Addressing the Obesity Epidemic Through Portion Balance:

A National Study on Portion Awareness & Attitudes







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Business for Impact

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On behalf of the Portion Balance Coalition



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Portion Balance Coalition

The Portion Balance Coalition (PBC) is a multi-sector collaborative of business, public health, academic, and governmental representatives working together to identify, cocreate, and implement demand- and supply-side portion innovations in support of a balanced, healthy lifestyle. We are grateful to members of the Portion Balance Coalition for their contributions to the consumer survey design and their support.

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Acknowledgements

National Consumers League

The National Consumers League (NCL) is America's pioneering consumer advocacy organization, representing consumers and workers on marketplace and workplace issues since its founding in 1899. Headquartered in Washington, DC, today, NCL provides government, businesses, and other organizations with the consumer's perspective on concerns including child labor, privacy, food safety, and medication information. Learn more at: www.ncinet.org

Natural Marketing Institute

Special thanks to NMI (Natural Marketing Institute), a leading business consulting and market research firm in health and wellness, for developing and conducting the message testing and consumer segmentation survey, and for their insights regarding the survey results. Learn more at: www.nmisolutions.com

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Recommended to be viewed or printed in color

Executive Summary

We humans make over 200 food-related decisions every day¹. These decisions about what to eat and drink and in what quantities rely largely on fast, automatic processes.² Scientists have repeatedly shown how difficult it is to know if the portions we are eating are the right size for our nutritional needs. In fact, we have a "completion compulsion"; we are prone to 'clean our plates' regardless of the amount or type of food being served. So as portion sizes have grown 138% since the 1970's³, so has the incidence of obesity in the U.S. and around the globe leading some to suggest that large portions, in addition to multiple other factors, are contributing to the obesity epidemic in our country.

In fall 2019, Georgetown Business for Impact at Georgetown University's McDonough School of Business and National Consumers League commissioned a national study for the Portion Balance Coalition (PBC) for PBC members and other sectors to learn how they can have an impact by focused on portions and more specifically to:

- Identify Core Target: Natural Marketing Institute (NMI)'s health and wellness segmentation was utilized to identify which of five segments would be most responsive to educational messaging about portions and healthy eating in general;
- Test Key Messages: Three messaging angles: Information I Can Trust; Food as Friend; and Quality Over Quantity (see appendix for messages) were tested for overall appeal, believability, and uniqueness; and
- Establish a Baseline: Food and beverage portions knowledge, attitudes, and behaviors were measured according to NMI segments and generational age cohorts. Satisfaction with one's weight in relation to eating behaviors was also explored.

Core Target Validated

NMI's "Well-Beings" and "Fence Sitters" (see page 7 for descriptions) with children and who meet the criteria for being overweight and having obesity are the bulls-eye target group for a PBC messaging campaign. These two segments, referred collectively throughout this report as the "Movable Target" (MT), have sub-optimal health and are prioritizing health and wellness. Having children in the household provides incentive and motivation to incorporate healthier habits into their lives, both for themselves and for their family.

Key Message Identified

The "Food as Friend" message scored the highest overall and was extremely highly rated for uniqueness. In the clutter of information and conflicting guidance on what to eat and what not to eat, the Movable Target (MT) acknowledge that *food can sometimes feel like the enemy*. Elements from the two other messages - they seek knowledge from a *trusted source*, and they want choices that fit with their family and lifestyle - should also be considered when developing any consumer messaging targeted to the MT.

¹ Brumberg, Adam, Food and Brand Lab at Cornell University.

² Riis. International Journal of Obesity (2014) 38, S19–S24.

³ Young, Lisa & Marion Nestle, "The Contribution of Expanding Portion Sizes to the US Obesity Epidemic", American Public Health Association, February 2002. "Reducing Portion Sizes to Prevent Obesity", American Journal of Preventive Medicine, Vol. 43, Issue 5, November 1, 2012.

Baseline Established

Analyzing the Movable Target's (MT) knowledge, attitudes, and behaviors regarding portions revealed some interesting differences when compared to the General Population (GP):

- The MT report higher levels compared to the GP of stress eating, distracted eating, and binge eating/drinking. As such, a focus on mindfulness can be a key strategy to help shape new behaviors.
- While the MT claim to be strongly knowledgeable and confident in their portion sizes, less than 50% agree there has been portion size creep; they also have relatively low awareness of insights (e.g. it takes your brain about 20 minutes to register that you are full) that can be helpful in managing the amount of food and beverages consumed.
- More than half the MT say they need help determining the correct portion sizes when eating at home and acknowledge having less control over portions when eating out.
- Eating out is full of complexity; there is an opportunity to address the perception that more/bigger is better and instead offer a value proposition that reframes the eating out occasion.
 - Eating out often results in overeating, making the MT feel poorly about themselves with three-quarters (75%) saying they would like restaurants to offer standard portions based on U.S. Dietary Guidelines.
 - At the same time, MT's like the large portions when eating out because it is a sign of good value. Eating out is also perceived as a treat and can mean there is extra food to be taken home.
- The sense of value and overeating becomes even more complex when the concept of waste is introduced as these factors are interrelated and can be in conflict in the MT's mind. Many buy larger packages and like large restaurant portions because of the 'good value'. However, they feel guilty if food spoils or expires before they eat it, or feel the need to clean their plate to avoid food waste and then feel bad about overeating.
- MT parents are knowledgeable and confident about the appropriate amount to feed their children and are positive about choosing healthier food and beverage options if offered. Most would pay a premium for healthier options of kids' restaurant meals.

These insights inform the development of the PBC's consumer messaging and awareness campaign (demand side). It also informs the PBC's efforts to promote portion balance at home and away from home settings (supply side) as consumer education alone is not enough to address the complexity of the obesity crisis. Education must be accompanied by changes to the food environment and to societal norms. Note that only in this Executive Summary is the message testing referenced. The rest of this report is focused on sharing what was learned regarding the MT's awareness, knowledge, and behaviors about food and beverage portions.

Introduction

Over 40% of U.S. adults are classified as having obesity; another 33% are overweight⁴. Among children, these numbers are 18.5% and 14%, respectively. These high rates persist and increased over more than three decades despite billions of dollars aimed at reducing rates of obesity.

A 2014 McKinsey Global Institute study titled *Overcoming Obesity⁵* evaluated seventy-four possible interventions to address the obesity crisis. The study identifies "Portion Control" as the number one intervention area, evaluated for both potential impact and cost-effectiveness. The McKinsey study authors also acknowledge that true change requires multiple sectors working together to apply diverse knowledge, experience, and organizational levers toward common action. As such, the Portion Balance Coalition (PBC) was founded in mid-2018 as a multi-sector collaborative of business, public health, academic, and governmental representatives working together to identify, co-create, and implement demand- and supply-side portion innovations in support of a balanced, healthy lifestyle.

Business for Impact at Georgetown University's McDonough School for Business is the coalition's neutral organizer and convener. The PBC adopted the term "portion balance" rather than portion control to offer a broader framework and "big tent" for all sectors to rally behind a game-changing initiative around portions. The portion balance framework encompasses three factors -- volume (quantity), proportionality (variety), and quality (nutrient density).

To inform its work on consumer messaging about portion balance, Georgetown Business for Impact at Georgetown University's McDonough School of Business and National Consumers League in fall 2019 commissioned a national study for the Portion Balance Coalition (PBC). This PBC research study identifies fifty-one million adults with healthy lifestyle aspirations who meet the criteria for being overweight or having obesity as a Movable Target (MT) for educational awareness and messaging about portions. The study focuses on what types of messaging resonates with the MT and captures their baseline awareness, attitudes, and behaviors involving portions as well as attitudes about weight satisfaction and sources of nutrition information. The Study Findings in this report only summarizes consumers' foundational attitudes and behaviors. It does not include analysis of the message testing.

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⁴ Prevalence of Obesity and Severe Obesity Among Adults: United States, 2017–2018, National Center for Health Statistics, Center for Disease Control and Prevention.

⁵ Overcoming obesity: An Initial economic analysis, McKinsey Global Institute, November 2014.

Methodology

Natural Marketing Institute (NMI) gathered data for 4,700 consumers in late September through early October 2019 via online surveys using NMI's proprietary survey platform, LENS. The study balanced responders by age, gender, income, region, race/ethnicity, and education and tagged them by generational cohorts as follows: Millennials (22-42); GenX (43-54); Boomers (55-73); and Matures (74+).

Study respondents self-reported height and weight answers, which was used to calculate body mass index (BMI) and broadly categorized a person as being underweight (<18.5); normal weight (18.5 to 24.9); overweight (25.0-29.9); or with obesity (30.0+). 10% of all responders declined to answer the height and weight questions.

NMI's Health and Wellness segmentation, which includes a number of additional healthrelated factors, was utilized to provide richer insights using five distinct consumer segments:



The NMI database includes twenty-one years of trended data with ~72,000 consumers and derives its segmentation from respondents' attitudes, behaviors, and product usage.

Study Findings

Each section below compares survey results between the General Population (GP) – graphs always in the **teal blue color** - and Movable Target (MT) – graphs always in the **bright green color**. Any significant outlier differences within generational cohorts, NMI health & wellness segments, or other demographic indicators are highlighted in **dark green boxes**.

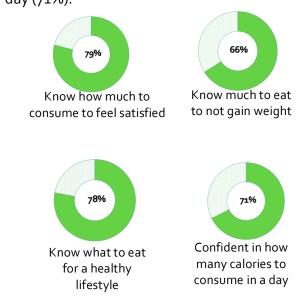
1. Portions Knowledge and Attitudes

A. Basic Knowledge and Confidence

While the number of U.S. adults that are overweight or have obesity continues to climb, the majority of consumers – the General Population - report they know how much to eat to feel satisfied (75%) and how much to eat for a healthy lifestyle (74%). Interestingly, consumers are not as confident in their knowledge of number of calories to consume in a day (57%) and how much to eat to not gain weight (60%). And the majority are not aware of portion size creep, with less than 50% being aware that portions are much larger today compared to 20 years ago (see section B below). There is room to make a stronger connection among these factors and grow this knowledge.

Movable Target's Knowledge and Confidence

The Movable Target indicates they are strongly or somewhat knowledgeable (79%) about how much to eat to feel satisfied and about what to eat for a healthy lifestyle (78%). They are not as confident in knowing how much to eat to avoid weight gain (66%) or the number of calories to consume in a day (71%).



The "Eat, Drink, and Be Merry" segment lags significantly behind other segments in confidence in knowing what to eat for a healthy lifestyle and in knowing how many calories to consume daily, indicating only 43% and 37% levels of confidence, respectively.

B. Awareness of Portion Size Creep

While many in the Movable Target (MT) acknowledge that portion sizes have grown over the last twenty years, less than one-third of the General Population (GP) are aware of this trend.

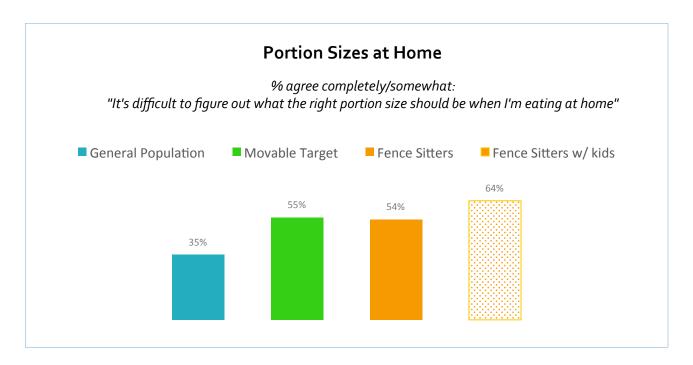
Top Box Agreement that xxx portions are larger than 20 years ago	General Population	Movable Target
Food and beverage items purchased on the go	29%	46%
Portion sizes at restaurants	30%	43%
Servings of packaged foods and beverages	23%	37%

C. Portions Sizes at Home

Consumers' false confidence in eating habits is likely contributing to weight gain. While over three-quarters (78%) of the Movable Target report confidence in understanding how much to eat for a healthy lifestyle, a large group (55%) have difficulty figuring out the right portion size to eat at home compared to only 35% of the General Population. Within the Movable Target group, "Fence Sitters" with kids report even higher levels of difficulty (64%).

Despite these difficulties, the majority of the Movable Target (63%) say they always or often think about serving sizes when eating at home, suggesting they would be open to new messages or considerations about serving and portion sizes.

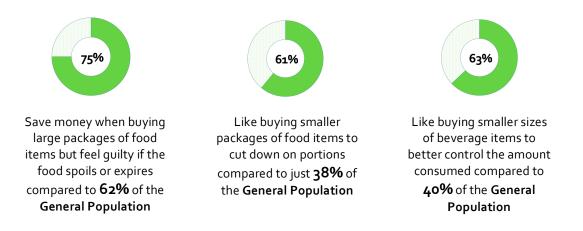
C. Portions Sizes at Home (continued)



Compared to older generations, Millennials along with Gen X have the most difficulty figuring out what the right size should be when eating *at home*.

D. Portions Sizes of Packaged Goods

This movable target not only considers the portions they serve at home but also the portions of products packaged for preparation and/or consumption at home or on the go.



E. Portions When Eating Away from Home

About one-third (30%) of the GP acknowledge that restaurant portions are larger compared to 20 years ago with half saying restaurant portions are larger than they would like. 50% of the GP believe restaurants portions are "somewhat or significantly larger than they would like".

The Movable Target sees large restaurant portions as both appealing and problematic, a contradiction that plays out across all five NMI Health & Wellness segments.

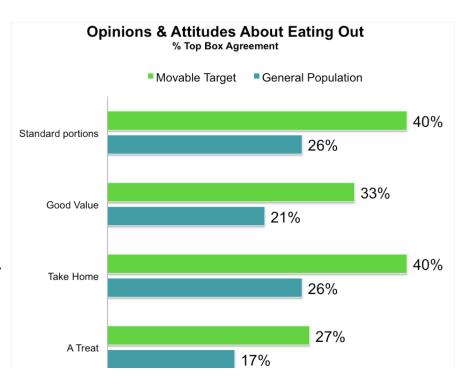
40% of the Movable Target want restaurants to offer standard portions based on USDA guidelines but are conflicted because they also equate large portions with good value (33%), more to take home (40%), and eating out as a treat (27%).

"Restaurants should offer **standard portion** sizes so people know what the right amount of food to eat"

"Large portion sizes at restaurants mean getting a **good value** for your money"

"I love restaurants that serve large portions because I typically **take home** extras to eat later"

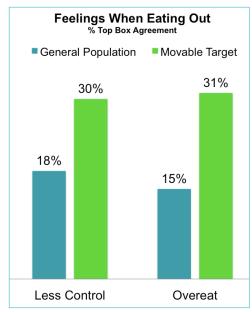
"I love restaurants that serve large portions – it's a **treat to eat out**, and I generally eat it all"



Compared to older generations, Millennials have the hardest time identifying the right portion size when eating away from home.

E. Portions When Eating Away from Home

Eating out leaves approximately one-third (30%) of the Movable Target feeling less in control of the portions that they consume. This may lead to eating choices that leave consumers feeling uncomfortable or unhappy.

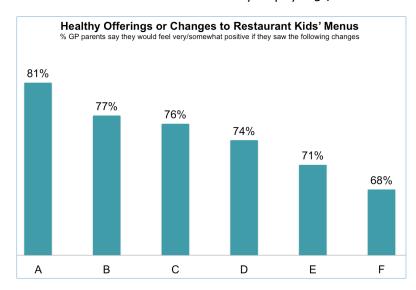


"I have less control over the amount of food I consumer when eating out than when I eat at home"

"I often overeat at a restaurant and then am uncomfortable or unhappy with myself afterward"

E. Portions and Kids Meals

A majority of parents feel positively about a range of healthy changes or offerings to restaurant kids' menus. 76% say they are willing to pay on average \$.81 extra for a healthier side dish. The MT are likely to pay \$.94 more.

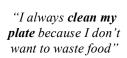


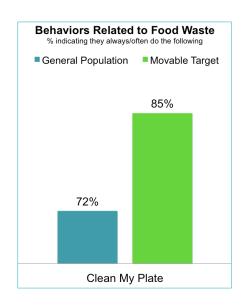
Descriptions of changes/offerings:

- A. Side of fruit/veg served in addition to a smaller serving of fries
- B. Side of fruit/veg served instead of fries
- C. Symbol indicating the meal is the appropriate balance of nutrition and calories for children in specific age ranges
- D. A healthier beverage (e.g. water, seltzer or milk) as the "default" in place of a sugary drink
- E. Smaller portions from regular menu instead of separate kids' menu

F. Portions and Food Waste

Compared with the General Population, the Moveable Target is more concerned with waste. Today, this concern drives the Movable Target to "clean their plates" but also points to an opportunity to link portion practices with minimizing food waste.





2. Weight Satisfaction and Eating Behaviors

While the Movable Target is more satisfied with their overall health, current weight, and current eating habits compared to the General Population, a distinct difference emerges based on income levels. There are challenges to address these mindsets and economic realities.

Extremely/Very Satisfied With	General Population	Movable Target: Income <\$50K	Movable Target: Income >\$50K
CURRENT WEIGHT	36%	38%	48%
Overall Health	49%	54%	69%
Current Eating Habits	48%	48%	66%

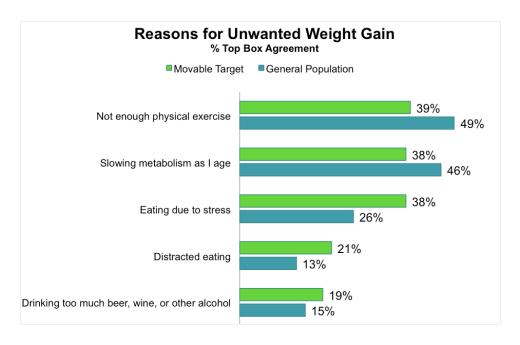
2. Weight Satisfaction and Eating Behaviors

Across all generations, men report significantly greater levels of satisfaction with their current weight, overall health, and eating habits compared to women. There is a high correlation between overall satisfaction with one's weight with satisfaction across other life categories such as health, employment, family life, and eating habits. Those who report more satisfaction with their weight are more consciously focused on portion sizes and more likely to notice that portions have increased in the last twenty years.

A. Reasons for Unwanted Weight Gain

While lack of exercise and slowing metabolism are key reasons for unwanted weight gain in the General Population, the Movable Target is also more likely to cite stress, drinking, binging, and distracted eating.

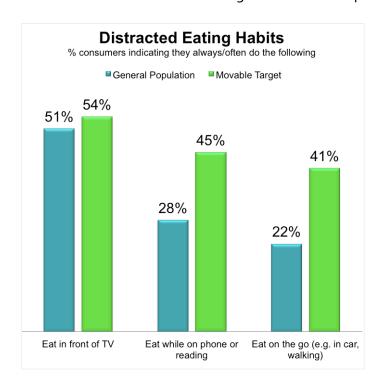
"If you have put on unwanted weight over the last few years, what do you think are some of the contributors?"



2. Weight Satisfaction and Eating Behaviors (continued)

B. Distracted Eating Habits

Individuals from the Movable Target are also more prone to distracted eating habits:

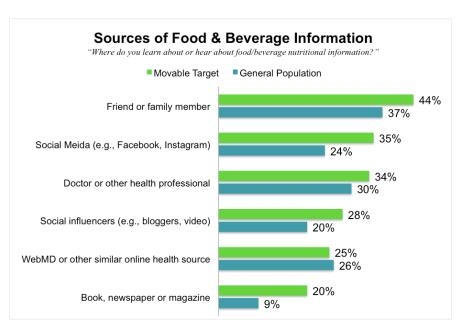


Younger generations report more distracted eating behaviors; more often than other generations, they eat and drink in front of the TV, on their phone, while reading, or on the go

3. Nutrition Information Sources

A. Sources of Nutrition Information

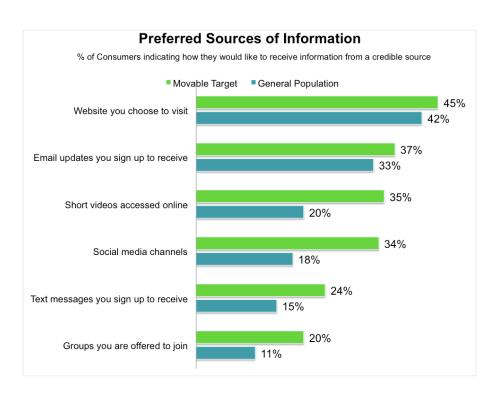
The MT receives information from a wide variety of sources but is most likely to learn about food and beverage nutritional information from friends and family or social media.



B. Preferred Sources of Information

Many in the Movable Target would be interested in receiving nutritional guidance for a healthy lifestyle from a credible source in a variety of media channels and media formats:

A website they choose to visit is the preferred option along with email updates and social media channels.



C. Reading Food Labels

Movable Targets are significantly more likely than the General Population to not only read labels on food packages, but also to indicate that the information influences their purchase.

Reading Food Labels % of Consumers Indicating How Often They Read Labels on Food & Beverage Packages

General Population

18%

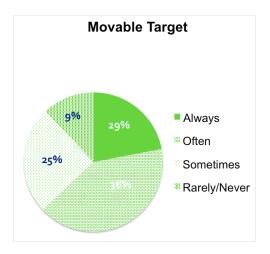
22%

Always

Often

Sometimes

Rarely/Never



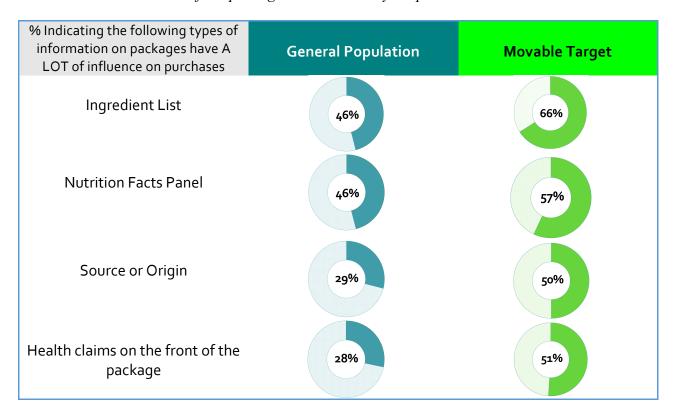
3. Nutrition Information Sources (continued)

D. Information on Packages

Over half of the Movable Target indicate that ingredient list and Nutrition Facts Panel have a strong influence over their food purchases.

Information on Packages and Influences on Purchases

"How much influence does the different types of information on food package labels have on your purchases?"



Most consumers learn about nutritional information from advertisements or food packages, but there are distinct differences by segment and age:

- o Matures and "Well Beings" are remarkably similar in relying on doctors/health care professionals and online sources such as WebMD and social influencers.
- Millennials and "Fence Sitters", especially those with children, are actively learning about nutrition information on social media; books, newspapers, or magazine; newsletters; blogs; and podcasts.
- The "Eat, Drink, and Be Merry" segment is the least willing to receive nutritional guidance or information from any credible source.

4. Managing Portions

The Moveable Target regularly thinks about serving sizes, and they use a wide variety of tactics to measure portions.

A. Managing Portions at Home

Managing Portions at Home

"Please indicate how often you use these methods at home."

% Consumers indicating they always/ often (top 2 boxes) use the following to manage how much to eat/drink when eating at home	General Population	Movable Target
Read the Nutrition Facts Panel to identify the serving size	44%	+17%
Recipe information that states the calories and number of servings	41%	+20%
Make half the plate fruits and vegetables	37%	+20%
Use smaller plates, bowls, or cups/glasses	36%	+21%
Calorie counters, calorie counter apps, measuring cups or other measuring tools	30%	+20%
I just eat until I feel like I've had enough	53%	+5%
Use cues like the palm of my hand for a portion of meat or fist size ~ 1 cup	30%	+22%
Use a sectioned plate	20%	+19%
I base it on the MyPlate visual, the nutrition guide from the federal government	23%	+19%
Photos online or in magazines that display food	22%	+20%

Implications

For any messaging campaign or intervention, there is no one-size-fits-all solution. There will always be specific subgroups or consumer segments that are more primed to take action. The idea of portion balance is no exception, as this study reveals disparities in knowledge, confidence, behaviors, and openness to change across consumer segments.

Based on the research, the following are implications for each key sector or audience in terms of what they should consider regarding portions:

General Takeaways

- The Movable Target (MT) is open to multiple sources of information, suggesting opportunities for a broad-based messaging program. These MT consumers that make healthy eating a priority can be influencers that can 'spread the word' if they find an approach that is useful.
- 'Share with a Friend' should be noted as the very high scores indicate a strong opportunity for word-of-mouth expansion and strong social media sharing.
- Value, overeating, and waste are all inter-related. Consumers need to be educated on proper portion sizes so that they are not inadvertently overeating and may be motivated by the additional benefit of reducing food waste.

For Dietitians and Health Professionals

- Mindfulness appears to be a key strategy for shaping new behaviors; the Movable
 Target is often distracted when consuming food and beverages and are likely not aware
 that this can lead to overeating.
- Similarly, while most feel that they know how much to eat to feel satisfied, have a
 healthy lifestyle, and to avoid weight gain, they are not confident in knowing their daily
 calorie needs or portion sizes while dining at home.
- The Movable Target is more likely than the General Population to use cues and other tips to manage their portions. They are open to utilizing options beyond habit or feeling sated. Over half read nutrition facts panels to identify serving sizes, use recipe information with calories and serving sizes, make half the plate fruits and vegetables, and use smaller plates to eat appropriate portions.

For Restaurants

- The Movable Target is engaged in eating out, but also recognize the challenges. This group is open to creative solutions for reframing the eat-out occasion such as takehome boxes and menu options that feature 'standard' portions based on U.S. Dietary Guidelines.
- At restaurants, the majority of parents are positive about being offered healthier options for their child (a side of fruit or vegetable, a healthier entrée, water or seltzer instead of soda) and are willing to pay extra (\$.81 for GP and \$.94) for this benefit.

 Many consumers are concerned about food waste. Moderating portions may be a way to reduce or eliminate food waste.

For Consumer Packaged Goods Companies

• A majority in the MT regularly thinks about serving sizes when eating at home, suggesting they would be open to new messages and serving size considerations. At the same time, two-thirds of this group says it is hard to figure out the correct portion sizes, and there is an opportunity to help them with this.

For Society

 Many consumers struggle with dissatisfaction with weight, health, and eating habits, yet say they are very confident in knowing how much to eat to not gain weight. Work moving forward will need to consider cultural insights and address tensions involving both the body-positivity movement and recognition of genetic pre-disposition to becoming overweight.

Conclusion

A lack of focus on portions as a key factor when eating and drinking at home, on the go, or at a restaurant means that larger portions are causing Americans to consume more than they intend or need. Before COVID-19, a greater share of wallet was going to food prepared away from home where portions tend to be larger than U.S. dietary recommendations. There is an inherent conflict with large portions equating to value if it means that consumers are unintentionally overeating and then feeling badly about themselves afterwards. The practice of 'cleaning your plate' or eating and drinking while distracted, all common American norms, can lead to overeating and unwanted weight gain.

Although the Movable Target (MT) are more focused on health and wellness than the General Population, they clearly have sub-optimal health and are thus more likely to respond to an awareness and educational campaign around portions.

Compared to the General Population (GP), the MT is more focused on health and wellness and more open to messaging and information from trusted sources about portions.

- This target needs help, in and out of the home, for themselves and for their children.
- Dissatisfaction with health, weight, and eating habits are strong within this target.
- Within the MT, younger families with children have additional motivation to build healthier habits for the entire family. When they succeed, they promote awareness for balanced portions with the next generation, their children.

While the MT has been shown to be more receptive to new information and tools for nutrition and overall health, there are certain segments, particularly the "Eat, Drink, and Be Merrys", who are not open to consumer education. This segment reports lower confidence in understanding what is needed for a healthy lifestyle and the lowest satisfaction levels for overall health, current weight, and current eating habits. For this segment, "stealth health" supply-side interventions, where portions are moderated without informing the customer of the changes, may be the most effective solutions.

Linking a more conscious awareness of portions to reducing food waste appears to be an opportunity, though more research is needed.

Over the next 10 years, the coalition seeks measurable change in activating consumers to create demand and acceptance for healthier, balanced food portions, and working with industry to respond to the demand.

Appendix

These are the three messages that were tested with consumers to help guide the PBC's consumer message campaign work:

Information I Can Trust

There is so much conflicting information and advice about food and nutrition it is hard to know what to believe. Now, there is a nonprofit organization putting out information, engaging content, and resources vetted by a group of nationally renowned nutritionists, registered dietitians, and health professionals. These experts are all working together to help you navigate lifestyle decisions and food choices that are right for you and your family – both for today's and tomorrow's healthy lifestyle.

Food as Friend

In our efforts to get healthy and stay healthy, food can sometimes feel like the enemy. It's time we reframe how we think about food as it relates to our bodies, self-image, and overall health. Now, there is a group of companies, nonprofits and researchers working together to change how society influences how we think about food. Tips for learning how to listen to your body, choose better options on a budget, and to be informed of your choices, especially around portions – all ultimately help you build a healthy relationship with food. After all, food is necessary, food is fun, food is central to celebrations, and food is an important part of our day and our time with family & friends. Your emotional and physical well-being is worth it – less guilt, more happiness, better health!

Quality over Quantity

We've been raised to be smart consumers. The more you get for your money - the better the deal! But when it comes to food, more is not always better. The more you know about the actual nutrients in food, the more likely you are to choose foods that help your body stay fueled up on good nutrients – not filled up on empty calories. In addition to nutritional value, food quality covers a wide range of ideas – farm methods, processing practices, ethical and sustainability approaches. Now there is a website and other content vetted by a group of food specialists and health professionals designed to help you understand dimensions of food quality. The nonprofit behind this effort brings you information to support you in making food choices that are the best for you and your family.