



Hudson Institute

Better-For-You Foods: *An Opportunity To Improve Public Health And Increase Food Industry Profits*

Support for this report
was provided by



Robert Wood Johnson
Foundation

**Hank Cardello, Jeffrey Wolfson,
Margaret Yufera-Leitch,
Lauren Warren, and Michael Spitz**

March 2013

Obesity Solutions Initiative

The mission of Hudson Institute's Obesity Solutions Initiative is to bring about practical, market-oriented solutions to the world's overweight and obesity epidemic.

The Initiative devises policies and offers solutions to the global obesity epidemic by aligning the needs of all vested parties—corporations, the public health community, consumers and regulators. Emphasis is placed on sound quantitative analysis and the incorporation of pragmatic principles to enhance adoption. The undertaking is currently focused on building the business case for lower-calorie, better-for-you foods and beverages by quantitatively demonstrating the sales, financial, and reputational benefits from selling larger amounts of such products.

The Initiative's director is Hudson Senior Fellow Hank Cardello, the author of *Stuffed: An Insider's Look at Who's (Really) Making America Fat* (www.stuffednation.com). He is a former food executive with Coca-Cola, General Mills, Anheuser-Busch and Cadbury-Schweppes, and co-Chair of the Global Obesity Business Forum sponsored by the University of North Carolina at Chapel Hill. Cardello has been a frequent contributor to *The Atlantic* and *Forbes* on business strategy, food policy and obesity matters.

For more information, visit www.obesity-solutions.org

HUDSON
INSTITUTE

Summary

The Centers for Disease Control and Prevention (CDC) estimates that more than 35 percent of adults and nearly 18 percent of children in the United States are obese. Governments at all levels have taken action to address this national epidemic through efforts to make schools and communities healthier for children and families. Business leaders are stepping up as well by participating in such obesity-tackling initiatives as the Healthy Weight Commitment Foundation and the National Restaurant Association’s “Kids LiveWell” program. However, until now, there has been little evidence to reveal whether packaged foods companies and restaurant chains can do well by doing good.

Two recent studies by the Hudson Institute, a nonpartisan policy research organization, show how these companies can succeed both in satisfying increased consumer demand for healthier foods and beverages and improving their bottom lines. These studies found that, among leading consumer packaged goods companies and restaurant chains, those which have grown their better-for-you (BFY)/lower-calorie foods and beverages over the past five years have delivered superior sales growth compared to those which were less aggressive in doing so. In short, the research demonstrates that selling lower-calorie, better-for-you foods and beverages is just good business.

Highlights

Consumer packaged goods (CPG) companies and restaurant chains growing their better-for-you (BFY)/lower-calorie sales are demonstrating superior business performance compared with those that are not.

- CPG companies growing their BFY sales enjoyed larger dollar sales increases, higher operating profit margins, superior operating profit growth, and stronger reputation ratings.
- Restaurant chains growing their BFY/lower-calorie menu servings exhibited greater same store sales, traffic, and total servings gains.

“The proper social responsibility of business is to tame the dragon—that is, to turn a social problem into economic opportunity and economic benefit.”

–Peter Drucker, *Frontiers of Management*, 1968

Background

Reducing obesity is the foremost public health challenge facing our nation today. Over the past two decades, obesity rates have grown to epidemic proportions that threaten our economic and national security. The CDC has found that more than two-thirds of U.S. adults and nearly one-third of children and adolescents are overweight or obese.¹⁻² Thus, there has been growing momentum among policy-makers at all levels to pass and implement laws to improve school nutrition, make communities safer for physical activity, and improve access to affordable healthy foods.

Many have suggested that the food and restaurant industries could help to solve the obesity crisis by making the U.S. food supply more nutritious. Companies in the consumer packaged goods (CPG) and restaurant industries have committed to reducing calories through a variety of pledges, yet some in the public health community question whether it is a priority for the food industry. Largely undisputed, however, is the direct impact that the \$1.25 trillion food industry can have on improving consumption of better-for-you (BFY) foods and beverages if fully engaged in the fight to reverse obesity.

The Public Health Case for Calorie Reduction

At the most basic level, overweight and obesity are the result of a caloric imbalance: too few calories expended for the amount of calories consumed.³⁻⁴ In 2010, our aggregate food supply provided 2,534 calories per person per day, 458 more than in 1970.⁵ Of this 22.1 percent increase, 242 calories came from added fats and oils; 167 calories from flour and cereal products; and 35 calories from sugar.⁵ The U.S. Department of Agriculture (USDA) estimates that by 2005-08, 20 percent of our calories were consumed in quick-service and full-service restaurants, more than triple the amount consumed in these locations in 1977-78.⁶ For the average consumer eating one meal a week away from home, this roughly translates to two extra pounds of weight gained each year.⁶ Similarly, The Keystone Food and Nutrition Roundtable (organized in 2007

to improve nutrition labeling on food products) has linked frequent meals prepared away from home to obesity, higher body fat, and a higher body mass index (BMI).⁷ Given these figures, it is not surprising that organizations such as the Institute of Medicine have called for CPG companies, chain-owned full-service restaurants and quick-service restaurants (QSRs) to substantially reduce the number of calories served to children and their families.⁸

To date, public health policy intervention aimed at the food industry has focused primarily on changing consumption habits by mandating calorie labeling, banning oversized beverages or taxing sugar-sweetened drinks. Each of these approaches contains elements that automatically guarantee industry resistance—either because it raises costs or induces declines in sales of highly profitable items. None of these approaches gives consideration to the success metrics that industry executives are responsible for when making decisions on behalf of their companies and shareholders. While reducing consumption of highly caloric, less healthy foods and beverages is a desirable outcome from a public health and nutritional policy perspective, in most cases consideration has not been given to the impact these measures have on a company's ability to grow its sales, profits and shareholder returns.

Current Industry Calorie-Reduction Efforts

While food industry proponents are understandably concerned about how such policies will impact their business, several corporations, including Darden Restaurants and General Mills, nevertheless have stepped forward to pledge substantial voluntary commitments. Many companies are now participating in self-regulatory initiatives such as the Healthy Weight Commitment Foundation (HWCF), the National Restaurant Association's Kids LiveWell Program, and the Alliance for a Healthier Generation's School Beverage Guidelines. The companies participating in the HWCF alone account for nearly 25 percent of calories consumed

in the United States.⁹⁻¹⁰ They collectively have pledged to remove 1.5 trillion calories from the marketplace by 2015, the equivalent of 14 calories per day for the average American.⁹⁻¹⁰ Even companies often targeted by public health advocates for selling high-calorie products have made strides in lowering the number of calories they sell per person, as evidenced by the Coca-Cola Company and PepsiCo lowering their amounts by 24 percent and 28 percent, respectively, from 2000 to 2010.¹¹

While a small number of food and restaurant innovators have had success in selling healthier food, limited evidence has emerged to convince these industries that making healthier product changes will benefit not only the public good, but also their bottom lines. Both the CPG and restaurant industries have faced one of the most challenging periods in decades,

with recession-driven sales declines in 2008 and 2009.¹² In the past two years, both industries have returned to growth, but they still face the key challenges of rising food costs, changes in consumer behavior post-recession, and building and maintaining sales volume.¹³ As publicly traded companies that report to their shareholders, food and restaurant companies are driven to make decisions that increase their sales and profits. Thus, they need financially driven incentives to substantially change their product portfolios.

The overarching goal of our research was to test whether increasing BFY/lower-calorie products could help corporations improve the key performance metrics demanded by their shareholders and Wall Street, while at the same time addressing obesity.

Research Overview

This paper provides an overview of two landmark studies in which our researchers examined whether CPG and restaurant corporations can improve their financial performance by offering more BFY/lower-calorie options.

The objectives of the research were twofold. First, we sought to determine whether companies that emphasized BFY/lower-calorie products achieved superior business performance. Second, if so, we sought to provide the empirical evidence to accelerate industry conversion to BFY/lower-calorie items; and to encourage policymakers to engage these industries constructively in helping to reverse obesity rates among children and their families.

To address these objectives, we examined public and third-party data sources to determine whether growing sales of BFY/lower-calorie products resulted in improved business performance. We evaluated the CPG and restaurant industries

because, together, they represent a large proportion of food and beverages expenditures (63%) in the U.S.¹⁴⁻¹⁵ The restaurant trade, a \$660 billion industry, employs 10 percent of the U.S. workforce, and the CPG industry accounts for \$340 billion in sales within supermarkets alone.¹⁴⁻¹⁵ Consequently, we conducted these two distinct, industry-focused research studies to determine whether there was a strong business case for selling BFY/lower-calorie items.

In the CPG category, BFY encompasses no-, low-, or reduced-calorie foods and beverages; traditional products packaged in smaller portions; and foods generally considered as wholesome, such as whole-grain products. In the restaurant category, BFY/lower-calorie options encompass foods below specified calorie limits in five categories: “center of the plate” (main course) items, side dishes, beverages, appetizers, and desserts.

Study 1: Consumer Packaged Goods

To determine the business case for CPG companies, we examined metrics for corporate sales growth, operating profits, and company reputation. A total of 15 companies (*see page 14 for companies included in the study*) and their 8,850 associated brand offerings were analyzed. These companies account for nearly \$100 billion in dollar sales, a significant share of their respective segments.

Study 2: Quick-Service and Full-Service Restaurants

To assess restaurant performance, we examined servings, traffic data, and sales trends to determine if sales of BFY/ lower-calorie menu items resulted in improved business performance. We analyzed 21 chains and 6,217 menu items across nine quick-service (QSR) and 12 full-service restaurant chains (*see page 15 for restaurant chains included in the study*). The selected brands account for \$102 billion in annual system-wide sales and represent nearly 50 percent of the total sales among the top 100 restaurant chains.¹⁶

Data Sources

For transparency and reproducibility of findings, our analysis did not use proprietary company data. We instead relied on no-cost, publicly available information or purchased third-party research group data from companies such as the A.C. Nielsen Company and the NPD Group.

Consumer Packaged Goods Data Sources

Product Classification: We collected the primary nutrition information for categorizing CPG brands or products as BFY or traditional from product packages or company websites.¹⁷⁻¹⁸

Financial Performance: We used two key metrics to assess financial performance, including operating profit margins and operating profit growth. This information was publicly available and obtained at no cost from corporate annual reports.

Sales Volume: To analyze food sales, we purchased CPG aggregate sales data provided through Nielsen ScanTrack.¹⁹ One of two major sources of CPG food and beverage industry data, Nielsen ScanTrack captures sales data on point-of-sale purchases through UPC code, at mass merchandisers, food

stores with more than \$2 million in sales, and drug stores with more than \$1 million in sales. ScanTrack does not include some key retailers and channels, including Walmart, Dollar Stores, and warehouse clubs. Our CPG study analyzed two sets of ScanTrack sales data: the first from a 12-month period ending April 2007, and the second from a 12-month period ending April 2011.

Company Reputation: To determine the impact on brand reputation, company scores were identified from CoreBrand's proprietary research study. Overall scores were identified based on the "BrandPower" metric, which is a proven predictor of market value for CPG and beverage companies and derived from an annual survey of more than 10,000 business decision-makers. The ratings are based on five key success metrics: reputation, familiarity, favorability, management, and investment potential.²⁰ The BrandPower Index has been validated by the Marketing Accountability Standards Board as providing a reliable assessment of a brand. CoreBrand has been tracking this measure since 1990, and has demonstrated through their proprietary methodology that the BrandPower rating is highly correlated with a brand's/company's marketplace performance.

Restaurant Data Sources

Product Classification: Publicly available nutrition information documents, primarily found on the companies' websites, provided calorie information by menu item. If a company did not publish its nutrition information online, we found this information on publicly available third-party data sources, including caloriecount.com and myfitnesspal.com. [Caloriecount.com](http://caloriecount.com) provides data for approximately 250,000 food items, and myfitnesspal.com has data for nearly 2.5 million items. Product classification criteria for the menu items were obtained from the Nutrition Coordinating Center at the University of Minnesota.²¹

Financial Performance: The primary measures to assess financial performance were industry-standard metrics: same-store sales change and total-store sales change. This information was obtained from corporate annual reports or purchased from trusted industry data sources, including the

industry publication *Nation's Restaurant News* and Trinity Capital.^{16,22} Same-store sales is a statistic commonly used in the retail industry (department stores, mass merchandisers, warehouse clubs, and restaurants) that tracks the sales of stores open for at least one year, and compares sales from the same set of stores for specified periods. This metric allows investors to determine which portion of sales growth can be attributed to the opening of new stores and which portion can be attributed to organic growth among existing stores. Total-store sales represent performance for all of a chain's outlets, regardless of how long the outlets have been operating.

Food and Beverage Volume and Traffic: We obtained data on QSR and full-service restaurant chain servings and traffic trends for two periods: the 52 weeks ending November 2006 and the 52 weeks ending November 2011. The sole data source for this information was the NPD Group,²³ which provides market research information for a variety of industries, including food service.

Methodology

Company Selection Process for Analysis

CPG COMPANY SELECTION

To select the companies for CPG analysis, we identified the top 30 food and beverage companies with U.S. sales over \$4 billion, as ranked annually by *Food Processing* magazine (2011). From this selection, we chose 15 companies that offered a diverse set of food and beverage products and met the study's inclusion criteria. Companies that are primarily chocolate marketers were excluded because private company data for the Mars Corporation were not available; in turn, this required that the study also exclude Hershey, Mars' direct competitor. Non-peer group companies (companies not considered by industry analysts to be comparable to the major diversified food manufacturers in the study) in the top 30 were also excluded from the study. These companies included commodity and private label companies in the dairy

(Land O' Lakes, Dean Foods, and Saputo) and meat (Tyson, Smithfield, Perdue Farms, Pilgrim Pride, and JBS) sectors, as well as bakery and agribusiness suppliers (Cargill, Dole, and Ralcorp) and beer/alcoholic beverage companies (Anheuser-Busch InBev and Miller Coors).

RESTAURANT CHAIN SELECTION

Our research analyzed two major categories of restaurants: quick-service restaurant (QSR) chains and sit-down/full-service restaurant chains. For the nine QSR chains, we identified the top national chains with U.S. sales of at least \$3 billion, excluding those that focused on snack, coffee, or other non-food items (e.g., Starbucks and Dunkin' Donuts). We also excluded companies that emphasized "build-your-own" menu combinations (such as Subway, Chipotle, Domino's, and Pizza Hut) because the calories per menu item varied widely with the customers' preferences. Our

selection criteria for the full-service restaurant chains in the study were based on the largest restaurant ownership groups (corporations that own one or more restaurant chains) in the U.S. currently participating in the Healthy Weight Commitment Foundation and/or the National Restaurant Association’s Kid’s LiveWell initiative (*see appendix online at www.obesity-solutions.org/bfyreport*). These chains also represent a wide variety of cuisine choices (seafood, steak, Italian, and American) across the primary eating occasions (breakfast, lunch, and dinner).

BFY Product Criteria and Categorization Process

CPG BRAND CATEGORIZATION

We developed a two-tiered product categorization system by breaking down the proprietary Nielsen sales data into two discrete categories:

1. **“Better-for-you” (BFY) Foods and Beverages.** This incorporates two types of products: “lite” and “good.” The “lite” products are foods and beverages that contain low, no, or reduced calories (typical designations include diet, lite, and zero); and packages that contain fewer calories, such as 100-calorie packs. The “good” products are generally categorized as wholesome, such as whole grain products. It also includes traditional products that have been made healthier but do not qualify as “lite.”
2. **“Traditional” Products.** These do not meet the criteria for “lite” or “good.”

Using nutrition information on the product packaging or from the company’s web site, we classified each of the company’s brands as either BFY or traditional. Once the brands and brand variations were categorized as BFY or traditional, the percentage of BFY sales per company was calculated and assessed across each of the business metrics.

FIGURE 1

CPG Classification Sample

Category	Kraft Foods	PepsiCo	Kellogg
Better-for-You	Crystal Light	Aquafina	Special K
	Maxwell House	Pepsi Max	Keebler Right Bites
	Roarin’ Waters	Tropicana 50	Special K Bars
	Boca Burgers	Baked Lay’s	Kashi TLC
	Oscar Meyer Lean Turkey	Quaker Oatmeal	Rice Krispies
	Wheat Thins	SoBe Life Water	NutriGrain
Traditional	Oreos	Doritos	Sunshine Cheez-It
	Kraft Mayonnaise	Pepsi	Pop Tarts
	Kraft Mac n Cheese	Tropicana OJ	Frosted Flakes
	Velveeta	Captain Crunch	Famous Amos
	Ritz Crackers	Classic Lays	Apple Jacks
	Chips Ahoy!	Sun Chips	Frosted Mini Wheats

In cases where the nutritional information varied widely within one brand—such as Campbell’s Condensed Chicken Noodle Soup versus its Cream of Chicken Soup—the data were further broken down by variety to provide a more accurate nutritional profile of each.

Figure 1 represents the classification of brands for three sample companies.

RESTAURANT CHAIN MENU CATEGORIZATION

For each of the restaurant chains, menu items were classified as either a BFY/lower-calorie food/beverage or as a traditional food/beverage. A set of criteria to classify the menu items into these two categories was developed in conjunction with the Nutrition Coordinating Center at the University of Minnesota. Utilizing their expertise and comprehensive database, we developed a pragmatic system to assess menu trends and performance centered on calories. Based on consumer purchase patterns, our model accounts

for the typical consumer order: an entrée, beverage, and choice of side dish, appetizer, or dessert. We categorized each brand’s menu items as either BFY/lower-calorie or traditional, based on their calorie counts; then we calculated the percentage of servings for each of these categories for business metric analysis. The calorie set points for each of these categories are based on a 2,000-calorie daily diet and assume that customers consume approximately one-third of their daily calories (700) at each meal. Figure 2 presents the five-tier categorization system that was developed.

Product / Brand Analysis

Once the CPG and restaurant companies were selected, our team analyzed a significant number of data points, including more than 8,500 data points in the CPG study and more than 6,000 in the restaurant assessment.

FIGURE 2
Restaurant Categories

Category	“Lower-Calorie” Criteria	What Qualifies?	
		Lower-Calorie	Traditional Item
“Center of the Plate”	≤ 500 calories	7 ounce filet mignon (450 calories / serving)	Angus Burger Deluxe (760 calories / serving)
Side Dish	≤ 150 calories	Mixed green salad (110 calories / serving)	Small French Fry (230 calories / serving)
Beverage	≤ 50 calories / 8 oz. serving	Diet Soda (0 calories / serving)	Medium Regular Soda (210 calories / serving)
Appetizer	≤ 150 calories	Cheddar Bay Biscuit (150 calories / serving)	Shrimp and Lobster Chowder (250 calories / serving)
Dessert	≤ 150 calories	Chocolate Chip Cookie (150 calories / serving)	Frosty Chocolate Shake (710 calories / serving)

Note: The data do not account for situations where an individual consumer orders multiple items for their meal, beyond that of an entrée, beverage and one dessert, appetizer or side dish (not multiples of these items). This data is not available from any source other than actual chain point-of-sales systems, and thus cannot be measured.

CPG ANALYSIS

As the first step in the analysis process, we evaluated the nutritional facts from the product labels or online nutrition information for each of the brands associated with the selected companies to determine their calorie content. We then assessed and classified each product as either BFY or traditional.

The percentage of traditional and BFY foods within each company's brand portfolio was then calculated. Once the average percentage of BFY product sales was determined, companies were further classified into those that had "above-average" or "below-average" BFY product sales compared to their peer group companies for performance analysis. To determine operating profit margins and growth, we performed a sensitivity analysis, which included assessing the extremes, evaluating the means, and compensating for the impact of companies with greater than 50 percent of their sales in the U.S. market.

RESTAURANT CHAIN ANALYSIS

For each restaurant, we collected calorie information by menu item from company nutrition information documents or the third-party data source. The calories for each menu item tracked by NPD were identified based on the categorization system shown in Figure 2 and classified as either BFY/lower-calorie or traditional. Once all menu items were assigned a caloric value and categorized by type, we calculated the percentage of servings contributed by the

BFY/lower-calorie servings for each chain restaurant. We calculated food and beverage items separately, then totaled them to determine the overall percentage for BFY/lower-calorie versus traditional servings.

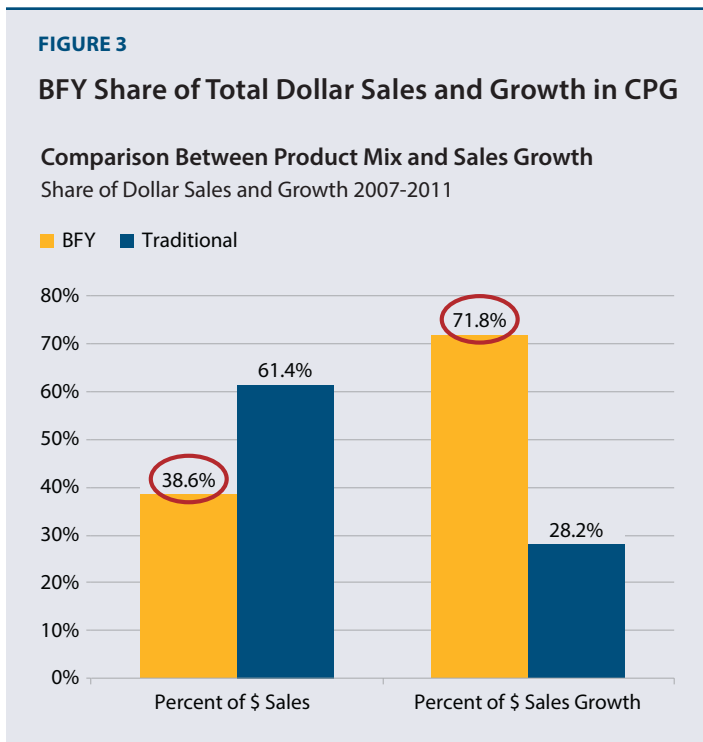
For QSRs that offered items typically purchased and consumed in varying quantities (e.g., tacos, chicken pieces), additional categorization schemas were developed. In collaboration with industry experts we determined historical serving ratios to derive caloric consumption. For example, based on the industry expert input, we learned that the typical consumer (individual) taco order breaks out as follows: 40 percent of consumers order one taco; 35 percent order two tacos; and 25 percent order three or more tacos. This model was used to classify NPD servings data into either BFY/lower-calorie or traditional categories. For full-service restaurants, we determined that NPD's serving data were not always item specific. While this situation was rare, in these cases we determined the number of menu items in a category that qualified for BFY/lower-calorie classification, then divided by the total number of category items. For example, for a steak ("center of the plate") item, we determined the number of menu items that qualified for lower-calorie status (six); determined the total number of main-course steak items (13); and thus calculated that 46 percent of the servings qualified as lower-calorie. This process provided a consistent classification measure across restaurants and reduced bias and variability within the analysis.

Study Results

Overall Portfolio Profiles for BFY Sales and Servings

Consumer Packaged Goods (Study 1): Across the CPG companies in our evaluation, only 38.6 percent of total sales were generated by BFY products, while close to two-thirds of sales were generated by traditional products. Of the 15 companies (and their associated 8,850 brands), nine had above-average BFY products sales and six had below-average sales (< 38.6%). The companies with the strongest portfolios of BFY foods included Danone, Campbell's, Smucker's, Heinz, General Mills, and Nestle.

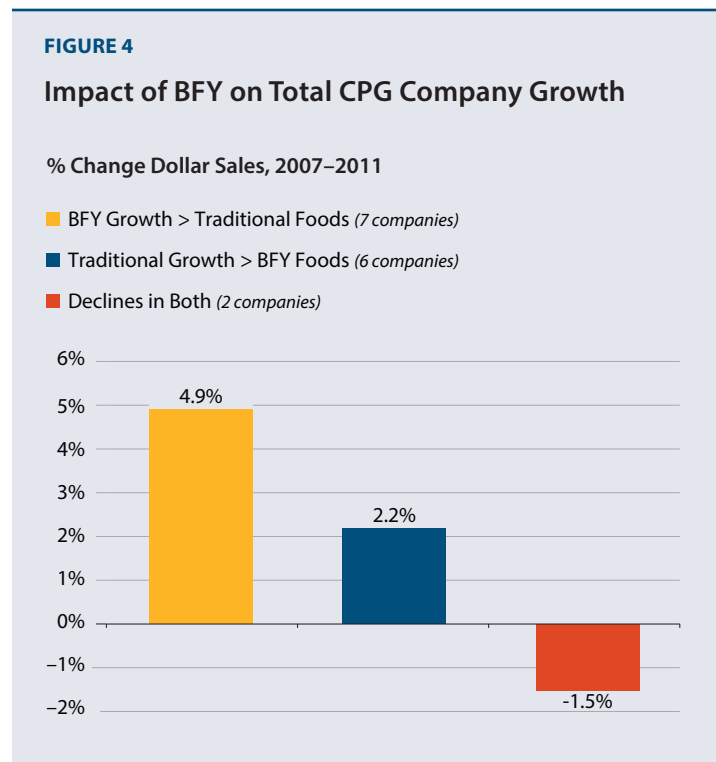
Chain Restaurants (Study 2): The BFY/lower-calorie items accounted for 37.5 percent of the total restaurant servings in 2011. This is a slight increase from 2006, when BFY/lower-calorie items accounted for 36.2 percent of total servings. Traditional items still dominate menus, accounting for 62.5 percent of servings in 2011.



Source: Nielsen Food, Drug and Mass Merchandiser sales tracking.

Impact of BFY on Sales Growth

Consumer Packaged Goods (Study 1): To assess sales growth, we analyzed the share of dollars sales and growth rates between 2007 and 2011 (Figure 3.) The results indicate that BFY foods drove a disproportionate share of sales growth over that time period. While BFY sales represented only 38.6 percent of total dollar sales, they accounted for 71.8 percent of dollar sales growth. Figure 4 shows the impact of BFY foods on total company growth, analyzed by percent change in dollar sales from 2007 to 2011. These results indicate that companies that have been growing their BFY items faster than traditional items are growing their total sales more than twice as fast as the other companies.



Source: Nielsen Food, Drug and Mass Merchandiser sales tracking.

Chain Restaurants (Study 2): For restaurants, we analyzed same-store sales (SSS) and total-store sales.

Chains that increased their BFY/lower-calorie servings from 2006 to 2011 showed superior performance compared to those that served fewer BFY/lower-calorie servings. The nine chains that increased their BFY servings saw a 5.5 percent increase in same-store sales, while those that did not suffered a 5.5 percent decline (Figure 5). A similar pattern was observed for total-store sales: chains that increased their BFY/lower-calorie servings enjoyed a 10 percent increase in total chain sales, while those that did not declined 3.8 percent.

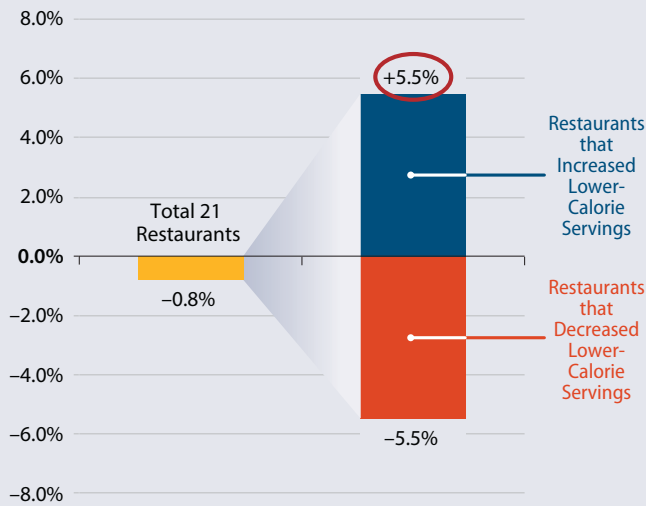
profit margin. Three companies, Coca-Cola, PepsiCo, and Dr. Pepper Snapple, were not included in this specific analysis as the soft drink industry historically delivers better operating margins than traditional packaged foods companies.

The operating profit growth assessment, which included the three beverage companies, showed that the nine companies with above-average BFY sales percentages recorded operating profit growth of 49.6 percent, while the six companies with below-average BFY percentages recorded a 14.3 percent increase in operating profits; more than 35 percentage points lower than their counterparts (Figure 6).

FIGURE 5

Change in Restaurant Same-Store Sales based on Growth of BFY/Lower-Calorie Servings

Same-Store Sales—% Change
(2011 vs. 2006)

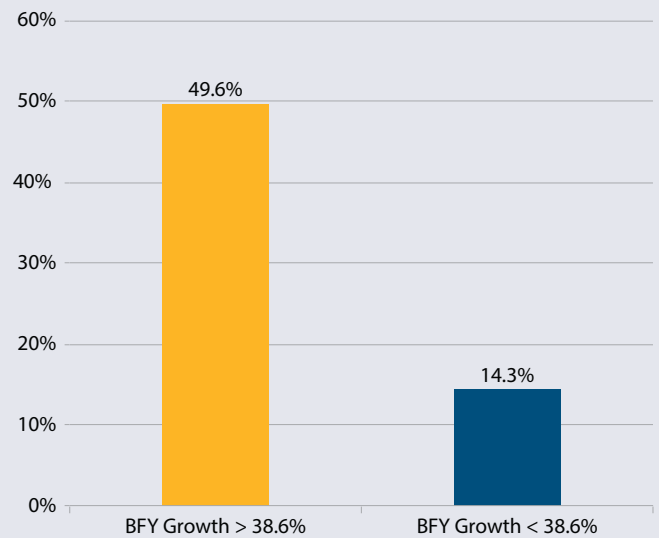


Source: Nation's Restaurant News, Trinity Capital, Company Annual Reports.

FIGURE 6

Impact of BFY on CPG Operating Profit Growth

Comparison of Operating Profit Growth



Source: Nielsen Data and Company Annual Reports.

Impact of BFY on Operating Profits

Consumer Packaged Goods (Study 1): Similar to sales growth findings, CPG companies with above-average percentages of BFY food sales also delivered better operating profit margins and operating profit growth. The operating profit margin for the eight companies that had above-average BFY portfolio sales averaged 15.3 percent. The four companies with below-average BFY portfolios averaged only a 9.5 percent operating

Impact of BFY on Overall and BFY/Lower-Calorie Servings

Chain Restaurants (Study 2): To assess overall servings growth, we analyzed each brand's change in servings from 2006 to 2011. Across the 21 chains, the BFY/lower-calorie items were the key growth engine (Figure 7). For total food and beverages, overall chain servings decreased by 832.5 million. But when these servings are broken down by

BFY/lower-calorie and traditional foods, we saw that servings of BFY/lower-calorie foods actually increased by 472.4 million while servings of traditional foods declined by 1.3 billion.

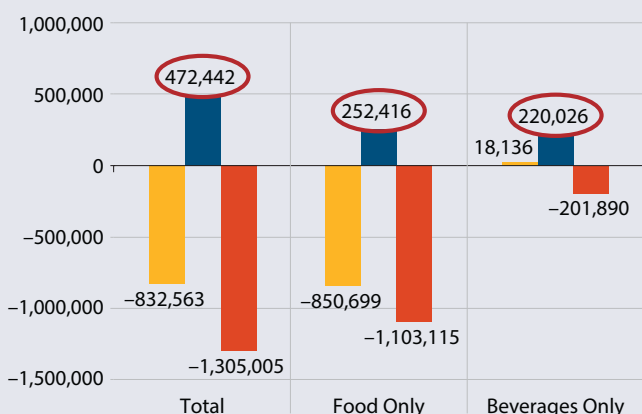
FIGURE 7

Change in Servings – Total Servings, Servings of BFY/Lower Calorie and Servings of Traditional Foods and Beverages

Change in Servings

(2011 vs. 2006, all numbers are in thousands)

■ Total ■ Lower Calorie ■ Traditional



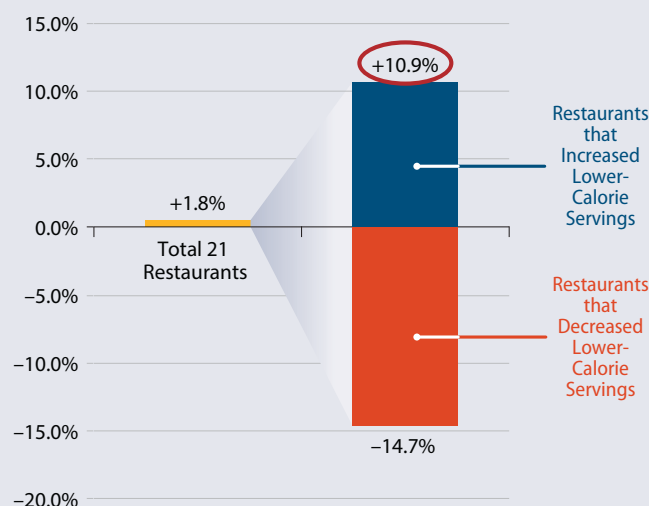
Source: NPD Group/Crest.

Across the 21 restaurant chains, we found that 10 increased the number of BFY/lower-calorie food servings from 2006 to 2011, and these chains increased their total food servings by 8.9 percent. For chains that experienced declines in their BFY/lower-calorie food servings, total food servings declined by 16.3 percent. We saw a similar pattern in store traffic. The 10 restaurant chains that increased their BFY/lower-calorie food servings also saw a 10.9 percent increase in total traffic, compared to a 14.7 percent decline in total traffic by the 11 restaurant chains whose BFY/lower-calorie food servings declined (Figure 8). As a point of reference, BFY/lower-calorie food servings increased despite total traffic in all restaurants as measured by NPD declining 2.2 percent, from 61.9 billion visits in 2006 to 60.6 billion in 2011. Finally, we assessed the few restaurants that were growing their traditional food servings and found their BFY/lower-calorie food servings were growing at a more robust rate (15.4%) than their traditional food servings (11.5%).

FIGURE 8

Impact of BFY/Lower-Calorie Servings on Total Traffic

Total Traffic Count—% Change (2011 vs. 2006)



Source: NPD Group/Crest.

Impact of BFY on Brand Reputation

Consumer Packaged Goods (Study 1): To assess corporate reputation among the consumer packaged goods companies, we obtained scores via CoreBrand's BrandPower Metric. Companies with above-average percentages of BFY foods received a 16.3 point higher BrandPower score than companies with below-average BFY percentages, with respective scores of 69.5 and 53.2. The average for all the CPG products in the study was 61.4.

CoreBrand's database of 1,000 companies encompasses 10 sectors and 54 industries, with an average BrandPower rating of 25.3. Variations of 2.25 or more are statistically significant. Among the CPG companies we studied, the difference between those with "above-average" and "below-average" BFY percentage is directional, based on the number of companies (15) in the CPG study.

Comparable brand reputation data for specific restaurant chains are not available.

Discussion

Our evaluation of both the CPG and restaurant industries concludes that BFY/lower-calorie offerings led to superior business results during the time periods of our assessment (2007 to 2011 for the CPG study and 2006 to 2011 for the restaurant study). The CPG study concludes that those companies with higher-than-average sales of BFY products achieved stronger sales growth, operating profit margins, operating profit growth, and company reputation. The restaurant study similarly concludes that QSR and full-service restaurant chains that grew their BFY/lower-calorie servings delivered superior same-store sales, traffic and servings growth.

The authors have made significant progress in developing a unique research question and sound evaluation process for assessing product portfolios and performance metrics. The classification criteria provide a methodologically sound process for future research, and the findings establish baseline benchmarks on which to evaluate future company performance.

Limitations

Given the complex research question and variety of sources used in these studies, the following important limitations should be noted. Foremost is the quality of the nutrition information for product classification. The restaurant chains provide their nutrition information at will on their websites, and therefore the data for product and brand classification depends on whether their reported measures are accurate. For the CPG study, calorie information was obtained from the package labels. The FDA allows manufacturers and packagers a considerable margin of error (+/- 20%) regarding the nutrition information depicted on the product packaging, which may have impacted our precision. Additionally, the nutrition information collected does not account for nutritional fact changes that might have occurred between the years of 2007 and 2011, as historical package labels were not available for our review.

For restaurants, the analysis was based on a typical consumer order. Ideally, we would have been able to obtain information for actual meals purchased rather than individual items, to more accurately determine the number of calories consumed at each meal. NPD and other industry data sources do not capture this level of information. As with the CPG analysis, any change in product nutrition information from 2006 to 2011 was not accounted for because historical menu information was not available. In addition, the contracts with our third-party data providers precluded identifying specific chain names with their associated results.

Additionally, it is important to note the data limitations within the CPG company analysis. Data for dollar sales were collected by Nielsen ScanTrack, which does not include data from Walmart, Dollar Stores, and warehouse clubs such as Costco. Nielsen is in the process of launching an all-channel product in 2013, which will capture three-year historical data for these categories and can be included in future analyses.

Conclusion

Until now there has been limited evidence that food and restaurant companies providing BFY alternatives can improve their financial performance. We believe this landmark research makes that connection, and provides an incentive for companies to begin transitioning their product lineups and menus to emphasize sales of more BFY/lower-calorie items. Our research offers sufficient proof that companies growing their sales of BFY/lower-calorie foods and beverages can reap financial gains. This should encourage them to develop and market healthier alternatives.

As a result of our findings, we recommend the following:

- Companies should place more emphasis on selling BFY/lower-calorie foods and beverages as an effective pathway to improved business performance.

- CPG food and beverage companies, restaurant chains, and industry analysts should include the measurement of BFY/lower-calorie sales developed in this research when assessing annual sales, financial, and reputation performance metrics.
- Public health officials and policymakers should be aware of food, beverage, and restaurant companies’ core performance metrics in order to work more effectively with them to address the obesity epidemic in the future.

By working together, food and restaurant corporations and the public health community can play a significant role in addressing obesity. This research helps bridge the divide between public health goals and the industries’ financial well-being, and presents a business case for change that can ultimately meet the needs of both parties.

CPG Companies in the Study



Restaurant Chains in the Study



Authors and Acknowledgments

Hank Cardello (lead author) is a Senior Fellow and the director of Hudson Institute's Obesity Solutions Initiative. Hank is the author of *Stuffed: An Insider's Look at Who's (Really) Making American Fat* (www.stuffednation.com) published by HarperCollins/Ecco. He is a former food company executive with Coca-Cola, General Mills, Anheuser-Busch, and Cadbury-Schweppes and has been a frequent contributor to *The Atlantic* and *Forbes* on food industry and obesity policy matters.

Jeffrey Wolfson, Chief Strategic Officer at The FORT Group, provided industry perspective and led the project analytics for both studies. Jeff has been a consultant to the food industry for more than 24 years and previously served as a food company executive with General Mills, Nestle, and General Foods (now part of Kraft Foods).

Margaret Yufera-Leitch, Ph. D., MSc., Hudson Institute Research Associate, led the team in our analysis for classifying the more than 8,850 CPG products in their appropriate category. Margaret's primary focus is on reward processing and hedonic motivation in human food choice. Published in peer review and the popular press, Margaret is strongly committed to obesity research, and to finding appropriate solutions for the current obesity epidemic.

Lauren Betzing Warren, a graduate student in the department of Health Policy & Management at the Yale School of Public Health, acted as writer and research staff member for the project team. Previously, Lauren was a senior consultant at Prophet, a leading strategic brand and marketing consulting firm.

Michael Spitz, a graduate student at the School of Public Policy at the University of Maryland, College Park, acted as a primary research assistant in the restaurant study.

Lisa Harnack, Dr. P.H., R.D., M.P.H., Professor and Director, Nutrition Coordinating Center, School of Public Health at the University of Minnesota, provided guidance on the classification of meal items for the restaurant study.

Additional assistance on this project was provided by Hudson Institute interns Daniel Green (undergraduate student at Cornell University) and Madeleine Livingston (undergraduate student at George Washington University).

Review of the findings was provided by Michael Jacobs, Professor of the Practice of Finance at the University of North Carolina at Chapel Hill; Christopher Malloy, PhD, Associate Professor of Business Administration at Harvard Business School; and Shu Wen Ng, PhD, Research Assistant Professor – Nutrition at the University of North Carolina Gillings School of Global Public Health.

Special thanks to Catherine and Bob Buday, The Bloom Group, for their contributions to the writing and editing of this paper.

Appendices referenced in this report, with more information regarding calorie consumption trends, industry initiatives, and data sources, are available online at www.obesity-solutions.org/bfyreport.

Support for this report was provided by the Robert Wood Johnson Foundation (RWJF). RWJF also supported the two original reports from which this one draws: *Better-For-You Foods: It's Just Good Business* and *Lower-Calorie Foods: It's Just Good Business*. RWJF is the nation's largest philanthropy devoted exclusively to health and health care.

References

1. National Center for Health Statistics. Health, United States, 2011: With Special Feature on Socioeconomic Status and Health. Hyattsville, MD. 2012.
2. Ogden C, Carroll M, Curtin L, Lamb M, and Flegal K. Prevalence of High Body Mass Index in US Children and Adolescents, 2007-2008. *Journal of the American Medical Association*, 303(3): 242-249, 2010.
3. U.S. Department of Health and Human Services. The Surgeon General's call to action to prevent and decrease overweight and obesity. U.S. Department of Health and Human Services, Public Health Service, Office of the Surgeon General. 2001. Available from: U.S. GPO, Washington.
4. NIH, NHLBI Obesity Education Initiative. Clinical Guidelines on the Identification, Evaluation, and Treatment of Overweight and Obesity in Adults. Available online: http://www.nhlbi.nih.gov/guidelines/obesity/ob_gdlns.pdf.
5. USDA Economic Research Service. Food Availability (Per Capita) Data System. 2012. Accessed: [http://www.ers.usda.gov/data-products/food-availability-\(per-capita\)-data-system/loss-adjusted-food-availability-documentation.aspx](http://www.ers.usda.gov/data-products/food-availability-(per-capita)-data-system/loss-adjusted-food-availability-documentation.aspx).
6. USDA Economic Research Service, Nutritional Quality of Food Prepared at Home and Away From Home, 1977-2008, <http://www.ers.usda.gov/publications/eib-economic-information-bulletin/eib105.aspx>.
7. The Keystone Forum on Away-From-Home Foods: Opportunities for Preventing Weight Gain and Obesity. The Keystone Center. 2006.
8. Accelerating Progress in Obesity Prevention: Solving the Weight of the Nation. Institute of Medicine 2012. Accessed: http://www.iom.edu/~media/Files/Report%20Files/2012/APOP/APOP_insert.pdf.
9. Healthy Weight Commitment Foundation, Food and beverage manufacturers pledging to reduce annual calories by 1.5 trillion by 2015. Press release, 2010.
10. Slining M., Wen Ng S., Popkin, B., Food Companies' Calorie-Reduction Pledges to Improve U.S. Diet. *American Journal of Pediatric Medicine*. 2013; 44: 174-184.
11. Kleiman S., Ng S.W., Popkin, B., Drinking to Our Health: Can Beverage Companies Cut Calories While Maintaining Profits? *Obesity Reviews* 13(3): 258-274, 2012.
12. Bureau of Labor Statistics, <http://www.bls.gov/spotlight/2012/recession/>.
13. McKinsey & Company, How the Recession Has Changed U.S. Consumer Behavior, https://www.mckinseyquarterly.com/How_the_recession_has_changed_US_consumer_behavior_2477, 2009.
14. 64th Annual Consumer Expenditures Study, 2011. *Progressive Grocer*. Accessed: <http://www.progressivegrocer.com/inprint/article/id2148/inside-the-marketbasket>.
15. U.S. Food Service Industry Forecast, 2013. Technomic. Accessed: http://www.technomic.com/Resources/Industry_Facts/dynUS_Foodservice_Forcst.php.
16. *Nation's Restaurant News*: The NRN Top 100 Report. June 25 2012, June 29, 2009. <http://nrn.com/industry-data/us-top-100>.
17. Federal Drug Administration. Guidance for Industry: Nutrition Labeling Manual—A Guide for Developing and Using Data Base. 1998. Accessed: <http://www.fda.gov/Food/GuidanceComplianceRegulatoryInformation/GuidanceDocuments/FoodLabelingNutrition/ucm063113.htm>.
18. U.S. Department of Agriculture. Food and Nutrient Database for Standard Reference. Nutrition Data Laboratory home page. www.ars.usda.gov/ba/bhnrc/ndl, 2010.
19. The Nielsen Company. <http://www.nielsen.com/us/en/about-us.html>.
20. CoreBrand. BrandPower: <http://corebrand.com/brandpower>.
21. Nutrition Coordinating Center University of Minnesota. 2011. <http://www.ncc.umn.edu>.
22. Trinity Capital: Proprietary Research Data. <http://www.trinitycapitalllc.com/>.
23. NPD Group Food Service Market Research, <https://www.npd.com/wps/portal/npd/us/industry-expertise/food/foodservice>.

*Forging ideas
that promote
security,
prosperity,
and freedom*

HUDSON
INSTITUTE

WWW.HUDSON.ORG

Hudson Institute
1015 15th Street, NW
6th Floor
Washington, DC 20005
www.hudson.org