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ARTICLE INFO	David J. Moore (2012). The allure of hedonic versus utilitarian food temptations featured in advertising appeals. *Innovative Marketing* , *8*(1)
RELEASED ON	Thursday, 26 April 2012
JOURNAL	"Innovative Marketing "
FOUNDER	LLC “Consulting Publishing Company “Business Perspectives”

NUMBER OF REFERENCES **0**

NUMBER OF FIGURES **0**

NUMBER OF TABLES **0**

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The allure of hedonic versus utilitarian food temptations featured in advertising appeals

Abstract

Prior research has shown that men are attracted to high calorie non-sweet comfort food like steak or chicken, whereas women tend to prefer high calorie sweet foods like cookies, chocolates, etc. This presumed higher consumption of high-fat sugary food may place women at a higher risk for increased weight gain and obesity-related diseases, particularly at a time when there is consistent evidence linking high calorie fattening food typically sold at commercial restaurants to the escalating rates of obesity and poor health among consumers. For this reason, the main objective of this paper is to gain a clearer understanding of the conditions under which women and men differ in their vulnerability to the allure of food temptations presented in advertising appeals. The results contribute to the literature by showing that: (1) in response to the ad highlighting the hedonic option (chicken), men reported stronger levels of appetitive desire and consumption impulses than women. However, in response to the ad highlighting the utilitarian option (salad), women reported stronger appetitive desires and consumption impulses; (2) women differ from men in their rationalizations for yielding to food temptations. Women were more likely than men to use hedonic rationalizations based on promises to make up for their dietary transgressions, whereas men showed a greater tendency to use rationalizations based on defiance. Implications for marketing practitioners and public policy strategists, as well as future research recommendations are also discussed.

Keywords: gender differences, hedonic versus utilitarian stimuli, affective deliberative dual-processing models, appetitive desire, consumption impulses, hedonic rationalizations.

Introduction

The irresistible aroma of a mouthwatering steak wafting from a nearby restaurant may activate the imaginations of the pleasure of satisfying one's appetite (Berridge, 2009; Geyskens et al., 2008). Momentary allurements to yield impulsively to an immediate eating temptation can stimulate hedonic food thoughts (Papies et al., 2007), which tend to deplete self-regulation and promote indulgent overeating just for the pleasure of eating (Baumeister & Heatherton, 1996; Baumeister, 2002; Mela, 2006; Hoch & Loewenstein, 1991; Baumeister & Heatherton, 1996). One pertinent issue facing marketing strategists and public policy advocates is whether women differ from men in their levels of vulnerability to the allure of hedonic impulses in the context of food temptations. Some healthy food like salads or tomato soup (virtue foods) may not possess the hedonic allure as other 'vice' foods like cookies and cinnamon rolls (Shiv & Fedorihkin, 2002). Imagine a scenario where both male and female consumers are exposed to an advertisement highlighting either an option to select a fresh healthy salad, or an option to select a generous serving of succulent baked chicken. Which option are women likely to select? Wansink et al. (2003) reported that males are more inclined to choose high calorie non-sweet (HCNS) comfort foods like beef burgers, steak or chicken, whereas women tend to prefer high calorie sweet (HCS) foods that require less preparation like cookies, chocolates and ice cream. This presumed higher consumption of high-fat sugary food may place women at a higher risk for increased weight gain and obesity-related diseases, particularly at a time when there is consistent evidence linking high calorie fattening food typically sold at commercial restaurants to the escalating rates of obesity and poor health among consumers (Grier et al., 2007; Guthrie et al., 2002). Interestingly, the findings showing women's preference for high calorie sweet foods seem to be inconsistent with a wide range of studies indicating that women generally manifest higher levels of interest in adhering to healthy eating habits (Courtnay, 2000; Bagozzi & Edwards, 1998; Wardle et al., 2004).

Objectives and contribution of the paper. This apparent inconsistency in the notion that women are more health conscious than men, versus the evidence that women are more likely than men to yield to the allure of high calorie sweet foods creates an intriguing conundrum in marketing research. For this reason, one of the main objectives of the current paper is to gain a clearer understanding of the conditions under which women will respond more favorably to healthy versus unhealthy food choices in consumer marketing environments. This investigation contributes to the literature by addressing the following issues: First, how would men and women differ in appetitive desire and consumption impulses when faced with advertising for a classic hedonic versus utilitarian product (e.g., a succulent piece of chicken versus a fresh salad)? Second, since enticing allurements to yield impulsively to an immediate temptation can simultaneously activate the

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Special thanks to the following students who assisted in the data collection for this project: Samantha Copeland, Salvatore DeBlasi, Curtiss Flexter, Stefani Norris and Daniel Schachne.

need to adhere to higher priority goals that offer superior benefits in the future (Hoch & Loewenstein 1991; Loewenstein & O'Donoghue, 2007), the consumer is likely to engage in various cognitive elaborations in an attempt to rationalize whether or not to yield to the prevailing temptation. Building on previous research (Moore & Bovell, 2008; Shiv & Fedorihkin, 2002), this paper demonstrates how the cognitive elaborations used by men and women differ when they are exposed to advertisements featuring hedonic versus utilitarian product categories (Shiv & Fedorihkin, 1999; 2002). In the remainder of this paper, we will briefly review the literature, the hypotheses, the methods as well as the results. We conclude with a discussion of the theoretical as well as the practical marketing applications of the findings.

1. Literature review and hypotheses

1.1. Gender differences in attitudes to healthy lifestyles. Researchers have shown that women are more concerned than men about maintaining healthy lifestyles, monitoring their eating habits, expressing stronger beliefs in the importance of dieting, and avoiding high fat foods (Bagozzi & Edwards, 1998; Courtnay, 2000; Wardle et al., 2004). Men, on the other hand, are more likely adopt beliefs and behaviors that increase their health risks, and are less likely to engage in behaviors that are linked to health and longevity (Courtnay, 2000). Based on these findings, it seems plausible to assume that women will be motivated to be more cautious in selecting the more utilitarian (or 'virtuous') food option, rather than the hedonic or 'vice' option that satisfies only short-term appetitive desires and consumption impulses (Shiv & Fedorihkin, 1999; 2002). The key issue is whether women will respond to the hedonic or the utilitarian choice in a manner that is consistent with their healthy lifestyle beliefs (Courtnay, 2000; Wardle et al., 2004). Dual-process models can provide the foundation for understanding why gender differences occur in response to hedonic versus utilitarian dilemmas in the response to food choices in the marketplace (Loewenstein & O'Donoghue, 2007; Metcalfe & Mischel, 1999; Shiv & Fedorihkin, 1999; 2002).

1.2. Time inconsistent paradigms applied to food temptation responses. Imagine a choice between a bowl of creamy chocolate ice cream versus a bowl of fresh fruit. Hedonic versus utilitarian alternatives are often driven by emotional or pleasure-laden responses rather than cold cognitive deliberations (Chun et al., 2007; Loewenstein & O'Donoghue, 2007; Metcalfe & Mischel, 1999; Shiv & Fedorihkin, 1999; 2002). Choice dilemmas in the time inconsistent paradigm typically have the capacity to arouse the type of appetitive desire that causes the respondent to forego distal goals of achieving a healthy body in the *long-term future*, and instead, surrender to the immediate temptation in order to gratify a *short-term* indulgent urge. Notable applications of time inconsistent paradigms include the conflict between desire and willpower (Hoch & Loewenstein, 1991), the affective/deliberation model (Loewenstein & O'Donoghue, 2007), the hot versus cool system (Metcalfe & Mischel, 1999), impulse versus self-control from a dual system perspective (Hofmann et al., 2009), and the hearts and mind in conflict affective-cognitive model (Shiv and Fedorihkim, 1999; 2002). The latter model proposes that when the respondent encounters a choice between an affect-rich option (chocolate cake) versus an affect-poor option (salad), the affect-rich option will automatically trigger higher-order cognitive deliberations about the wisdom of making the choice at hand. These cognitions, in turn will spontaneously set in motion higher-order affective reactions such as appetitive desire as well as action tendencies (consumption impulses). These assumptions are compatible with those articulated by the affective/deliberation model (Loewenstein & O'Donoghue, 2007). Gender differences in response to the ad featuring the hedonic versus utilitarian product are likely to occur presumably because women seem to be more interested in protecting their health and may therefore be motivated to be more cautious in selecting the more utilitarian (or 'virtuous') food option, rather than the hedonic or 'vice' option that satisfies only short-term appetitive desires and consumption impulses (Shiv & Fedorihkin, 1999; 2002).

1.3. Cognitive deliberations. The choice dilemma may activate the higher-order cognition route which allows for more cognitive deliberations about the benefits or adverse consequences of the selection (Shiv and Fedorihkim, 2002; Loewenstein & O'Donoghue, 2007; Fishbach et al., 2003). In this context, the mind is engaged in a tug-of-war between impulse versus self-control (Hofmann, 2009). During this process the thoughts that are generated may focus on hedonic rationalizations or convenient excuses to give in to the indulgent eating temptation (Moore & Bovell, 2008). This process is also called self-licensing – the tendency to rely on certain types of excuses to justify subsequent gratification, which in turn may have a significant influence on increasing food consumption (De Witt Huberts et al., 2011; Khan & Dhar, 2006). It is likely, therefore, that health conscious women who are faced with a choice dilemma may focus more on the adverse consequences of choosing the affect-rich option (e.g., the cake) compared to their male counterparts. These consequence-related thoughts are also likely

to have a restraining influence on appetitive desire and consumption impulses (Shiv & Fedorihkim, 2002; Loewenstein & O'Donoghue, 2007).

1.4. Appetitive desire and consumption impulses. Exposure to an mouth-watering stimulus like a hot pizza oozing with mozzarella cheese typically triggers automatic appetitive responses and action tendencies (consumption impulses) in favor of 'grabbing' or acquiring the desired object (Shiv & Fedorikhin, 2002; Shiv, Fedorikhin and Nowlis, 2007). Appetitive desire is associated with the consumption of things such as having a 'desire' for sex or for chocolate ice-cream (Bagozzi, 1992). Because appetitive desire is an expression of intense affect, yearning or hungering to eat, the consumer may not have a reason (i.e. active cognition) for desiring the food (Bagozzi, 1992). For example, Jack may have a *desire* to eat fried chicken, but can't explain why. On the other hand, volitive desires are driven by reasons, and imply a motivational commitment (e.g., Mary desires to learn to drive, and she can explain why). Consistent with this notion of appetitive desire as implying more affect than cognition, Belk, Ger, and Askegaard (2003) conceptualizes desire as "a hot, passionate emotion" that dominates our thoughts and actions, and overpowers our willpower until we give in to it" (p. 327).

1.5. Hypotheses. *1.5.1 Appetitive desire.* Since women supposedly share a deeper concern than men for maintaining healthy lifestyles (Courtnay, 2000; Wardle et al., 2004), they may display more self-control by suppressing their desire and consumption impulses for the attractive hedonic option, and instead, show stronger intensity of desire for the healthy food option. In contrast, because men report less interest in dieting and the need for avoiding high fat foods, they should show more desire for the hedonic option that satisfies the immediate need to gratify the appetite. If this prediction is confirmed, there should be a gender x product-type interaction on appetitive desire and consumption impulses.

Hypothesis 1: A gender x product-type interaction is predicted to occur, showing: (a) significantly higher appetitive desire and consumption impulses expressed by men compared to women when exposed to the ad highlighting the hedonic option; and (b) significantly higher appetitive desire and consumption impulses expressed by women compared to men when exposed to the utilitarian product option.

1.5.2. Cognitive deliberations: the role of hedonic rationalizations. Since women express stronger beliefs about maintaining healthy lifestyles and monitoring their eating habits (Wardle et al., 2004), they should reflect a more time consistent philosophy by thinking of the long-term effects of their immediate reactions when faced with a hedonic choice dilemma. Hence, the type of hedonic rationalizations they would use to justify yielding to an eating temptation should be different from those used by men who may be motivated by the more immediate urges to satisfy their appetitive urges (Hoch & Loewenstein, 1991; Loewenstein & O'Donoghue, 2007). For this reason, it is expected that men will express a more resolute determination to use *hedonic rationalizations* based on satisfying immediate self-gratification goals, whereas women will justify their surrender to the temptation by promising to make amends in the future for their current dietary 'transgressions'. In other words, in the context of self-licensing (De Witt Huberts et al., 2011; Khan & Dhar, 2006), women are likely to be 'repentant' and therefore make promises to remedy the problem in the future, whereas men will be 'defiant' in their determination to satisfy their appetitive urges, and therefore make fewer promises to protect their bodies from the long-term effects of their current dietary 'transgressions'.

Hypothesis 2a: Women will show a greater tendency than men to use promises as a means of rationalizing their yielding to the eating temptation

Hypothesis 2b: Men will show a greater tendency than women to use defiant rationalizations to justify their yielding to the eating temptation

Hypothesis 2c: A gender x product-type interaction is predicted to occur, showing: (a) significantly higher level of defiant rationalizations expressed by men compared to women when exposed to the ad highlighting the hedonic option; and (b) a significantly greater tendency by women to use defiant rationalizations when exposed to the utilitarian product option.

1.5.3. Consequence-related thoughts. Given the fact that women are more concerned than men about maintaining healthy lifestyles, and monitoring their eating habits (Wardle et al., 2004), they may be more willing than men to evaluate the long-term negative effects of their immediate reactions. It is also plausible to assume that women will be more likely to ruminate and deliberate about the adverse consequences of indulging in the unhealthy but more enticing food. Women are therefore expected to generate a significantly higher number of consequence-related thoughts than men (Shiv & Fedorihkin, 1999; 2002). In contrast, since men tend to show less interest in adhering to healthy diets, they should be expected to express fewer consequence-related thoughts in response to the hedonic food option.

H3: Women will generate significantly more consequence-related thoughts than men when exposed to the hedonic product option than when exposed to the utilitarian product option.

2. Method

2.1. Participants, design and procedure. Participants were 219 adults (116 male) aged nineteen to sixty-five, sampled from several states across the USA. Surveys were administered on board two passenger flights from Detroit, Michigan to Phoenix, Arizona, and on the return trip two weeks later from Phoenix to Detroit. The study featured a 2(Product type: hedonic vs utilitarian) x 2(Gender: male vs female) between subjects design. In the hedonic version of the questionnaire, participants were exposed to a print advertisement for *Buffalo Wild Wings* restaurant highlighting a special invitation to come in and enjoy their 'delicious succulent chicken wings' at a specially low price of $5.95. The utilitarian version also featured a print advertisement for *Buffalo Wild Wings* restaurant highlighting a special invitation to come in and enjoy their 'delicious refreshingly crisp salad at a specially low price of $5.95. Both ads also contained the address, phone number and website of the restaurant. After viewing the ad, participants were encouraged to complete the rest of the questionnaire containing the dependent measures.

2.2. Measures. *Appetitive desire* (α = .92) was measured by a composite of four items using a 1-9 point (strongly disagree/strongly agree) scale: "I have a strong desire to eat chicken (salad)"; "The description caused me to have strong cravings for chicken (salad)"; "When I experience a craving for chicken (salad)", it is very intense"; "My desire for chicken (salad)" is so strong, I can imagine myself tasting it" (Cepeda-Benito et al., 2000). *Consumption impulses* (α = .88) was measured with two 1-9 point scales in response to the following question (Moore & Bovell, 2008; Shiv & Fedorihkin, 2002): "Having read the description of the chicken wings (salad), what is the likelihood that you would do the following: (1) Take a quick snack if you had the chance right now"; (2) stop by a *Buffalo Wild Wings* restaurant to have some chicken (salad). *Cognitive deliberations (hedonic rationalizations)* were measured by the following two items captured on a 1-9 point strongly disagree/strongly agree scale: "When I feel the urge to eat something, I will eat it regardless of the consequences" (defiance); and "If I eat it, I will make up for it when I work out" (promise). *Consequence-related thoughts* (α = .88) were measured with a composite of the following four items: "Food like these are dangerous to my health", "Food like these will make me gain weight", "I am thinking of how lousy I would feel after eating these food".

3. Results

3.1. Manipulation checks. Manipulation cheks were designed to confirm the extent to which men and women will be consistent in their emotional and cognitive responses to the hedonic versus utilitarian characteristics of the products featured in the advertisements. Attitudes toward food may be classified in terms of cognitive versus affective dimensions (Dube et al., 2005). In the present study the affective dimension is measured on a 1-9 point disagree/agree scale estimating (1) *emotions*: the extent to which the ad 'got my emotions going'; and (2) *immediate sensorial benefits*: the extent to which the ad stimulated thoughts about the *pleasure* of consuming the product, and thoughts of feeling hungry (Dube et al., 2005). The cognitive dimension is measured by two 1-9 point semantic differential scales capturing peoples' attitudes concerning the benefits and the wisdom of responding favorably to the hedonic versus the utilitarian product options highlighted in the ads. Two responses were elicited in response to the following prompt: "Having read the product description, I believe that eating *Buffalo Wild Wings* chicken (salad) is: (a) harmful/beneficial; (b) a foolish/wise choice (α = .90).

3.3.1. Emotions (see Table 1 for results). First, it was presumed that if the manipulation of the product type treatment condition was effective, then participants exposed to the hedonic versus utilitarian version of the advertisement should differ significantly when asked whether the ads 'got their emotions going'. Confirming this prediction, the results showed that the hedonic product (chicken wings) was more effective than the utilitarian product (fresh salad) in stimulating the emotions of participants ($M_{hedonic}$ = 4.52 vs $M_{utilitarian}$ = 3.73, $F(1,217) = 6.5$, $p < 0.01$). There was, however, no product-type x gender interaction even though the means were in the expected direction $F(1,217) = 2.54$, $p = 11$). Second, since women are supposed to have a deeper concern for maintaining a healthy lifestyle (Courtnay, 2000; Dube et al., 2003; Wardle et al., 2004), will they nevertheless still ruminate about the pleasures to be derived from consuming enticing food that may gratify the immediate desires of the heart (Shiv & Fedorihkin, 1999; 2002)? Research has shown that women tend to be more passionate than men about enjoyment of the taste of high calorie sweet foods (Dube et al., 2005; Roininen et al., 1999). However, will there be a similar anticipation of pleasure for high calorie non-sweet (HCNS) food like chicken that may be perceived as less healthy than salad (Moore & Zhang, 2010)? The data revealed a significant product-type x gender interaction, $F(1,217) = 10.28$, $p < .002$, such that in response to the chicken wings, it was the men who

were far more likely than women to think about the pleasure of chicken consumption (M_{men} = 5.28 vs M_{women} = 4.29, $F(1,217) = 16.5$, $p < .0001$). In contrast, it was *only* in response to the salad that women scored higher than men in anticipated pleasure (M_{men} = 4.14 vs M_{women} = 4.83, $F(1,217) = 6.5$, $p < .01$). A similar interaction was observed when men and women were asked whether the advertisements made them hungry. Here, men scored significantly higher than women only when exposed to the chicken (M_{men} = 5.49 vs M_{women} = 3.71, $F(1,217) = 9.1$, $p < .003$). However, the feelings of hunger expressed by men dropped drastically in response to the salad option (M_{men} = 3.94), while the hunger feelings expressed by women for the salad exceeded that of men (M_{women} = 4.28 vs. M_{men} = 3.94, $p < .05$).

Table 1. Mean scores of product-type x gender interactions

Dependent measures	Hedonic product type		Utilitarian product type		Level of significance
	Male	Female	Male	Female	
Appetitive desire	36251	3.00	19784	20911	$F(1,219) = 33.58$, $p < .0001$
Consumption impulses	21671	44621	35490	20941	$F(1,219) = 47.03$, $p < .0001$
Hedonic rationalizations					
Repentant promise	6.00	45748	27851	19845	$F(1,219) = 14.77$, $p < .0001$
Defiant determination	46539	13971	35886	32599	$F(1,219) = 6.22$, $p < .013$
Consequence related thoughts	16862	45778	30682	20852	$F(1,219) = 4.75$, $p < .03$
Manipulation checks					
Got emotions going	27485	44287	18323	34759	$F(1,219) = 2.54$, $p = .11$
Thoughts of pleasure	29707	4.295	4.145	30407	$F(1,219) = 10.27$, $p < .002$
Feel hungry	41158	15797	21276	32599	$F(1,219) = 9.10$, $p < .003$
Attitude	16558	29281	41821	34486	$F(1,215) = 9.78$, $p < .002$

The cognitive dimension of attitude (Dube et al., 2005) was measured by two 1-9 point semantic differential scales focusing on beliefs about eating the product: (a) harmful/beneficial; and (b) foolish/wise (α = .90). A significant product-type x gender interaction revealed that in response to the chicken wings, men reported more favorable attitudes than women (M_{men} = 5.45 vs M_{women} = 3.81, $F(1,219)$ = 9.78, $p < .002$), but in response to the salad, both women and men showed dramatic increases in favorable attitudes, but no significant differences in mean values were observed (M_{men} = 7.14 vs M_{women} = 6.94. In other words, both men and women had similar beliefs in the wisdom and benefit of eating salads; however, when it comes to a meat product like chicken, men have more favorable cognitions than their female counterparts. Interestingly, although men did believe that it was more beneficial to eat salad than chicken, they were the same ones who reported more feelings of pleasure toward eating chicken.

3.2. Results: Hypotheses. *3.2.1. Product-type x gender interaction on appetitive desire and consumption impulses* (Table 1). Results showed that in response to the ad highlighting the hedonic option, men reported stronger levels of appetitive desire than women (M_{men} = 5.00 vs M_{women} = 3.00; however, in response to the ad highlighting the salad (utilitarian) option, women reported stronger appetitive desires (M_{men} = 3.55 vs M_{women} = 4.57 (Figure 1). A significant product-type x gender interaction was therefore observed for appetitive desire $F(1,219)$ = 33.58, $p < .0001$), thus confirming hypothesis 1a. Meanwhile, a similar significant product-type x gender interaction on consumption impulses was also observed $F(1,219) = 47.03$, $p < .0001$), thus confirming hypothesis 1b.

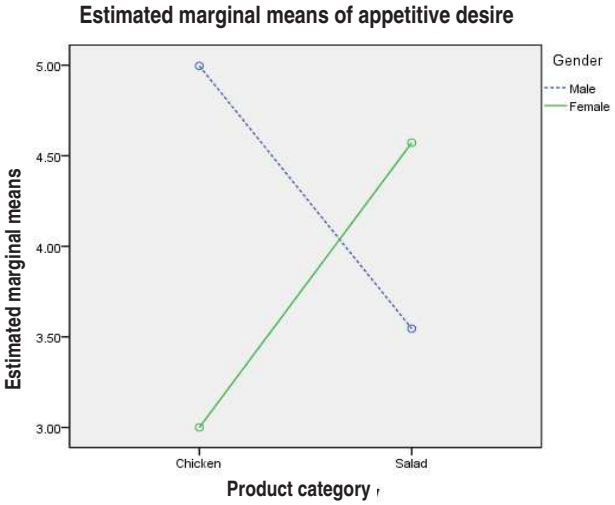

Fig. 1. Gender x product-type interaction on appetitive desire

3.2.2. Cognitive deliberations: 'promises' and 'defiance' as hedonic rationalizations. In support of H2a, women showed a greater tendency than men to use 'promises' as hedonic rationalizations for wanting to yield to the eating temptation (M_{men} = 3.77 vs M_{women} = 4.75, $F(1,219) = 7.94$, $p < .005$). In contrast, men showed a greater tendency than women to use 'defiance' to rationalize their desire to yield to the eating temptation (M_{men} = 5.66 vs M_{women} = 4.68, $F(1,219) = 7.27$, $p < .008$). H2b was therefore confirmed. In keeping with H2c, a significant product-type x gender interaction was observed $F(1,219)$ =

6.22, $p < .01$ (Figure 2). Here we found that in response to the hedonic option, men used significantly more defiant rationalizations than women (M_{men} = 6.28 vs M_{women}; however, in response to the salad option, women increased their defiant rationalizations (M_{women} = 4.89) while men decrease their defiant rationalizations (M_{men} = 4.98).

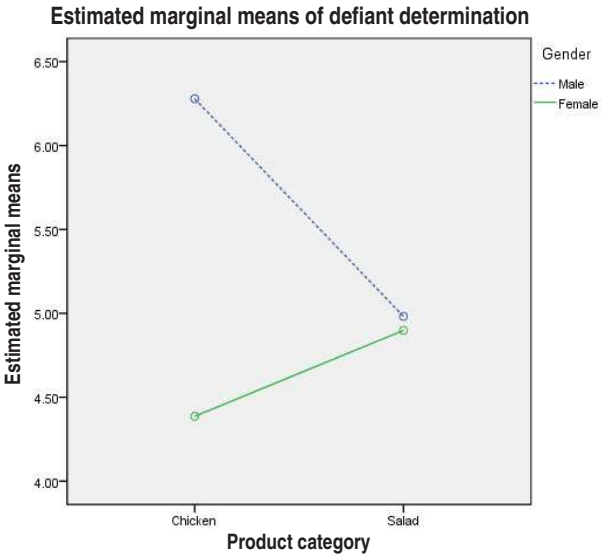

Fig. 2. Gender x product-type interaction on defiant determination

Hypothesis 3 was also confirmed, in that women generated significantly more consequence-related thoughts than men (M_{women} = 5.26 vs M_{men} = 3.46) when exposed to the chicken option than when exposed to the salad option (M_{women} = 2.58 vs M_{men} = 1.84, $F(1,215) = 4.75$, $p < .03$).

Discussion and conclusion

Overall, the main objective of this investigation was to determine the extent to which women differ from men in their levels of vulnerability to the allure of hedonically charged food temptations in advertising appeals. The results indicate significant product-category x gender interactions on both appetitive desire and consumption impulses. Specifically, we found that in response to the ad highlighting the hedonic option (chicken wings), men reported stronger levels of appetitive desire and consumption impulses than women. However, in response to the ad highlighting the utilitarian option (salad), women reported stronger appetitive desires and consumption impulses. In light of the literature indicating women's greater concern about maintaining healthy lifestyles (Courtnay, 2000; Wardle et al., 2004; White et al., 2002), the current findings seem to provide a plausible explanation for the fact that women showed a preference for the healthier and less fattening food option. Furthermore, the findings also confirmed that people do engage in cognitive deliberations as they try to rationalize their excuses to give in to eating temptations (Moore & Bovell, 2008; Shiv & Fedorihkin, 2002). In this context, women were more likely than men to use hedonic rationalizations based on promises to make up for their dietary transgressions, whereas men showed a greater tendency to use defiant rationalizations to justify their yielding to the eating temptation.

Contribution and implications of the findings. Although dual-process models attempt to predict the conditions under which people are influenced by the affective impulsive system versus the deliberative system that is governed by sound reasoning for decision making (Hoch & Loewenstein, 1991; Lowenstein & O'Donoghue, 2007; Metcalfe & Mischel, 1999), this is the first study to take into consideration the influence of gender differences when consumers are confronted with a 'hot' pleasure-laden option like chicken wings versus a 'cold' virtuous and utilitarian option like salad (Kivetz & Keinan, 2006). Based on the literature that has shown that women tend to be more concerned about healthy living and its long-term benefits (Courtnay, 2000; Wardle et al., 2004; White et al., 2002), this paper has confirmed for the first time that a 'cold' virtuous and utilitarian option can stimulate the appetitive desires and consumption impulses of female respondents, while men, on the other hand, responded far more favorably when exposed to the hedonic pleasure-driven option (chicken wings). This finding seems to confirm the assumptions of time inconsistent dual-process models (Hoch & Loewenstein, 1991; Lowenstein & O'Donoghue, 2007) which assume that pleasure driven hedonic stimuli in typical choice dilemmas have the capacity to arouse the type of appetitive desire that causes the respondent to forego distal goals of achieving a healthy body in the *long-term future*, and instead, surrender to the immediate temptation in order to gratify a *short-term* indulgent urge (Kivetz & Keinan, 2006).

Another unique contribution of this study is the elucidation of the role of hedonic rationalizations and consequence-related thoughts when men and women respond to the allure of hedonic pleasure-driven food options in the market place (De Witt Huberts et al., 2011; Moore & Bovell, 2008). The notion that men and women differ in the types of hedonic rationalizations they are inclined to generate provides deeper insight into the type of challenges that marketing and public policy strategists will face in any attempts to reshape the eating habits of male or female consumers. For example, men displayed a greater tendency to generate 'defiant determination' rationalizations ("I will eat this regardless of the health consequences to me") for indulging in an eat-

ing pleasure that may have long-term negative health implications (Figure 2). On the other hand, women seem more 'repentant' and willing to promise to make up for their dietary 'sins' by engaging in exercise later. De Witt Huberts et al. (2011) refer to these rationalizations as a type of self-licensing to indulge in some type of forbidden pleasure. The current paper shows that men and women differ in self-licensing perspectives. These findings are further bolstered by the powerful product-type x gender interaction effect showing that in response to the chicken wings, it was the men who were far more likely than women to think about the pleasure of chicken consumption (Table 1). In contrast, it was *only* in response to the salad that women scored higher than men in anticipated pleasure (Mela, 2006). Further insight into the attitude of men versus women with respect to the hedonic versus utilitarian food options should be noted. The significant product-type x gender interaction on attitude suggests that in the evaluation of the extent to which the selection of the chicken versus the salad was wise and beneficial, men score significantly higher than women when exposed to the ad highlighting the chicken (Table 1). However, with respect to the salad, men indicated that they too, like women believed that salad was wiser and more beneficial choice, thus signifying that men are quite informed about the benefits of choosing the healthier option, but yet are still willing to display a defiant determination to indulge in the more pleasurable but potentially unhealthy food option.

This study also revealed for the first time that women, compared to men, were likely to generate more consequence-related thoughts (Shiv & Fedorihkin, 2002) regarding the unhealthy fattening food option (chicken wings). This is consistent with the literature indicating that women are more concerned about healthy lifestyles than their male counterparts (Courtnay, 2000; Wardle et al., 2004; White et al., 2002). Some researchers have also found that food cravings can be reduced when respondents focus on long-term consequences of consumption (i.e., consequence-related thoughts), than when exposed to the short-term consequences of consumption (Kober et al., 2010).

Implications for marketing and public policy strategists. The study of the hedonic rationalizations consumers use can prove to be a very important tool in gaining a strategic peep into the underlying motivations and reservations that may influence responses to eating opportunities in the marketplace. It should be also noted that advertisers have been using hedonic rationalizations for many years now in an attempt to entice consumers to yield to the allure of various pleasure-driven products and services. For example, in a commercial food environment often characterized by mindless eating (Wansink and Sobal, 2007), advertisers have often used hedonic rationalizations to make it easier for consumers to yield to food temptations. Needham, Harper & Steers promoted McDonald's in 1971 and in 1980-1981 with the theme: "You deserve a break today". General Foods also promoted their coffee with the slogan: "Celebrate the moments of your life"; and M&M tried to woo consumers with the theme: "To make that tough job easier, you deserve M&M candies". Food consumption locations are also ideal situations for mindless eating (Wansink & Sobal, 2007). For example, the descriptions of food items on restaurant menus usually highlight the ingredients rather than the anticipated pleasures of the consumption experience. However, the use of hedonically-charged menu descriptions may indeed increase the amount of food consumed (Garg, Wansink & Inman, 2007). Unfortunately, this strategy may also backfire if patrons interpret this strategy as a disingenuous attempt by the restaurant to increase profits while the consumer gains unwanted weight through increased food consumption (Garg, Wansink and Inman, 2007). What is noteworthy is that many consumers may be unaware of the many environmental factors that influence their food consumption (Wansink and Sobal, 2007), and hence marketers may be expected to exercise a greater degree of corporate social responsibility through gestures such as listing of product ingredients and nutritional information (Kozup et al., 2003). Marketers may actually discover that forming relationships with consumers by helping them to control how much they eat, may prove to be a worthwhile strategy for building long-term loyalty and increasing brand equity (Garg, Wansink & Inman, 2007).

The findings suggest that in order to persuade men to eat more salads and healthy food, it may be necessary to emphasize the sheer pleasure of food consumption, rather than the nutritional value of the food. For example, this study suggests that men are already very aware of the wisdom and benefits of eating salads. Therefore, a marketing strategy designed to persuade men about the nutritional value of foods may be futile and redundant. Instead, advertising appeals should focus on anticipated pleasure of food consumption (Gard et al., 2006; Mela, 2006; Moore, 2010). Advertising messages should also attempt to address the 'defiant' rationalizations men are likely to use when faced with an eating opportunity. Once this manner of thinking is directly uncovered and exposed, men may be less likely to resort to defiant rationalizations in future food temptation episodes.

Limitations of the study and future research possibilities. The conundrum we face is that while women are reputed to be more concerned about their health

than their male counterparts (Courtnay, 2000; Wardle et al., 2004), yet these same women are also known to be more highly vulnerable than men to the allure of high calorie sweet food like chocolates and cookies (Wansink et al., 2003; Dube et al., 2005). Therefore, even though this study found that women presumably exercised more wisdom and self-restraint than men, and therefore were less attracted to the hedonic high calorie option (chicken), it is still not totally clear that women are more likely than men to successfully resist a temptation for high calorie sweet food (Wansink et al., 2003; Dube et al., 2005). One possible explanation for these findings of this current study may be the fact that women were aware of the salad option when they were exposed to the chicken option. The presence of the salad option may have reminded women of their healthy goals. Fishbach et al. (2003) demonstrated that sometimes automatic associations may be formed between short-term motives (e.g., enticing food temptations) and the long-term goals with which they interfere. Therefore, in order to really test whether women are consistent in maintaining their long-term noble goals and concern for healthy eating, a new study should be designed in such a manner that women and men should be exposed to the temptation of a high calorie sweet food (like cookies, chocolates, etc.) with no other healthy option available. This design would help to clarify some of the important questions that this study has yet to address about whether women differ from men in their levels of vulnerability to the allure of hedonic impulses in the context of food temptations. Such a study should also measure the deeper motivations expressed through hedonic rationalizations and consequence-related thoughts (Moore & Bovell, 2008; Shiv & Fedorihkin, 2002) as well as the relative capabilities to exercise impulse control (Hofmann et al., 2009).

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