

Obesity and the Dilemmas of Choice



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Obesity is a complex issue, and, as researchers look at it more broadly, its paradigms are open to change. Let's consider two articles that were run in the *New York Times* in the summer of 2006. The first article, published in July 2006 by Gina Kolata and entitled "So Big and Healthy Grandpa Wouldn't Even Know You," tells a wonderful story about how researchers are finding that humans in the industrialized world have undergone "a form of evolution that is unique not only to humankind, but unique among the 7,000 or so generations of humans who have ever inhabited the earth." It describes researchers who are amazed at the transformation of humans in size and in health and robustness. They compare findings found in records from the Civil War, from famines in many parts of the world, and current records (5).

This article was followed in August 2006 by an article by Robin Henig, who began to lay out the dilemma of some researchers who study obesity. They are finding that many of the concepts about obesity do not really hold when one studies traditional mass-balance obesity. Some scientists are looking for a link with gut microflora and even suggest that there is a potential for "infectobesity." The research is saying that this

whole area is complex and that an interdisciplinary approach is key. Yet blaming the people who make food (big food companies) and the people who use food has been the traditional way to deal with the issue. The Henig article quotes a woman named Joan, who says, "I know that I'm not being obedient, I am not using my body the way God intended. I know how I'm supposed to eat, but I'm not having a healthy appetite....I'm not wanting to be obedient." These blaming practices are reliable ways to sell government programs and books on diets, the industry, health, and policy (4). But what other consumer insights exist that can move beyond a focus on blame?

Agreed-upon definitions suggest that "big" (overweight) people are those who have a surplus of weight that includes muscle, bone, fat, and water. "Obesity" gets more specific and is really about a surplus of body fat. Most health professionals concur that men meet the criteria for obesity when they have 25% body fat, while women need to have 30% body fat to qualify as obese (World Health Organization, www.who.int). Right now, the U.S.

Center for Disease Control (CDC) has suggested that about 60 million people in the United States are obese. Obesity is a focus for health professionals due to its relationship with increased risk for many diseases and health conditions, including the following:

- Hypertension
- Dyslipidemia (for example, high total cholesterol or high levels of triglycerides)
- Type 2 diabetes
- Coronary heart disease
- Stroke
- Gallbladder disease
- Osteoarthritis
- Sleep apnea and respiratory problems
- Some cancers (endometrial, breast, and colon).

Although one of the national health objectives for the year 2010 is to reduce the prevalence of obesity among adults to less than 15%, current data indicate that the situation is worsening rather than improving (7).

Recent research that we (the authors) have done has suggested that diets are frameworks that consumers use to understand how to make choices about what they eat. Diets help us humans make sense of eating when there is too much choice (1). A typical trip through a grocery store presents the consumer with upward of 20,000 product choices. Most consumers need a framework to help them make decisions about what they will or will not take home. "Diets" like Atkins, South Beach, the Food Pyramid, and low-fat diets have directed people to a set of foods that enable them to limit the number of choices they have to make.

Looking historically, we find that there are generational frameworks and that "diets" have been with us for more than 1,000 years. Examples include Brillat-Savarin's work in the late 1700s, in which the pleasure of dining was investigated, and W. Kellogg's mid-1800's work with whole grains, low fat, and low salt to help people live longer and healthier lives. Ansel Keyes's work in the early 1950s suggested that eating only 100 calories too much every day over a period of years would lead to obesity. Combining today's message of 100-calorie packs of food and the suggestions of authors like Brian Wansink in *Mindless Eating*, we hear the echoes of Dr. Hunt Peter's calorie-counting research of 1918, which discussed 100-calorie portions, and FDA's suggestions of 100-calorie portions from 1923. Diets tend to follow a cyclical pattern.

In research we conducted several years ago, consumers identified that obesity ("being obese," "thinking about being obese," "having been obese") was a situation that produced high anxiety, second only to loss of income and slightly more important than sexual failure and loss of assets (Fig. 1). The research indicated that 68% of the consumers participating in the study felt that they were managing obesity (we will call them "obesity managers") at that time (2003; the study was administered via the Internet just after the war in Iraq began). Other factors these test

participants were feeling at the time were tiredness (60%), stress (37%), and frustration (38%) at much higher levels than the general population (2,3).

Feeling that you are obese is very stressful and anxiety producing—for an individual, more so than a war or threat of terrorism. One reason for this is people’s feeling that they lack control over their eating. They feel that people judge them and that it is hard to find an eating pattern to fit their lifestyle. Family and friends were felt to be a big asset in reducing the stress of obesity. However, opening up to others and risking the consequence of their judgment is a difficult decision for people to make.

As society mandates more and more behavioral expectations via “approved” eating patterns (e.g., the Food Pyramid changes) and sends messages that your problems will go away if you just eat the right food, consumers find that integrating these expectations into their lifestyle is difficult, and their anxiety levels increase. People indicated that they trusted God to help them through this event and also that they were fairly confident that obesity would happen to them or someone close to them. What the research suggested is that people *believe* they are trying to eat and exercise, although they are taking less action than is required. Consumers believe, as “Joan” stated above, that *they* are responsible for their obesity and yet that dealing with obesity and incorporating changes into their lifestyle is not simple or easy. We as a society look for the “silver bullet” answer to our problems, and obesity does not have a single solution.

Why do consumers not trust the food industry? Historically, the food industry and the product-testing field have developed products and testing methods to maximize the pleasure or hedonic response of the food, a consequence of which is overeating, which has led to obesity. Reviewing the focus of product testing for the past 50 years, one might believe that this is true. However, recent research suggests the opposite. David Mela, in a recent article in *Appetite*, indicates that this belief about heightened hedonic response, gained through science and anecdote, has intuitive appeal. Yet, he points out that it is important to distinguish between “liking” (pleasure derived from the orosensory stimulation of food) and “wanting” (incentive salience, the motivation to engage in eating). His research suggests that obesity may be associated with greater motivation for food consumption, possibly directed at energy-dense foods, but without any great pleasure being derived from the orosensory experience of eating. He concludes by suggesting that overeating to obesity reflects responsiveness to non-homoeostatic stimuli (i.e., psychophysical stimuli *not* related to restoring metabolic homeostasis), rather than a primary defect or failure of the body with respect to energy balance (6).

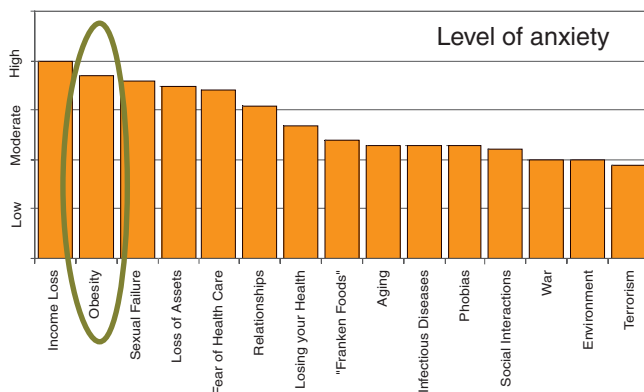


Fig. 1. Situations provoking high anxiety, with obesity circled. (Courtesy The Understanding and Insight Group)

Data collected through a number of semisynthesized pieces of research provide deeper understanding of Mela’s conclusions by demonstrating that consumers who report they are dealing with overweight/obesity issues indicate less interest in processed foods than those who claim not to be managing obesity. These individuals conceptualize many foods and their attributes differently and therefore appear to have very different frameworks when thinking about the foods they want to select. For instance, when asked about creamy fruit beverages, the obesity managers gravitate to cream-based flavors while berry flavors are of greater interest to those who are not managing health conditions. Our data also indicated a marked difference between obesity managers and non-managers in their interest in flavored water containing calcium. Obesity managers rate calcium as being of far greater interest to them. The key here is that obesity managers are more focused on a shorter list of familiar healthy ingredients than those who are not managing their health conditions.

This current research puts into question the methods currently utilized by most food product researchers today; that is, do they ask the right questions? How many researchers really make an effort to track individuals beyond their stated habits and practices? How do we monitor and record testers’ weights, their mindsets toward health, and intended future action plans in a taste test? Do we track these people? Do we know what medications they are on? How aware are we of the people who are participating in these projects? What about the people in trained panels and in focus groups? What do we not know about them that might impact either the products they select or the decisions they make about wanting the attributes of the products we design, manufacture, and sell? Current data suggest that tracking is important because obese/overweight managers, in contrast to non-managers:

- express greater interest in “healthier” foods,
- look for specific ingredients in their foods (ingredients different from those sought by the non-managers), and
- are influenced by different ideas surrounding foods, which may impact their choice of and desire for those foods.

Over the last several years, during the “in-context” work (i.e., work in individuals homes and in exercise studios, during active exercise, and during depth interviews of 4 hr or more) that we conducted with individuals, we have found that the words and imagery of obesity managers who are actively trying to manage their diet and weight have an enormous impact on how they select products and on the decisions they make regarding product performance. We have found that knowing who these people are in the data sample is incredibly important for understanding and interpreting responses they make to scaled questions.

As a case in point, product-study researchers may reach different conclusions (e.g., that certain products are preferred or that certain product profiles are beneficial) as a result of results that are skewed by individuals who are working to modify their conscious behaviors. Their responses can cause a degree of chaos within quantitative or qualitative data sets that can have an impact on the conclusions. Consider, for example, a product evaluation of a sucralose-containing product by people who were obesity managers vs. people who did not manage their diets. Although the sucralose was used for formulation reasons (not calorie reduction or sugar-free claims), obesity managers familiar with nonnutritive sweeteners had one reaction to the product over a period of time whereas the non-managers had a very different (and more negative response). In this case, the conclusion of the entire data set was skewed by the non-managers and did not reflect the importance that obesity managers placed on ingredients as they read the label and on the differences in the familiar flavors and taste profiles they expected.

A recommendation coming out of these observations is a suggestion that much of the research we are conducting today should blend the normative approaches (standard quantitative testing) of the past with initial stepwise approaches to full understanding of the individual (idiographic testing). Understanding the data as we have in the past, via traditional averaging of consumer populations, leads us to conclusions that do not reflect the differences in the mindsets of individuals. Building the data up from the individual to the group is more powerful in this area than extrapolating the data down from the group to the individual. The translation from the specific individual to clusters of individuals with similar, although perhaps not completely exact, behavior and mindset then yields more robust product development efforts. This enables the product developer to understand what is expected from the product category and what is different for different individuals and groups. Linking this individual-behavior approach (ideographic method) to larger normative approaches is the key.

Research data and empirical findings today suggest that we must begin to consider that those individuals who are actively managing their obesity/overweight conditions may approach food choices differently in times of active weight management and that it is therefore worthwhile to consider new strategies by which to understand them under those conditions. The consideration of choices made by consumers who are managing weight issues blended with the choices made by the normative population should yield innovations that could lead to product leadership in categories of interest to product development teams.

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