



ASSOCIATION FOR CONSUMER RESEARCH

Labovitz School of Business & Economics, University of Minnesota Duluth, 11 E. Superior Street, Suite 210, Duluth, MN 55802

Mental Accounting For Food in Exceptional Contexts

Abigail B. Sussman, University of Chicago, USA

Adam L. Alter, New York University, USA

Anna Paley, New York University, USA

Across five studies, we show that the perceived dietary effect of a food depends on where that food is encountered. People underestimate the impact of calories consumed in exceptional contexts, thus preferring larger portions. Using a mental accounting framework, we suggest errors in both booking and posting drive the effects.

[to cite]:

Abigail B. Sussman, Adam L. Alter, and Anna Paley (2016) , "Mental Accounting For Food in Exceptional Contexts", in NA - Advances in Consumer Research Volume 44, eds. Page Moreau and Stefano Puntoni, Duluth, MN : Association for Consumer Research, Pages: 174-178.

[url]:

<http://www.acrwebsite.org/volumes/1021408/volumes/v44/NA-44>

[copyright notice]:

This work is copyrighted by The Association for Consumer Research. For permission to copy or use this work in whole or in part, please contact the Copyright Clearance Center at <http://www.copyright.com/>.

Healthy or Unhealthy? Large or Small? How Context and Language Shape Consumption Preferences

Chair: Anna Paley, New York University, USA

Paper #1: Better for Both the Waistline and the Bottom Line: A Field Study on the Sales Impact of Featuring Healthy Foods, Unhealthy Foods, or a Mix of Both

Peggy J. Liu, University of Pittsburg, USA
Steven K. Dallas, New York University, USA
Matt Harding, Duke University, USA
Gavan J. Fitzsimons, Duke University, USA

Paper #2: Mental Accounting for Food in Exceptional Contexts

Abigail B. Sussman, University of Chicago, USA
Adam L. Alter, New York University, USA
Anna Paley, New York University, USA

Paper #3: Outsourcing Responsibility for Indulgences

Linda Hagen, University of Michigan, USA
Aradhna Krishna, University of Michigan, USA
Brent McFerran, Simon Fraser University, Canada

Paper #4: You Call This Healthy? Refining “Healthy Food” Claims and Their Impact on Choice and Healthiness Associations

Quentin Andre, INSEAD, France
Pierre Chandon, INSEAD, France
Kelly L. Haws, Vanderbilt University, USA

SESSION OVERVIEW

Although extant research has made great strides in illuminating how consumer food choices are shaped by environmental and contextual factors, many questions remain ripe for exploration. This session explores two broad questions regarding consumer beliefs, preferences, and choices regarding healthy vs. unhealthy foods and portion sizes: (1) How does context affect the preferences and choices consumers make around healthy eating and portion size? (2) What are the implications and downstream consequences of perceiving healthy vs. unhealthy foods? With a multi-methods approach, this session explores the questions above from four complementary perspectives.

First, Liu, Dallas, Harding & Fitzsimons explore the implications of increasing the visual salience of various items in shopping displays. The authors detail an extensive field study at twelve convenience stores. Their results speak to the key managerial decision of which types of foods to feature (i.e. healthy vs. unhealthy vs. mix of both). For example, the authors show that featuring healthy foods increases sales of healthy foods; however, featuring both healthy and unhealthy foods leads only to an increase in sales of unhealthy foods.

While visual salience is unquestionably important, the following two papers explore other ways in which the context surrounding food consumption affects preferences.

Sussman, Alter & Paley directly examine the situation in which foods are consumed. When the same foods are eaten in more exceptional scenarios (e.g. a snack consumed in an airplane rather than in a car), consumers underestimate the caloric impact of their meal. In turn, this leads to preferences for larger portion sizes and an increase in actual consumption.

Next, Hagen, Krishna & McFerran suggest another contextual influence that guides preferences around consumption experiences: whether consumers wish to serve themselves or be served by others. When faced with unhealthy foods, consumers prefer to absolve themselves from responsibility for indulgent decisions. Correspondingly,

for unhealthy (but not healthy) foods, consumers display a marked preference for being served by others rather than serving themselves.

Lastly, Andre, Chandon & Haws provide a nuanced view of various types of health-related messaging. The authors identify two key dimensions characterizing health-related claims — positivity (vs. negativity) and naturalness (vs. scientific-alteration). Importantly, these dimensions have implications on perceptions and preferences regarding the healthiness, taste, satiation, and quality of the foods. These perceptions differ between French and American consumers.

In sum, addressing the first question raised earlier, this session provides three novel contextual factors shaping decisions around healthy vs. unhealthy foods and portion sizes: (1) the types of foods featured in displays (Liu et al.), (2) perceptions of consumption experiences as ordinary versus exceptional (Sussman et al.) and (3) preferences for being served by others vs. serving oneself (Hagen et al.). Regarding the consequences of perceiving healthy and unhealthy foods, this session identifies and explores important nuances surrounding health claims (Andre et al.), and details the consequences of perceiving healthy versus unhealthy foods on sales (Liu et al.) and serving-style preferences (Hagen et al.). Overall, this session offers key insights into real-world issues and carries implications for both managers and consumers.

Better for Both the Waistline and the Bottom Line: A Field Study on the Sales Impact of Featuring Healthy Foods, Unhealthy Foods, or a Mix of Both

EXTENDED ABSTRACT

Many stores offer both unhealthy foods and healthy (“better-for-you”) foods (Gebauer and Laska 2011). Yet although healthy options are increasingly available, consumers often do not select them. One of the most common reasons is lack of salience (Chandon and Wansink 2002). Thus, policy makers have called for featuring healthy foods as a way to increase healthy food sales (Cohen and Babey 2012). Indeed, considerable research suggests that featured products are more likely to be chosen (e.g., Just and Wansink 2009).

However, we know little about the real-world impact of featuring either healthy or unhealthy foods on sales of the non-featured food type and thus on overall sales. We also know little about the impact of jointly featuring both food types. From a managerial perspective, both questions are important because they have implications for whether it is a more effective sales strategy to feature healthy foods, unhealthy foods, or a combination of both. Additionally, there are theoretical reasons why we might expect featuring one food type (healthy or unhealthy) to have a particular impact on sales of the non-featured food type and why we might expect a certain impact of jointly featuring both food types. For instance, the concept of licensing suggests that featuring healthy foods might increase both healthy and unhealthy food sales if consumers choose healthy foods and then feel licensed to indulge (Khan and Dhar 2006). As another example, the concept of vicarious goal fulfillment, whereby exposure to a healthy food can vicariously fulfill health goals (Wilcox et al. 2009), suggests that featuring both healthy and unhealthy foods will primarily lead to an increase in unhealthy sales.

Importantly, however, these various theoretical concepts have been identified through laboratory studies, primarily of hypothetical

choices, and few field tests exist. Given that some research suggests similarities in findings between hypothetical-choice lab studies and field tests (Shah et al. 2014), whereas other research suggests dissimilarities (Kiszko et al. 2014; Mochon et al. 2016), field tests are important when the findings have implications for real-world managerial decisions. Such field tests may also indicate which theoretical forces are strong enough to overcome the noisiness of the field.

Accordingly, we conducted a field study in twelve convenience stores over eight weeks, using an efficient Latin-Square research design enabling comparison of the impact of three treatment conditions (vs. a control) while controlling for differences between stores and time periods. Specifically, we identified 18 target products (9 unhealthy, 9 healthy) and compared the sales impact of featuring unhealthy foods, healthy foods, or a mix of both (vs. a control display not featuring any target products identified for this study) on sales of the 18 target products. The convenience stores provided basket-level sales data.

First, we found that featuring either only healthy foods or only unhealthy foods successfully increased sales of the featured foods. Second, we found that relative to the control condition, featuring only healthy foods did not decrease sales of unhealthy foods. In contrast, featuring only unhealthy foods resulted in a decrease in sales of healthy foods. In other words, featuring healthy (vs. unhealthy) foods had different effects on sales of the non-featured food type. Third, we found that featuring a mix of both healthy and unhealthy foods only significantly increased sales of unhealthy foods. The first finding is consistent with research showing that increasing the salience of products increases their sales (e.g., Just and Wansink 2009). The second and third findings offer unique contributions by representing field tests of effects predicted by various theoretical accounts from lab research. The second finding does not follow straightforwardly from any single theoretical account identified in prior research, showing that lab findings and field tests do not always converge cleanly. The third finding could be consistent with a vicarious goal fulfillment account whereby the presence of the healthy foods addresses a health goal for some consumers (Wilcox et al. 2009).

Interesting results were also found at the basket-level, shedding light on potential explanations for the sales results. The basket-level data for when only unhealthy foods were featured mirrored the sales data—unhealthy items per basket increased (vs. control), and healthy items per basket decreased. However, the basket-level data for when only healthy foods were featured and when a combination was featured did not mirror the sales data. Specifically, when healthy foods were featured alone, healthy items per basket increased (consistent with the sales results), while unhealthy items per basket decreased (differing from the sales results, which showed total unit sales of unhealthy items were not affected). We conjecture that this difference between unhealthy items per basket and unit sales of unhealthy items might have occurred because the healthy display may violate expectations for a convenience store (Gebauer and Laska 2011) and thus draw attention (Bettman 1979; Helgeson and Beatty 1987), leading some to make an unplanned healthy purchase; further, people who entered the store planning to buy an unhealthy item likely still purchased it (i.e., increasing the number of baskets purchasing any test items but not affecting sales of the unhealthy items). Similarly, when both healthy and unhealthy foods were featured, unhealthy items per basket increased (consistent with the sales results), whereas healthy items per basket decreased (differing from the sales results, which showed that total unit sales of healthy items were not affected). Again, we conjecture that this difference between healthy items per basket and unit sales of healthy items occurred because the healthy items drew people's attention to the display, increasing the number

of baskets purchasing a test item. Yet although some customers purchased healthy test products, most consumers still purchased the unhealthy test products, perhaps because of vicarious goal fulfillment processes (Wilcox et al. 2009). Thus, total unit sales of healthy foods directionally increased in this condition, but the number of such products per basket significantly decreased.

In sum, these findings mitigate potential concerns about featuring healthy foods. Rather, featuring healthy foods alone may be better from both firm and consumer welfare standpoints than either featuring unhealthy foods alone or featuring both food types.

Mental Accounting for Food in Exceptional Contexts

EXTENDED ABSTRACT

What seems like a bigger setback to one's diet: A small bag of peanuts consumed on a typical car ride or that same bag of peanuts consumed on a flight across the ocean? While the food is the same, the consumption context differs. This research suggests that the difference in context has broad consequences: the extent to which a consumption occasion is considered more ordinary or more exceptional guides eating behavior. Specifically, we demonstrate that people do not appropriately account for calories consumed during exceptional circumstances. This occurs in part because people have greater difficulty tracking these foods, and are less likely to recall eating them. In turn, this leads to a preference for larger portions and an increase in consumption.

Prior research has examined the distinction between ordinary and exceptional items in a financial context. Sussman and Alter (2012) demonstrate that people underestimate spending on exceptional purchases and overspend on such items. This occurs because of errors in budgeting. In the domain of charity donations, more exceptional framing of causes can increase donations (Sussman, Sharma, & Alter, 2015).

Across five lab studies, we investigate whether a similar distinction between ordinary and exceptional contexts influences choices we make for our diets. Examining both real and hypothetical consumption, we explore mental accounting processes around tracking caloric consumption. We provide evidence that people have greater difficulty tracking and recalling their consumption when foods are considered more exceptional.

In study 1, we prompted participants to consider a target food (chocolate) as more ordinary or more exceptional through a broad vs. narrow categorization task. Some participants were asked to list prior instances of junk food consumption, making chocolate seem more ordinary. Other participants were asked to list prior instances of chocolate consumption, making chocolate seem more exceptional. Then, participants had the opportunity to eat chocolate or other healthy snacks. We find that participants who view chocolate as more exceptional consume more of the target food (chocolate); however, they do not consume more of the control foods ($F_{mi}(1, 144) = 6.21, p = .014$).

To better understand this behavior, in studies 2a and 2b, we showed participants a list of 10 foods consumed in exceptional contexts and 10 similar foods consumed in ordinary contexts (20 items per subject, counterbalanced between subjects). Participants indicated the extent to which each food was a setback to their diet. Participants considered the foods consumed in exceptional contexts to be less of a setback to their diets when compared to the same foods consumed in ordinary contexts (study 2a; $t(152) = 2.71, p = .008$). Further, participants believed that those same foods required less exercise to work off when consumed in exceptional (vs. ordinary) contexts (study 2b; $t(149) = 2.42, p = .017$).

In study 3, we explored a consequence of these beliefs. With the same list of foods used in studies 2a and 2b, we demonstrate a preference for larger portion sizes when a particular food is consumed in an exceptional (vs. ordinary) context ($t(247) = 4.27, p < .001$). The relative difference in preferred portion size between exceptional and ordinary contexts was mediated by the difference in the perceived setback to one's diet between foods consumed in each of the two settings ($b = .33, t(246) = 8.26, p < .001$; Judd, Kenny, and McClelland, 2001).

In study 4, we apply a mental accounting framework to investigate how the calorie tracking process may vary as a function of perceived exceptionality. After seeing a list of 30 exceptional and ordinary items, participants were asked to recall the items shown. Participants had worse recall for exceptional items, suggesting errors in booking ($t(64) = 3.94, p < .001$). Participants were also asked to categorize recalled foods in seven categories (breakfast, morning snack, lunch, afternoon snack, dinner, evening snack, and other). For exceptional (vs. ordinary) items, participants were more likely to place them in the miscellaneous category, suggesting errors in posting ($t(58) = 2.27, p = .027$). This study points to the notion that people may be less likely to take note of exceptional consumption instances and less likely to post them to meaningful budget categories.

In five studies, we show a preference for higher levels of consumption (studies 1 and 3) when an identical food is considered exceptional rather than ordinary. We provide evidence that this discrepancy stems from errors in both booking and posting: episodes of exceptional consumption are less likely to be either remembered or meaningfully noted. People may fail to record the full value of their caloric intake when foods are consumed during exceptional circumstances (study 2a 2b, and 4), leading to higher levels of consumption.

Individual overindulgences can accumulate with little awareness. The conceptual distinction between caloric consumption in exceptional versus ordinary contexts is important for understanding biases that prevent people from leading healthier lives.

Outsourcing Responsibility for Indulgences

EXTENDED ABSTRACT

For many consumers, food consumption contexts are riddled with conflict. On the one hand, unhealthy food options are enticing—consumers perceive them as tastier (Raghunathan, Naylor, and Hoyer 2006) and more satisfying (Finkelstein and Fishbach 2010), and overall they elicit strong positive affective reactions (Shiv and Fedorikhin 1999). On the other hand, unhealthy eating is generally considered a “vice” (Chernev and Gal 2010; Thomas, Desai, and Seenivasan 2011), the consumption of which leaves many consumers feeling guilty (Ramanathan and Williams 2007; Wansink and Chandon 2006). Some research has found that consumers attempt to resolve this uncomfortable conflict with the help of motivated reasoning strategies so that they can “have their cake and eat it, too.” For instance, they may fabricate licenses for their indulgence by minimizing their remembered prior consumption (May and Irmak 2014) or exaggerating foregone consumption (Effron, Monin, and Miller 2013). In this paper, we predict and find that a different path to remorse-free indulgence that consumers take is having someone else serve them.

Recent work suggests that consumers become more likely to make unhealthy choices when they are served by someone else, because being served allows them to reject responsibility and thus feel less bad for their unhealthy eating (Hagen, Krishna, and McFerran 2015). Based on these findings we hypothesize that consumers may strategically and proactively outsource responsibility for unhealthy eating. Specifically, we propose that consumers have a lay theory that being served by someone else will allow them to absolve them-

selves of (some) responsibility. If that is indeed the case, they should (i) strategically choose being served (versus serving themselves) for unhealthy (but not healthy) foods, and (ii) this preference for being served (versus serving themselves) should be driven by a motivation to reject responsibility. Two field studies and one controlled laboratory experiment support this idea.

Studies 1A and 1B tested consumers' preference for being served (versus serving themselves) unhealthy and healthy foods in field settings. Both studies featured contexts where who serves (self or other) is chosen by the consumer, that is, both serving oneself and taking a pre-served portion are available side by side.

In study 1A, we provided beverages in different groups of an undergraduate extra-curricular program. Students were told they could feel free to take a cup or pour themselves one if they wanted. In all classrooms, we provided the beverage containers and empty 8oz cups as well as half-filled 8oz cups. Thus people could either serve themselves the drink or take a pre-served cup. We manipulated the beverages' healthiness (healthy almond milk/blueberry juice versus unhealthy chocolate milk/pumpkin eggnog; pre-tested to be seen as differentially healthy but equally well-liked) and measured the respective proportions of students that chose the pre-served cups versus the empty cups to serve themselves.

Healthiness and server choice had a significant relationship, $\chi^2(1, N=88)=30.34, p < .01$. Specifically, for the unhealthy beverages, people who elected to have a drink were disproportionately more likely to choose the pre-served cups (50 out of 52) than to serve themselves (2 out of 52; $\chi^2(1, N=52)=44.31, p < .01$). For the healthy beverages, however, people were equally likely to take the pre-served drink (16 out of 36) as they were to serve themselves (20 out of 36, $\chi^2(1, N=36)=44, p > .5$).

Study 1B replicated the pattern from study 1A using snack foods in international student orientations. Together, the two field studies showed that, as predicted, for unhealthy (but not for healthy) foods consumers prefer being served instead of serving themselves. This is consistent with the hypothesis that consumers seek to avoid serving themselves in the case of unhealthy food, because they strategically seek to push off responsibility for unhealthy food. Yet, these data are aggregate, and process can only be inferred. Study 2 examined the hypothesized process directly in the laboratory and tested whether consumers' stronger preference for being served by someone else (versus serving themselves) when the food is unhealthy (versus healthy), is due to a greater motivation to reject responsibility for unhealthy (versus healthy) food.

In study 2, participants imagined a dinner reception where dessert was offered. We manipulated the dessert's healthiness (healthy fruit versus unhealthy cake) and measured participants' preference regarding who should serve the food as well as their motivation to reject responsibility. Serving preference was measured on a slider scale ranging from “*I prefer serving myself*” (0) to “*I prefer another person serving me*” (100). Motivation to reject responsibility was measured via agreement with “*For chocolate cake [fruit salad], I would probably look for ‘excuses’ allowing me to eat this food*” and “*For chocolate cake [fruit salad] it's nice if I can ascribe ‘responsibility’ for having it to other circumstances,*” measured on a slider scale from “*Strongly disagree*” (0) to “*Strongly agree*” (100). These two items were combined into an index for “motivation to reject responsibility” ($\alpha=.63$).

People's preference for being served by someone else was higher for the unhealthy dessert than for the healthy dessert, $F(1, 118)=11.80, p < .01$. They were also more motivated to reject responsibility for the unhealthy dessert than for the healthy food, $F(1, 118)=11.03, p < .01$. Finally, motivation to reject responsibility medi-

ated the effects of food's healthiness (healthy versus unhealthy) on the preference for who should serve it (95% CI= -10.15 – -.21).

These results align with our motivated reasoning account: People's preference for being served (versus serving themselves) is enhanced for unhealthy food compared to healthy food, and the driving process behind this effect is the motivation to reject responsibility for consumption. Interestingly, we found that this process seems to occur even when people themselves chose to have a certain food.

These findings suggest that when offering indulgent foods (e.g., frozen desserts) providing full service may more easily attract consumers than requiring self-service. Studies directly testing this managerial implication are underway.

You Call This Healthy? Refining "Healthy Food" Claims and Their Impact on Choice and Healthiness Associations

EXTENDED ABSTRACT

Although it is well-known that consumers are poor at understanding food claims (see Mariotti et al. 2010; Nocella and Kennedy 2012 for a recent review), it may come as a surprise that practitioners, food researchers, and consumers still have limited conceptual tools to navigate the diversity and complexity of the plethora of food claims present in the marketplace. Indeed, although past research has investigated people's responses to specific food claims (e.g., "low fat"), we do not know whether these reactions 1) can be generalized to other claims, 2) differ based on health goals, or 3) vary across different cultures (Rozin et al. 1999).

In this research, we first identified two dimensions of high theoretical and practical relevance in the context of food evaluations. First, positivity (focusing on the positive or negative aspects of the food), has been shown to lead to different responses in the context of food benefits (Malaviya and Brendl 2014), and this distinction between positive and negative nutrients is commonly used by business practitioners (e.g. "Smart Choice" or "NuVal" labeling systems). The second dimension, naturalness, reflects the natural or scientific derivation of the food claim. Indeed, concerns for the naturalness of food are widespread (Rozin et al. 2012), and marketers often highlight the natural qualities of their food products or extol the scientific benefits of their production process.

Next, we identified a set of 37 common and familiar food claims using an Amazon MTurk sample (N=432). These 37 claims were then used in Study 1, in which 401 MTurk participants each evaluated 8 food claims randomly chosen from the 37. The assessments included measures of naturalness, positivity, as well as inferences about the healthiness, taste and satiating power of the food, as well as demographic information.

Results revealed that consumers' perceptions of food claims are appropriately described by a four cluster solution, corresponding to a 2 (nature vs. science based) x 2 (positive vs. negative focus) perceptual space. We propose labels for the four types of claims we identify from this framework as follows: "Removing" claims (which are science-based and negative-focused, e.g., "gluten free"), "Adding" claims (science-based and positive-focused, e.g., "added vitamins"), "Not Removing" claims (nature-based and positive-focused, e.g., "organic"), and "Not Adding" claims (nature-based and negative-focused, e.g., "no artificial flavor"). Further analysis revealed that each type of claim was associated with different taste, health, and satiation expectations. For example, positive-focus claims were seen as healthier than negative-focus ($M=5.49$ vs. $M=5.05$, $F(1,33)=19.67$, $p<.001$), and similar differences were observed for the predicted satiation from the food ($M=4.35$ vs. $M=3.70$, $F(1,33)=22.32$, $p<.001$). The differences were even stronger for predicted taste: "Not Removing"

claims were seen as tastier than both "Not Adding" and "Adding", which were in turn seen as tastier than "Removing".

In study 2, we examined how our framework can predict choice. We focused on two specific products, corn flakes cereals and milk, and tested the impact of the four types of claims identified in study 1 across different eating goals. A U.S. marketing research firm provided us with a panel of 600 participants, who were primed with one of three goals, two of which were health-related (losing weight goal vs. being healthier goal), and a "taste good" control condition. Consumers were then asked to pick one cereal among a set of five different realistic cereal boxes, four of them bearing a health claim for each of the four types (e.g., "no artificial flavors" for negative-natural claims and "low in sugar" for negative-scientific claims) and the fifth being a control option bearing no claim. Analysis revealed that preferences for food claim types shifted across goals. For example, consumers primed with a weight loss goal favored science-based claims, while those primed with a healthy eating goal chose nature-based claims. This pattern was particularly true for negative, but not positive claims. Similar findings emerged based on subsequent choice of milk to accompany the cereals, using different exemplar claims from our health-claim framework.

In study 3, we sought to conceptually replicate the results obtained in study 2, but also investigate similarity and differences between cultures in responses to the health claims. To do so, we collected samples from both U.S. MTurkers as well as a demographically matched sample of French participants (Total N=1367). We selected 16 food claims from our previous list of 37 (4 from each cluster), and each participant was randomly assigned to view four food claims. For each claim, the participants were asked to imagine a cereal box bearing the claim, and to evaluate the predicted benefit of consuming the product in terms of health, taste, satiation, quality, and dieting. For overall evaluation of the cereal, the French preferred those with the nature-based claims over those with the science-based claims, whereas the Americans liked both nature and science-based claims equally. Health claims focusing on positive elements led to better inferences in general (about healthiness, taste, and quality) than health claims focusing on negative elements across both cultures. However, while Americans viewed science-based claims as healthier than nature-based claims, the opposite was true amongst the French participants. Science-based and negative "Removing" claims were perceived to be better for dieting in both countries. Finally, nature-based claims were linked to better taste and food quality than science-based claims across cultures.

In conclusion, our results provide both food researchers and marketers with a better understanding of the way consumers perceive healthy food claims based on the underlying dimensions of positivity and naturalness, and the extent that food claims impact choice based on various health goals, and the different expectations in terms of taste, healthiness, and other characteristics. Further, our cross cultural study documented both some similarities, but also striking differences in how health claims were perceived by American and French participants, suggesting that the cultural context is critical in determining which type of claims most effectively communicate a product's healthiness.

REFERENCES

- Bettman, James R. (1979), *An Information Processing Theory of Consumer Choice*, Reading, MA: Addison-Wesley.
- Chandon, Pierre and Brian Wansink (2002), "When are Stockpiled Products Consumed Faster? A Convenience-Salience Framework of Postpurchase Consumption Incidence and Quantity," *Journal of Marketing*, 39 (3), 321-335.

- Chernev, Alexander and David Gal (2010), "Categorization Effects in Value Judgments: Averaging Bias in Evaluating Combinations of Vices and Virtues," *Journal of Marketing Research*, 47 (4), 738-47.
- Cohen, Deborah A. and Susan H. Babey (2012), "Cash at the Candy Register—A Risk Factor for Obesity and Chronic Disease," *New England Journal of Medicine*, 367 (15), 1381-1383.
- Effron, Daniel A., Benoît Monin, and Dale T. Miller (2013), "The Unhealthy Road Not Taken: Licensing Indulgence by Exaggerating Counterfactual Sins," *Journal of Experimental Social Psychology*, 49 (3), 573-78.
- Finkelstein, Stacey R. and Ayelet Fishbach (2010), "When Healthy Food Makes You Hungry," *Journal of Consumer Research*, 37 (3), 357-67.
- Gebauer, Hilary and Melissa N. Laska (2011), "Convenience Stores Surrounding Urban Schools: An Assessment of Healthy Food Availability, Advertising, and Product Placement," *Journal of Urban Health*, 88 (4), 616-622.
- Hagen, Linda, Aradhna Krishna, and Brent McFerran (2016), "Cater to Me Cater to Me: Being Served Food Encourages Unhealthy Eating by Lowering Consumers' Sense of Responsibility," *University of Michigan Working Paper*.
- Helgeson, James G. and Sharon E. Beatty (1987), "Price Expectation and Price Recall Error: An Empirical Study," *Journal of Consumer Research*, 14 (3), 379-386.
- Judd, C. M., Kenny, D. A., & McClelland, G. H. (2001). Estimating and testing mediation and moderation in within-subject designs. *Psychological methods*, 6(2), 115.
- Just, David R., and Brian Wansink (2009), "Smarter Lunchrooms: Using Behavioral Economics to Improve Meal Selection," *Choices*, 24 (3), 1-7.
- Khan, Uzma, and Ravi Dhar (2006), "Licensing Effect in Consumer Choice," *Journal of Marketing Research*, 43 (2), 259-266.
- Kiszko, Kamila M., Olivia D. Martinez, Courtney Abrams, and Brian Elbel (2014), "The Influence of Calorie Labeling on Food Orders and Consumption: A Review of the Literature," *Journal of Community Health*, 39 (6), 1248-1269.
- Malaviya, Prashant and Miguel Brendl (2014), "Do Hedonic Motives Moderate Regulatory Focus Motives? Evidence from the Framing of Persuasive Messages," *Journal of Personality and Social Psychology*, 106(1), 1-19.
- Mariotti, Francois, Esther Kalonji, Jean Francois Huneau, and Irene Margaritis (2010), "Potential Pitfalls of Health Claims from a Public Health Nutrition Perspective," *Nutrition Reviews*, 68(10), 624-638.
- May, Frank, and Caglar Irmak (2014), "Licensing Indulgence in the Present by Distorting Memories of Past Behavior," *Journal of Consumer Research*, 41 (3), 624-41.
- Mochon, Daniel, Janet Schwartz, Josiase Maroba, Deepak Patel, and Dan Ariely (2016), "Gain Without Pain: The Extended Effects of a Behavioral Health Intervention," *Management Science*, forthcoming.
- Nocella, Giuseppe, and Orla Kennedy (2012), "Food Health Claims – What Consumers Understand," *Food Policy*, 37(5), 571-580.
- Raghunathan, Rajagopal, Rebecca Walker Naylor, and Wayne D. Hoyer (2006), "The Unhealthy = Tasty Intuition and Its Effects on Taste Inferences, Enjoyment, and Choice of Food Products," *Journal of Marketing*, 70 (4), 170-84.
- Ramanathan, Suresh and Patti Williams (2007), "Immediate and Delayed Emotional Consequences of Indulgence: The Moderating Influence of Personality Type on Mixed Emotions," *Journal of Consumer Research*, 34 (2), 212-23.
- Rozin, Paul, Claude Fischler, and Christy Shields-Argelès (2012), "European and American Perspectives on the Meaning of Natural," *Appetite*, 59(2), 448-455.
- Rozin, Paul, Claude Fischler, Sumio Imada, Allison Sarubin, and Amy Wrzesniewski (1999), "Attitudes to Food and the Role of Food in Life in the U.S.A., Japan, Flemish Belgium and France: Possible Implications for the Diet-Health Debate," *Appetite*, 33(2), 163-180.
- Shah, Avni M., James R. Bettman, Peter A. Ubel, Punam Anand Keller, and Julie A. Edell (2014), "Surcharges Plus Unhealthy Labels Reduce Demand for Unhealthy Menu Items," *Journal of Marketing Research*, 51 (6), 773-789.
- Shiv, Baba and Alexander Fedorikhin (1999), "Heart and Mind in Conflict: The Interplay of Affect and Cognition in Consumer Decision Making," *Journal of Consumer Research*, 26 (3), 278-92.
- Sussman, A. B., & Alter, A. L. (2012). The exception is the rule: Underestimating and overspending on exceptional expenses. *Journal of Consumer Research*, 39(4), 800-814.
- Sussman, A. B., Sharma, E., & Alter, A. L. (2015). Framing charitable donations as exceptional expenses increases giving. *Journal of Experimental Psychology: Applied*, 21(2), 130.
- Thomas, Manoj, Kalpesh Kaushik Desai, and Satheeshkumar Seenivasan (2011), "How Credit Card Payments Increase Unhealthy Food Purchases: Visceral Regulation of vices," *Journal of Consumer Research*, 38 (1), 126-39.
- Wansink, Brian, and Pierre Chandon (2006), "Can "Low-Fat" Nutrition Labels Lead to Obesity?" *Journal of Marketing Research*, 43(4), 605-617.