# FOOD AND BEVERAGE PRODUCT REFORMULATION AS A CORPORATE POLITICAL STRATEGY

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Abstract

Product reformulation– the process of altering a food or beverage product’s recipe or composition to improve the product’s health profile – is a prominent response to the obesity and noncommunicable disease epidemics in the U.S. To date, reformulation in the U.S. has been largely voluntary and initiated by actors within the food and beverage industry. Similar voluntary efforts by the tobacco and alcohol industry have been considered to be a mechanism of corporate political strategy to shape public health policies and decisions to suit commercial needs.

We propose a taxonomy of food and beverage industry corporate political strategies that builds on the existing literature. We then analyzed the industry’s responses to a 2014 U.S. government consultation on product reformulation, run as part of the process to define the 2015 Dietary Guidelines for Americans. We qualitatively coded the industry’s responses for predominant narratives and framings around reformulation using a purposely-designed coding framework, and compared the results to the taxonomy.

The food and beverage industry in the United States used a highly similar narrative around voluntary product reformulation in their consultation responses: that reformulation is “part of the solution” to obesity and NCDs, even though their products or industry are not large contributors to the problem, and that progress has been made despite reformulation posing significant technical challenges. This narrative and the frames used in the submissions illustrate the four categories of the taxonomy: participation in the policy process, influencing the framing of the nutrition policy debate, creating partnerships, and influencing the interpretation of evidence. These strategic uses of reformulation align with previous research on food and beverage corporate political strategy.

Keywords: product reformulation, food industry, nutrition policy, political strategy, framing, narratives, obesity

# Introduction

The food and beverage industry regularly changes or reformulates its products’ recipes or composition, for example to improve taste or decrease costs. However, reformulations intending to improve the health profile of food and beverage products have recently gained prominence as a public health approach (Combris et al., 2011; World Health Organization, 2004). Health-specific reformulations typically aim to reduce salt, sugar and fat in highly processed foods and sugary drinks, well-established as drivers of the obesity and noncommunicable disease (NCD) epidemics (Monteiro, 2009). Health-focused reformulation of food and beverages (herein referred to as reformulation) is increasingly considered a nutrition policy intervention or initiative in and of itself, but has also been conducted in response to other nutrition policies such as food labeling – as was demonstrated by the industry-wide reformulations following mandatory trans-fat labeling in the United States (U.S.) (Otite et al., 2013).

A variety of food and beverage reformulation initiatives are currently underway in the U.S.: quasi-regulatory public-private partnerships with government institutions, co-regulatory mechanisms in partnership with non-profit or non-governmental organizations, voluntary corporate pledges initiated by alliances of food and beverage companies, and codes of conduct or commitments at individual food and beverage companies, some of whom are also participating in collective corporate reformulation pledges/alliances (Alliance for a Healthier Generation, n.d.; Mars Inc., n.d.; McDonald’s, n.d.; Partnership for a Healthier America, n.d.; Slining et al., 2013; The Hershey Company, n.d.; The NYC Health Department, n.d.). Reformulation has also been a priority of First Lady Michelle Obama’s obesity prevention campaign, Let’s Move, and she is the honorary chair of the reformulation focused Partnership for a Healthier America (Let’s Move, n.d.; Partnership for a Healthier America, n.d.; The White House - Office of the First Lady, 2010). Most recently, in June 2016, the Food and Drug Administration issued proposed guidance on a set of voluntary salt reduction targets (U.S. Food and Drug Administration, 2016). Taken together, these initiatives illustrate food and beverage reformulation’s prominent position on the industry and health policy agendas in the U.S.

All of the above reformulation initiatives in the U.S. are voluntary, and the majority are self-regulated. Literature on corporate political strategy – the variety of ways corporations seek to influence policy decisions and the regulatory environment (Hillman and Hitt, 1999) – has identified such voluntary initiatives as a mechanism used by industries facing political and social pressure to preempt or avoid restrictive or mandatory regulations on their activities (Haufler, 2001; Saloojee and Dagli, 2000). The food and beverage industry has increasingly been under such pressures as obesity and NCDs continue to rise and governments adopt policies and issue policy recommendations which would impact the food and beverage industry’s business (Ng and Dunford, 2013; Sacks et al., 2013; The PLoS Medicine Editors, 2012). For example, taxation and other fiscal measures feature in numerous nutrition policy documents, including the World Health Organization’s 2013 NCD Action Plan, which, if implemented, would be considerably more intrusive on the industry’s business than a voluntary program such as product reformulation (World Health Organization, 2013).

This paper is part of a larger research project exploring the political aspects of product reformulation from multiple viewpoints, in order to inform the broader debate about effective solutions and policies to address obesity and NCDs in the U.S. This paper in particular aims to provide insights into food and beverage product reformulation and its relationship to industry political strategy around obesity and NCD policies. It examines the narratives and frames contained within food and beverage industry responses to a U.S. government consultation on reformulation and compares them against a taxonomy of food and beverage industry political strategies collated for this research.

# Methods

Nutrition policy is a value-laden, political process, and subject to inherent tensions between stakeholders’ beliefs, motives and desired policy outcomes (Nestle, 2002; Weible et al., 2012). In order to identify the political strategies and tensions within voluntary product reformulation, we conducted an analysis of frames and narratives.

A frame is a way of “select[ing] some aspects of a perceived reality in order to make them more salient…” so that a problem, and therefore its solution, are defined in a certain way (Entman, 1993). The way an issue is framed dictates whether or not the issue comes onto the public policy agenda, and how to respond to that issue once it is on the agenda (Dorfman et al., 2005; Mah et al., 2014). Importantly, frames can “construct policy decisions even before a decision per se has been made…”(Mah et al., 2014) – therefore frames used by the food and beverage industry may be strategic in attempting to shape future nutrition policy decisions in a particular direction.

A study of narratives is one of many approaches commonly applied to identify and analyze stakeholder positions and their effect on the policy process. Narratives provide a structural arch – a story, or plot line – to political debate, and the building of narratives is a key component of political strategy (Atkinson, 2000; Stone, 2012). In particular, narratives are able to “frame who benefits and who sustains costs in the policy conflict”(McBeth et al., 2007). In the case of nutrition policy, the food and beverage industry may be using narratives in order to shape on-going discussions about how to address the obesity and NCD epidemic toward policy options in which they are the constituent who benefits.

Frames and narratives are closely interrelated but distinct concepts. They both imbue texts and discourse with underlying values and convey broader implications and meanings to policy debate. Frames, as used in this research, are more specifically concerned with how a problem, and its solutions, are defined in order to shape policy processes. While narratives may contain frames within them, or even help to define the frames themselves, they refer more specifically to the story being told within the text or discourse. When this paper refers to a narrative, it is referring to the overarching line of argumentation or storyline of the food and beverage industry submissions.

## 2.1 Taxonomy of Food and Beverage Industry Corporate Political Strategies

To create a taxonomy of food and beverage industry corporate political strategies, we first reviewed the work on such strategies by Brownell and Warner (2009), Miller and Harkins (2010) and Goldman et. al.(2014). We then searched Scopus and Medline for additional papers, using the search string: ([food OR beverage industry) AND (strategy OR policy OR politics OR voluntary OR regulation OR regulate)]. If the title or abstract indicated the paper was specifically about the food and beverage industry, we read the full text (n=36) and extracted any political strategies identified within. We then grouped the strategies into categories, and crosschecked the categories identified against those discussed by Brownell and Warner (2009) as well as those identified in two prominent books in this field (Freudenberg, 2014; Nestle, 2002). The resulting categories in the taxonomy were: influencing the framing of the debate, influencing the evidence, providing funding and participating in partnerships, and participating in the policy process (Figure 1). This taxonomy of industry tactics is intended to be an evolving tool through which to interpret food and beverage industry political strategies. Furthermore, it is noted that a number of the strategies identified within the taxonomy and within this paper could be categorized under multiple taxonomy categories. For example, the use of voluntary pledges and codes can be seen as participating in the policy process, as well as framing the nutrition policy debate away from mandatory regulations, among others.

The frames identified in this taxonomy and in this research were also informed by the literature reviewed on food and beverage industry corporate political strategy. In particular, these include the frame that the industry is ‘part of the solution’ to obesity and NCDs and the individual responsibility/consumer choice frame frequently employed by industry (Dorfman and Wallack, 2007; Kwan, 2009; Nixon et al., 2015). However, two of the frames identified in this paper – focusing on ‘positive’ nutrients in products and emphasizing the cost/effort of reformulation – were unique to and generated from this research.

This taxonomy was originally generated from a literature search in 2014, when this research commenced. In the time since that literature search, further academic work has been completed on the corporate political strategies of the food and beverage industry. In particular, in 2015 Mialon Swinburn, and Sacks (2015) published a framework for monitoring the corporate political activity of the food and beverage industry (Mialon et al., 2015). The categories and strategies contained within framework proposed by Mialon et al (2015) are largely overlapping with that of the taxonomy proposed here; however, the taxonomy presented here contains fewer categories of strategies.

## 2.2 Consultation Analysis

To apply the taxonomy to empirical data, we analyzed publically available food and beverage industry responses to a consultation on food and beverage product reformulation (health.gov, 2015), run by the 2015 Dietary Guidelines Advisory Committee (DGAC) in conjunction with the U.S. government’s formulation of the 2015 Dietary Guidelines for Americans (DGAs). Government consultations are a known entry point for corporate lobbying activities and therefore – in and of themselves – are an illustration of industry participation in the policy process (Hawkins and Holden, 2013; Hillman and Hitt, 1999). In addition, they provide an opportunity for industry to influence regulatory debates and lobby policy makers, as well as to insert doubt around the evidence underpinning un-favored policy approaches. In this case in particular, as will be shown, the DGAC consultation also allowed the industry to highlight their reformulation work done in partnerships – which have been identified as a strategy the industry uses to gain legitimacy and credibility with policy makers, the community and consumers (Ken, 2014).

### 2.2.1 Dietary Guidelines Advisory Committee: Consultation 2.1

The role of the DGAC is to: “provide independent, science-based advice and recommendations for development of the Dietary Guidelines for Americans, 2015, which forms the basis of Federal nutrition programs, nutrition standards, and nutrition education for the general public” (The Secretary of Health and Human Services, 2013). The report of evidence reviewed by the 2015 DGAC was delivered in February 2015 to the secretaries of Health and Human Services and the U.S. Department of Agriculture, who then used the findings of the DGAC to inform the official 2015 DGAs, which were released in January 2016.

The 2015 DGAC was organized into five subcommittees, each of whom accepted public comments through an online platform. Across all subcommittees, a total of 971 comments were submitted online, and the DGAC accepted 918 as relevant to their work(2015 Dietary Guidelines Advisory Committee, 2015a). All responses to the DGAC consultations are available in an online archive (health.gov, 2015).

Within the general consultation, subcommittees 2 and 5 issued specific calls for comments on topics of interest to their work. This research solely examined responses to Request 2.1: Food and beverage industry approaches to reducing sodium, added sugars and fats. The Chair of Subcommittee 2 described the aim of Request 2.1 as: “understanding a little bit more than what might be published out there in those steps that the food industry is doing to reduce sodium, added sugars and fats in the food supply…[and] understanding what types of evaluations have gone on, and what the outcomes are of those programs…”(Siega-Riz, 2015).

All responses submitted to Request 2.1 from 1 February to 13 November 2014 were downloaded from the consultation website (health.gov, 2014) and archived into a database. An additional key word search of the entire DGAC consultation platform was also conducted using the search terms “product reformulation” and “reformulation”, which resulted in one response being added to the sample.

### 2.2.2 Coding

The consultation responses were indexed according to type of responder and coded in NVivo10 (QSR International Pty Ltd., 2012) using a coding framework created for this research. The coding framework was primarily inductive (e.g. emerging from the data), however, in line with the basis for this research, we began the coding process with a skeleton of potentially important themes or concepts from the literature on corporate political strategy and food and beverage industry tactics. We then read and open-coded a sub-sample of the responses to generate a set of codes specific to this consultation process. These codes were analyzed for similarity and grouped into themes, many of which were the themes identified in the literature used to create the taxonomy. We then used this initial set of themes and codes to code all of the responses, however the coding framework was continuously updated as new codes emerged from the responses. After coding was completed, the results were compared to the taxonomy. A full copy of the coding framework can be found in Appendix 1; the main themes were:

* Reformulation approach (e.g. voluntary, partnership, etc)
* Type of progress reporting
* Motivation to reformulate
* Limiting factors or risks of reformulating
* Benefits or opportunities of reformulating
* Reasons not to reformulate
* Legitimacy in participating in the policy process
* Use of evidence
* General discussion about nutrition problems and policies
* Responsibility/accountability of various actors (e.g. individual responsibility and informed choice)

As is standard practice in qualitative research of this type, (Dorfman, Cheyne et al. 2014) the minimum unit for coding was a sentence, however we primarily chose to code entire paragraphs to ensure relevant context was included with the specific code. If a paragraph or sentence contained multiple codes, they were all coded.

To test the reliability of the coding framework, two researchers (CS and CK) coded a subset of 10 submissions. Disagreements between researchers were identified and discussed, and were found to primarily result from coding different lengths of text and differences in the depth of coding. There were no major disagreements between the two coders in terms of interpretation of content, main themes or codes, and one researcher (CS) coded the remainder of the submissions. After the coding process was completed, all submissions were checked for consistency and re-coded as necessary.

## 2.3 Notes on Methods

It is important to note that though we refer here to “industry” as a whole, we recognize that this sector is not homogenous and contains a wide variety of actors, who have varying businesses, positions and political priorities. Furthermore, in order to focus on the narratives and framing surrounding reformulation – rather than pinpointing the actions of individual companies or sectors of the industry – we have blinded corporation and product names in this paper. However, all quotes used in this paper are publically available on the consultation archive website (health.gov, 2015), and a list of the respondents whose submissions were analyzed can be found in Appendix 2.

The non-industry submissions to consultation 2.1 were smaller in number and came from a variety of groups and perspectives. Given the limitations of the non-industry sample, and to allow for a more in-depth consideration of the industry submission, we decided to exclude their responses from this analysis and reserve for further work.

# Results

Sixty-five responses were submitted online to request 2.1 on reformulation by 13 November 2014 (Table 2). Thirty-one food and beverage industry actors submitted 41 unique submissions (7 entities submitted more than one response); 12 submissions were from academic actors; 6 public health or public interest actors; and 6 from other or unknown groups. Of the 41 industry contributions, half (21/40; 52%) came from trade associations.

## 3.1 Illustration of the Taxonomy of Food and Beverage Industry Political Strategies

The themes and frames we interpreted from the industry’s consultation submissions mapped onto the categories of the food and beverage industry corporate political strategy taxonomy (Figure 1). These are summarized in Table 2 and presented in further detail below.

### 3.1.1 Participate in the policy process

##### Participation in the consultation process

The results from this consultation analysis demonstrate industry participation in the policy process to define the dietary guidelines, with 41 of the 65 responses analyzed from request 2.1 coming from food and beverage industry actors, seven of whom contributed more than once. Furthermore, of all 971 responses to the entire DGAC online consultation, 286 came from food and beverage industry actors. However, this is likely an underreporting, as a further 50 submissions that were categorized as “other” came from known industry partnerships and industry funded entities.

### 3.1.2 Funding and partnerships

The voluntary reformulation pledges referred to in the industry’s responses frequently involved partnerships with health or public interest groups, either in their design, implementation or evaluation. For example, multiple food companies described being a “founding member” of the Healthy Weight Commitment Foundation, a coalition that includes NGOs and government, whereas this trade association described its “genuine partnerships” with policy makers:

The association and its member companies are committed to meeting the needs of consumers through product innovation, responsible business practices and effective public policy solutions developed through a genuine partnership with policymakers and other stakeholders. (CID 358)

### 3.1.3Influence the framing of the debate

The industry consultation responses framed the issue of reformulation, and nutrition policy more broadly, by using a highly similar narrative. The majority of industry submissions used the following narrative structure or story line:

1. That a product or industry is not a large contributor to consumption of the nutrient of concern or obesity/NCDs and/or that it contributes beneficial nutrients to the diet of Americans;
2. That even though they or their products may not be a large contributor to obesity or NCDs, the industry is ‘part of the solution’ and reformulating at-will;
3. That reformulation is underway despite it being a significant challenge for a number of reasons, among them technical difficulty, lack of substitutes, and taste and safety concerns.

Two of the three narrative aspects above were found in 83% of the industry submissions (n=34), and more than a third (n=15; 36%) contained all three narrative aspects. The second narrative point, that industry is ‘part of the solution’ and reformulating at-will, was the most common and was present in all but four industry submissions (90%). Narrative aspect one (positive nutrients or not part of the problem) was present in 33 submissions (80%). Relatively, narrative aspect three (difficulty of reformulation) was the least common, but was still identified in close to half of the submissions (n=20; 49%).

Lastly, the industry submissions argued for voluntary governance mechanisms and emphasized individual responsibility and consumer choice. Each of these narrative points and frames will be explored further below.

##### Focusing on “positive” nutrients

The industry frequently highlighted the beneficial nutrients that their products provide to the American population. Their submissions argued that positive nutrients, such as calcium, justify the presence of components to limit, such as sugar. For example:

[Products] are nutrient-rich, providing significant levels of calcium, protein, vitamin A, vitamin D and many other beneficial nutrients to the overall diet. While some [products] do contain some fat, added sugars or sodium, the presence of these nutrients to limit is outweighed by the nutrients to encourage naturally present in (products). (CID 372)

Similarly, a food company argued that ingredients designed to increase palatability, such as sugar, were necessary to ensure children would consume the product and thereby increase their consumption of “positive nutrients” (CID 431)

##### Industry is part of the solution, not the problem

Food and beverage industry submissions consistently used arguments to position themselves as “part of the solution” to NCDs and obesity, and cited reformulation as an example of fulfilling their commitments. For example:

Our members have expressed their shared commitment to working with the federal agencies to advance the important public health goal of reducing sodium intake. This is evidenced by the voluntary strides our members have made, and continue to make, to reduce sodium contents of their foods… (CID 817)

While another says:

The [industry] is focused on responding to consumer demands and we are passionate about serving our guests and ensuring their happiness. We are working hard and engaging our members to do our part in addressing nutrition. (CID 366)

##### Emphasizing the cost and effort to industry

The food and beverage industry also framed the issue of reformulation by emphasizing the difficulties and costs involved. A multitude of reasons were given for why reformulation is challenging, how it will take a long time, require a significant investment of resources, and will be most successful if implemented gradually. For example, this trade association stated that companies are making changes but that they take “decades” and “extensive work”:

Companies react to the demands of their customers, including products that have lower levels of fat, sodium, and added sugar. However, product development of new better-for-you product options takes years of extensive work, market testing and understanding consumer acceptance to taste, texture and function in various uses such as cooking. (CID 372)

In addition, the submissions cited multiple business consequences of reformulation including safety concerns, altered product functionality, lost efficiency, and a lack of return on investment or decreased sales. For example:

…our members have not identified available technology that will allow for a significant reduction in sodium without flavor loss, dramatic cost increase, or adding additional questionable ingredients, both from a consumer and restaurant perspective. (CID 255)

##### Arguing for voluntary governance mechanisms

The industry consistently argued for voluntary governance of reformulation in their responses, for example by stating that voluntary and flexible approaches are not only the preferred and most viable option, but also shown to be effective through existing voluntary efforts. For instance, this food company said:

We were successful in our voluntary efforts because we were able to slowly implement changes at a rate that did not impact liking of the product or outpace technological challenges. Therefore, [company] believes that voluntary, gradual, step-wise reductions in sodium across the food industry is the most sustainable and realistic approach. (CID 370)

Another food company argued that mandatory reformulation efforts would be impossible because of the wide variety of products and recipes in the food and beverage industry (CID 372). Whereas, a third plainly stated that government intervention is not necessary:

The industry is currently working to improve the nutritionals of our product, without government mandate. (CID 369)

##### Reinforcing individual responsibility and consumer choice

In addition, industry responses emphasized the importance of individual responsibility and consumer choice and cited their reformulations as a means of providing choice for consumers. For example:

In conclusion, the [industry] is responsible and is dedicated to providing meaningful choices and useful information for consumers when making purchasing decisions. (CID 378)

In another example, a food and beverage company placed consumer responsibility at an equal level with the changes required of industry:

It is equally important to help consumers make smart food and beverage choices in order to benefit from efforts by [company] and food industry peers to reduce fat, sugars and calories. (CID 341)

### 3.1.4 Influence the evidence

As the DGAC’s work is primarily scientific, the industry’s submissions to consultation request 2.1 also focused heavily on the scientific evidence related to reformulation and the health impacts of their products. This is demonstrated by the fact that industry actors used 391 citations of the 429 cited in total by all responses analyzed. The extensive use of academic-style references lends credibility to industry submissions, however the references cited included among them industry’s own data or studies funded by industry, which have been shown to be biased towards results that are favorable for the industry. (Lesser, Ebbeling et al. 2007, Bes-Rastrollo, Schulze et al. 2013)

The food and beverage industry also used recurring arguments to call into question evidence linking their product or industry to NCDs or obesity. Most argued that the quality of evidence was not sufficient, that more evidence was required or highlighted doubt and uncertainty in the existing evidence. For example, a typical industry discussion is illustrated by this trade association highlighting conflicting evidence on the relationship between snacking behavior and weight:

Although there are studies suggesting snacking increases body weight, there are also several studies showing an inverse or neutral relationship between snacking and body weight. (CID585)

## 3.2. Policy Process Outcome: Reformulation in the DGAs

Product reformulation appeared in six unique places in the DGAC report released in February 2015. In particular the report issued strong support for reformulation of processed foods to lower sodium content, saying reformulation should be the “primary strategy for decreasing sodium intake in the U.S. population” (2015 Dietary Guidelines Advisory Committee, 2015b).

Reformulation was also subsequently included in the 2015 DGAs – the final recommendations released in January 2016 by the USDA and HHS – in the form of pop-out boxes in the sections on the “Socio-Ecological Framework” and on “Meeting People Where They Are” (U.S. Department of Health and Human Services and U.S. Department of Agriculture, 2015a). However, the DGAs recommendation for reformulation was hedged as compared to that of the DGAC, for example:

…Food manufacturers are encouraged to consider the entire composition of the food, and not just individual nutrients or ingredients when developing or reformulating products…care should be taken to assess any potential unintended consequences so that as changes are made to better align with the Dietary Guidelines, undesirable changes are not introduced. (U.S. Department of Health and Human Services and U.S. Department of Agriculture, 2015b)

# 4. Discussion

Previous research has found that the food and beverage industry attempts to influence the nutrition policy process through multiple strategies, which we grouped into a taxonomy consisting of participation in the policy process, influencing the framing of the debate, providing funding and establishing partnerships, and influencing the evidence. This taxonomy aligns with the broader literature around corporate political strategy (Hillman and Hitt, 1999), and the well-established research on the political strategies of the tobacco and alcohol industries – with which the food and beverage industry is often compared. (Brownell and Warner, 2009; Freudenberg, 2014; Hawkins and Holden, 2013; McCambridge et al., 2013; Miller and Harkins, 2010; Saloojee and Dagli, 2000; Savell et al., 2016, 2014)

This consultation analysis has shown that when the food and beverage industry argued in favor of voluntary product reformulation, it did so in a way that aligned with these previously established political strategies. Furthermore, the industry submissions to this consultation were highly internally consistent and employed a markedly similar narrative structure, coalescing around arguments for reformulation to be voluntary. Interest groups have been shown to strategically use narratives to influence policy discussions for a particular problem towards their preferred solution (McBeth et al., 2007; Stone, 2012). Therefore, the consistent narratives in the food and beverage industry’s consultation responses further suggest that voluntary reformulation may be one part of the industry’s political strategy to preempt future policy debates and processes from moving towards mandatory approaches.

The respondents to this consultation consisted primarily of food and beverage industry actors, which is not unexpected as it specifically aimed to elicit the industry’s perspective. However, the consultation provided an opportunity for the industry to publicly employ their framing of reformulation, including the use of numerous arguments to cast doubt on the scientific literature about the health effects of their products, a known political strategy of several industries (Oreskes and Conway, 2010). Furthermore, the industry framed themselves, and their reformulation initiatives, as part of the solution to obesity and NCDs, further reinforcing the industry’s preference for voluntary partnership-based initiatives. By focusing on being ‘part of the solution’, the industry also shifted the debate away from the increasing evidence of the industry’s contributions to the problems of obesity and NCDs (Monteiro et al., 2011; Moodie et al., 2013; Nestle and Wilson, 2012). This research reinforces previous findings that the food and beverage industry emphasizes being ‘part of the solution’ to obesity in their messaging, as well as publically employing arguments for voluntary governance mechanisms (Nixon et al., 2015).

The industry also used their consultation responses to emphasize consumer choice – a well-established frame emphasizing an individual responsibility framing of nutrition -- in order to minimize industry responsibility for poor nutrition (Dorfman et al., 2005; Kersh, 2009; Nixon et al., 2015) – and to argue that their products are not a large contributor to the problem. However it is worth noting that any one product in isolation would be unlikely to do so. Furthermore, this research has identified that the industry focuses on “positive” nutrients in their products, which served to deflect attention away from the high levels of nutrients of concern (sugar, salt, and fat) also found in their products, and deflected attention away from the need to reformulate. This deflection is inconsistent with the arguments presented above that voluntary food and beverage reformulation is ‘part of the solution’ to obesity and NCDs. However, the focus on positive nutrients is logically consistent with the narrative found in the consultations responses that the industry and their products are not a large contributor to the problem. Though these framings of reformulation are contradictory, they each independently align with the taxonomy of food and beverage industry political strategies.

It is impossible to know whether reformulation would have appeared in the 2015 DGAs without the DGAC holding consultation 2.1, or to say if the food and beverage industry narratives and frames identified in this analysis influenced the recommendations of the DGAC. However, the 2010 Dietary Guidelines did not mention or recommend reformulation, while the 2005 Dietary Guidelines only used the word reformulation twice as an explanation as to why trans-fat consumption has decreased in the U.S. ((U.S. Department of Agriculture and U.S. Department of Health and Human Services, 2005)p.30). Therefore, in issuing explicit support for reformulation the 2015 DGAs represent a departure from the two previous editions of the guidelines and may indicate that the industry’s participation in the DGAC consultation process was influential.

Product reformulation has been praised as a rare example of a “win-win” for the food and beverage industry and public health efforts to reduce obesity and NCDs, and has been described as a “pragmatic” nutrition policy (Winkler, 2014, 2013). However, the industry submissions analyzed here provided numerous reasons to suggest that voluntary reformulation plays a role in the industry’s strategy to avoid unfavorable regulatory conditions, and this finding warrants significant consideration.

## 4.1 Limitations

This analysis did not intend to be representative of all industry actors and their reformulation efforts, and therefore does not claim to document all of the potential aspects of food and beverage industry reformulation that may or may not be politically relevant. Furthermore, the consultation responses analyzed represent a self-selected cross-section of some of the industry actors interested in nutrition policy, however those that did respond are among the major industry actors in the U.S. It is also likely that individuals or companies who responded to this consultation request were already interested in reformulation, and therefore was not inclusive of the opinion of companies who do not participate in voluntary food and beverage reformulation.

# 5. Conclusion

The results of this consultation analysis suggest the food and beverage industry in the United States is using a highly similar narrative around voluntary product reformulation, and demonstrated the taxonomy of corporate political strategies collated from previous research: participating in the policy process, influencing the framing of the nutrition policy debate, establishing partnerships, and influencing the interpretation of evidence on nutrition. The food and beverage industry may be undertaking voluntary reformulation, in part, to subtly shift the public health regulatory environment towards voluntary agreements and partnerships that suit their interests. However, further research is necessary in order to fully understand the political strategy aspects of voluntary reformulation efforts.

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Figure 1: Taxonomy of Key Food and Beverage Industry Corporate Political Strategies

Figure by author; building on the work of: (Bailin et al., 2014; Bes-Rastrollo et al., 2013; Bødker et al., 2015; Brownell and Warner, 2009; Cannon, 2004; Center for Science in the Public Interest, 2015; Dietz, 2013; Dorfman et al., 2012, 2005; Elliott, 2012; Fleischhacker, 2007; Freedhoff, 2014; Freedhoff and Hébert, 2011; Freudenberg, 2012; Goldman et al., 2014; Gomez et al., 2011; Hawkes and Buse, 2011; Hobbs et al., 2004; Jou et al., 2014; Kearns et al., 2015; Ken, 2014; Kersh, 2009; Kmietowicz, 2015; Knai et al., 2010; Koplan and Brownell, 2010; Kraak et al., 2012; Kurzer and Cooper, 2013; Lesser et al., 2007; Lewin et al., 2006; Ludwig and Nestle, 2008; Miller and Harkins, 2010; Myers, 2006; Nelson, 2004; Nestle, 2015, 2002, 1993; Nestle and Wilson, 2012; Nixon et al., 2015; Oppenheimer and Benrubi, 2014; Sharma et al., 2010; Shelley et al., 2014; Simon, 2005; Slining et al., 2013; Vallgarda et al., 2015; Yanamadala et al., 2012)

Table 2: Number of Submissions, Analyzed by Sector and Sub-Type

|  |  |  |
| --- | --- | --- |
| Sector | Sub-Type  | Total per Sector |
| Food and Beverage Industry | Individual Company: 15Trade Association: 21Research Institute: 2Partnership: 2Consultant: 1 | 41 |
| Academia | Professor: 2Student: 4Unknown role: 6 | 12 |
| Public Health / Public Interest | Individuals/professionals: 4Association: 1Website:1Unknown role: 5 | 6 |
| Other | Individuals, unknown: 5Foundation: 1 | 6 |
| Total | 65 |

Table 2: Food and Beverage Industry Political Strategies and Illustrative Examples from the Reformulation Consultation

|  |  |
| --- | --- |
| Category of Food and Beverage Industry Political Strategy(Figure 1) | Illustration from responses to 2015 DGAC consultation request 2.1 |
| Participate in the policy process | 41 of 65 submissions from industry actors |
| Funding and partnerships | Frequently cited voluntary reformulation partnerships |
| Influence the framing of the debate | Positioned the industry as part of the solutionArgued for voluntary governance mechanisms Emphasized costs/effort of reformulationFocused on “positive” nutrients in productsReinforced individual responsibility and consumer choice |
| Influence the evidence | Used extensive academic style referencesCited data created or sponsored by the industryArgued there is insufficient evidence against their productsRaised doubts about existing evidence against their products |