” emoji [32]. Community advocates can effectively utilize social media campaigns, but they should be well coordinated with broader advocacy efforts so that the success of a viral campaign is sustainable. Importantly, social media campaigns organized by community advocates can also impact the consumer demand, for instance as mentioned above in the case of consumers of *Seventeen* magazine demanding unaltered images [31]. If reductions in consumer demand for the products—and subsequently reduced profits—were to be achieved through a combination of effective mass media communications and use of social media targeting consumers, the position of public health professionals would be further strengthened to motivate CSR.

CONCLUSIONS

Dietary supplements sold for weight loss and muscle building have been consistently shown not to lead to long-term, healthy weight loss or strengthening and instead are linked to a range of adverse effects, including death. In addition, they are prone to abuse by vulnerable consumers, such as adolescents and individuals with eating disorders, body dysmorphic disorder, and other body image problems. Current FDA regulation of these products is limited and fails to protect consumers adequately. This problematic scenario can be mitigated by shifting the balance of economic and ethical incentives to motivate corporations that manufacture and sell these supplements to self-regulate in a socially responsible way.

One criticism of taking a CSR approach to addressing the public health threat posed by dietary supplements is that CSR should not be encouraged for products that have no redeeming value. It can be argued that unlike alcohol, which poses health risks, but also generates benefits for consumers, dietary supplements sold with promises of weight loss or muscle building at best offer no benefits and at worse cause considerable harm. In an ideal world, products offering no value

that pose a threat to health would not be allowed on the market. But in reality, many of these products are unlikely to be banned. Therefore, the goal of this paper was to identify and encourage other ways to address this problem. CSR is an imperfect solution, but it may be one of the few viable paths to protect the public from the health harms of dietary supplements in the absence of more aggressive policies. Although dietary supplements may never deliver on their promises of weight loss or muscle building, we should work to ensure that at a minimum, they cause no harm.

Public health professionals should engage multiple strategies and stakeholders to incentivize CSR to improve consumer safety. These efforts should heighten the consequences for corporations if they choose not to act. A strategic approach to framing the problem must balance scientific data with powerful personal testimonials of harm where most effective. We encourage public health professionals to work in coalition with other community stakeholders to advance the strategies described here to motivate CSR with the goal of enhancing consumer safety and mitigating harm caused by dietary supplements sold for weight loss and muscle building.

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Compliance with ethical standards

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