

Norm-Violation, Norm-Adherence, and Overeating

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ABSTRACT

Two routes to overeating are discussed; they are both premised on people's strong motivation to avoid eating excessively and thereby avoid negative ascriptions associated with the overeating/overweight stereotype. The first route to overeating involves infractions of restrictive intake norms: people who attempt to restrict their intake by implementing dietary rules often run afoul of disinhibitory circumstances that undermine the self-control upon which successful dieting depends. The second route to overeating involves adherence to restrictive intake norms in situations where it is unclear how much eating is permitted. People search the environment for indicants of what constitutes permissible intake and end up relying on such arbitrary criteria as portion size and the intake of other people. Using such criteria derived from the eating situation often leads to overeating even while individuals believe that they are successfully restricting their intake.

Key words: norm-violation, norm-adherence, overeating

Introduction

In this paper, working from our perspective as experimental psychologists, we examine why people overeat. Because we are experimental researchers, by training and by disposition, we are inclined to believe that the best way to explain (i.e., identify the causes of) a phenomenon is by conducting experiments, if at all possible. If we are interested in the causes of overeating, for example, we attempt to manipulate what we suspect are the causes of overeating and see whether the extent of overeating varies as a function of those manipulated candidate causes. This is a narrow approach to science, compared to the approach that many anthropologists take, but it has its value, especially when it comes to establishing direct causality of certain sorts. Secondly, we try to focus as much as possible on overt behavior; this behavioral focus sets us apart from many of our experimental psychological colleagues, who study what goes on inside of people (their thoughts, emotions, motivations). We were trained in a tradition^{1,2,3} that assumes that people are by and large unaware of why they behave as they do and are surprisingly ignorant of the factors that influence their behavior. Asking people why they eat the way they do, then, may provide some interesting data about people's *beliefs* about the causes their own behavior, but it is not a particularly useful source of information about the actual causes of their behavior. Occasionally we will

postulate a thought process in our experimental subjects, but this is usually for expositional purposes, and not intended as anything more than an explanatory ploy along the lines of »it's *as if* the individual were thinking X or Y.« (As will become evident, we invoke the concept of »norms,« which requires acknowledgement of cognition as an essential element of our theorizing.) Thirdly, because of our primary interest in behavior, we are concerned with eating rather than obesity. Obesity, however it may be defined, is not a behavior but rather a state of the body. Eating, on the other hand, is a behavior. What is the relation between eating and obesity? Perhaps eating, or overeating, contributes to obesity; whatever the case may be, we are interested in eating (and overeating; see reference 4 for an extended discussion of overeating), and if obesity is the result, that is not our direct concern. In fact, behavioral studies of (over)eating are more likely to consider obesity as an antecedent variable than a consequent variable. The research tradition best exemplified by Schachter^{2,3} examined whether in fact obese people ate differently (i.e., responded differentially to experimental manipulations of variables alleged to control eating), so obesity was in fact an independent (albeit non-manipulated) variable in most of Schachter's studies. So, we study (over)eating, which may contribute to obesity; bearing in mind that it is well-known that many factors

(e.g., metabolism, energy output) contribute to obesity, we make no claims that explaining overeating will necessarily explain obesity; nor do we necessarily ascribe the current »obesity epidemic« to a concurrent epidemic of overeating.

To make matters worse, we study eating on single occasions, in the lab. This approach has several practical advantages, but it precludes our generalizing very far from singular instances of overeating. For instance, if we find that a particular variable drives overeating on a particular occasion, we are often tempted to extrapolate and suggest that repeated instances of such overeating in response to continuing exposure to this variable will have a cumulative effect that may well lead to weight gain. This temptation must be resisted, however, in light of our ignorance regarding compensatory mechanisms that may offset the caloric consequences of overeating on a given occasion. If an individual overeats in a single lab session, she may well make up for this indulgence by undereating during the rest of the day. Although there is some evidence⁵ that overeating in the lab is not compensated for during the remainder of the day, it may well be that deliberate compensation is likely to occur on the following day, because dietary resolutions tend to take effect at the beginning of a new day rather than partway through a day of overindulgence⁶. Moreover, compensation for overeating is not necessary deliberate: the defense of body weight (a notion that is currently tattered but not entirely destroyed) entails metabolic and other adjustments that may oppose the weight-increasing effects of overeating, even repeated overeating. So our lab studies of overeating, on reflection, do not necessarily tell us much about the causes of obesity.

On a more positive note, insofar as the theme of this special issue pertains to women, our laboratory research is germane, inasmuch as most of the studies use samples of female participants. This bias is largely a matter of convenience (e.g., females are disproportionately represented among psychology students and thus among psychology research participants; females are more likely to be dieters, and many of our studies focus on dieters), but regardless of the reason, our research explores the psychology of females. More particularly, we study young adult females, a sample of convenience but also a sample for whom eating is particularly problematic.

The Source of Overeating: Restricted Eating

Having identified our particular perspective, let us examine our view of the causes of overeating. We start from a simple, if paradoxical, proposition: overeating stems from the attempt to restrict food intake. How the attempt to restrict one's food intake leads to overeating will occupy most of the rest of this paper, but let us first consider why people would attempt to restrict their intake in the first place.

The attempt to restrict food intake is widespread in Western culture. People are eager to avoid eating exces-

sively⁷. Although people are generally motivated to eat as much as possible when palatable food is available in large quantities^{8,9}, people will often stop eating before they reach capacity. But why? One significant reason is that people who eat a lot are stigmatized in our society. The stigmatization of overweight in our society is well-known¹⁰. What is less well-known, except perhaps among nonscientists, is that not just overweight but overeating is similarly stigmatized¹¹. People who eat a lot are perceived as having many of the same negative attributes as those who are overweight, even if the overeaters are themselves not overweight (e.g., females who are overweight or who eat a lot are seen as less feminine than are those who eat more moderately). Indeed, if two individual of identical appearance are presented to naïve raters, the individual who eats a lot will be rated as heavier than will the individual who eats a small amount¹¹. Accordingly, people have good reason to avoid overeating as well as overweight, even if people do not believe that overeating will lead to overweight. And of course, people do believe that overeating leads to overweight, which gives them all the more reason to avoid overeating¹². It should be added that although people want to avoid giving the impression that they are overeating (and therefore personally defective), it is not only other people who make such negative judgments; the individual may judge herself in a negative fashion if she catches herself overeating, even if the overeating is private¹³. In short, people are motivated to avoid eating excessively, at least in our culture. This is not to say that every single individual will manifest this motivation on every single occasion; many people recognize that they sometimes eat excessively, and some people do so on a regular basis; but for our purposes, we may start with a broad generalization to the effect that people try to avoid eating excessively, or at least try to avoid being seen (and seeing themselves) as eating excessively.

Norm Violation as a Cause of Overeating

How does the attempt to avoid eating excessively lead to overeating? We start with the proposition that people seek to adhere to a norm of avoiding excessive eating. This norm becomes most explicit in the case of dieters. The dieter, by definition, is someone who is trying to suppress her food intake below what it would normally or otherwise be in the absence of a restrictive intake norm. In fact, we may regard a weight-loss diet as an explicit and detailed restrictive intake norm. (We use the term »norm« somewhat casually, to mean a rule that prescriptively governs behavior. Norms shape and control behavior, but not necessarily all the time. Norms, like other rules, are sometimes honored in the breach.) Not everyone is a dieter, of course, but dieting is certainly normative in many pockets of developed societies; and the particular prescriptions and proscriptions that comprise a given diet may certainly be regarded as rules to be obeyed.

Dieters adopt diets because they believe that they must obey a set of rules if they are to achieve their

weight-related goals. The diet, then, may be regarded as the imposition, by the self on the self, of a restrictive norm the purpose of which is to ensure that the dieter undereats (or at least does not overeat). Certainly excess is to be avoided, and adhering to the diet's rules guarantees that eating will not be excessive. The prescriptions and proscriptions of diets typically pertain to amounts and types of foods. Some diets limit the number of calories that one may consume during a given period of time (typically a day)⁶. Other diets focus more on the type of food consumed, sometimes allowing all you can eat of particular foods but none whatsoever of other foods. (It is often argued that these »all-you-can-eat« diets limited to particular foods work – when they work – because people simply can't eat all that much of any given food, so they end up taking in fewer calories than if they ate a varied diet. Dietary monotony is a good way to suppress intake over weeks and months^{14,15,16}.)

But why should a restrictive diet lead to overeating? Technically it shouldn't, but more often than not, it does. And the reason is simple: restrictive diet norms are very difficult to adhere to. It is extremely easy to decide to go on a diet, as is evident from the popularity of dieting resolutions on New Year's lists, but actually sticking to a diet is a different matter¹⁷. We have now conducted three decades' worth of research focusing on the factors that interfere with successful dieting. And what is it that interferes with successful dieting? The answer, in a nutshell, is: Just about anything.

Successful dieting involves adherence to a rule that has little grounding in biology. Almost always, the dieter's body is exerting pressure toward eating forbidden foods or a larger amount of permitted foods. Resisting this pressure requires self-regulatory strength, which is a commodity in short supply, particularly in an environment that contains so many attractive food cues and people consuming them¹⁸. As Oscar Wilde¹⁹ put it: »I can resist anything but temptation.«

The first laboratory study on dieters²⁰ involved requiring experimental participants to consume either zero, one, or two milkshakes. We called this forced consumption a preload. After the preload, participants were allowed to eat as much or as little ice cream as they wanted, as part of what they thought was a »taste test.« We examined the amount of ice cream consumed by dieters and nondieters, who were differentiated on the basis of a questionnaire concerning chronic dieting habits. Nondieters (i.e., those who do not adhere to a restrictive intake norm) ate ice cream in inverse proportion to the size of the forced preload. This regulatory pattern was far from perfect (e.g., those preloaded with one milkshake ate substantially less than those not receiving a preload milkshake, but not substantially more than those preloaded with two milkshakes), but was consistent with rough compensation (i.e., the more milkshake, the less ice cream).

Dieters, by contrast, displayed what could only be called a »counter-regulatory« pattern: they ate more ice cream after a milkshake preload than after no preload at

all. In fact, they ate just about the same (large) amount of ice cream after one or two milkshakes. This pattern makes little physiological sense and defies any notion of caloric compensation.

From the standpoint of restrictive norms as a precursor of overeating, it should be noted that the only true overeating in this experiment was displayed by the preloaded dieters. Like preloaded dieters, nondieters who did not receive a preload milkshake ate a lot of ice cream; in fact, the nonpreloaded nondieters ate the most *ad lib* ice cream of all. But remember: those nondieters had not had a preload, so the ice cream was all that they ate. In the case of the preloaded dieters, their substantial ice-cream consumption was in addition to one or two milkshakes. In the case of the dieters who ate a lot of ice cream, this was on top of 15 ounces of milkshake, making it by far the largest intake in the study.

The most important features of these data are the following:

1. The dieters displayed the lowest *ad lib* consumption of ice cream of any group when they had not been preloaded. This minimal intake simply confirms that dieters adhere to a restrictive intake norm, at least when they are not provoked.
2. The dieters ate considerably more ice cream after they had been forced to consume one or two milkshakes. This considerable ice-cream intake may well be regarded as overeating by any standard.

But *why* did the milkshake preloads unleash overeating in dieters? We believe that the basic reason is that the milkshake preloads transgressed the dieters' diets, their proscriptive norms, either because of the caloric value of the milkshakes or simply because they were milkshakes and therefore forbidden foods. Either way, the diet was broken; and it did not seem to matter whether the diet was broken by one milkshake or two; either way, it was broken.

Once the diet is broken, what is the dieter to do? She could easily enough try to make amends, by eating as little as possible, but clearly that is not what happens. Instead, she seems to be acting as if once the diet is broken, there is no longer any point in restraining her intake at all. We call this the »what-the-hell effect,« alluding to the dieter's postulated internal dialogue: »My diet is blown. What the hell, I might as well continue eating that oh-so-tempting ice cream.« Another way of putting it, more germane to the thesis of this paper, is that restrictive norms are effective as long as they are effective; but once they are rendered ineffective, the dieter no longer has any clear guidance for her eating and proceeds in an unrestricted fashion, presumably until she reaches satiety. The restrictive intake norm conduces to overeating, then, because once the norm has been violated, the dieter has nothing else to fall back on as a means of achieving sensible regulation of intake. The dieter puts all her eggs in the diet basket; and if the basket develops a leak, all is lost, at least temporarily, long enough for a minor binge.

A rich preload is a good way to violate the restrictive intake norm, but it is by no means the only way. Before we complete our discussion of preloads, however, we should note that the actual caloric value of the preload is not necessarily the crucial element in disinhibiting dieters' intake. It turns out that if dieters *believe* that the preload is high in calories, they act as if the restrictive norm has been violated, even if the preload is actually low in calories and the norm has not really been violated. Likewise, a rich preload will not serve to violate the restrictive norm if the dieter does not realize that the preload is rich, perhaps because she has been misled by the experimenters, or simply by her own false assumptions. A 580-calorie milkshake preload leads to overeating in dieters, but a 580-calorie serving of cottage cheese and fruit does not, because dieters do not consider cottage cheese and fruit to be rich in calories or in any way forbidden⁵.

There are many experimental manipulations in addition to rich preloads that disrupt adherence to restrictive intake norms. Among the most prominent is distress. If you threaten or upset nondieters, they tend to eat less, as well they should if the only considerations were physiological: distress acts sympathomimetically, and ought to suppress appetite²¹. If you threaten or upset dieters, however, they tend to eat more^{22,23,24,25,26}. The particular type of distress may make a difference²⁷ but not so much as to challenge the foregoing generalizations. Calm dieters adhere to a restrictive norm, presumably because their self-regulatory controls are intact and effective. Distress, however, interferes with self-control; exactly how that interference happens is still subject to debate²⁸ but the fact that distress disinhibits eating in dieters is not in dispute. The motive to avoid eating excessively is undermined, abandoned, or superseded by more urgent concerns. The disinhibited, overeating dieter usually regrets the bout of self-indulgence later, and certainly recognizes that she has overeaten. For the moment, however, she is caught up in the allure of the available, palatable food²⁹; and the constraints that normally prevent the individual from eating maximally are absent.

Precisely the same pattern obtains when we substitute intoxication for distress³⁰. Alcohol is rich in calories and ought to suppress appetite, as it typically does in nondieters; but in dieters who are intoxicated, normal constraints on eating are often ignored. There are many more ways to induce dieters to abandon their restrictive norms^{18, 31, 32}. Indeed, the real world appears to be full of threats to restrictive (esp. »avoid-eating-excessively«) norms. Arguably, the reason that diets are so difficult to maintain is that these threats are ubiquitous. Overeating among dieters is correspondingly ubiquitous. And it is worth emphasizing that when dieters abandon adherence to their restrictive norms, it is not the case that they fall back to a position of a more lenient or generous restrictive intake norm. As best we can tell, for the dieter the alternative to a restrictive intake norm (i.e., a strict constraint on intake) is no constraint at all, and the resultant eating proceeds in a largely unregulated fashion, often until the dieter cannot comfortably eat any more, and sometimes further.

Norm Adherence as a Cause of Overeating

The preceding discussion of how certain circumstances disinhibit dieters accounts for much of the overeating in which dieters periodically engage. It applies to those who follow formal diets and to those who simply promise themselves that they will »watch what they eat« or »not overdo it« on a specific eating occasion. It is premised on explicit inhibition, the private or public avowal that one will not eat as much as one would prefer. There is another, second route to overeating, however, that applies more broadly to just about everyone, and which does not depend on explicit avowals of restraint or on rules about what and how much is permitted or forbidden.

The second route to overeating, like the first, is based on the motive to avoid excessive eating. For many of us, however, the exercise of avoiding excessive eating does not entail planning to restrict our intake to a specified, limit amount of food (i.e., to diet). Rather, we enter eating situations eager simply to avoid eating excessively but with no particular plan as to how to achieve that goal. Instead of adhering to explicit restrictive intake guidelines (the sort of restrictive guidelines that, as we have seen, are vulnerable to disinhibitors), most people just trust to their own good judgment in figuring out how to avoid excess. This »good judgment,« more often than not, is spurious, because people have no clear means for translating a vague wish into a specific behavior plan. The result is that we end up searching our eating environment for clues as to how we are to behave. Is there something in the eating situation that will help us to figure out how much we can eat without eating excessively?⁴

One possible clue to how much one may eat without eating excessively is provided by the behavior of others in the same situation. If we are eating with other people, we may use their intake as guide to appropriateness. More specifically, we may use others' intake as an indicator of the line dividing appropriateness from excess. If I eat appreciably more than my eating companions do, then I risk the ignominy of excess; but as long as I do not appreciably exceed their intake, I remain safe from negative evaluation. Note that this use of others' intake as a way of determining what is excessive or not is profoundly arbitrary. If you happen to find yourself eating with a large eater, your »limit« (i.e., how much you can safely eat) will be much higher than if you find yourself eating with someone eating sparingly.

There is a voluminous literature⁸ on what researchers have called »modeling.« In these studies, naïve individuals are paired with experimental confederates who are secretly instructed to eat either a lot or a little. This body of research shows quite conclusively that naïve eaters tend to track the intake of the experimental confederates, eating more when confederates eat more and eating less when confederates eat less.

This literature on the modeling of eating has several features worth mentioning. First, it is not an especially artificial situation, at least insofar as it reflects the fact

that eating is usually a social activity and we tend to eat along with others. Attending to the intake of others is something that we normally can do. Second, when the confederate eats a lot, the naïve eater tends to eat a lot, but usually not quite as much as the confederate. This pattern is particularly helpful to the theory that we are developing. If modeling were simply a matter of copying, then we would expect naïve eaters to match confederates bite for bite. But because naïve eaters tend to eat less than large-eating confederates do, it seems more likely that they are (a) indulging their appetite for the palatable food while at the same time (b) taking care to make sure that they do not exceed the level of intake established by the confederate. It is as if the naïve eater builds in a margin of error, to ensure that she does not come too close to crossing the line between appropriate and excessive intake. Third, it is important to recognize that the fact that naïve eaters tend to match what the confederates eat is not simply a matter of the naïve eater trying to make a good impression on the confederate, on the premise that imitation is the sincerest form of flattery. There are two lines of evidence that contradict the »ingratiation« hypothesis. First, naïve eaters tend to track confederates even if the confederates are not really there and are clearly oblivious of the naïve eaters' behavior. Roth et al.¹³ pioneered the use of »remote confederates,« in which naïve eaters were given (bogus) information about how much previous participants in the study had eaten. These previous participants ate either a lot or a little, but there was no prospect of these previous participants ever meeting the naïve eaters or knowing how much they ate, so the naïve eaters could not hope to make a good impression on them. The second argument against ingratiation comes from a study by Leone³³, in which people (»raters«) rated other people (»targets«) who had eaten more than, less than, or the same as they had eaten. The data showed quite clearly that raters rated targets most negatively when the targets ate less than they did. We believe that this negative rating is a reflection of the fact that the target who eats less than the rater does in effect renders the rater's intake level excessive by comparison, and the rater is resentful. In the modeling studies, recall, naïve eaters tend to eat somewhat less than do large-eating confederates; so these naïve eaters are hardly in a position to expect to receive a warm reception from the confederate when they have, by eating less than the confederate, made the confederate look bad.

There is one final feature of the modeling literature that bears scrutiny. When the confederate eats only a small amount, the naïve eater eats a small amount but is much more likely to eat slightly more than the confederate does than when the confederate eats a large amount. For example, in a study by Pliner and Mann³⁴, when the confederate ate 14 small cookies, the mean intake for naïve eaters was 11 cookies; but when the confederate ate 4 cookies, the mean intake for naïve eaters was 5 cookies. This pattern would at first blush appear as evidence against our view, but we suggest that the eater's ultimate goal is to avoid excess, and when the confederate

eats minimally, the naïve eater is not likely to be regarded as eating excessively if she exceeds the confederate's intake by just a small amount. The naïve eater tends to eat more than the minimally-eating confederate does but not appreciably more, so she can still claim with some justification that she has not been too self-indulgent.

Tracking the intake of one's eating companions allows one to avoid excess insofar as excess is defined as eating appreciably more than others do. At the same time, however, tracking the intake of one's eating companions, if those companions eat a great deal, is a good way to end up overeating. Of course, we have argued that people who do not exceed the intake of their eating companions are not overeating, but this is true only in the most superficial sense. The individual who eats (almost) as much as a large-eating confederate may convince herself that she is not overeating, using a socially-derived definition of overeating; but by any commonsense (caloric) definition of overeating, she is overeating. This sort of overeating is especially insidious, precisely because it allows the overeater to overeat while maintaining the fiction that she is not overeating. The motive to avoid excess has been fulfilled, but only because excess has been defined in social terms that are themselves often inappropriate. The dieter who overeats, following disinhibition, at least recognizes and acknowledges that she has overeaten. The individual who overeats by merely tracking the intake of her large-eating companions does not even achieve this level of self-awareness. As a result, the likelihood of continued overeating on similar occasions remains high. The dieter, too, is likely to overeat when encountering temptations under conditions of self-regulatory impairment. But the »social« overeater will overeat regardless of whether her self-control mechanisms are fully functioning or not. For her, it is not a matter of self-control; in effect, control has been delegated to her companions, who are themselves motivated to have her eat as much as possible so as to prevent their own intake from appearing excessive. The »social approach« to avoiding excess, then, is almost a guarantee of achieving excess, unless one dines regularly with people who are explicitly committed to dieting and minimizing their intake (and who do not fall prey to disinhibitors).

The social induction of overeating is also evident in the so-called »social facilitation« of eating (i.e., people eat more in a group). As they do when in the company of one or more models who have been instructed to eat a lot, people eat more in a group than they would were they eating in isolation, but none of the eaters is an experimental confederate; social facilitation appears to be a socially-emergent phenomenon and varies as a direct function of group size (at least up to a point)³⁵. Various hypotheses have been put forward to explain the effect, one of which is that as group size increases, any individual is increasingly likely to find someone else in the group who is eating a great deal, thereby allowing said individual to eat more while avoiding the ascription of excessive eating⁸. (See reference 36 for data that would appear to contradict this interpretation).

A second, non-social example of situational cues that are recruited to help define appropriate or permissible intake is portion size. Several laboratory studies have manipulated the size of the initial portion presented to naïve eaters. The general result is what has come to be known as the »portion-size effect« – namely, people eat in direct proportion to the size of the initial portion. For example, Rolls, Morris, and Roe³⁷ found that as initial portion size of macaroni-and-cheese increased (from 500g to 625g to 750g to 1000g), intake increased linearly by about 100g or 30%. This effect is not a simple artifact reflecting a ceiling on how much one can eat if served a small initial portion; in these studies, additional food is made easily available, but obtaining this additional food requires going beyond the initial portion. From our standpoint, initial portion size may be regarded as an indicator of the line between appropriate and excessive intake. The individual accepts the initial portion as what may appropriately be eaten³⁸. Someone, clearly, has decided that this portion represents a suitable quantity of food. Eating more (unless the initial portion is obviously inadequate) would be excessive. It is worth noting that when the food is served in such a way that the appropriate portion is difficult to determine, the likelihood of »excessive« consumption may increase. Thus, when people have access to a large bowl of peanuts or to small appetizers – How many pieces of sushi or pigs in a blanket is the »correct« number to eat? – the portion is unclear and the limiting effect of portion size on intake may evaporate. Much of the experimental research reviewed above on disinhibition in dieters and social influences on eating exploits the fact that the *ad lib* food available to the research participants is not easy to interpret as a clear, single portion beyond which intake should not proceed.

In the study by Rolls et al., people tended not to finish their portion. Even in the condition with the largest initial portion (1000g) and the largest intake, mean intake (434g) was still less than the size of the smallest initial portion (500g). What this means is perhaps debatable, but we suggest that all of the portions that Rolls et al. served were perceived as excessively large, leading few if any of the eaters to finish the initial portion. Nevertheless, the larger the initial portion, the greater the intake. We submit that as portion size increases, the perceived permissible amount, even if it remains less than the full portion, increases as well. As portion size increases from 500g to 1000g, the mean proportion of the portion consumed declines from 67% to 43%; but absolute amount eaten increases by 30%, as we have already seen. Even if the portion is clearly too much, the eater feels entitled (if not required) to eat more as the portion size increases.

The intricacies of the portion-size effect are admittedly not yet fully understood. We introduce this phenomenon because we believe that it shares an essential feature with modeling: it represents an aspect of the immediate eating situation that eaters may use to help decide how much they may eat without eating excessively. Like eating with large eaters, large portion sizes may act in an insidious manner, luring people to eat more than

they otherwise might, even while allowing them to believe that they are eating appropriately (i.e., not overeating). (Wansink³⁹ provides other examples of how the immediate eating situation can induce what he calls »the unknowing overconsumption of food.«) This belief that by limiting oneself to one's initial portion one is necessarily behaving appropriately is fraudulent. Indeed, it seems possible that people may even suspect how fraudulent it is, but allow themselves to continue eating, because basically they want to indulge themselves and eat that palatable food and it is relatively easy to rationalize robust intake if »everyone« else is doing it or if stopping eating before one finishes one's portion would be »wasteful«³⁹.

One final comment on the issue of people's complicity in their »inadvertent« overeating: Roth et al.¹³ found, in their study of confederate influence, that experimental participants, when asked why they ate as much or as little as they did, cited the traditional explanations for food intake (i.e., hunger/satiety and palatability). These two sets of factors were controlled for in the study and are not actually why people ate more or less. None of the experimental participants mentioned other people's (confederates') intake as an influence on their own intake. (See reference 40 for another example of people's belief that they are unaffected by the factors that in fact affect their consummatory behavior.) We believe that people recognize that it is not appropriate to eat more just because someone else is eating more. And yet people do eat more just because other people are eating more. We believe that people rationalize their own behavior (eating more) on the grounds that others are behaving likewise (eating more). (Indeed, people actively encourage their dining companions to eat or order more food, thereby »justifying« their own additional intake.) Ironically, then, people may decide how much to eat on the basis of what they recognize as an inappropriate comparator (other people's intake) even while acknowledging, in their self-reports, that deciding how much to eat by reference to other people's intake is not an appropriate basis for a decision. How aware people are that they are influenced by other people's intake or by portion size remains an interesting issue, although one that is likely to pose investigative difficulties given that people, even if they are fully aware of the influence of these factors, are reluctant to admit it, at least to researchers.

Conclusion

Dieters bring with them to the eating situation a restrictive norm (explicit prescriptive and proscriptive rules), which they attempt to honor, but frequently they fail to do so. When those rules are violated, the dieter tends to overeat because the diet does not provide a fallback position of moderate intake. For the dieter, then, it is usually a matter of famine (success) or feast (failure). The rest of us may not bring an explicit restrictive norm with us into the eating situation, beyond the norm of avoiding excessive eating. This norm, however, pro-

vides little useful guidance in practice, and we are often left not knowing how much is excessive. In our attempt to determine where the line is that separates what is permitted from what is excessive, we scan our environment for clues. The behavior of others and the portions put on our plate are recruited as guidelines, and more specifically serve to delineate the upper boundary of acceptable eating. If others eat a lot, or we are served a large portion, then we can eat a great deal while still adhering, or while still believing that we are adhering, to a moderate restrictive intake norm. Ironically, then, we can overeat while avoiding excessive eating, as long as others overeat or our portions are large. And being in the presence of overeating companions and huge portions has become a regular occurrence in many parts of the developed world.

Obviously, if we did not adhere to a restrictive intake norm, we would be unlikely to eat any less in the presence of gluttonous eating companions and prodigious portions. Abiding by no restrictions is not the solution to overeating. But it certainly appears that the alternative – adhering to a restrictive intake norm – likewise provides us with scant protection against overeating. For dieters and nondieters alike, restrictive intake norms appear to be counter-productive with some regularity.

We shall close by revisiting the issue of sex differences in overeating. It goes (almost) without saying that women are overrepresented among weight-loss, calorie-restricting dieters. This overrepresentation is probably both an effect and a cause of their relative fatness. Women are naturally fatter than are men, at least in terms of body composition, and so it is no surprise that

they are eager to correct the imbalance, especially given the ideals that have been established for the female physique⁴¹. So women struggle with dieting more than men do. As for those whose overeating is attributable to adherence to elevated intake norms (based on social modeling and portion-size considerations), the research evidence does not show much of a sex difference: everyone appears to be affected by these environmental cues. It remains possible that there is a subset of people who do not even attempt to adhere to restrictive intake norms and who overeat no matter what their eating companions do or the size of their serving portion. Although there are no useful data about this hypothetical subset, we suspect that it is populated mostly by males. Are males overrepresented among competitive eaters? Are males overrepresented among those who are oblivious to social norms? We cannot provide empirical support for these imaginings, but the stereotype is certainly there¹¹. We have discussed how people are led to overeat by their restrictive intake norms, but there are probably some people, largely male (or large and male) who simply overeat even though they are not trying not to.

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KRŠENJE PRAVILA, POŠTIVANJE PRAVILA I PREJEDANJE

S A Ž E T A K

Raspravljana su dva obrasca ponašanja koja vode prema prejedanju; oba su vezana uz jaku motivaciju ljudi za izbjegavanjem prekomjernog jedenja i time izbjegavanja negativnih predodžbi vezanih uz stereotipe o prejedanju/prekomjernoj težini. Prvi obrazac uključuje kršenje pravila restriktivnog unosa hrane: osobe koje pokušavaju ograničiti unos hrane uključivanjem dijetnih pravila, često pogriješe u neinhibirajućim okolnostima, koje potkopavaju samokontrolu o kojoj ovisi uspješno provođenje dijeta. Drugi obrazac koji vodi prejedanju uključuje poštivanje pravila restriktivnog unosa u situacijama u kojima je nejasno koliko je dozvoljeno pojesti. Ljudi u svom okruženju traže pokazatelje dozvoljenog unosa hrane, što završava oslanjanjem na proizvoljne kriterije kao što su veličina porcije i unos hrane drugih osoba. Oslanjanje na takve kriterije, koji proizlaze iz situacija povezanih s jelom, često dovode do prejedanja čak i kad osobe misle da uspješno ograničavaju unos hrane.