Would you like a Bite? The Influence of an Advertisement's Dessert Portrayal on Consumer Perceptions of Desirability

by

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A Thesis submitted to the Faculty of Graduate Studies of the University of Manitoba in partial fulfilment of the requirements of the degree of

MASTER OF SCIENCE

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Abstract

The purpose of this thesis is to assess dieting consumers' perceptions of dessert advertisements containing subtle food cues. Participants were presented with one of three dessert advertisements depicting either, a dessert that had been left untouched, cut in half, or had a bite mark. Across the studies, the results show that the image of the bitten dessert is more preferred than the cut or whole desserts among participants with dieting experience. The relationship between dessert type and dieting is mediated via perceptions of realness/authenticity. The findings contribute to the literature on food consumption and advertising. Companies advertising low-fat products to dieting consumers can benefit from the results of these studies.

Key words: dieting, dessert advertising, food, food cues

Acknowledgements

I would first like to thank my thesis advisor Dr. Kelley Main who has helped me in the completion of this project. Kelley's endless support made this thesis a fun learning experience. She has been available to help me whenever I needed assistance, whether it was on a weekend or during the holidays. I can't thank Kelley enough for all her help and support!

I would also like to thank the members of my committee, Dr. Sandeep Arora, Dr. Mohammed El Hazzouri, and Dr. Luke Zhu who provided me with valuable feedback during my proposal defense. I would like to especially thank Mohammed, who was not only a wonderful committee member, but also someone I could contact whenever I had any questions or needed help with this or any project.

Finally, I would like to thank my parents Kafia and Hanif Shabgard, my sisters, Tami and Abi, and my friends for their support and guidance.

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Would you like a Bite? The Influence of Dessert Advertisement's Portrayal on Consumer

Perceptions of Desirability

Introduction

Imagine that you are watching your favorite show and a dessert commercial comes on the television screen. The dessert in the commercial is a scrumptious chocolate chip cookie, such as a Chips Ahoy, or maybe it is a delicious Klondike ice cream sandwich that has had a bite taken out of it so you can see its tantalizing filling. What will be your response to this dessert? Will you find the image of this dessert to be appetizing or will you find it to be unpleasant? What factors might contribute to your reaction? Perhaps your previous dieting experience and your concerns about your weight might influence your perceptions of the dessert? The purpose of this thesis is to examine these questions. I am interested in the influence of subtle food cues, such as a bite mark on desirability evaluations of desserts in advertisements.

The world is filled with advertisements, and we come across various forms of advertisements during a single day (Alt, 2013), hence, it is important to study whether these advertisements influence our thoughts and behaviors. A large portion of the advertisements that are directed at us are for food products (Neville, Thomas, & Bauman, 2005), and these advertisements have been shown to influence consumption. For example, individuals tend to consume more snacks, both healthy and unhealthy, following exposure to food advertisements (Harris, Bargh, & Brownell, 2010). Given this tendency, it would be useful to examine how consumers are influenced by subtle details within advertisements, for example, does an image of a bite mark affect desirability evaluations or purchase intentions differently than an image of a dessert that has been cleanly cut?

The results from this thesis indicate that an image of a dessert with a bite mark will lead to favorable evaluations by participants who have dieting experience. Conversely, participants with no dieting experience tend to be significantly more positive in their evaluation of an image of a whole dessert (no subtle food cue). Notably, Study 1 also shows that this effect is especially strong for male dieters. The relationship between dessert type and dieting experience on consumer perceptions is mediated by perceptions of realness. Across many of the studies, it is found that only participants with dieting experience perceive the bitten dessert to be more real, and hence evaluate it more positively than the whole and cut desserts. The final study refutes the alternative explanations of social proof and scarcity. The findings from this study confirm that dieters are more influenced by subtle food cues than are non-dieters (Fedoroff, Polivy, & Herman, 1997) and that consumers have a greater preference for a real representation in advertisements (Beverland, 2006). The results from these studies can benefit advertisers of food products, and especially those who advertise desserts.

Literature Review

Food Cues

Research has shown that perceptions of food are mainly influenced by factors such as food presentation and color. For example, meals are evaluated more positively when they are well-presented rather than messily laid out on the plate (Zellner, Loss, Zearfoss & Remolina, 2014): food that has been well-presented is associated with a high-quality restaurant, whereas food with a haphazard presentation is often perceived as being contaminated, which results in less favorable evaluations of the meal (Zellner et al., 2011). These findings also translate to taste evaluations. For example, research has found that a beverage's color influences how refreshing

people perceive it to be, with brown colored beverages being rated as less refreshing than those with different colors Zellner & Dulach, 2003).

Based on the information above, we can conclude that subtle differences in food presentation affect how consumers perceive a particular food. Perhaps incorporating a subtle difference, such as a dessert item that has been bitten versus one that has been sliced will also influence consumers; however, whether the effect will be positive or negative is unknown. There is a possibility that the bitten and cut desserts may be perceived as contaminated (Argo, Dahl, & Morales, 2008), which will result in negative evaluations; on the other hand, showing a dessert that has been cut or had a bite taken out of it could make the image seem more authentic or real, which will lead to favorable ratings (Doherty, 2012).

Research in the consumer contamination domain has shown that individuals dislike products that have been touched by other consumers (Argo, Dahl & Morales, 2006). For example, when selecting a T-shirt, consumers tend to seek shirts that have not been touched or tried on by a fellow consumer (Argo, Dahl, & Morales, 2006). In a similar study, participants were asked to evaluate products in shopping carts (Morales & Fitzsimons, 2007). The results showed that the products that came into direct contact with the feminine napkins were evaluated negatively because were perceived as having been contaminated. However, this effect did not occur when both of the products were present but not touching. In terms of food products, consumers can classify food as inedible if it comes into contact with something that is not acceptable for eating as they associate this contact with contamination (Paul & Fallon, 1987).

Based on the consumer contamination literature, it is plausible that a bitten dessert could result in negative evaluations as it may be perceived as having been touched by another consumer.

Dieters vs. Non-dieters

When assessing the effects of food products on consumers, one must take into consideration the similarities and differences between consumers with and without dieting experience. The literature shows a number of differences between the two groups. For example, the two groups differ based on what they consider to be healthy. While dieters place importance on fat content in determining healthiness, non-dieters value the freshness of the product and use that as a predictor of healthfulness (Oakes & Slotterback, 2002). The two groups also differ in terms of food categorization. For example, dieters tend to put food into good and bad categories and evaluate food based on guilt versus no guilt, whereas non-dieters however, think of food in simpler terms (King, Herman & Polivy, 1987). When presented with images of food, non-dieters show activation in the craving-related parts of the brain, while dieters however show activation in the brain's hunger and desire regions in addition to craving-related regions (Coletta, et al., 2009). While non-dieters have the ability to control themselves in the presence of food cues, such as the smell of a tasty meal, dieters tend to be more sensitive and show an increased desire to eat food when presented with the same stimuli (Fedoroff, Polivy, & Herman, 1997). Dieters have also been shown to develop hedonic food thoughts when presented with tempting food cues (Papiers, Stroebe & Aarts, 2006).

Another interesting study examined the behavioral effects of tempting food cues on the two groups. The results showed that dieters were more inclined to select an unhealthy food option following exposure to a tempting food cue than their non-dieting counterparts (Ouwehand & Papies, 2010). The above findings support the theory that dieters and non-dieters seem to perceive, categorize, and respond to food/tempting food cues in different ways. It is therefore expected that the two groups will also differ in their perceptions of the dessert advertisements.

Due to the fact that the bitten dessert signals a tempting food cue, it is expected that dieters in comparison to non-dieters will respond more positively to the bitten dessert than non-dieters will.

As seen above, the literature distinguishing dieters from non-dieters clearly indicates some major differences between the two groups. Since the stimuli in this thesis involve food and perceptions of food, it is expected that the two groups will also differ in their perceptions of the desserts. Due to differences in responses to subtle food cues (Fedoroff, Polivy, & Herman, 1997), it is expected that dieters will have a significantly more positive perception of the bitten dessert (i.e., greater desirability evaluations, purchase intentions, eating intentions, and expectations of taste) than will non-dieters, as the bitten dessert contains a subtle food cue. It is also expected that dieters who view the cut dessert will rate it more positively than dieters who view the whole dessert; however, they will not rate the dessert as positively as will dieters who view the bitten dessert. More formally,

H1: Dieters will express greater desirability evaluations, purchase intentions, eating intentions, and expectations of taste for the bitten dessert, followed by the cut and whole desserts. Non-dieters will respond more positively to the whole dessert, followed by the cut and bitten desserts.

Gender Differences

The literature on food consumption has also established some major differences between males and females when it comes to their responses to food products and food cues. For example, research has shown that females are more drawn to fattening foods than males, even though males consume a greater number of calories (Rolls, Fedoroff & Guthrie, 1991). There is also a difference in how men and women evaluate healthiness. Women are more focused on fat content whereas men tend to pay attention to nutrient levels when evaluating the healthiness of

food (Oakes & Slotterback, 2001). Women also have a comparatively greater preference for healthy food options than men. For example, when comparing perceptions of healthy food products, research has shown that female participants are more likely than their male counterparts to rate a healthier food option as significantly healthier and more pleasant (Rappoport, Peters, Downey, McCann & Corzine, 2010). When comparing females to males in terms of dieting experience, research has shown that females tend to be more experienced in the domain of dieting whereas males tend to be more naïve; hence, male dieters could be more influenced by subtle food cues (Gough, 2006).

But what causes these differences between women and men? Perhaps the answer to this question lies in the biological differences between the two groups. Research examining the effects of females' menstrual cycles on food consumption has shown that women differ in their levels of food consumption depending where they are in their menstrual cycle. They tend to eat less food during the late "follicular phase" whereas food consumption increases during the "luteal phase." Participants in this study were presented with images of high and low calorie food items while their brain activity was assessed. The findings showed that, while both of these images resulted in brain activity during the follicular phase, participants in the luteal phase only showed brain activation when presented with high-calorie foods (Frank, Kim, Krzemien, & Van Vugt, 2010).

As seen above, women and men may differ in their perceptions and responses to food and subtle food cues. As discussed, men are significantly less experienced in the dieting domain (Gough, 2006) and thus following hypothesis is proposed:

H2: In comparison to male non-dieters, male dieters will be more influenced by the subtle food cue and hence express greater desirability evaluations, purchase intentions, eating

intentions and expectations of taste for bitten dessert than they will for the whole and cut desserts. No difference is expected for women.

Authenticity or Realness

A dessert that has been bitten as opposed to one that has not been touched might signal or portray a sense of realness to the consumer. The fact that someone has taken a bite from the dessert could demonstrate that the dessert has not been photoshopped and is therefore real.

Research in consumer behavior has shown the importance of realness and authenticity when it comes to consumer preferences for products. For example, it has been shown that due to the increased criticism that advertisements ae inauthentic and not real, advertisers attempt to replicate reality by increasing their focus on the importance of authenticity and portrayals of reality within their ads (Stern, 1994). More recently, research has shown that consumers have a preference for authenticity and are more satisfied with products that are portrayed as how they "ought to be" in reality (Berverland, 2006). Authenticity was broken down into different categories based on the interviews that were conducted with the participants; with the results showing that one category of authenticity was "naïve marketing." Participants expressed a preference for a real and authentic representation of a product as opposed to one that is advertised in a fancy and unauthentic manner.

Rose and Wood (2005) investigated the phenomenon of realness and authenticity in terms of reality television. They conducted their research with individuals who enjoy watching reality television such as *Survivor* and *The Bachelorette*. Their findings show that the increased interest in reality shows has occurred as a result of consumers' desire for a sense of realness and authenticity in today's unauthentic world (Rose & Wood, 2005). The findings from this study and the studies summarized above suggest that consumers are more interested in a realistic

portrayal of the world as opposed to a fancy or fake one. Based on this research, consumers may find the bitten dessert to be more preferable as it might be perceived as a more real representation than a fancy, photoshopped representation.

As consumers seem to have a preference for real and authentic representations, and that an image of bitten dessert could signal authenticity, it is expected that the bitten dessert will be perceived as the most real, followed by the cut dessert, and finally the whole dessert. Perceptions of realness will mediate the relationship between the dessert type and dieting on the dependent variables. It is expected that:

H3: The bitten dessert will be perceived as most real, which will therefore result in more favorable evaluations than the cut and whole desserts.

Potential Alternative Mechanisms

While perceptions of realness, dieting experience, and gender might influence the overall perceptions of the dessert advertisements, it can also be argued however that social proof and scarcity could play a role in how consumers perceive advertisements. Research has shown that consumers are more inclined to exhibit a behavior similar to those around them (Goldstein, Cialdini, & Griskevicius, 2008). For example, when participants were presented with an explanation of the eating behaviors of fellow consumers, they were more likely to select the same food option as another consumer (Thomas, Aveyard, & Higgs, 2012). Mirroring other consumers also occurs in terms of the amount of food consumed. For example, when consumers were told that the participant before them had eaten a larger portion of food, in comparison to a smaller portion, the current participant consumed more food (Pliner and Mann, 2004). If the bitten dessert signals a form of social validation that a previous consumer has bitten the dessert, there is a possibility that this validation could result in a positive evaluation of the bitten dessert.

Another possible alternative explanation for positive product evaluations is the presence of scarcity. Research has shown that products are more preferred when they are less abundant; for example, a recipe book of limited availability is more preferred than one that is easily obtainable (Verhallen & Robben , 1994). Prior research has also investigated the influence of product scarcity products on purchase intentions. According to the findings from this research, labelling a product as "limited quantity," resulted in greater purchase intentions due to consumer competition (Aggarwal, Jun, & Huh, 2013). Hence, there is a possibility that the bitten dessert can be perceived as scarce, thus resulting in positive evaluations. It is therefore important to rule out the alternative explanation that the bitten dessert is perceived as being scarce.

I will now present the results of 4 studies. Study 1 examines Hypotheses 1 and 2. Studies 2A and 2B will assess whether realness mediates the relationship between the dessert type and the dependent variables and will test Hypothesis 3. Study 3 will once again test Hypotheses 1-3 and it will also investigate the alternative explanations of scarcity and social proof.

Study 1

Method

Procedure and design

This study was designed to examine H1 and H2; that is, do dieters and non-dieters perceive the dessert advertisements differently and are there any gender effects? Participants were informed that an image was going to pop up on their screen and that they should pay attention to it because they would be asked questions about it afterwards. They were randomly assigned to view one of three advertisements depicting a dessert that had either been left untouched, cut with a utensil, or had a bite taken out of it (see Appendix for stimuli).

Participants were 192 Mturk workers from Mturk.com who received \$1.00 for their participation. There were an equal number of male and female participants (96 males) and the mean age of the participants was 34 years of age.

Measures

After seeing the advertisement, the participants responded to a series of questions assessing the dependent measures. Desirability evaluations were assessed by having the participants rate 5 items (e.g., How would you rate the item in the image overall? Good/bad, unfavourable/favourable, negative/positive, disliked/liked, disgusting/tasty?) using a 7-point scale ($\alpha = 0.97$). Expectations of taste were measured via 2 items ("I expect that the item in the image will be delicious", and, "I expect that the item in the image will satisfy me") on a 7-point scale, where 1 = "strongly disagree" and 7 = "strongly agree" (r = .90). Purchase intentions were measured using one item: ("How likely are you to purchase the item"), on a 7-point scale where 1 = "very unlikely", and, 7 = "very likely". For manipulation checks, the following items were rated on a 7 point scale in order to assess the image images depicting the cut, bitten and whole desserts, respectively: "to what extent was the item on the image: not cut/cut, not sliced/sliced, undivided/divided ($\alpha = 0.85$), not bitten/bitten, not chewed/chewed, not nibbled/nibbled ($\alpha = 0.88$), half/whole, not intact/intact?" (r = .55). Since there were only 2 items assessing perceptions of the dessert being whole, a simple correlation between the two items was used.

Results

Manipulation Checks. A one-way Analysis of Variance (ANOVA) indicated that participants were able to distinguish whether they saw a bitten (F(2,192) = 30.93, p < .001), cut (F(2,192) = 38.21, p < .001) or whole dessert (F(2,192) = 32.31, p < .001). Post hoc tests revealed that participants who viewed the bitten dessert were significantly more likely to indicate that the

dessert was bitten (M_{bite} =3.18) as compared to those who saw the cut (M_{cut} = 1.73, p < .001) or whole (M_{whole} = 1.26, p < .001) desserts. Participants who viewed the cut dessert were significantly more likely to indicate that the dessert was cut (M_{cut} =4.62) compared to those who viewed the whole dessert (M_{whole} = 1.91, p < .001) however, the difference was not significant for those who viewed the bitten dessert (M_{bite} = 4.22, p = .225). Finally, the participants who were presented with the whole dessert were significantly more likely to indicate that the dessert was whole (M_{whole} = 5.43) compared to those who saw the cut (M_{cut} = 2.95, p < .001) and bitten (M_{bite} = 3.22, p < .001) desserts.

Tests of Hypotheses. While there was no significant interaction between dessert type and dieting experience (testing H1), the results of a 3-way Univariate ANOVA with dessert type, gender, and dieting experience as independent variables (testing H2), and desirability evaluations as a dependent variable were significant (F(11,191) = 3.711, p = .025); see Figure 1). There was also a marginally significant main effect of dessert type on desirability evaluations (F(2,191) =2.93, p = .056) showing that participants who saw the bitten ($M_{bite} = 5.21$, p = .022) and cut $(M_{cut} = 5.20, p = .028)$ desserts rated them as significantly more desirable than the whole dessert $(M_{\text{whole}} = 4.58)$. To decompose the 3-way interaction, 2 two-way ANOVAs were conducted: one for men and one for women. For women, dieters and non-dieters showed no significant differences in their desirability evaluations of the dessert (F(5,95) = .882, p = .417); conversely, the responses of the male participants differed based on their dieting experience (F (5.95) = 3.523, p = .034). Simple effects revealed that males who had no previous dieting experience marginally differed in their desirability evaluations of the dessert (F(2,90) = 2.587, p = .081) and showed significantly higher desirability evaluations for the cut dessert ($M_{Cut} = 5.64$) than for the bitten dessert (M_{Bite} =4.26, p = 0.028). Male participants with no dieting experience did not differ

in their desirability evaluations of the cut and whole desserts ($M_{whole} = 4.77$, p = .17) nor did they differ in their evaluations of the bitten and whole desserts ($M_{whole} = 4.77$, p = .45). The post hoc tests also indicated that male dieters and non-dieters differed in their perceptions of the bitten dessert (F(1,90) = 5.719, p = .019) with the male dieters expressing significantly higher desirability evaluations ($M_{diet} = 5.61$) than the non-dieters ($M_{non-diet} = 4.26$).

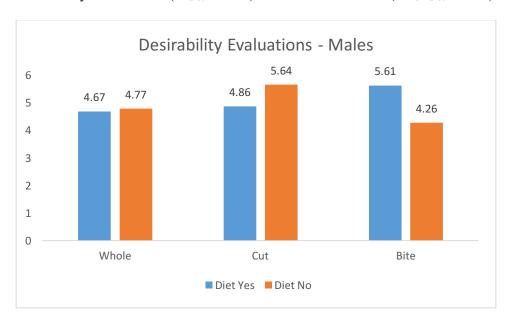


Figure 1: Study 1 -Desirability Evaluations for Males

Similar to the results mentioned above, the same pattern occurred for expectations of taste with a three way interaction emerging between dessert type, gender and dieting experience (F(11,191) = 3.93, p = .021, see Figure 2). Once again, no significant differences were found for the 2-way ANOVA of dieting experience and dessert portrayal for women (F(5,95) = .774, p = .464). However, male dieters and non-dieters expressed differing expectations of taste for the desserts (F(5,95) = 4.156, p = .019). Males with no dieting experience expressed different expectations of taste for the three types of desserts (F(2,90) = 4.306, p = .016) with post hoc tests showing significantly more positive expectations of taste for the cut dessert $(M_{\text{cut}} = 5.93)$ than for the whole $(M_{\text{whole}} = 4.36, p = .029)$ and bitten desserts $(M_{\text{bite}} = 4.08, p = .009)$. There was also a

significant difference between male dieters and non-dieters in their expectations of taste for the bitten dessert (F(1,90) = 6.549, p = .012); male dieters expressed significantly more positive expectations of taste for the bitten dessert (M_{diet} = 5.68) than did males with no dieting experience ($M_{no-diet}$ = 4.08).

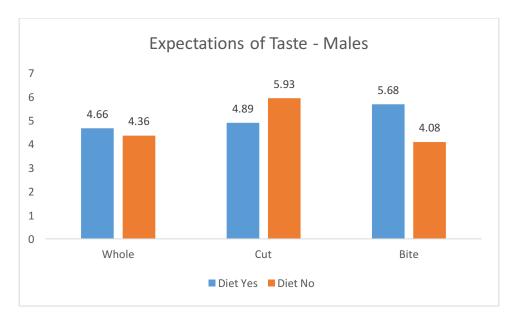


Figure 2: Study 1 – Expectations of Taste for Males

Finally, a 3-way ANOVA with dieting experience, dessert portrayal and gender (F(11,191)=3.023, p=.051) revealed a similar trend for purchase intentions. Once again, women did not differ in their purchase intentions based on dieting experience (F(5,95)=.704, p=.498) whereas the purchase intentions of males marginally differed based on their dieting experience (F(2,95)=2.992, p=.055, see Figure 3). This time, however, the difference occurred among males who have dieting experience (F(2,90)=3.920, p=.023). Male participants with dieting experience expressed greater purchase intentions for the bitten dessert (M=5.12) than they did for whole $(M_{whole}=3.70, p=.013)$ and cut $(M_{cut}=3.77, p=.038)$ desserts. The results also indicated that male dieters $(M_{bite}=5.12)$ expressed marginally greater purchase intentions

for the bitten dessert F(1,90) = 3.331, p = .071) than did their non-dieting counterparts ($M_{\text{no-diet}} = 3.92$).

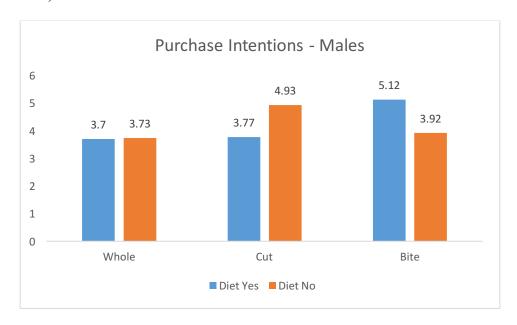


Figure 3: Study 1 – Purchase Intentions for Males

Discussion

The findings of this study indicate that the main difference occurs between males with and without dieting experience. One important finding relates to the perceptions of the bitten dessert by male dieters: males with dieting experience perceived the bitten dessert positively (desirability evaluations, expectations of taste and purchase intentions) whereas males with no dieting experience perceived it negatively. Perhaps this effect is due to the fact that dieters are more likely than non-dieters to respond to subtle food cues (Fedoroff, Polivy, & Herman, 1997). Research has also established that males tend to have less dieting experience than females (Gough, 2006), which thus makes male dieters more prone to being affected by subtle food cues. While there seemed to be mixed findings in terms of the cut dessert, Study 1 confirms the notion that male dieters respond positively to bitten dessert. Hypothesis 3 will be tested in the following

study to examine the proposed mediator. Therefore, Study 2A consists of the same stimuli and procedures as Study 1, but it incorporates additional measures to assess perceptions of realness.

Study 2A

Method

Procedure and design

Study 2A followed the same procedure as Study 1 but differed in two respects: it included an assessment of perceptions of realness, and it added another behavioural measure eating intentions (detailed below). The study consisted of 194 University of Manitoba undergraduate students (114 males) who received course credit in exchange for their participation. The mean age of the participants was 21 years of age.

Measures

Perceptions of realness were assessed using a 7-point scale that indicated the extent to which they found the dessert in the image to be real/fake, not plastic/plastic, and edible/not edible ($\alpha = 0.88$). The same items as Study 1 were used to assess desirability evaluations ($\alpha = 0.97$), expectations of taste (r = .75), and purchase intentions. Eating intentions were measured with 2 items, ("Please imagine that you have been given a piece of the dessert in the image, to what extent would you want to eat the dessert? To what extent will you eat the dessert?" (r = .60)) that participants assessed on a 7 point scale where 1 = not at all and 7 = very much so. The same set of items from Study 1 was used as manipulation checks in order to assess the extent to which the participants found the dessert to be bitten ($\alpha = 0.87$) and cut ($\alpha = 0.80$). The item, "to what extent was the item on the image half/whole," was used to measure whether the participants perceived the dessert as having been left untouched.

Results

Manipulation Checks. Participants in all three of the conditions were able to significantly distinguish whether the dessert they were presented with was bitten (F(2,191 = 7.95, p = .000), cut in half (F(2,191) = 9.96, p < .0001) or left untouched (F(2, 191) = 19.78, p < .001). The post hoc tests revealed that participants who saw the bitten dessert (M_{bite} = 3.57) were significantly more likely to indicate that the dessert had been bitten compared to those who saw the cut (M_{cut} = 2.57, p = .002) and whole (M_{Whole} = 2.41, p < .001) desserts. The participants who saw the cut dessert (M_{cut} = 4.19) were significantly more likely to indicate that the dessert was not whole (M_{whole} = 2.84, p < .001) but had also not been bitten (M_{bite} = 3.93, p = .42). Finally, those who saw the whole dessert were significantly more likely to indicate that the dessert remained untouched (M_{whole} = 5.01) than were those who saw both the bitten (M_{Bite} = 3.53, p = .000) and cut (M_{Cut} = 3.74, p < .001) desserts.

Tests of hypotheses. There was a main effect of dessert type on desirability evaluations (F(2,194) = 5.79, p = .004). Participants expressed significantly greater desirability evaluations for the bitten dessert ($M_{Bite} = 5.24$) than for the cut ($M_{Cut} = 4.42$, p = .004) and whole ($M_{Whole} = 4.46$, p = .004) desserts. The same pattern emerged for expectations of taste (F(2,193) = 4.61, p = .011) with participants who viewed the bitten ($M_{Bite} = 4.76$) dessert expressing significantly greater expectations of taste than did participants who saw the cut ($M_{Cut} = 3.92$, p = .01) and whole ($M_{Whole} = 3.96$, p = .01) desserts. There was also a main effect of the dessert type on perceptions of realness (F(2,191) = 4.89, p = .009); participants who saw the bitten ($M_{Bite} = 4.94$) dessert rated it the dessert as marginally more real than those who saw the cut ($M_{Cut} = 4.37$, p = .06) or whole ($M_{Whole} = 4.06$, p = .002) desserts. There were no significant 2-way or 3-way interactions between dieting experience, dessert type and gender on the dependent variables.

Mediation. Mediation analyses was conducted using Process Model 8 (Hayes, 2013). The categorical independent variable for this study had 3 levels, which precluded a simple mediation analysis. Therefore, due to a multi-categorical independent variable, two separate analyses were run with one showing a comparison between the cut and the whole desserts (with bite held constant) and the other comparing the bitten and whole desserts (while keeping the cut constant). The second independent variable in the model was dieting experience, and the dependent variable was desirability evaluation with realness mediating the interaction between them. Dieting was coded as either 1 = dieting, or 0 = no dieting and realness was rated on a 7-point continuous scale. While there were no conditional direct or indirect effects for the cut dessert, the results showed indirect effects of dessert type and dieting experience on desirability evaluations through perceptions of realness only for participants with dieting experience ($\beta = .18$; CI: .08 -.67). These results show that for those who viewed the bitten dessert, there was a significant conditional indirect effect of dessert type and realness on desirability evaluations for those who viewed the bitten dessert. In other words, those with dieting experience who viewed the bitten dessert expressed greater desirability evaluations and this relationship was mediated by greater perceptions of realness (see Table 1, Appendix A).

The same pattern occurred for eating intentions. There was a significant conditional indirect effect of dessert type and dieting experience on eating intentions as mediated by realness. Realness significantly mediated the effect of the bitten dessert and dieting experience on eating intentions (see Table 2, Appendix A). Only participants with dieting experience who viewed the bitten dessert expressed greater eating intentions and this relationship was mediated by realness ($\beta = .28$; CI: .05 - .73).

The same results also occurred in relation to expectations of taste. Once again, there were no significant conditional direct or indirect effects for the cut dessert when compared to the whole dessert. However, dieting experience produced significant conditional indirect effects for the cut when compared to the whole. However, dieting experience produced a significant conditional indirect effect on the expectations of taste via realness for those who had seen the bitten dessert compared to those who had seen the whole dessert (β = .49; CI: .15 - .97, see Table 3 Appendix A).

Finally, the same effect occurred for purchase intentions. Dieting experience produced a conditional indirect effect of dieting on purchase intentions through perceptions of realness for those who viewed the bitten dessert as compared to those with dieting experience who viewed the whole dessert (β = .37, CI: .11 - .82, see Table 4, Appendix A). These findings show that participants with dieting experience who viewed the bitten dessert expressed greater purchase intentions than those who viewed the whole dessert, and that this relationship was mediated by perceptions of realness.

Discussion

This study above sheds some light on how subtle food cues can create favorable attitudes towards a dessert. The appearance of realness seems to be a significant contributing factor to the image of the bitten dessert's effect has on perceptions and attitudes towards the dessert. The findings from this study show that, while there is no effect for participants without dieting experience, the three dessert types influence the realness perceptions of those with dieting experience. This study confirms the notion that participants with dieting experience are more influenced by subtle food cues (Fedoroff, Polivy, & Herman, 1997). Moreover, the results from

this study also confirm that perceptions of realness mediate the bitten dessert's effect on desirability evaluations, eating intentions, expectations of taste, and purchase intentions.

One limitation of this study is that the bitten and cut desserts do not appear to contain the same amount of cream. Therefore, it was unclear whether such a difference could have influenced the results. The bitten dessert appeared to have significantly more than the cream filling than the cut dessert, which may have resulted in the positive response from dieters. A follow up study was conducted in order to examine this concern with the amount of cream in each desserts kept constant. Study 2B was designed and run to investigate one reason behind the gender differences found in Study 1 and to test for potential alternative explanations.

Study 2B

Method

Procedure and design

This study followed a similar procedure as the previous studies, but it incorporated two new elements: (1) the cream filling inside the dessert was held constant in both the cut and bitten desserts (see Appendix C, pp. 56); and (2) some new dependent variables were added (positive and negative evaluations). In addition, this study also sought to examine whether the dessert was perceived to be more appropriate for males or females and whether the alternative explanations of social proof and scarcity play a role.

This study consisted of 195 Mturk workers from Mturk.com who each received \$1.00 for their participation. The mean age of the participants was 34.7 years old, and 94 of the participants were male.

Measures. The same set of items were used to assess desirability evaluations ($\alpha = 0.97$), eating intentions (r=.72), expectations of taste (r=.87), and perceptions of realness ($\alpha = 0.92$) and

purchase intentions. Positive evaluations were assessed with 7 items ("To what extent is the dessert in the image: delicious, appetizing, yummy, mouth-watering, scrumptious, healthy, and attractive"), which were measured using a on a 7-point scale where 1 = not at all and 7 = verymuch so ($\alpha = 0.81$)). Negative evaluations were assessed by asking participants to indicate the extent to which the dessert in the image appeared to be revolting, sickening, horrible, unappealing, contaminated, ruined, spoiled, filthy, unhygienic, tainted, gross, or dirty ($\alpha = 0.94$); as with positive evaluations, these items were measured on a 7 point scale where 1 = not at all and 7 = very much so. Two separate items were utilized to measure the extent to which the dessert was perceived as having been made for males or females ("Was the dessert on the image is made for males?" (1/7 = strongly disagree/agree); Was the dessert in the image is made for females?" (1/7 = strongly disagree/agree)). The items that were used to measure scarcity in terms of size were "I think the dessert is of limited availability"; and "this dessert is rare" (1/7 =strongly disagree/agree; r = .82). The items used to measure scarcity in terms of quantity/size were "the size of the dessert is and the quantity of the dessert is very small/large" (r = .71). Social proof was measured on a 7 point scale (where 1 = strongly disagree and 7 = strongly agree) using the statements: "Other consumers like this product", "Other consumers would purchase this product"; and, "This is a popular dessert" ($\alpha = 0.93$)). The same set of items were used as manipulations checks in order to assess whether the dessert was perceived as whole, cut $(\alpha = 0.81)$ or bitten $(\alpha = 0.92)$.

Results

Manipulation Checks. Participants were able to distinguish whether they had seen a bitten (F(2,195) = 30.827, p = .000), cut (F(2,195) = 35.097, p < .0001), or whole dessert (F(2,195) = 6.486, p = .002). Participants who saw the bitten dessert were significantly more likely to

indicate that the dessert was bitten ($M_{Bite} = 3.57$) than were those who saw the cut ($M_{Cut} = 2.79$, p = .001) or whole desserts ($M_{Whole} = 1.63$, p < .001). Participants who had been presented with the image of the cut dessert were significantly more likely to indicate that the dessert was cut ($M_{Cut} = 4.22$) as compared to bitten ($M_{Bite} = 3.57$, p = .03) or whole desserts ($M_{Whole} = 1.95$, p < .001). Those who viewed the whole dessert were significantly more likely to indicate that the dessert is whole ($M_{Whole} = 4.68$) as compared to the bitten ($M_{Bite} = 3.44$, p = .002) or cut dessert ($M_{Cut} = 3.46$, p = .002).

Test of Hypotheses. There was a significant 2-way interaction between dieting experience and dessert type on how real the dessert was perceived to be (F(5,200) = 4.854, p = .009) (testing H2). The 3-way interaction with gender was not significant. According to post hoc tests, those participants who indicated having dieting experience perceived the cut $(M_{cut} = 5.14, p = .053)$ and bitten desserts $(M_{bite} = 5.29, p = .01)$ as appearing significantly more real than the whole dessert $(M_{whole} = 4.51, F(2,194) = 3.35, p = .037)$. The results also showed that participants with dieting experience perceived the bitten dessert as appearing significantly more real than did those with no dieting experience $(M_{BiteDiet} = 5.29, M_{BiteNoDiet} = 4.05, F(1,194) = 9.100, p = .003)$.

Mediation. The mediation analyses of this study followed a similar pattern as in Study 2B with one exception, there was an effect for those with and without dieting experience. Similar to Study 2A, the cut condition was compared to the whole condition while holding the bitten condition constant, while a separate analysis compared the bitten condition with the whole condition while holding the cut condition constant. Mediation analysis was run with the new variables and dieting experience as the independent variables, realness as the mediator and desirability evaluations as the dependent variable. Similar to study 2A, there were no conditional direct or indirect effects for the cut dessert as compared to the whole dessert. However, the

results showed significant conditional indirect effects for the bitten dessert among participants with both dieting participants (β = .51; CI: .072 – 1.01, see Table 5, Appendix A) and no dieting experience (β = -.63; CI: -1.29 - -.02). Specifically, participants with dieting experience expressed greater desirability evaluations when seeing the bitten dessert as compared to the whole dessert, and this effect was mediated by increased perceptions of realness. Similarly, those with no dieting experience expressed lower desirability evaluations for the bitten dessert, which was mediated by lower perceptions of realness.

As expected participants with dieting experience who were presented with the bitten dessert expressed higher eating intentions and this relationship was mediated by perceptions of realness (β = .57; CI: .09 – 1.14). The non-dieting participants who viewed the bitten dessert expressed lower eating intentions and, once again, this conditional indirect effect that was mediated by perceptions of realness (β = -.69; CI: -1.50 - -.03; see Table 6, Appendix B).

Furthermore, the effect of dessert type on expectations of taste was mediated by perceptions of realness. Participants with dieting experience who viewed the bitten dessert who had dieting experience expressed greater expectations of taste, and this effect was mediated by perceptions of realness (β = .62; CI: .09 - 1.22). Similar to the previous mediation analyses, those with no dieting experience expressed comparatively lower expectations of taste when viewing the bitten dessert than they did when they viewed the whole dessert and this effect was also mediated via realness (β = -.76; CI: -1.53 - -.02, see Table 7, Appendix B).

The positive evaluation items followed the same pattern. Participants with dieting experience produced a higher amount of positive evaluations when they viewed the bitten dessert than they did for the others, and this relationship was mediated via perceptions of realness (β = .26; CI: .05 - .55, see able 8, Appendix A). Those without dieting experience expressed less

positive evaluations for the bitten dessert and this relationship was also mediated by perceptions of realness ($\beta = 0.32$; CI:-.73 - - .03). Notably, the opposite pattern occurred in terms of negative ratings, ((Diet; $\beta = -.20$; CI: -.47 - -.03), (NoDiet; $\beta = .25$ CI: .02 - .58, see Table 9, Appendix B).

The same pattern occurred for purchase intentions. Participants with dieting experience who viewed the bitten dessert expressed greater purchase intentions than they did for the whole condition, and this effect was mediated via realness (β = .57; CI: .08 – 1.12). Those with no dieting experience expressed lower purchase intentions for the bitten than they did for the whole condition, and this effect was also mediated by realness (β = -.70; CI: -1.42 - -.02; see Table 10, Appendix A).

In order to further examine the gender differences that were found in Study 1, the participants were also asked to indicate the extent to which they found the dessert to be made for males or females. While participants did not find the whole dessert to have been made for females (F(2,198) = .259, p = .772), they did feel that the cut (M_{Cut} = 6.23, p = .009) and bitten (M_{Bite} = 6.04, p = .023) dessert ads were made specifically for males (M_{Whole} = 4.94, F(2,198) = 4.165, p = .017). These findings potentially explain the gender differences found in Study 1. Perhaps the bitten and cut desserts are perceived to be more masculine, which is why they only affected male dieters.

Finally, there was no effect of dessert type on perceptions of scarcity – both in terms of quantity (F(2,199) = 2.287, p = .104) and availability (F(2,199) = 2.287, p = .104) and social proof (F(2,199) = .040, p = .961). Mediation analysis with scarcity and social proof also showed no indirect effects.

Discussion

The advertisements in this study depicted the same amount of cream filling, which

suggests that the results from Study 1 and the mediation effects found in Study 2A were not attributable to variations in cream filling across the conditions, but were instead the result of manipulating the dessert type (cut/bite/whole). Although there seems to be no direct effect of dessert type on the dependent variables, the interaction of dessert type and dieting experience indirectly influenced the dependent measures via the perceptions of realness. Both Studies 2A and 2B confirm the notion that the bitten dessert is perceived as being more real - especially for those with dieting experience - and that in turn positively influences the dependent variables.

This study also sheds some light on the gender differences found in Study 1. Perhaps the positive effect among male participants in Study 1 occurred due to the perception that the bitten and cut desserts are more appropriate for males. Hence Study 3 uses different stimuli that were created by an advertising professional. I have chosen the color pink, in the hope it will be perceived as more appropriate for females and to test whether that will change the effect of the bitten dessert results for males. Although Study 2B also found that scarcity and social proof do not play a role, Study 3 will test these as potential mediators once again.

Study 3

Method

Procedure and Design

This study was designed to further assess the gender differences found in Study 1, and to explore possible explanations as to why the previous stimuli were perceived as being more appropriate for males. The study followed the basic procedure of the study followed the previous studies and used the same measures were used to assess the dependent variables. The new stimuli utilized for this study are included in Appendix B (pp. 59).

The participants in this study were 173 University of Manitoba Marketing students who received course credit as a compensation for their time. The study consisted of 105 male participants and the mean age was 20.9.

Measures. The same set of items as the previous studies were used to measure the variables. This study assessed eating intentions (r = .61), expectations of taste (r = .77), purchase intentions, realness (r = 0.87) and the alternative explanations of scarcity (r = .68), and social proof ($\alpha = .83$). Once again, the same items were used to assess perceptions of the cut ($\alpha = 0.85$), bitten ($\alpha = 0.82$) and whole desserts.

Results

Manipulation Checks. Participants were significantly able to distinguish whether they saw a bitten (F(2,170) = 47.755, p < .001), cut (F(2,170) = 21.519, p < .001), or whole dessert (F(2,169) = 3.173, p = .044). Participants who viewed the bitten dessert were significantly more likely to rate the dessert as bitten (M_{Bite} = 3.56) rather than cut (M_{Cut} = 2.04, p < .001) or whole (M_{Whole} = 1.85, p < .001). Those who viewed the cut dessert were significantly more likely to recall seeing a cut (M_{Cut} = 4.87) dessert as opposed to a bitten (M_{Bite} = 3.02, p < .001) or whole (M_{Whole} = 1.97, p < .001) dessert. The participants who had seen the whole dessert were more likely to indicate that the dessert was whole (M_{Whole} = 4.71), rather than bitten (M_{Bite} = 3.71, p = .021) or cut (M_{Cut} = 3.83, p = .041).

Test of Hypotheses. There was a 2-way interaction between dieting experience and dessert type on eating intentions (F(5,169) = 3.625, p = .029), gender did not interact with the other independent variables. The participants with dieting experience (F(2,164) = 4.57, p = .012) expressed higher eating intentions for the cut (M_{cut} = 4.66, p = .011) and bitten desserts (M_{bite} = 4.77, p = .006) than they did for the whole dessert (M_{whole} = 3.21). The dieting (M_{diet} = 3.21)

participants also expressed lower eating intentions for the whole dessert when compared to the non-dieting participants ($M_{\text{no-diet}} = 4.87$, (F(1,164) = 8.986, p = .003).

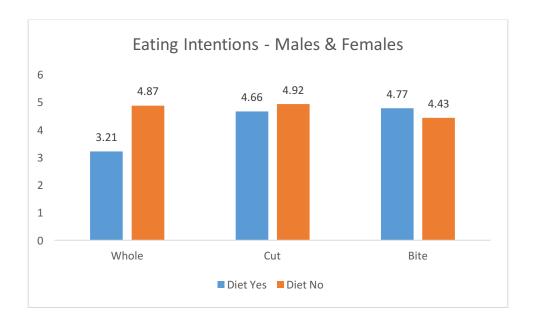


Figure 4: Study 3 – Eating Intentions

There was a significant 2-way interaction between dieting experience and dessert type on expectations of taste (F(5,167) = 4.889, p = .009). Once again, a similar, yet marginally significant pattern emerged for the participants with dieting experience (F(2,164 = 2.876, p = .059). These individuals expressed greater expectations of taste for the cut (M_{Cut} = 5.35, p = .061) and bitten desserts (M_{bite} = 5.61, p = .023) than they did for the whole dessert (M_{whole} = 4.26). When comparing dieters and those with no dieting experienced another similar pattern appeared: the dieters expressed marginally greater expectations of taste for the bitten dessert ($M_{dietbite}$ = 5.57 & $M_{no-dietbite}$ = 4.60, (F(1,164) = 3.354, p = .069) while expressing significantly lower expectations of taste for the whole dessert ($M_{dietwhole}$ = 4.26 & $M_{no-dietwhole}$ = 5.63 (F(1,164) = 5.885, p = .016). Once again, these results demonstrate that the subtle food cue - in this case, the cut and bitten desserts - influence the dieters but not the non-dieters.

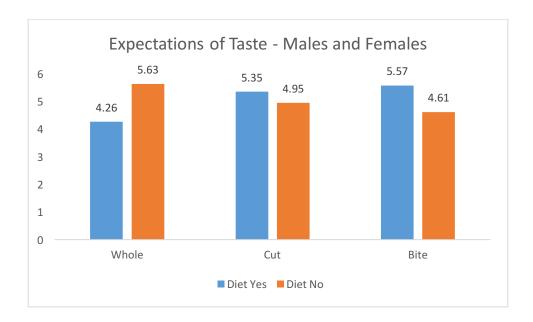


Figure 5: Study 3 Expectations of Taste

As with Study 1, there was a marginally significant interaction between the dessert type and dieting experience on purchase intentions (F(5,167) = 2.643, p = .07). Purchase intentions differed among the participants who indicated having some dieting experience (F(2,162) = 3.732, p = .026). Dieters expressed greater purchase intentions for the bitten ($M_{bite} = 3.87$, p = .008) and cut ($M_{cut} = 3.55$, p = .041) than they did for the whole dessert ($M_{whole} = 2.45$). Overall, dieters ($M_{diet} = 2.45$) expressed lower purchase intentions for the whole dessert (F(1,162) = 4.424, p = .037) than the non-dieters ($M_{no-diet} = 3.57$). These findings indicate that those with dieting experience are more influenced by subtle food cues and hence express greater purchase intentions for the cut and bitten desserts, which seem to provide them with a visual signal. However, since the whole dessert however does not provide a visual cue, dieters tend to express lower purchase intentions for it.

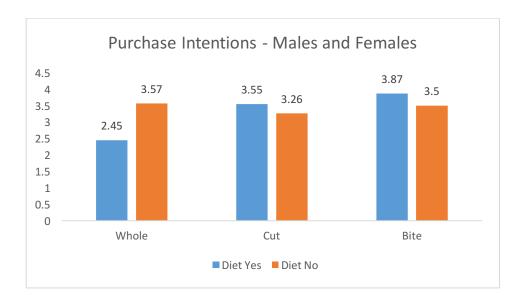


Figure 6: Study 3 Purchase Intentions

Alternative Explanations. Scarcity and social proof were also measured. According to the findings there was no significant difference in whether the desserts provided social proof (F(2,171) = .753, p = .472) or signaled scarcity (F(2,171) = 1.397, p = .250). The indirect effects for these variables were also not significant nor were the indirect effects through realness.

Discussion

The findings from this study are consistent with those of Study 1. While dieting participants seem to particularly like the bitten dessert, those without dieting experience are drawn to the whole dessert. The findings for the cut dessert are mixed and future research is required to explore why that is. This study also confirms that the alternative mechanisms of scarcity and social proof do not appear to play a role in the relationship between the independent variable and dependent measures. Finally, unlike Studies 2A and 2B, realness was not a mediator in this study. Perhaps this is due to the drastic difference in the stimuli used in this study and the stimuli used in the previous ones.

General Discussion

Consumers in these studies were presented with advertisements contacting images of desserts that were bitten, cut, or whole. Based on the literature on consumer preferences for authenticity, it was predicted that participants viewing the bitten dessert would respond more favorably than those viewing the cut and whole desserts. It was expected that this relationship would be mediated via perceptions of realness/authenticity. The dieting literature has shown a significant difference between dieters and non-dieters in their responses to subtle food cues (Fedoroff, Polivy, & Herman, 1997; Papies, Stroebe, & Aarts, 2007), and it was consequently predicted that dieters' and non-dieters would have different responses to the bitten dessert. Research comparing males and females has shown a number of differences in how they responded to food cues (Gough, 2006), and it was therefore it was predicted that males and females would also differ in their responses to the bitten dessert.

A reccurring finding across all of the 4 studies was the influence of the bitten dessert on participants with dieting experience. While participants without any dieting experience seemed to be unaffected by the bitten dessert, those with dieting experience who viewed the bitten dessert responded more favorably (higher purchase intentions, desirability evaluations, etc.) than those who viewed the cut and whole desserts. These findings were expected as research has shown that dieters differ from non dieters in their responses to food cues (Frank, Kim, Krzemien, & Van Vugt, 2010). The cut dessert produced a similar effect as the bitten dessert in both Studies 1 and 3. Perhaps this is due to the possibility that the cut dessert also provides some form of visual cue for dieters is absent with the whole dessert.

Studies 2A and 2B confirm that realness as a mediates the bitten dessert's positive influence on dieting participants. These findings explain that the bitten dessert is percieved as

more real and authentic in comparison to the cut and whole dessert, and, thus, these perceptions of realness resulted in its positive evaluations. After the bitten dessert, the cut dessert was perceived as being the next most real, with the whole dessert being viewed as the least real of the three. Due to the failure to provide a subtle food cue to dieters, the whole dessert was perceived as less real and thus rated most negatively. These results were also expected and are supported by the liteature on consumer preference for authenticity and realness. As discussed earlier, consumers have a preference for products that are portrayed in a real manner (Rose & Wood, 2005).

Finally, there were gender differences, but these were only observed in Study 1. The results from Study 1 show that male dieters were specifically influenced by the bitten dessert, which could be due to the lack of dieting experience in the male population (Gough, 2006). However, such an effect was not found in Studies 2A and 2B. Study 2B did find that the dessert was perceived to be most appropriate for male participants, but it is unclear whether that could have caused the gender differences found in Study 1. Studies 2B and 3 tried to rule out the alternative explanations of scarcity and social proof as doing so would allow us to conclude that realness is driving the effects.

The findings from these studies contribute to the literature on dieting by showing how subtle food cues influence dieters (Fedoroff, Polivy, & Herman, 1997), and that this effect is even greater among males as they are less experienced in dieting (Gough, 2006). The results also contribute to the literature on consumer preferences for authenticity and authentic representations of products in advertisements (Rose & Wood, 2005). The results can benefit advertisers of desserts products and also other food products as we can confirm that consumers, and especially those with dieting experience, prefer products to be represented as they are in reality.

Marketers who are targeting dieters for various food products can benefit from the findings of this research. Perhaps, including a subtle food cue such as a bite mark can increase perceptions of realness which may serve to attract more consumers with dieting experience. Weight loss campaigns and magazines that are aiming to reduce the consumption of high caloric foods can also benefit from these findings. Perhaps limiting the use of subtle food cues, such as a bite marks could be beneficial and could help reduce the likelihood that a dieting individual will cheat and consume sweets.

Limitations & Future Research

There was a consistent pattern of realness as a mediator across Studies 2A and 2B, however this pattern did not emerge in Study 3. This could be due to the change in the stimuli that were created for Study 3. Apart from just the color, the new simuli varied in several other respects. For example, there was a plate visible in the second set of stimuli whereas the first set did not include plates. The dessert type was also different, while the first set of studies used a chocolate dessert stimuli, the second set did not include a chocolate dessert and was instead an advertisement of a donut. Besides the images being larger in size, the desserts within the image were also larger in the second set of stimuli than the first set. It is unclear which of these differences could have resulted in the missing effect of realness in the third study. Future research should explore what aspect of the stimuli in Studies 1, 2A, and 2B accounted for realness' effect on the dependent variables. Study 1 found no differences between the cut and bitten conditions, and the effect was mainly between those two conditions and the whole condition. However, Study 2A did show a significant difference in how the cut and bitten conditions affected the dependent variable. It is unclear why this difference occurred. While it is possible that the different sample may have led to this effect, further research is required in order to assess what may have caused it more fully. Future research should also explore whether the male participants were influenced by the color of the packaging or if there were other factors that contributed to such an effect. It would also be interesting to test whether the effect holds for other food products, such as burgers and pizza, or whether it is limited to desserts, or a certain type of dessert. For example, are the results limited to unhealthy products such as desserts that are considered vice food items, or can these findings be translated to virtue products as well?

Overall, the findings from these studies expand the literature on food advertising. I show that authentic representations are especially effective for consumers with dieting experience.

Future research should explore whether these effects are limited to vice products and whether the opposite effects would occur for virtue products.

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Appendix A

Table 1

			DC-8 050/ CI
	Effect		BCa ^a 95% CI
	Effect	Lower	Upper
Cut vs. Whole	.38	47	1.04
Diet	.29	73	.43
Bite vs. Whole	.66	36	2.24
Cut vs. Whole	.		
irect Effect of Dessert Ty	pe on Desirab	ollity Evaluations	D.G. 8.0.50 / GY
			BCa ^a 95% CI
	Effect	Lower	Upper
No Diet	.37	70	.78
Diet	.41	- 1.10	.51
onditional Indirect Effect	s of Dessert T	Type on Desirabilit	
			BCa ^a 95% CI
Piet	Effect	Lower	Upper
O	03	20	.25
ES	.11	13	.42
ite vs. Whole			
irect Effect of Dessert Ty	pe on Desirab	oility Evaluations	
			BCa ^a 95% CI
	Effect	Lower	Upper
No Diet	.37	07	1.40
Diet	.38	29	1.20
Conditional Indirect Effect	s of Dessert T	Type on Desirabilit	V
			BCa ^a 95% CI
Diet	Effect	Lower	Upper
OV	15	02	.41
TES	.18	.08	.67

Table 2

Study 2A: Results	of Moderated	Mediation	Predicting	Eating Intentions
Diddy =11. Itesuits	or moutinita	Miculation	1 1 careting	Laung Intentions

Cut vs. Whole			-	
Direct Effect of Dessert typ	e on Eating Inten	tions		
			BCa ^a 95% CI	
	Effect	Lower	Upper	
No Diet	30	- 1.33	.78	
Diet	08	- 1.21	1.05	
Conditional Indirect Effect	s of Dessert Typ	e on Eating Intention	ns	
			BCa ^a 95% CI	
Diet	Effect	Lower	Upper	
NO	.03	17	.28	
YES	.10	11	.44	
Bite vs. Whole				
Direct Effect of Dessert Ty	pe on Eating Inte	ntions		
			BCa ^a 95% CI	
	Effect	Lower	Upper	
No Diet	.24	78	1.26	
Diet	.17	87	1.22	
Conditional Indirect Effect	s of Dessert Typ	e on Eating Intention	ns	
			BCa ^a 95% CI	
Diet	Effect	Lower	Upper	
NO	.14	01	.46	
YES	.28	.05	.73	

Table 3

Study 2A: Results of Moderated Mediation Predicting Expectations of Taste

Cut vs. Wh	ole						
Direct Effe	Direct Effect of Dessert Type on Expectations of Taste						
				BCa ^a 95% CI			
		Effect	Lower	Upper			
	No Diet	.02	79	.84			
	Diet	36	- 1.24	.54			
Conditiona	l Indirect Effects	s of Dessert Type	e on Expectations of	Taste			
				BCa ^a 95% CI			
Diet		Effect	Lower	Upper			
NO		.03	31	.39			
YES		.10	22	.63			

Bite vs. Wh	ole				
Direct Effe	ct of Dessert Typ	oe on Expectation	s of Taste		
			BCa ^a 95% CI		
		Effect	Lower	Upper	
	No Diet	.86	04	1.66	
	Diet	.007	81	.83	
Conditiona	l Indirect Effect	s of Dessert Type	e on Expectations of	Taste	
				BCa ^a 95% CI	
Diet		Effect	Lower	Upper	
NO		.24	04	.61	
YES		.49	.15	.97	

Table 4

Study 2A: Results of Moderated Mediation Predicting Purchase Intentions

v	ts of Moderated M	ediation Predicting	Purchase Intentions	
Cut vs. Whole				
Direct Effect of Dessert Ty	pe on Purchase Int	entions		
			BCa ^a 95% CI	
	Effect	Lower	Upper	
No Diet	.45	51	1.42	
Diet	.25	81	1.30	
Conditional Indirect Effect	ts of Dessert Type	on Purchase Intentio		
			BCa ^a 95% CI	
Diet	Effect	Lower	Upper	
NO	.04	23	.33	
YES	.13	16	.53	
Bite vs. Whole				
Direct Effect of Dessert Ty	pe on Purchase Int	entions		
			BCa ^a 95% CI	
	Effect	Lower	Upper	
No Diet	.93	03	1.88	
Diet	02	-1.00	.95	
Conditional Indirect Effec	ts of Dessert Type	Purchase Intentions		
			BCa ^a 95% CI	
Diet	Effect	Lower	Upper	
NO	.18	03	.51	
YES	.37	.11	.82	

Table 5

Cut vs. Whole			
Direct Effect of Desse	ert Type on Desirability	Evaluations	
			BCa ^a 95% CI
	Effect	Lower	Upper
No D	iet .23	47	.94
Diet	03	56	.51
Conditional Indirect	Effects of Dessert Type	on Desirability Ev	aluations
			BCa ^a 95% CI
Diet	Effect	Lower	Upper
NO	13	69	.39
YES	.42	02	.89
Bite vs. Whole			
Direct Effect of Desse	ert Type on Desirability	Evaluations	
			BCa ^a 95% CI
	Effect	Lower	Upper
No D	iet .13	62	.88
Diet	53	-1.05	02
Conditional Indirect	Effects of Dessert type	on Desirability Eva	luations
			BCa ^a 95% CI
Diet	Effect	Lower	Upper
NO	63	-1.29	02
YES	.51	.072	1.01

Table 6

YES

Study 2B Direct Effects of IV	s on Medi	ator (Realness)		
		,		BCa ^a 95% CI
		Effect	Lower	Upper
Cut vs	. Whole	.29	4.42	5.58
Diet		.42	-1.06	.65
Bite vs	. Whole	.46	-1.85	05
Cut vs. Whole				
Direct Effect of De	essert Typ	e on Eating I	ntentions	D G 3 0 #0 / GY
				BCa ^a 95% CI
		Effect	Lower	Upper
No	Diet	.70	31	1.71
Die	et	25	- 1.02	.52
Conditional Indire	ect Effects	of Dessert Ty	pe on Eating Inter	ntions
				BCa ^a 95% CI
Diet		Effect	Lower	Upper
NO		14	78	.42
YES		.46	02	1.00
Bite vs. Whole				
Direct Effect of De	essert Typ	e on Eating II	ntentions	
				BCa ^a 95% CI
		Effect	Lower	Upper
No	Diet	.43	65	1.51
Die	et	83	-1.57	08
Conditional Indire	ect Effects	of Dessert ty	pe on Eating Inten	
				BCa ^a 95% CI
Diet		Effect	Lower	Upper
NO		69	-1.50	03

.09

.57

1.14

Table 7

Study 2B: Results of Moderated Mediation Predicting Expectations of Taste

Cut vs. Whole			Expectations of Tuste	
Direct Effect of Dessert Ty	pe on Expectation	ons of Taste		
			BCa ^a 95% CI	
	Effect	Lower	Upper	
No Diet	.67	14	1.48	
Diet	09	71	.53	
Conditional Indirect Effec	ts of Dessert type	e on Expectations o	f Taste	
		-	BCa ^a 95% CI	
Diet	Effect	Lower	Upper	
NO	16	82	.47	
YES	.51	03	1.06	
Bite vs. Whole				
Direct Effect of Dessert Ty	pe on Expectation	ons of Taste		
			BCa ^a 95% CI	
	Effect	Lower	Upper	
No Diet	.19	68	1.06	
Diet	53	-1.13	.07	
Conditional Indirect Effec	ts of Dessert Typ	e on Expectations	of Taste	
	~ ~		BCa ^a 95% CI	
Diet	Effect	Lower	Upper	
NO	76	-1.53	02	
YES	.62	.09	1.22	

Table 8

Study 2B: Results of Moderated Mediation Predicting Positive Evaluations

irect Effect of I	Dessert Typ	e on Positive Eva	lluations	BCa ^a 95% CI
		Effect	Lower	Upper
]	No Diet	.31	33	.97
	Diet	06	56	.44

Diet		Effect	Lower	Upper
NO		07	37	.20
YES		.21	002	.48
Bite vs. Whole				
Direct Effect of I	Dessert Type	on Positive Eval	uations	
				BCa ^a 95% CI
		Effect	Lower	Upper
	No Diet	.35	36	1.05
Ι	Diet	24	73	.24
Conditional Indi	rect Effects	of Dessert Type o	on Positive Evaluat	
				BCa ^a 95% CI
Diet		Effect	Lower	Upper
NO		32	73	02
YES		.26	.05	.55
Table 9 Study 2	B: Results o	f Moderated Med	diation Predicting	Negative Evaluations
Cut vs. Whole	2110001100		<u></u>	
Direct Effect of 	Dessert Typ	e on Negative Eva	aluations	
				BCa ^a 95% CI
		Effect	Lower	Upper
]	No Diet	04	-1.03	.95
]	Diet	.40	35	1.15
Conditional Indi	rect Effects	of Dessert Type	on Negative Evalu	
				BCa ^a 95% CI
Diet		Effect	Lower	Upper
NO		.05	.16	.29
YES		16	.39	.001
Bite vs. Whole				
Direct Effect of	Dessert Typ	e on Negative Eva	aluations	
				BCa ^a 95% CI
		Effect	Lower	Upper
	No Diet	33	-1.39	.72
	Diet	.08	65	.81
Conditional Indi	rect Effects	of Dessert Type	on Negative Evalu	
D: /		E.CC		BCa ^a 95% CI
Diet		Effect	Lower	Upper
NO		.25	.02	.58

YES -.20 -.47 -.03

Table 10

Study 2B: Results of Moderated Mediation Predicting Purchase Intentions

Study 2B: Resu	lts of Moderated M	lediation Predicting	g Purchase Intentions	
Cut vs. Whole				
Direct Effect of Dessert T	Type on Purchase I	ntentions		
			BCa ^a 95% CI	
	Effect	Lower	Upper	
No Diet	.19	69	1.07	
Diet	20	47	.87	
Conditional Indirect Effe	ects of Dessert Type	e on Purchase Inten	tions	
			BCa ^a 95% CI	
Diet	Effect	Lower	Upper	_
NO	15	75	.44	
YES	.47	03	.96	
Bite vs. Whole				
Direct Effect of Dessert T	Type on Purchase I	ntentions		
			BCa ^a 95% CI	
	Effect	Lower	Upper	
No Diet	.24	70	1.18	
Diet	34	99	.31	
Conditional Indirect Effe	ects of Dessert Type	e on Purchase Inten	tions	
			BCa ^a 95% CI	
Diet	Effect	Lower	Upper	
NO	70	-1.42	02	_
YES	.57	.08	1.12	

Appendix B

Study 1:

Stimuli







How would you rate the item in the image overall?

Bad	0000000	Good
Unfavourable	0000000	Favorable
Negative	0000000	Positive
Undesirable	0000000	Desirable
Disliked	0000000	Liked
Disgusting		Tasty

To what extent is the dessert in the image:

	Not at All						Very Much So
Revolting	0	0	0	0	0	0	0
Sickening	\circ	\circ	\circ	\circ	\circ	\circ	\circ
Horrible	\circ	\circ	\circ	\circ	\circ	\circ	\circ
Unappealing	\circ	\circ	\circ	\circ	\circ	\circ	\circ
Delicious	\circ	\circ	\circ	\circ	\circ	\circ	\circ
Appetizing	\circ	\circ	\circ	\circ	\circ	\circ	\circ
Yummy	\circ	\circ	\circ	\circ	\circ	\circ	\circ
Mouth watering	\circ	\circ	\circ	\circ	\circ	\circ	\circ
Scrumptious	\circ	\circ	\circ	\circ	\circ	\circ	\circ
Contaminated	\circ	\circ	\circ	\circ	\circ	\circ	\circ
Spoiled	\circ	\circ	\circ	\circ	\circ	\circ	\circ
Ruined	\circ	\circ	\circ	\circ	\circ	\circ	\circ
Filthy	\circ	\circ	\circ	\circ	\circ	\circ	\circ
Unsanitary	\circ	\circ	\circ	\circ	\circ	\circ	\circ
Unhygienic	\circ	\circ	\circ	\circ	\circ	\circ	\circ
Healthy	\circ	\circ	\circ	\circ	\circ	\circ	\circ
Tainted	\circ	\circ	\circ	\circ	\circ	\circ	\circ
Clean	\circ	\circ	\circ	\circ	\circ	\circ	\circ
Attractive	\circ	\circ	\circ	\circ	\circ	\circ	\circ
Gross	\circ	\circ	\circ	\circ	\circ	\circ	\circ
Dirty	0	0	0	0	0	0	0
How likely are you to purchase th	ne item?						
Unlikely							Very Likely
0 0	0		0	0)	0
What is the most you would be w	villing to pay for	the desse	ert?				

I expect that the item will be delicious										
Strongly D	disagree O	000	000	Stron	ngly Agree					
I expect that the item will be sweet Strongly D	disagree O	000	000	Stron	ngly Agree					
I expect that the item will satisfy me Strongly Disagree										
Please write a short paragraph about	ut how you exp	pect the iten	n would taste	9						
Please write a short paragraph about the sho										
Please imagine that you have be								Very Much So		
Please imagine that you have be	en given a pi				0	0	0			

I have a preference for food that is			
Salty	Sweet	Both	
I have a preference for food that is			
Sweet	Sour	Both	
0	0	0	
I have a preference for food that is			
Spicy	Sweet	Both	
0	0	0	
Have you ever dieted?			
Yes		No	
0		0	

Have you ever dieted?											
	Yes					No					
	0					0					
If No is Selected	ed, Then Skip T	o End of Block	Skip Logic	-					×		
How often do you diet?											
Not Very Often								Ver	ry Often		
0	0	0	0		0		0		0		
Please complete the foll I am on a diet	llowing statem	ent:									
Every week		Every Month		Every 6	months		0	nce a ye	ar		
0		0		C)			0			
Do you avoid sweets w	hen you are o	n a diet?									
	Yes					No					
	\circ					\circ					
				Strongly Disagree						Strongly Agree	
I experience feelings	of guilt after o	overeating		0	0	0	0	0	0	0	
I eat sensibly in front	of others and	splurge alone		\circ	\circ	\circ	\circ	\circ	\circ	0	
I give too much time a	and thought to	o food?		\circ		\circ			\circ	\circ	
A weight fluctuation of	f 5 lb affects	the way I live my I	ife	0	\circ	\circ	\circ	0	\circ	0	
I am conscious of wha	at I am eating)		0	\circ	\circ	\circ	\circ	\circ	0	

Series *Diet No* Point *Bite* Data Label To what extent was the item on the image: Not Child Sicod Not Sliced Sitoed Not Nibbled Bitten Not Chewed Not Nibbled Whole Undivided Divided Not intact Intact Please indicate your gender Male Female Other Other What is your age? Yes No How long have you been speaking English? What do you think the researchers are interested in for this study?	Series "Diet No" Beint	"Bito" Data Label		
Not Siliced Not Bitten Not Chewed Not Nibbled Not Nibbled Not Nibbled Half Undivided Not Intact Please indicate your gender Male Female Other What is your age? How long have you been speaking English? Page Break Page Break		Bite Data Laber		
Not Sliced Not Bitten Not Chewed Not Nibbled Not Nibbled Half Undivided Not intact Not intact Not intact Not nibbled Half Undivided Not intact Not	TO WHAT EXICITE WAS THE ITEM ON THE IMAGE.			
Not Bitten Not Chewed Not Nibbled Half Undivided Not intact Please indicate your gender Male Female Other What is your age? Yes No How long have you been speaking English? Page Break Page Break	Not Cut	000000	Cut	
Not Chewed Not Nibbled Not Nibbled Half Undivided Not intact Please indicate your gender Male Female Other What is your age? Yes No How long have you been speaking English? Page Break Page Break Page Break	Not Sliced	000000	Sliced	
Not Nibbled	Not Bitten	000000	Bitten	
Half Undivided Not intact Divided Intact Please indicate your gender Male Female Other What is your age? Yes No How long have you been speaking English? Page Break Page Break	Not Chewed	000000	Chewed	
Undivided Not intact Divided Intact Please indicate your gender Maile Female Other What is your age? Yes No Page Break Page Break Page Break	Not Nibbled	000000	Nibbled	
Not intact Please indicate your gender	Half	1000000	Whole	
Please indicate your gender Male Permale Other What is your age? Yes No How long have you been speaking English? Page Break	Undivided	000000	Divided	
Please indicate your gender Male Permale Other What is your age? Yes No How long have you been speaking English? Page Break	Not intact	000000	Intact	
Male Female Other What is your age? Senglish your native language? Yes No Page Break Page Break				
Male Female Other What is your age? Senglish your native language? Yes No Page Break Page Break				
Female Other What is your age? Page Break Page Break Page Break	Please indicate your gender			
Female Other What is your age? Page Break Page Break Page Break	○ Male			
Other What is your age? Senglish your native language? Yes No O Page Break Page Break				
What is your age? Senglish your native language? Yes No No Page Break Page Break				
S English your native language? Yes No How long have you been speaking English? Page Break Page Break				
S English your native language? Yes No How long have you been speaking English? Page Break Page Break				
Yes No O	Vhat is your age?			
Yes No O				
Yes No O				Ø
Yes No O				
How long have you been speaking English? Page Break	s English your native language?			
How long have you been speaking English? Page Break	Yes		No	
Page Break	0		\circ	
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What do you think the researchers are interested in for this study?				
What do you think the researchers are interested in for this study?	•			
What do you think the researchers are interested in for this study?				
	What do you think the researchers are in	terested in for this study?		

Study 2A

Everything is the same as study 1 with the exception of the following measure:

The dessert on the image was:

Fake	0000000	Real
Plastic	0000000	Not Plastic
Not Edible	0000000	Edible

Study 2B:







To what extent does the dessert appear authentic?

Not at All	0	0	0	0	0	Very Much So
To what extent do	oes the dess	ert appear natu	ral?			Very Much So
0	0	0	0	0	0	0
To what extent is	dessert real	ity-like?				
Not at All	0	0	0	0	0	Very Much So
To what extent do	oes the dess	ert look fresh?				
Not at All	0	0	0	0	0	Very Much So
When was the de	ssert baked?	?				
A long time ago	0	0	0	0	0	Very Recently

I think the dessert	I think the dessert is of limited availability								
Strongly Disagree	0	0		0	0	Strongly Agree			
This dessert is ran Strongly Disagree	e	0		0	0	Strongly Agree			
The availability of	this product is	3:				Not at all			
Very restricted	0	0	0	0	0	restricted			
The size of the de	ssert is:								
Very Small	0	0	Medium	0	0	Very Large			
The quantity of the dessert is:									
Very Small	0	0	Medium	0	0	Very Large			

Other consume	rs like this prod	luct				
Strongly Disagre	e	C		0	0	Strongly Agree
Other consume	rs would purch	ase this produ	ct			
Strongly Disagree	0	0	0	0	0	Strongly Agree
This is a popula	r dessert					
Strongly Disagree	0	0	0	0	0	Strongly Agree

Study 3



