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"Bet You Can't Eat Just one"-

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"Bet You Can't Eat Just One"—What Stimulates Eating Bouts

Brian Wansink

ABSTRACT. A manufacturer of package goods has two ultimate goals in developing a marketing mix for a product: encouraging consumers to "choose" and encouraging consumers to "use." Hence, it is critical for food marketers to know what causes dramatic swings in an individual's consumption of the brand (eating bouts). Two questions are examined here: (1) What stimulates eating bouts? and (2) What determines their frequency over a given time period? The results from a survey of 178 adults suggest that when an eating bout is stimulated by external cues (such as food salience), the brand's versatility, perishability, and nutritional value have a major impact on how frequently the consumer will eat it. These factors have no impact on eating bouts that are stimulated by internal cues (such as moods or emotions). This research has implications for advertising, media planning, sales promotion, packaging, and pricing.

For the marketers of many mature brands, increasing a person's consumption frequency of that brand is the most cost-effective way to build sales (Wansink and Ray 1993a). It is not clear, however, what marketing variables might alter a person's consumption frequency of this brand, or of all brands in that food category. Why, for instance, will a person eat a particular food continually throughout one week, and then not eat it again for another month?

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Food marketers want to understand what causes the dramatic swings in consumption often referred to as eating bouts. Two questions are examined here: (1) What stimulates eating bouts? and (2) What determines their frequency over a given time period? Answering these questions provides insights into the consumption process and suggests important marketing implications for advertising, media planning, packaging, sales promotion, and for pricing.

Irregularities in one's consumption rate of a particular food are common (Adams 1989; Tarsa 1989). While some irregularities are attributable to a particular situation or occasion (e.g., weddings, tailgate parties), others can be attributed to seasonality and availability. This research focuses on eating bouts that are psychologically-induced. Empirical findings show that eating bouts can be stimulated by either internal cues or by external cues. These cues not only determine how frequently the food will be consumed, but also whether eating bout frequency will be influenced by a person's perceptions of the food's perishability, substitutability, price, and nutritional value.

EATING BOUTS AND THEIR MOTIVATIONS

Eating Bouts Defined

Eating bouts are distinguished from "binging," in that they are not pathological in nature (Herman and Polivy 1984). An "eating bout" refers to a period over which a particular type of food is consumed with much greater frequency than is the norm for an individual (Herman and Mack 1975; Logue 1991). One way to measure this frequency level objectively is by dividing the number of occasions the food is consumed by the number of days over which it is consumed (Berry, Beatty, and Klesges 1985). This unit-free metric allows for a more accurate comparison across foods than could be made by examining only measures of consumption volume (Kidder 1980). To look simply at consumption volume would not allow a comparison across foods because the unit of analysis is very different depending on whether the product is ice cream, potato chips, cake, or pizza. Measures of consumption frequency allow this.

Although a basic hunger drive can obviously trigger an eating bout (Logue 1991), the boundary model of consumption (Herman and Polivy 1984) argues that the point at which a person is hungry, and the point at which he or she is full, are both very flexible and wide-ranging (Sunday, Sanders, and Collier 1983). Unless one is physically stuffed with food, he or she can still "make room for some more," particularly in the case of foods containing sugar or salt (Ferber and Cabanac 1987; Berry, Beatty, and Klesges 1985; Denton 1982). As a result, even if we assume that hunger plays a significant physiological role in food consumption, there are other important non-physiological factors that also influence eating bouts.

The Rationality and Impulsivity Perspectives of Consumption Frequency

One's consumption frequency of a food can be explained by two perspectives: rationality perspective and an impulsivity perspective. The *rationality perspective* argues that consumption frequency is a direct function of the costs and benefits a person will incur to consume a food (Lea 1978; Azjen and Fishbein 1980).

These costs can be both physiological and psychological. They can include the price of purchasing the food (relative to other foods), the inconvenience of obtaining and preparing the food, and they can include the nutritional consequences (to one's diet and one's health) of eating the food. Given this perspective, if consumers are rational, an individual will consume a food more frequently, the more he or she believes it to be relatively inexpensive or easily substitutable. "Banana economics" suggests this will also be true if the individual perceives the food as being perishable. That is, if a food—such as a banana—is not eaten before it spoils, the amount of money paid for it is effectively thrown away. When the costs for consuming the product are instead related to one's health or one's diet, we should see the opposite result. That is, if consumers are rational, an individual will consume a less nutritious and more caloric food less frequently.

In contrast to this rationality perspective, the *impulsivity perspective* argues that such unplanned consumption is similar to unplanned purchases because both are accompanied by strong psycho-

logical pressures. Rook (1987) argues that such behaviors are often accompanied by:

- 1. Feeling a "sudden and spontaneous desire to act"
- 2. Being in a "state of psychological disequilibrium"
- 3. Experiencing a "psychological conflict and struggle"
- 4. Reduced "cognitive elaboration"
- 5. Consuming "without regard for consequences"

In effect, these bouts are driven less by rational considerations than by a desire for a more emotional form of fulfillment (Rook and Hoch 1985). In spite of the intuitive appeal of this impulsivity perspective, it merely describes the behaviors and feelings that accompany eating bouts. It does not explain why they occur in the first place, other than suggesting they are more emotionally stimulated rather than rationally stimulated.

Both of these perspectives have merit: The rationality perspective has a logical appeal, and the impulsivity perspective has an intuitive appeal. Our evidence shows that the rationality perspective best explains eating bouts that are externally cued.

THEORETICAL DEVELOPMENT

The distinction between internal and external cues is a widely cited framework used to explain the differences in what motivates people to eat (Schachter and Gross 1968). A series of studies conducted in the late 1960s suggest that the eating behavior of some people-particularly overweight people-is greatly influenced by factors such as food visibility, the number of highly palatable food cues present, the time of day, and the person's stress level in the situation (Nisbett 1968; Schachter and Gross 1968). These studies imply a dichotomy between internal and external control of feeding (cf. Schachter, Goldman, and Gordon 1968). They suggest that people exposed to highly salient cues in the external environment are more likely to increase their consumption of a food than are other people who have not been exposed to such cues (Rodin 1981). These studies are especially important in that they provide justification for examining the distinct roles that internal and external cues play in stimulating consumption.

What Makes a Product Salient? ... Internal Cues and External Cues

Internal cues represent self-generated needs in that one evokes the food to salience without the aid of any external stimulus cues, such as the presence of the food itself (Schachter 1971). Research by Kirkley, Burge, and Ammerman (1988) and by Herman and Polivy (1984) suggests that eating bouts stimulated by internal cues are frequently associated with strong negative emotions (e.g., depression, boredom, loneliness). Although it might seem that eating bouts may also be attributed to a "craving" or hunger one has for the food, past research has suggested that once past one's satiation point, psychological factors are what drives consumption volume (Berry, Beatty and Klesges 1985).

External cues such as the visual prominence of the food can also bring a food to salience (Schachter 1971). As with the other types of motivations, externally cued consumption necessitates at least a threshold-level of attraction to the target food (Rook and Hoch 1985). The important issue is whether externally cued consumption is distinct from internally cued consumption (Schachter, Goldman, and Gordon 1968; Rodin 1981). Given the frequency with which people attribute their eating bouts to external cues, there is justification of investigating this distinction. Externally cued eating bouts are stimulated when one walks past a plate of cookies on the table or sees a cake sitting on the counter. In effect, people claim to eat this externally cued food "because it's there." In such cases, it is unlikely that there is a powerful premeditated drive to consume this food; it is simply salient and convenient. In effect, it is salient because of recent exposure, and not necessarily because one made a conscious attempt to actively evoke it to salience (Schachter 1971; Rook and Hoch 1985).

In summary, an eating bout that has been externally cued should be seen as reasonable, "matter-of-fact" behavior and should not have the strong emotional associations of an internally cued eating bout. As a result,

H₁: When an eating bout is stimulated by an internal cue, a person will perceive it as less reasonable than if it were externally cued.

This hypothesis is important because it suggests that there are certain circumstances under which a particular food's substitutability, price, perishability, and nutritional value will influence the frequency with which it is consumed. This should be when a person is being rational and reasonable. If internally cued eating bouts are perceived as being less rational than externally cued eating bouts, they are also less likely to be affected by perceptions of a product's substitutability, price, perishability, and nutritional value.

What Factors Influence Consumption Frequency?

The strength of a person's motivation to consume a food will predict the volume of food he or she will ultimately consume (Nisbett 1968). For this reason, the more strongly motivated a person is to initiate an eating bout, the less rational he or she is likely to be, and the less he or she will be influenced or troubled by considerations of perishability, substitutability, price, or nutritional value (Herman and Polivy 1984; Rook and Hoch 1985). An eating bout that is internally cued would characterize this intense level of motivation because it necessitates that the food be evoked from memory, and frequently that the person locate and open the food (it may not be as convenient as simply being "on the table"). Under these internally cued circumstances, the related needs are likely to be so strong as to negate rational cost/benefit considerations temporarily. The frequency with which one consumes the food will thus be unrelated to the rational factors mentioned earlier.

H₂: The frequency of a consumption bout that is stimulated by an *internal cue* will be . . .

H_{2a}: Uncorrelated with the food's perceived perishability

H_{2b}: Uncorrelated with the food's perceived substitutability

H_{2c}: Uncorrelated with the food's perceived price

H_{2d}: Uncorrelated with the food's perceived nutritional value

Recall that H₁ stated that eating bouts that are externally cued will be perceived by a person as more justifiable and reasonable

than those bouts that are internally cued. If this is true, the rationality perspective suggests that this frequency will be moderated by the factors above. Therefore, we expect the following:

H₃: The frequency of a consumption bout that is stimulated by an *external cue* will be . . .

H_{3a}: Positively correlated with the food's perceived perishability

H_{3b}: Positively correlated with the food's perceived substitutability

H_{3c}: Negatively correlated with the food's perceived price

H_{3d}: Positively correlated with the food's perceived nutritional value

METHODOLOGY

The objectives of this study are (1) to determine if internally cued eating bouts are distinct from externally cued eating bouts, and (2) to determine if the frequency of these eating bouts is altered by food-related factors such as a food's substitutability, price, perishability, and nutritional value.

Subjects and Procedure

Subjects were recruited through seven New England Parent Teacher Associations (PTAs). Involvement in this study served as a fundraiser, as six dollars were donated to the organization for each member who participated in the study. Each PTA managed its own recruitment. Notes were sent home with children, and follow-up telephone calls were made by selected members. Correspondence with parents revealed simply that we were exploring their experiences with different home economics issues. A total of 212 subjects participated. Seventy-two percent of the subjects were between the ages of 30 and 45, 63 percent were female, and 62 percent were employed outside the home. All but three had completed high school, and 32 percent had completed college.

Subjects were met in groups of 11 to 19 at the schools where their PTA met. They were asked to take alternate seats, and were given a closed packet of materials by the experimenter, which contained a cover sheet of instructions and a number of consecutively labeled booklets. The subjects were told they were going to answer a variety of questions that dealt with issues ranging from home economics issues to questions about how they spent their leisure time (Wansink 1992).

Each subject was then instructed to turn to the booklet containing the questionnaire about their consumption habits. Upon opening the 19-page booklet, they read the following:

Many of us go through short periods of time when we eat a particular food more frequently than we usually do. We are interested in getting a better understanding of a recent experience which you had after going on such an eating bout for a particular food. Think carefully about your experience for a few moments and then answer the questions on the next page. If you cannot recall the last time you went on such an eating bout, please continue to the next booklet.

What initially prompted you to start eating this food more frequently than you normally do?

Subjects were given a full page in which to answer these questions. Following this, they were asked the kind of food they ate, how many days this eating bout lasted, how many total times they ate this food during these days, and how many times they normally ate this food in this time period (Kirkley, Burge, and Ammerman 1988).

Measures

Subjects were then asked to respond on a 9-point scale as to whether they thought eating this food during this particular occasion was foolish-wise; bad-good; unreasonable-reasonable (Rook 1987). Measuring food on these dimensions is consistent with past survey research on foods. The use of semantic differential scales is effective for attitude-related questions, and Likert scales are effec-

tive for belief-related questions (Stemple and Westley 1988; Kidder 1980). Given this, we used 9-point Likert scales to measure subjects' beliefs about various properties of the foods (Gormally, Black, Daston, and Rardin 1982). Last, basic demographic measures were taken regarding family size, age, and education. It took most people approximately 25 minutes to complete this 11-page booklet.

RESULTS

Overview and Coding

Out of the 212 subjects, 52 percent reported that their eating bout involved a sweet food, and 36 percent reported their eating bout involved a salty food. The remaining 12 percent of subjects mentioned a variety of foods from casseroles to fruit. The average duration of these eating bouts was 3.1 days, during which the food was consumed on an average of 6.9 different occasions.

These questionnaires were coded by two judges to determine the reason why people initiated these consumption bouts. The consensus of the coding (as to whether an eating bout was internally cued or externally cued) was high. Consistent with the descriptions of internal and external cues given earlier in the paper, 27 percent of the eating bouts were coded as being externally cued and 65 percent as internally cued (Cronbach alpha = .94). Six disagreements were resolved through discussion with one of the authors. The remaining 8 percent of the questionnaires noted situation motivations (e.g., "It was on sale"); they were eliminated from further analysis along with 17 questionnaires that had not been fully completed. This left 178 questionnaires used for the remainder of the analyses; 47 of these eating bouts were stimulated by external cues and 131 were stimulated by internal cues.

The important question is whether the internally cued or externally cued distinction represents a meaningful difference. To answer this, we used two groups as the two levels in a one-way analysis of variance (ANOVA). As would be expected, someone who said their eating bout was stimulated by an external cue indi-



cated that the food was "sitting out" [F(1,177) = 4.1, p < .05] or "in a convenient location" [F(1,177) = 3.1, p < .05]. The eating bouts stimulated by internal cues were much more frequent than those stimulated by external cues $[\overline{X} = 3.6]$ incidence/day versus 2.1 incidences/day; (F(1,177) = 6.1; p < .01)], but they tended to be shorter in duration than those stimulated by external cues $[\overline{X} = 5.5]$ days versus 2.2 days; (F(1,177) = 5.8; p < .01)]. These results are consistent with the assumption that most eating bouts tend to continue until the product is gone (Schachter and Gross 1968). When a food is eaten more frequently, it will be gone more quickly, and the



What Stimulates Eating Bouts? (H_1)

eating bout for that food will temporarily terminate.

Recall that H_1 stated that internally cued eating bouts would be perceived as less reasonable than externally cued eating bouts. This is confirmed in Table 1. Subjects having internally cued eating bouts perceived their eating of the foods as being less reasonable than those whose eating bouts were externally cued. The significance of these differences was confirmed when ANOVAs were conducted on ratings of whether their eating of the food was "unreasonable" [F(1,177) = 4.5, p < .05] or "foolish" [F(1,177) = 4.3, p < .05]. These same differences existed across the three different categories of food (salty foods, sweet foods, other), even when they were examined separately.

What Influences Eating Bout Frequency? (H₂ and H₃)

 H_{2a-d} hypothesize that when an eating bout is stimulated by an internal cue, a person's consumption frequency of the food should be unaffected by perceptions of the food's perishability, substitutability, price, and nutritional value. That is, regardless of one's perceptions about these factors, they will not influence how frequently the food is consumed. The results in Table 2 support these hypotheses; none of these four variables was significantly correlated with one's consumption frequency of the food (p > .05).

In contrast to this, it was hypothesized in H_{3a-d} that eating bouts stimulated by external cues would be positively correlated with a

TABLE 1

Distinctions Between Internally Cued and Externally Cued Eating Bouts

Variable	EATING BOUTS Internally Cued Exte	S rnally Cued
Consumption Measures Consumption Frequency (incidence/day) Consumption Duration (in days)	3.4 > ** 2.2 < **	2.1 5.5
Motivations for Consumption "Eating the food was reaso" "Eating the food was wise"	4.5 < *** < ***	5.6 5.4
Location of Food "The food was in a handy spot" "The food was sitting out"	3.7 <** 3.5 <**	4.9 4.8
Perceived Substitutability with Other Foods "Can eat the food instead of other foods" "Can eat the food in a variety of situations" "It's an inexpensive substitute for other food	7.7 > ** 4.9 < ** 5" 4.4 > **	5.2 6.7 2.9
Perceived Price "I was aware of the price of the food" "I never considered the price of the food" "It didn't matter how much I paid for it"	6.2 <* 4.9 5.4	6.9 5.2 4.9
Inventory Measures "Ate it until it was gone" "Usually have it in the house"	4.9 4.7 >**	4.0 2.3
Food Perceptions "The food is nutritious" "The food is healthy" "The food is fattening" "I enjoyed the food" "The food tasted good"	3.3 < ** 3.3 < * 2.3 < * 3.1 < ** 4.3 < **	4.9 4.4 3.3 4.9 5.8
Food-Related Associations "Reminded me of my childhood" "Reminded me of childhood foods"	5.2 > ** 5.0 > **	3.3 3.4

Note: Information about the characteristics of the product or the situation in which it was consumed were measured on a 9-point Likert scale (1 = strongly disagree; 9 = strongly agree).

ANOVAs between groups yielded significance of p <.10.

^{**} ANOVAs between groups yielded significance of p <.05.

food's perceived substitutability, perishability, and nutritional value, and negatively correlated with its price. These hypotheses were generally supported. People ate foods much more frequently when they perceived them as either versatile, perishable, or nutritious (p < .01). As shown in Table 2, the average correlation between versatility and consumption frequency is .61 (.70 and .51), the average correlation between perishability and consumption frequency is .32 (.26 and .39), and the average correlation between nutritiousness and consumption frequency is .41 (.43 and .40). It is likely that this correlation with perishability would have been even higher if not for the fact that these foods tended, in general, not to be very perishable.



The perceived price of the food was only weakly correlated [r =

TABLE 2

Correlations Between Food Perceptions and Eating Bout Frequency

·	Correlations		
Food Perceptions	Aggregate	Internally Cued Eating Bouts Only (n = 132)	Externally Cued Eating Bouts Only (n = 47)
Perceived Perishability			
It becomes stale quickly	.06	.17	.26*
It loses flavor once opened	.10	.19	.39**
Perceived Substitutability			
I can eat it instead of other	foods .12	.11	.70**
I can eat it in a variety of sit	uations .18	.22	.51**
Perceived Price			
I never considered the price	05	21	37
It didn't matter how much I	paid04	26*	34
Perceived Nutritional Value			
The food is nutritious	.05	.24	.41**
The food is less fattening	.04	.26*	.44**

^{*} p < .05

^{**} p < .01

-.35 (-.34 and -.37); p > .10] with one's consumption frequency. This may be because food is relatively inexpensive, or it may be because the decision-buying process and the usage process are very distinct. Evidence in the consumer behavior literature suggests that considerations of price tend to be isolated to the purchase occasion, but not to usage occasions (Blattberg and Neslin 1990). That is, any impact that price has is likely to be witnessed in one's choice at the grocery store—not in one's choice once the food has been purchased and is in the kitchen. This is consistent with the findings.

Summary of Results

Eating bouts that are internally cued are very distinct from those that are externally cued. Even though they involve the same foods, eating bouts that are internally cued are perceived as less reasonable and less healthy. Moreover, they are likely to result in more frequent eating of the product. An examination of the factors that influence these eating bouts indicates that both the rationality perspective and the impulsivity perspective have merit. Factors such as the versatility and the substitutability of a food are important in determining how frequently a food will be eaten, but as one's motivation to consume the food grows stronger, these factors become very significant. That is, foods that are visually prominent may simply be eaten instead of other foods because of their convenience and substitutability. If one desires a food enough to evoke it (without it being visually prompted), however, any considerations about substitution, perishability, and nutritional value become unimportantthe food will be eaten.

Self-Reported Measures of Consumption

There are a number of difficulties associated with self-report measures, especially when a person is asked to analyze about his or her motivations in a particular situation. Therefore, it is important in this type of research to be certain that self-reports are validated with secondary measures, such as rating measures of availability. If variables such as external cue salience were manipulated (instead of measured) in a field study, the results would be valuable, but identi-

fying "internal cues" from an observer's standpoint would still be impossible, thus necessitating the measurement of these variables through introspection.

DISCUSSION OF RESULTS

Recall that the goal of this paper is to provide insights to two fundamental questions about consumption: (1) What stimulates eating bouts? and (2) What determines their frequency over a given time period?

1. What Stimulates Eating Bouts?

Broadly speaking, eating bouts are stimulated by external cues ("it was sitting on the table") and by internal cues (moods, boredom). In both cases, the food becomes highly salient in one's mind, either because the person sees the food (externally cued) or evokes it (internally cued).

Although a salient food will not always be consumed, the *more* frequently it is evoked, the more frequently it will be considered and, ultimately, consumed. In this study, a food was generally mentioned to be salient, if it were sitting out. This, in itself, would not be a revelation to most consumers: If it's sitting out, you eat it; if it's not sitting out, perhaps you don't eat it . . . out of sight, out of mind. It is important to realize, however, that visual salience is only one of the ways a product can become salient. Memory research has shown that salience is also directly related to how frequently one eats a food and how recently (Baker, Hutchinson, Moore, and Nedungadi 1986). As a result, the more recently a food has been eaten, the more salient it is, whether it sits on the counter or is buried in the freezer.

2. What Determines the Frequency of Eating Bouts over a Given Time Period?

If the eating bout is internally cued, the motivation is generally perceived as relatively irrational, and it is unaffected by perceptions

of the food's substitutability, perishability, or nutritional value. If an eating bout is externally cued (the food is salient because it is sitting out or "in plain sight"), these perceptions have a significant impact on a person's consumption of it. That perception of price has no impact on consumption of a food is not surprising. Price may influence one's choice in the grocery store, but it has less of an impact on decision making once the food has been purchased and is in the house (Blattberg and Neslin 1990). This may be because purchases represent "sunk costs," or it may simply be because people do not remember prices.

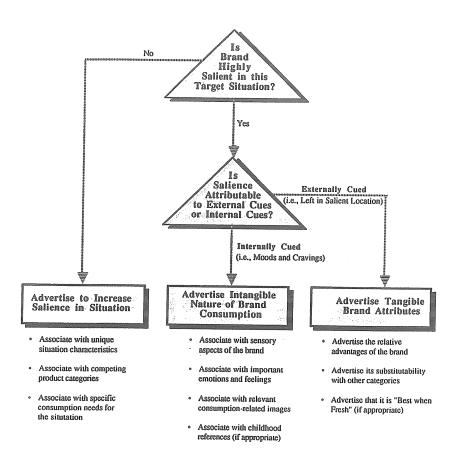
IMPORTANT MARKETING IMPLICATIONS

We noted that the marketer of package goods has two ultimate goals when advertising: Encouraging consumers to "choose," and encouraging consumers to "use." For marketers of mature food products, increasing a person's consumption frequency of that product will be the most cost-effective way of building sales (Wansink 1990; Wansink and Ray 1993a). Although the majority of the products identified in this study were either "sweets or salts" (potato chips or crackers), a variety of food from canned fruit to TV dinners was mentioned. That is, the marketing implications of eating bouts are relevant to an entire range of foods.

The results of this study indicate that a brand manager will want to generate product salience. Whatever the product, the consumer, or the situation, generating product salience is the *only* way a product will enter into a consumer's consideration set. In some cases, such product salience happens fortuitously... a product will be left on the kitchen table or left in a prominent place in the cupboard (Wansink and Deshpandé 1992). In most cases, however, a concerted effort is needed to help prompt the mental associations that will help bring a product to salience at the appropriate time. Figure 1 shows that the inferences and assumptions a manager makes about the salience of his or her product (in a given consumption situation) can lead to drastically different marketing communication strategies.

Figure 1 is most useful if a manager can infer whether the salience of the product (in a particular consumption situation) depends on

FIGURE 1:
Suggested Strategies for Increasing the Consumption Frequency of a Brand in a Specific Target Situation*



^{*}Note: It is important to use a particular strategy with consistency across all marketing communication channels. These channels include advertising along with packaging information, point-of-purchase displays, sales promotion incentives, and publicity.

internal cues or external cues. How can a manager determine this? Although the impact of these cues will vary from person to person, products that tend to be "left out" (opened bags of potato chips or cookies, for example) can benefit from being externally cued. Products that need refrigeration or require the use of eating utensils will need to be internally cued.

It is important to remember that a person's motivation for consuming a product will be related both to the product and to the situation involved. Focus groups and quantitative research can provide some guidance about the consumption of specific products in specific situations, although the results of this study suggest marketing implications that are generalizable across product categories.

Media Planning Implications

We know a product was often rated as salient simply because it was left sitting out on the kitchen table (or counter). Consider, however, that a product can also be made salient through advertising. Indeed, some people in the study mentioned they went on an eating bout because an ad had reminded them of how good the product was.

The choice of media and the timing of ads can be crucial. The Campbell's Company, for instance, schedules many of its television ads for canned soup just prior to meal times. Campbell's has also found that soup consumption tends to increase during stormy weather. To capitalize on this tendency, the company produces radio ads called "storm spots," which radio stations are instructed to broadcast during stormy weather.

Remember that when an ad helps stimulate a product to salience, the motivation is externally cued. When a product is externally cued, a person's consumption of this product is significantly affected by perceptions of the product's substitutability, versatility, perishability, and nutritiousness. If the purpose of an ad is to encourage immediate consumption, the message should focus on the specific, tangible advantages of consuming the product. Depending on the product, these advantages might include its substitutability, any nutritional advantages it might have, and how it is best when it is fresh.

Advertising Message Implications

Although we now know why people initiate eating bouts, we do not know whether such a bout will involve ice cream, or cookies, or cranberry sauce. When such eating bouts are internally cued, an advertising message needs to focus on the emotional feeling that initiates the eating bout in the first place. In this way, an emotional feeling will cue the product as being an attractive consumption alternative (Wansink 1993a). For instance, a Snickers candy bar campaign in the late 1980's positioned the candy bar as a solution for the low-energy "blahs." To the extent that the onset of low-energy "blahs" can stimulate someone to look for a snack, Snickers positioned itself as an option that may be cued to mind.

Some evidence exists that people remember sequences of events better than individual events themselves. In effect, people have mental behavior scripts for many of the routines they frequently encounter. One of these routines that may be stored in the form of a behavior script is a "low-energy snacktime" script. Insofar as a product's message can tie in to some type of pre-existing consumption script such as this, the more likely the product is to be evoked when one begins this pre-programmed set of behaviors.

In general, if a product is one that will be internally cued to salience, it is important not to advertise simply tangible attributes. The last two rows in Table 1 are illustrative in this regard: Consumers whose eating bouts are internally cued are more likely to eat foods that remind them of the foods they ate as children. Clearly, when eating bouts are internally cued, consumers are looking for something that will yield more satisfaction than simply "filling them up." For this reason, an ad should emphasize the emotions, the images, and the memories associated with the product as well as highlight its sensory aspects. Such appeals can be made independently, or they can be made in the context of a consumption script. Regardless of the appeal, copy-testing should be conducted to determine whether such executions will be effective in increasing usage (Wansink and Ray 1992).

Sales Promotion and Pricing Implications

One effect of sales promotions is that they encourage consumers to stockpile or to forward buy. Evidence exists that such stockpiling will increase ones consumption rate of the product only if the product is salient (Wansink and Deshpandé 1992). If its out of sight . . . it's out of mind. Such results are consistent with the findings of this study: If no effort is made to increase the salience of the product, the product will merely gather dust in the pantry.

Obviously, increasing gross rating points and altering the advertising message can change this salience, but such salience can also be tied to the promotion itself. A P-O-P display can offer ideas for new uses of the product. Any related premiums can be items that can be tied to usage—a "chip clip," a scoop, a glass—anything that will keep the product in the front of the buyer's mind and in the front of the pantry.

Recall that prices are thought to influence decisions in the store, but not eating decisions in the house. These results are consistent with what we find in this study. Unless prices are so low that they encourage stockpiling, they will have no impact on eating bouts. The only way that prices affect consumption rates is if prices are given in the context of quantity discounts ("Buy three, get one free"). Across-the-board price discounting will be ineffective.

Packaging Implications

Many of the implications for advertising that are mentioned in the text and displayed in Figure 1 are also relevant for packaging. If a product is one that is likely to be left sitting out, tangible attributes related to its substitutability, and its nutritiousness should be highlighted on the package. If a product is one that is not likely to be left out, information on the package should provide potential memory cues that can help highlight the sensory aspects of the product. In addition, this information should emphasize the emotions, the images, and the memories associated with the product and with consuming the product.

We show in Table 2 that concerns about a food's perishability can speed the frequency with which someone eats that food. It is important to inform consumers of such perishability, and this is especially true if sales promotions focus on large-size packages. Opening a large package of a food necessitates that it be eaten at a relatively

brisk pace (compared to a smaller package) if a consumer does not want it to grow stale (Wansink 1993b).

ONE FINAL NOTE

For the marketers of many mature brands, increasing a person's consumption frequency of that brand is the most cost-effective way to build sales. An effective marketer will be one who leverages advertising, media planning, sales promotion, packaging, and pricing to most cost-effectively build these sales. An admirable marketer will be one who does so responsibly.

REFERENCES

Adams, A. (1989). Personal Correspondence, July 19.

Azjen, I., and M. Fishbein (1980). *Understanding Attitudes and Predicting Social Behavior*, Englewood Cliffs, NJ: Prentice Hall, Inc.

Baker, W., J. W. Hutchinson, D. Moore, and P. Nedungadi (1986). Brand Familiarity and Advertising: Effects on the Evoked Set and Brand Preference. In Richard J. Lutz, *Advances in Consumer Research* (Volume 13), Provo, UT: Association for Consumer Research, 637-642.

Berry, S. L., W. W. Beatty, and R. C. Klesges (1985). Sensory and Social Influences on Ice Cream Consumption by Males and Females in a Laboratory Setting, *Appetite*, 6, 41-45.

Blattberg, R. C., and S. A. Neslin (1990), Sales Promotion: Concepts, Methods, and Strategies, Englewood Cliffs, NJ: Prentice Hall, Inc.

Denton, D. (1982). The Hunger for Salt, New York: Springer-Verlag.

Edelman, B., D. Engell, and E. Hirsch (1986). Environmental Effects on the Intake of Overweight and Normal-Weight Men, Appetite, 7, 71-83.

Ferber, C., and M. Cabanac (1987). Influence of Noise on Gustatory Affective Ratings and Preference for Sweet or Salt, *Appetite*, 8, 229-235.

Garn, S. M., and W. R. Leonard (1989). What Did Our Ancestors Eat? Nutrition Reviews, 47, 337-345.

Gormally, J., S. Black, S. Daston, and D. Rardin (1982). The Assessment of Binge Eating Severity Among Obese Persons, Addictive Behaviors, Volume 7, 47-55.

Herman, C. P. and D. Mack (1975). Restrained and Unrestrained Eating, *Journal of Personality*, Volume 43, 647-660.

Herman, C. P., and J. Polivy (1984). A Boundary Model for the Regulation of Eating, in A. B. Stunkard and E. Stellar (Eds.), *Eating and Its Disorders*, New York: Raven Press, 141-156.

Kidder, L. H. (1980). Research Methods in Social Relations, New York: Holt, Rinehart and Winston.

- Kinnucan, H. W., S. R. Thompson, and H. Chang (1992). Commodity Advertising and Promotion, Ames, Iowa: Iowa State University Press.
- Kirkley, B., J.C. Burge, and A. Ammerman (1988). Dietary Restraint, Binge Eating, and Dietary Behavior Patterns, *International Journal of Eating Disorders*, Volume 7, No. 6, 771-778.
- Lea, S. E. G. (1978). The Psychology and Economics of Demand, *Psychological Bulletin* (May), Vol. 85, No. 3. 441-466.
- Logue, A. W. (1991). *The Psychology of Eating and Drinking*, Oxford: W.H. Freeman and Company.
- McAlister, L., and E. Pessemier (1982). Variety Seeking Behavior: An Interdisciplinary Review, *Journal of Consumer Research*, Volume 9, 311-322.
- Nisbett, R. E. (1968). Taste, Deprivation and Weight Determinants of Eating Behavior, *Journal of Personality and Social Psychology*, Volume 10, 107-116.
- Nunnally, J. C. (1967). Psychometric Theory, New York: McGraw-Hill.
- Rodin, J. (1981). Current Status of the Internal-External Hypotheses for Obesity, *American Psychologist* (April), Volume 36, No. 4, 361-372.
- Rook, D. W. (1987). The Buying Impulse, *Journal of Consumer Research*, 14 (September), 189-199.
- Rook, D. W., and S. J. Hoch (1985). Consuming Impulses, in Advances in Consumer Research, Vol. 12, Eds. Morris B. Holbrook and Elizabeth C. Hirschman, Provo, UT: Association for Consumer Research, 23-27.
- Ruderman, A. J., and A. E. Henry (1991). Some Tests of the Boundary Model of Food Regulation, Working paper, University of Illinois at Chicago.
- Schachter, S. (1971). Some Extraordinary Facts About Obese Humans and Rats, American Psychologist, 26, 129-144.
- Schachter, S., R. Goldman, and A. Gordon (1968). Effects of Fear, Food Deprivation, and Obesity on Eating, *Journal of Personality and Social Psychology*, Volume 10, 91-97.
- Schachter, S., and L. Gross (1968). Manipulated Time and Eating Behavior, Journal of Personality and Social Psychology, Volume 10, 98-106.
- Stemple, G. H., and B. H. Westley (1988). Research Methods in Mass Communication, Englewood Cliffs, NJ: Prentice Hall, Inc.
- Sunday, S., S. A. Sanders, and G. Collier (1983). Palatability and Meal Patterns, Physiology & Behavior, Volume 30, 915-918.
- Tarsa, J. (1989). Personal Correspondence, July 22.
- Wansink, B. (1993a). Advertising and Category Substitution, *Journal of Marketing Research*, Volume 21, forthcoming.
- Wansink, B. (1993b). *Package Size and Usage Volume*. Paper presented at the annual meeting of the American Marketing Association's Winter Educators' Conference, Newport Beach, California.
- Wansink, B. (1992). Consumption Framing and Expansion Advertising, in Gerald Gorn and Rebecca Holman (Eds.), *Advances in Consumer Research*, Volume 18, Provo, Utah: Association of Consumer Research, 191-198.
- Wansink, B., and R. Deshpandé (1992). Inventory Stockpiling and Consumption

Rate. Paper presented at the annual meeting of the American Marketing Association's Winter Educators' Conference, San Antonio, Texas.

Wansink, B., and M. L. Ray (1993a). New Uses for Old Products: Comparison Frames and Expansion Advertising. Paper presented at the annual meeting of the Marketing Science Institute (May) in Durham, North Carolina.

Wansink, B., and M. L. Ray (1993b). Expansion Advertising's Impact on Brand Equity, in David Aaker and Alexander L. Biel (Eds.), Advertising and Building Strong Brands, Cambridge, MA: Lexington (forthcoming).

Wansink, B., and M. L. Ray (1992). Measuring an Advertisement's Impact on the Consumption of a Brand, *Journal of Advertising Research* (May/June), 8-16.

Winer, B. J. (1971). Statistical Principles in Experimental Design, New York: McGraw-Hill.

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