

Is it Time to Rethink Nutrition Communications? A 5-Year Retrospective of Americans' Attitudes toward Food, Nutrition, and Health

TODAY'S CONSUMERS ARE AT the center of a perplexing and changing nutrition environment, particularly when it comes to eating healthfully and reducing health risks associated with overweight and obesity. With instant access to information, it might seem that Americans have "knowledge" literally at their fingertips, yet evidence suggests that they are not acting on this knowledge when it comes to making decisions about food and health. Insights revealed from the first 5 years (2006-2010) of the International Food Information Council (IFIC) Foundation's Food & Health Survey: Consumer Attitudes Toward Food Safety, Nutrition & Health suggest that, although food and health communications may have fostered general awareness, a disconnect remains among

Americans' perceptions, attitudes, and actual behaviors when it comes to achieving a healthful lifestyle.¹⁻⁵

The 2010 Dietary Guidelines for Americans (DGA) opens a new chapter in food and health communications, focusing for the first time on an at-risk, overweight, obese population.⁶ It challenges nutrition and health practitioners to consider new approaches for motivating today's consumers toward more healthful choices. Helping Americans achieve diet and physical activity goals means more than just communicating what to do. Communications must reach consumers where they eat, work, and play and include strategies that both inspire and guide them on how to make healthful behavior changes. This effort calls for programs and partnerships that deliver consistent, persistent, and positive messages that also provide interactive and hands-on direction to consumers.

Using longitudinal data collected during the first 5 years of the IFIC Foundation's Food & Health Survey, this article highlights key findings and trends in consumer knowledge, attitudes, and behaviors.¹⁻⁵ To relate to Americans' mindsets, nutrition and health practitioners, including registered dietitians (RDs), must consider this evidence of what consumers know and understand, what they identify as important, what actions, if any, they are taking to make improvements, and common barriers to making changes. Equipped with this information, practitioners can build on communication strategies that appear to be working with consumers while rethinking other approaches that will motivate and inspire change toward achieving a healthful lifestyle.

SURVEY DESCRIPTION

The IFIC Foundation's Food & Health Survey is an annual national survey that

monitors consumer knowledge, attitudes, and self-reported behaviors related to important nutrition, health, and food safety practices. Using a web distribution approach, Cogent Research was commissioned by the IFIC Foundation to develop and conduct the survey from 2006-2010. Surveys were presented in English, self-administered online, and contained a range of 90 to 134 questions. In addition, researchers used Flesch-Kincaid, a readability test designed to indicate comprehension difficulty, which accessed the survey's reading grade levels between 6.8 and 7.5. Some questions were repeated in the surveys, whereas others varied to elaborate on previous information or address new issues. Figure 1 summarizes the research objectives and how they have evolved during the 5 years. The Food & Health Survey permits a unique longitudinal view of evolving consumer attitudes and their reported behaviors.

Survey participants were members of an online panel who have opted to participate in consumer research. They were recruited randomly to reflect the latest US Census data for the US adult population (18 years or older) on key US Census characteristics, including age, sex, race, and level of education. Responses from 1,000 to 1,064 participants per year with a sample size error of ± 3.0 - 3.1 for individual years and ± 4.4 among survey years 2006-2010.

KEY SURVEY FINDINGS AND IMPLICATIONS

The following sections highlight key findings and implications from 5 years of data collection. Select data are presented in the Table with key questions identified and yearly responses. Demographic data is from the 2010 Food & Health Survey.

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Survey Year	Key focus/areas of change
2006 (benchmark survey)	How consumers approach overall diet, physical activity, and weight to manage their physical health; explored knowledge and attitudes toward food components such as fats, sugars, and carbohydrates, as well as attitudes towards and use of information sources
2007	Knowledge and use of information about calories; awareness and perceptions of low-calories sweeteners and caffeine; benefits of food that can contribute to physical health and well-being, and typical meal occasions
2008	Knowledge and practices regarding food safety and safe food handling
2009	Knowledge regarding information sources, behavioral patterns, food additives, and food irradiation
2010	Knowledge and practices regarding calorie/energy balance, physical activity levels and motivators, protein, sodium, food shopping destinations, and consumer trust

Figure 1. Food & Health Survey. Summary of changes, 2006-2010.

Perceptions of Overall Health, Weight Status, and Diet Status

Overall Health. From 2006-2010, at least three quarters of Americans have consistently reported their health as being good to excellent, a surprising finding given the rates of overweight and obesity. They also reported a relatively high degree of satisfaction with their overall health; fewer consumers reported being either “not very satisfied” or “not at all satisfied.”

Weight Status. Each year, respondents rated their weight status as underweight, ideal, overweight, or extremely overweight/obese. This was compared to actual weight status, calculated as body mass index (BMI) using self-reported height and weight and categorized according to Centers for Disease Control and Prevention standards.

In 2010, 25% of the respondents with BMI in the overweight range described themselves as “ideal” and 76% with BMI in the obese range described themselves only as overweight. This disparity between Americans’ perceived and actual weight status has remained nearly unchanged since 2006 (Figure 2). Still, the majority of consumers in 2010 admitted to being “extremely” (21%) or “somewhat” (49%) concerned about their weight. Despite 70% expressing concern about their weight, this concern has declined in recent years, down from 75% in 2008, suggesting a movement toward complacency with weight status.

However, many consumers reported taking action regarding to their weight. Since 2007, about 8 in 10 Americans have consistently reported they are try-

ing to lose or maintain their weight. The top three changes reported for weight management in 2009 and 2010 included changing the amounts of food eaten, changing the types of foods or components eaten, and engaging in physical activity. Although consumers’ reported approaches show a level of knowledge related to weight management strategies, this knowledge does not appear to have reversed the incidence of overweight or obesity.

Primary motivators to lose or maintain weight included improvements in physical appearance or in overall health and well-being, while the top three barriers included lack of will power, lack of time, and not seeing results quickly. Consistent over the 2009 and 2010 surveys, younger populations (18 to 24 years of age) and those respondents concerned with their weight status reported physical appearance as a primary motivator, whereas older adults (65 years of age and older) with a higher income level were trying to lose or maintain weight for improvements in health and overall well-being. Since 2007, women have been more likely than men to report that they were trying to lose weight. In addition, those who were not satisfied with their health and whose BMIs were in the overweight or obese range also reported attempts at weight loss.

At a time when the majority of adults and one in three children are overweight or obese,^{7,8} Americans should be increasingly concerned about their weight status, its effect on health, and strategies to improve healthful behavior and choices. With rising rates of

obesity also come increased risk for noncommunicable diseases, including coronary heart disease, stroke, high blood pressure, type 2 diabetes, and other serious health conditions.⁹ Yet Food & Health Survey results indicate a persistent disconnect between consumers’ perceptions of their weight status and health.

Perhaps the perceived growing acceptance and/or state of denial regarding overweight may be interfering with consumers’ desire to make diet and behavior changes. Nutrition and health practitioners must seek new and practical ways to connect with consumers; provide guidance in evaluating personal weight status and identifying a realistic body weight; encourage healthful behavior changes; and prioritize messages that foster understanding of the connections among diet, weight, health, and cultural sensitivities.

Diet Status. Consistent with the US Department of Agriculture’s national data reporting a declining assessment by Americans in the overall healthfulness of their diet,¹⁰ Food & Health Survey trends indicate that fewer Americans rate their overall diets as healthful (“diet” was defined in the surveys to include all foods; beverages; and vitamin, mineral, and other dietary supplements). Just over half rated their overall diet as being somewhat or extremely healthful, a significant decrease from earlier years (Table). This suggests a growing recognition among consumers that their diets may lack healthfulness, yet a sense of urgency appears to be missing with an increasing number

who rated their diets as “neither healthful nor unhealthful” (26%, 2010 vs 20%, 2008). Women, those with a college degree or higher, and those who perceive themselves to be at an ideal weight, are more likely to state that their diet is either “somewhat or extremely healthful.”

Steady since 2007, roughly 6 in 10 Americans reported making an effort to improve the healthfulness of their diet. As shown in the Table, of those making changes in 2010, weight was a top reason for making dietary modifications. However, in previous years, health-based reasons such as “improve overall well-being,” “improve physical health,” and “for a specific health condition” all competed as top reasons consumers wanted to make dietary changes. In 2010, those most likely to have made a change in their diet include women, those who are 18 to 34 years of age, and those who are concerned about their weight.

Americans make dietary changes for many reasons, and weight loss has grown in prominence over the years. Successful consumer messaging requires a better understanding of the motives and behavioral determinants for specific groups or individuals. If behavior change is desired, it is important for nutrition and health practitioners to first listen closely for specific goals and motives, and then provide messages and recommendations accordingly.

Consumers’ Calorie Conundrum

The DGA recognizes calorie imbalance as a primary factor in the increased incidence of being overweight and obese, and suggests that everyone know their daily calorie needs based on their age, sex, and activity level to avoid inappropriate weight gain.⁶ Food & Health Survey findings demonstrated the need to prioritize communications around calories, provide information on how to balance calories, and make these messages meaningful and actionable for consumers.

Calories. Consumers reported a lack of awareness of their personal calorie requirements and the effects of calorie sources on their weight. When asked to choose whether calories in general, calories from fats, calories from carbohydrates, or calories from protein were most likely to cause weight gain, only about 30% correctly identified that “calo-

ries in general are what causes weight gain.” About 20% of Americans were not sure about the relationship between calorie sources and weight gain. These figures have remained unchanged since 2006.

Also unchanged since 2006, only 12% of Americans correctly estimated their daily calorie requirements in 2010 (within a ± 100 calorie range based on age, weight, height, and physical activity) (Figure 3). However, more consumers were willing to venture a guess at their daily calorie needs in 2010 (75%) compared to 2006 (57%), potentially suggesting a growing interest in or awareness of calories. Messages that encourage consumers to “know their number” and understand that “calories count” may help consumers understand the important role that calories play related to weight management. Recent research reveals that these messages, in fact, are motivating to consumers.¹¹⁻¹³

Physical Activity. Physical activity is vital to helping consumers live a healthful life. Between 2006 and 2009, when consumers were given a broad definition of physical activity, the percentage of Americans who reported being physically active at least 1 day per week increased from 64% in 2006 to 83% in 2009. However, when the question was revised in 2010 to better understand whether consumers were meeting the 2008 US Department of Health and Human Services’ Physical Activity Guidelines, findings showed that the majority of consumers (77%) were not meeting these guidelines. The Physical Activity Guidelines provide science-based guidance to help Americans improve their health through appropriate physical activity. Although many food and nutrition practitioners focus on food as a way to help consumers manage their weight, emphasizing the important role of physical activity will not only assist with weight management, but also with overall health.

Insights and Understanding of Nutrients

While the 2006-2010 Food & Health surveys took a longitudinal look at specific nutrients, such as dietary fats, carbohydrates, and sugars, others nutrients were added in subsequent years to

fully understand consumer attitudes regarding broader nutrients.

Dietary Fats. Dietary guidance has evolved from a singular focus on reducing total fat intake to adjusting the types of fats consumed. Yet all types of dietary fat continue to have a poor reputation among Americans, with little recognition of the beneficial impact that fats can have on health.

From 2006 to 2009, about two thirds of Americans reported concern with the amount and type of fats consumed. As part of the first four Food & Health surveys, Americans were asked whether they had heard of various types of fats and fatty acids, with *trans* fats, saturated fats, and vegetable oils being the most recognized fats in 2009. Awareness of *trans*-fatty acids grew from 81% in 2006 to 90% in 2009, along with reported attempts to reduce dietary consumption of *trans*-fatty acids. Awareness of n-3 fatty acids has remained fairly steady with 74% in 2009 reporting that they have heard of this type of fat. Yet only 51% indicated they were trying to eat more of n-3 fatty acids.

When making purchasing decisions, the use of total fat, saturated fat, and calories from fat information on the Nutrition Facts panel appears to be declining, which may suggest that consumers are directing their attention to other nutrients and overall calories.

Carbohydrates, Sugars, and Low-calorie Sweeteners. Although concern with the total amount of carbohydrates consumed remained stable between 2006 and 2009, more Americans became concerned with the type of carbohydrate. Awareness of fiber and whole grains increased, with a peak in interest in 2008 when nine of 10 consumers reported that they were trying to increase their intakes.

Since 2008, consumers have become increasingly concerned about the amount and type of sugar they eat. In 2010, the majority of Americans reported trying to consume less sugar (70%) and less high-fructose corn syrup (63%), whereas a declining number of Americans believed that “moderate amounts of sugar can be part of an overall healthful diet” (58%, 2010 vs 71%, 2008). Fewer Americans believed it is not necessary to eliminate sugar from their diet to lose weight. Likewise, a de-

Table. Select questions and findings from the International Food Information Council Foundation's Food & Health Survey, 2006-2010

Survey questions	2006 n=1,000	2007 n=1,000	2008 n=1,000	2009 n=1,064	2010 n=1,024
Which of the following best describes your overall health status?					
– Good	43%	41%	41%	44%	42%
– Very good	24%	29%	31%	29%	30%
– Excellent	9%	10%	9%	8%	8%
How satisfied are you with your overall health status?					
– Somewhat satisfied	41%	42%	46%	43%	43%
– Extremely satisfied	14%	16%	14%	15%	14%
– Not at all satisfied	6%	5%	6%	4%	3%
– Not very satisfied	24%	20%	18%	19%	21%
How would you rate the healthfulness of your overall diet? Again, by "diet," we mean everything you consume, including foods; beverages; and vitamin, mineral, and other dietary supplements.					
– Somewhat healthful	46%	51%	51%	51%	48%
– Extremely healthful	8%	7%	7%	6%	5%
Over the past 6 months, have you made any changes in an effort to improve the healthfulness of your diet?					
– Yes	57%	66%	67%	64%	64%
– No	43%	34%	33%	36%	36%
[IF Yes to the Above Question] For which of the following reasons are you trying to improve the healthfulness of your diet? Select all that apply.		n=669	n=660	n=684	n=658
– To improve my overall well-being		70%	69%	64%	59%
– To improve my physical health		65%	64%	61%	56%
– To lose weight		70%	69%	61%	65%
– Because of a specific health condition (eg, diabetes, high cholesterol, high blood pressure, food allergies)		37%	34%	30%	31%
– To maintain my weight		20%	11%	17%	16%
[Among Active Respondents] Keeping in mind that physical activity ^a can include a range of activities from running and basketball to gardening, playing golf and dancing, on average, how many days per week are you physically active?	n=638 ^a	n=842 ^a	n=877	n=883	n=642
– 1-2 days	22%	18%	19%	19%	8%
– 3-5 days	56%	59%	57%	59%	68%
– 6-7 days	21%	22%	24%	22%	24%
Please indicate whether you are trying to consume more or less of the following. Scale: "trying to consume less"		n=430		n=960	
– <i>Trans</i> fats		75%		64%	
How concerned are you, if at all, with the <i>amount</i> of fat you consume in the foods you eat?					
– Somewhat concerned	48%	51%	51%	49%	
– Extremely concerned	21%	19%	18%	18%	

(continued on next page)

Table. Select questions and findings from the International Food Information Council Foundation’s Food & Health Survey, 2006-2010 (*continued*)

Survey questions	2006 n=1,000	2007 n=1,000	2008 n=1,000	2009 n=1,064	2010 n=1,024
How concerned are you, if at all, with the <i>types</i> of fat you consume in the foods you eat?					
– Somewhat concerned	47%	47%	49%	49%	
– Extremely concerned	22%	25%	21%	20%	
As far as you know, which of the following statements, if any, are true? Select all that apply.					
– It is not necessary to eliminate sugar from your diet to lose weight			48%	45%	41%
– People with diabetes can include some foods with sugar as part of their total diet			44%	39%	34%
Which of the following, if any, have you used in your efforts to improve the healthfulness of your diet? Select all that apply.				n=684	n=658
– I have not used any resources to help improve the healthfulness of my diet				38%	34%
– Family/friends support				29%	37%
Which of the following information, if any, do you use on the Nutrition Facts Panel? Select all that apply.	n=581	n=657	n=627	n=738	n=698
– Calories	78%	73%	75%	75%	74%
– Total Fat	76%	73%	71%	69%	62%
– Saturated Fat	60%	58%	58%	56%	52%
– Sugars	67%	63%	68%	61%	62%

^aThe definition of physical activity changed from 2006 to 2007. The 2006 question was worded as follows: By physical activity we mean something that would increase your heart rate like walking, jogging, etc. On average, how often, if at all, would you say you are physically active, for health benefits, in a given week?

clining number of Americans agreed that people with diabetes can include some foods with sugar as part of their total diet (see the Table).

In 2009 and 2010, about 4 in 10 Americans agreed that low-calorie/artificial sweeteners can play a role in weight loss or weight management. More than one third (38%) reported consuming low-calorie/artificial sweeteners primarily to help with calorie management, whereas 22% indicated that they prefer the taste (2010) as a reason for consuming low-calorie/artificial sweeteners. When asked about specific types of low-calorie sweeteners (2006-2009), the majority of consumers (roughly 6 of 10) are aware of saccharin and aspartame. About one third of consumers are familiar with sugar alcohols and sucralose. Awareness of stevia gradually increased to 21% in 2009.

The DGA provides recommendations on foods and nutrients to increase or

reduce, yet there remains confusion among consumers about the role of some nutrients and in what direction to change consumption behaviors. For example, consumers may be ignoring nutrient-specific information, such as advice about dietary fats, because these messages often fail to relate nutrients to foods consumers actually eat. In addition, directions to reduce intake of specific nutrients and foods may be interpreted as negative rules, which research has shown are often resented and ignored. On the other hand, messages about moderating dietary intake are seen as empowering and encourage consumers to make their own healthful choices.¹⁴ These findings indicate a great educational opportunity to help provide positive and actionable messages that not only focus on *foods* that provide specific nutrients but also reinforce balance and attention to overall diet.

Influences and Information Sources

Dietary Guidance. During the 5-year period (2006-2010), familiarity with the DGA and corresponding food guidance system (MyPyramid¹⁵ prior to the 2011 introduction of MyPlate¹⁶) appears encouraging. Close to three quarters of Americans have heard of the DGA since first asked in 2009, yet close to half also admitted knowing very little about them. About 85% of Americans (2010) had heard of MyPyramid, which remained stable since 2006. The MyPyramid icon was better known with about half (51%) knowing at least a fair amount about it during the 5 years of the Food & Health Survey.

In 2010, sources of contact with MyPyramid included doctor’s office or health clinic (31%); TV, newspaper, or magazine story (28%); and food or beverage package (20%). These figures represent a decline from 2008. Amer-

Perception of Weight ^a	Calculated Weight (BMI) ^b			
	Underweight <18.5 (n=9)	Normal 18.5-24.9 (n=266)	Overweight 25-29.9 (n=267)	Obese 30.0+ (n=274)
Underweight (n=37)	54%	9%	--	--
Ideal weight (n=320)	31%	72%	25%	4%
Overweight (n=587)	15%	19%	74%	76%
Extremely overweight or obese (n=81)	--	--	--	20%
	100%	100%	100%	100%

Figure 2. Perceived and calculated weight status, 2010. The disparity observed between Americans’ perception of their weight status^a and their calculated body mass index^b continues in 2010, with a quarter who are in the overweight range describing themselves as “ideal” and three quarters who are in the obese range describing themselves as “overweight.” ^aQuestions asked since 2006. Darker blue indicates accurate perception; lighter blue indicates misperception.^bBody mass index calculated from self-reported weight and height and categorized according to Centers for Disease Control and Prevention standards.

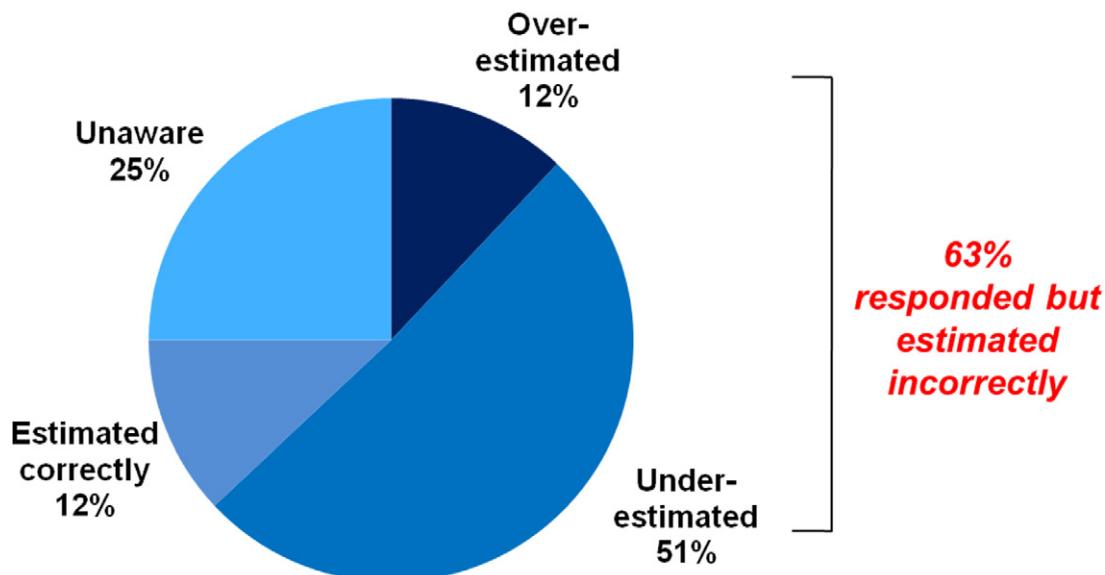


Figure 3. Knowledge of daily calorie needs. When asked to estimate the number of calories that they should be consuming in an average day, a quarter of Americans were unwilling or unable to provide an answer and roughly two thirds provided a response, but estimated incorrectly. Question: As far as you know, how many calories should a person of your age, weight, height, and physical activity consumer per day?^{a,b} (Open-end; n=1,024.) ^aQuestion asked since 2006. Estimate correctly is determined within a ±100 calorie range based on the Estimated Energy Requirements (EER) and activity levels from the Institute of Medicine Dietary Reference Intakes Macronutrients Report, 2002.¹⁷ ^bModification from 2008 to 2010. “And physical activity” was added to the question. Definitions of physical activity levels were provided.

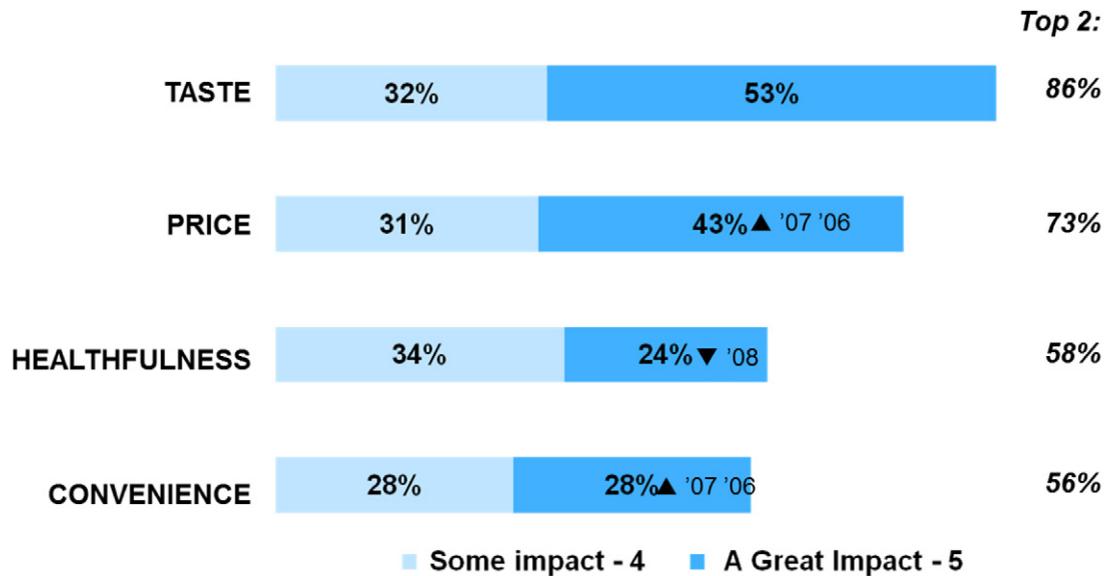


Figure 4. Factors influencing purchasing decisions. Taste remains stable and in the highest position, followed by price, healthfulness, and convenience when it comes to factors that influence Americans’ purchasing decisions. Question: How much of an impact do the following have on your decision to buy foods and beverages?^a (Select one; n=1,024.) ^aQuestion asked since 2006. ▲/▼=significant increase/decrease from year indicated.

icans also reported seeing MyPyramid information in advertising, at/from a school, and in a grocery store; each at about 20%. Interestingly, among those who have heard of MyPyramid, the majority admitted not using it (71% in 2010). From 2008 to 2010, only about 1 in 10 reported using MyPyramid to help change their diet to either eat healthier or lose weight; less than 10% reported visiting the MyPyramid website or using its tools to plan or assess their diets.

Future dietary guidance communications need to address consumer behaviors by first understanding where consumers are in their interest and understanding of dietary guidance. While recognition is a positive step, Americans are not necessarily connecting with dietary guidance tools. In an expanding world of interactive media and mobile apps, understanding where and how consumers wish to seek and use dietary guidance information will be increasingly important. The new MyPlate uses a familiar food- or meal-related image, which may provide further context for putting dietary guidance into actual practice. Future Food & Health surveys will explore the new MyPlate, icon, and messages.

Food Labels. During the 5 years of the Food & Health Survey, Americans con-

sistently reported that they actively used food and beverage packaging label information when deciding whether to purchase or consume food and beverages. The Nutrition Facts panel remained the top source (68% in 2010), closely followed by expiration date (66% in 2010), and, increasingly, brand name (up from 38% in 2006 to 50% in 2010).

When asked about specific elements used on the Nutrition Facts panel, “calories” has topped the list since the question was first asked in 2007, whereas use of other information has declined significantly, including total fat, saturated fat, and sugars (see the Table). Significantly more Americans were using sodium information in 2010 (63%) compared to 2009 (56%). Subgroups more apt to look at sodium on the label in 2010 include those 45 years and older and African Americans.

Purchase Influences. Since 2006, consumers have been asked about the impact of taste, price, healthfulness, and convenience on their food and beverage choices. Taste has consistently ranked as the number one factor for all 5 years (86%, 2010), a reminder that taste is a key motivator and needs to be a part of communicating health and nutrition information to consumers. Both price (73%, 2010 vs 64%, 2006) and con-

venience (56%, 2010 vs 48%, 2006) have seen growth as factors influencing purchase decisions. Although the impact of healthfulness has declined in recent years (65%, 2007 vs 58%, 2010), it has remained as one of the top three purchase influences (Figure 4).

Concern with economics and the challenge of hectic, hurried lifestyles may explain why price and convenience appear to have a growing impact on purchasing decisions. More importantly, the Food & Health Survey underscores the dominant and enduring importance of taste and the need to continually affirm good taste to consumers, especially when introducing healthier versions of foods and beverages.

Information Sources. Consumers were first asked in 2009 to specify resources used to improve the healthfulness of their diets. Most important, most people who reported making healthful diet changes said they did not use any resources to help improve the healthfulness of their diet. In addition, of those who made changes, support from family and friends was reported as the greatest information resource used to improve the healthfulness of their diets (see the Table). Those more apt to use family and friends as support to improve the healthfulness of their diet included

those 18 to 34 years of age, those who considered themselves to have an unhealthful diet, and those who perceived themselves as obese. Fewer Americans reported using health professionals (14%), online resources including support from community groups or blogs (11%), and dietitians (5%).

About 6 in 10 Americans in the 2009 and 2010 Food & Health surveys identified the food label as the top source of information used to guide their food and nutrition choices. Other top sources in 2010 included friends/family (40%), grocery/drug/specialty stores (29%), and health professionals (28%).

Survey results show that food and nutrition practitioners, specifically RDs, are underutilized when consumers seek information about nutrition and health. The wide range of information sources used, much of it personally derived, raises concern since people tend to seek out like-minded opinions that may not lead to new attitudes and behaviors. There is an increasing need to inform consumers about the importance of seeking well-qualified health and wellness practitioners and resources.

RETHINKING CONSUMER COMMUNICATION STRATEGIES

Longitudinal consumer research surveys, such as the IFIC Foundation's annual Food & Health Survey, provide the groundwork to help nutrition communicators, including RDs, better understand how to meet consumers where they are in their understanding, and how to motivate them toward desired behavior change. During the 5 years of the survey, there has been an explosion in access to technology and information, including food, nutrition, and health counsel, yet this has not appeared to facilitate greater consumer understanding or action. These data raise the question of whether traditional nutrition communications may have contributed to consumer confusion and perhaps, the lack of motivation expressed by many Americans.

In this era of information overload and personal choice, Americans are faced with myriad daily decisions about what they will eat and drink and the type and amount of, if any, physical activity they will engage in. Nutrition and its impact on health is only one of many factors that influ-

ence these decisions. Food & Health Survey results indicate that some nutrition and health messages are indeed being heard and Americans desire to engage in healthful behaviors. Imparting knowledge and direction through education may foster short-term action or interest, but current approaches have not facilitated established, long-term healthful habits. Indeed, we are at a critical juncture in determining how to effectively communicate with today's consumers to motivate them to action.

At present, qualified food and nutrition practitioners often go unrecognized and underutilized for helping consumers reach their healthy living goals. As the science-based experts in nutrition, RDs must earn consumers' trust as an authentic source for advice by seeking to understand their individual and complex needs, rather than just delivering information. Developing real relationships with consumers where they seek information, such as through social networks, blogs, twitter, mobile apps, and varied media channels, will help foster better consumer recognition of RDs as a "go to" source to guide their food and nutrition choices. Stopping to really listen to consumers regarding their current behaviors and concerns is what is needed to equip them with practical, relevant, and actionable strategies for implementing and sustaining healthful changes. Otherwise, consumers will continue to see dietary changes as a "do-it-yourself" project to be completed some other day—with or without the right "tools."

The DGA provides an excellent opportunity to rethink current approaches and develop new, innovative, and customized communication

strategies to help consumers. RDs and dietetic technicians, registered and uniquely qualified to help Americans connect knowledge with behavior to achieve a healthful, active lifestyle.^{12,13}

References

1. International Food Information Council Foundation. 2006 Food & Health Survey: Consumer attitudes toward food safety, nutrition, and health. http://www.foodinsight.org/Resources/Detail.aspx?topic=Food_Health_Survey_Consumer_Attitudes_toward_Food_Nutrition_Health_2006_. Accessed June 1, 2011.
2. International Food Information Council Foundation. 2007 Food & Health Survey: Consumer attitudes toward food safety, nutrition, and health. http://www.foodinsight.org/Resources/Detail.aspx?topic=2007_Food_Health_Survey_Consumer_Attitudes_toward_Food_Nutrition_Health. Accessed June 1, 2011.
3. International Food Information Council Foundation. 2008 Food & Health Survey: Consumer attitudes toward food safety, nutrition, and health. http://www.foodinsight.org/Resources/Detail.aspx?topic=2008_Food_Health_Survey_Consumer_Attitudes_toward_Food_Nutrition_Health. Accessed June 1, 2011.
4. International Food Information Council Foundation. 2009 Food & Health Survey: Consumer attitudes toward food safety, nutrition, and health. http://www.foodinsight.org/Resources/Detail.aspx?topic=2009_Food_Health_Survey_Consumer_Attitudes_toward_Food_Nutrition_and_Health. Accessed June 1, 2011.
5. International Food Information Council Foundation. 2010 Food & Health Survey: Consumer attitudes toward food safety, nutrition, and health. http://www.foodinsight.org/Resources/Detail.aspx?topic=2010_Food_Health_Survey_Consumer_Attitudes_Toward_Food_Safety_Nutrition_Health. Accessed June 1, 2011.
6. US Department of Agriculture, US Department of Health and Human Services. *Dietary Guidelines for Americans*. 7th ed. Washington, DC: US Government Printing Office; 2010.
7. Flegal KM, Carroll MD, Ogden CL, Curtin LR. Prevalence and trends in obesity among U.S. adults, 1999–2008. *JAMA*. 2010;303(3):235–241.
8. Ogden CL, Carroll MD, Curtin LR, Lamb MM, Flegal KM. Prevalence of high body mass index in U.S. children and adolescents, 2007–2008. *JAMA*. 2010;303(3):242–249.
9. World Health Organization. Global Status Report on Noncommunicable Diseases, 2010. Geneva, Switzerland: WHO Press; 2011. http://whqlibdoc.who.int/publications/2011/9789240686458_eng.pdf. Accessed December 1, 2011.
10. Variyam J. Americans are more realistic about the quality of their diets. *Amber Waves, USDA ERS*. March 2010:7. <http://www.ers.usda.gov/amberwaves/march10/findings/americanidiets.htm>. Accessed August 1, 2011.
11. Dietary Guidelines Alliance. 2010 Dietary Guidelines Alliance consumer research: Motivating families to lead a healthier lifestyle in 2011 and beyond. <http://www.foodinsight.org/Content/3651/FINAL2010DGACConsumerResearchReport.pdf>. Accessed March 9, 2011.
12. Reinhardt Kapsak W, Smith Edge M, White C, Childs NM, Geiger CJ. Putting the Dietary Guidelines for Americans into action: Behavior-directed messages to motivate parents—Phases I and II observational and focus group findings. *J Acad Nutr Diet*. 2012. In press.
13. Reinhardt Kapsak W, Smith Edge M, White C, Childs NM, Geiger CJ. Putting the Dietary Guidelines for Americans into action: Behavior-directed messages to motivate parents—Phase III quantitative message testing and survey evaluation. *J Acad Nutr Diet*. 2012. In press.
14. Borra ST, Kelly L, Tuttle M, Neville K. Developing actionable dietary guidance messages: Dietary fat as a case study. *J Am Diet Assoc*. 2001;101(6):678–684.
15. US Department of Agriculture and Center for Nutrition Policy and Promotion: Food Guide Pyramid. <http://www.cnpp.usda.gov/FGP.htm>. Accessed March 1, 2011.
16. ChooseMyPlate.gov. <http://www.choosemyplate.gov/>. Published June 2, 2011. Accessed August 29, 2011.
17. Institute of Medicine. Dietary reference intakes for energy, carbohydrate, fiber, fat, fatty acids, cholesterol, protein, and amino acids. <http://iom.edu/Reports/2002/Dietary-Reference-Intakes-for-Energy-Carbohydrate-Fiber-Fat-Fatty-Acids-Cholesterol-Protein-and-Amino-Acids.aspx>. Published September 5, 2002. Accessed August 29, 2011.

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