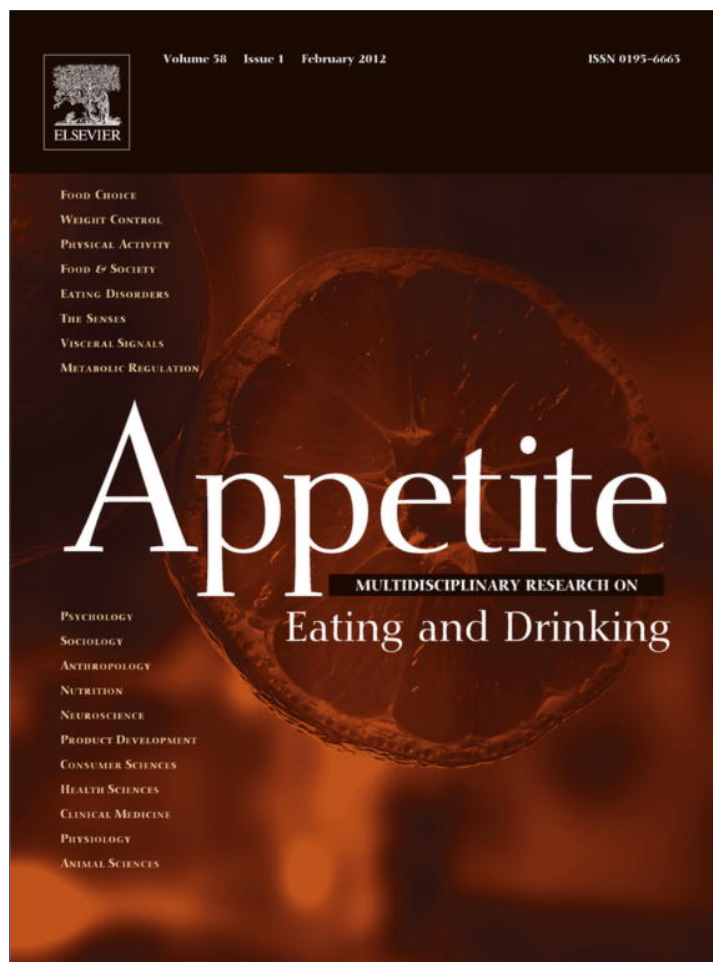


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## Research review

# Assessing the three types of dieting in the Three-Factor Model of dieting. The Dieting and Weight History Questionnaire



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## ABSTRACT

The construct of attempted eating restriction has been measured in a number of ways in recent years. The Three-Factor Model of Dieting suggests that dieting can be subdivided into three types: (1) frequency of past dieting and overeating (i.e., history of dieting), (2) current dieting to lose weight, and (3) weight suppression, or the difference between an individual's current weight and his or her highest previous weight. The purpose of this paper is to (1) describe the Dieting and Weight History Questionnaire (DWHQ), a measure that we have used for many years to assess these three dimensions of dieting; (2) provide some recent examples of published research on each type of dieting; (3) discuss some of the nuances of assessing these dieting types; and (4) suggest directions for future research.

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## Introduction

The construct of attempted eating restriction has been measured in a number of ways over the last few decades. Restraint theory, which suggests that restrained eaters share certain behavioral features with obese individuals and that restraint contributes to vulnerability to disinhibited eating (Herman & Mack, 1975; Herman & Polivy, 1980; Polivy & Herman, 1985), served as the basis for the development of the Restraint Scale (Herman & Polivy, 1980).

This measure includes two items assessing attempted eating restriction but also includes items assessing weight fluctuation, emotional distress and overeating. Consequently, researchers have noted that this measure likely identifies unsuccessful chronic dieters rather than measuring the pure intention to restrain oneself from eating (Heatherton, Herman, Polivy, King, & McGree, 1988). Newer measures of restrained eating include the Cognitive Restraint scale from the Three-Factor Eating Questionnaire (Stunkard & Messick, 1985) and the Restrained Eating scale from the Dutch Eating Behavior Questionnaire (Van Strien, Frijters, Bergers, & Defares, 1986). These newer measures represent more homogenous measures of restrained eating, as they describe specific cognitive

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and behavioral strategies for reducing caloric intake and do not include items tapping weight fluctuations, emotional involvement with food, or overeating, as does the original Restraint Scale.

Herman and Polivy (1980) have used the terms “restraint” and “dieting” interchangeably. However, more recent research suggests that restrained eating is in fact not equivalent to weight-loss dieting. Lowe (1993) reviewed evidence that the majority of restrained eaters are not currently on a diet to lose weight. Additionally, restrained eaters who are on a diet to lose weight have been shown to behave very differently relative to restrained non-dieters (as described below), suggesting that there is an important distinction between these two constructs.

Lowe (1993) proposed the Three-Factor Model of Dieting as an improved conceptualization of the restraint construct originally described and measured by Herman and Polivy. Lowe reviewed evidence suggesting that dieting can be more comprehensively conceptualized as including three dimensions: (1) frequency of dieting and overeating (i.e., history of dieting), (2) current dieting to lose weight, and (3) weight suppression, or the difference between an individual's current weight and his or her highest previous weight (Lowe, 1993). Research conducted since the publication of this model points to the utility of these distinctions. Over the years our research team and others have learned a good deal about the best way of assessing these three types of dieting. We have identified a number of important questions that need to be answered to better understand why each type of dieting is associated with the eating and weight patterns that have been identified. Given the proliferation of research on dieting, appetite, and eating behavior, it is important that standardized measures of dieting be available to researchers. Therefore, the purpose of this paper is describe the measure we have developed and refined to assess the dieting types identified in the Three-Factor Model of Dieting (Lowe, 1993), to cite examples of recent research on these dieting types, and to describe additional research that is needed to better understand the impact of these dieting types on appetite and body weight. We also include the current version of Dieting and Weight History Questionnaire (DWHQ) as a table so that interested researchers can utilize it in their studies.

#### *Current dieting*

Until recently, current dieting was assessed by simply asking respondents if they are currently on a diet to lose weight. We subsequently realized that some people could consider themselves to be on a diet but with the goal of avoiding weight gain rather than inducing weight loss. The DWHQ therefore first asks respondents if they are currently on a diet and then, for those who respond affirmatively, asks why – to lose weight or to avoid weight gain. Our work with non-clinical and eating disordered individuals suggests that roughly 20% of those who answer the current dieting question affirmatively say that they are dieting to prevent weight gain. Little research has been published on potential differences between these two subtypes of current dieters, although preliminary evidence indicates that those dieting to lose weight engage in a wider variety of weight-control behaviors (Timko, Perone, & Crossfield, 2006), and report more frequent food cravings (Massey & Hill, 2012) compared to those dieting to avoid weight gain, and that those dieting to avoid weight gain may show similarities to non-dieters with respect to eating behaviors (Timko, Juarascio, & Chowansky, 2012). Since the distinction between current dieting to lose weight and current dieting to avoid weight gain is relatively recent, the research described below is based on affirmative answers to the question “are you currently on a diet to lose weight?” or slight variations of that question. Although this question is simple, provides a straightforward method of classifying individuals for research purposes, makes the objective of restricted eating clear

(i.e., weight loss), and avoids the conflation of dieting with other constructs such as disinhibition, it should be noted that a limitation of this approach is that individuals may define dieting differently (e.g., Timko et al., 2006) and that this question does not provide an index of either objective or subjective dieting “success.” Nevertheless, results of recent research suggest that this question is a valid method of assessing current intentions to alter eating behavior in order to lose weight and has important behavioral correlates that distinguish dieting from restrained eating, as described below.

Research on current dieting has demonstrated that current dieters respond differently than do restrained eaters who are not currently dieting in laboratory eating tasks (Lowe, 1995; Lowe, Whitlow, & Bellwoar, 1991). Specifically, current dieters were found to respond to a standard preload manipulation in a manner opposite to that of restrained non-dieters: they eat more than restrained non-dieters in a no preload condition, and sharply reduce their eating following a preload, whereas restrained non-dieters eat relatively little without a preload and modestly increase their food intake following a preload. Several additional studies have examined this distinction and have replicated findings that current dieting and measures of restrained eating are associated with different eating behavior patterns. For instance, in a more recent laboratory-based eating paradigm, the induction of impulsivity caused restrained non-dieters to increase their food intake, while restrained eaters currently on a diet ate similar amounts regardless of the impulsivity manipulation (Guerrieri, Nederkoorn, Schrooten, Martijn, & Jansen, 2009). Similarly, restrained non-dieters were found to work progressively harder for high-calorie palatable food during a task with successively more demanding reinforcement contingencies, while current dieters expended almost no effort to obtain the high-calorie palatable food even when little effort was required to earn it (Giesen, Havermans, Nederkoorn, Strafacci, & Jansen, 2009). Similar findings have been obtained when examining the relation of current dieting and binge eating among women with bulimia nervosa. That is, individuals with bulimia who are not currently dieting binge more often than those who are currently dieting to lose weight (Lowe, Gleaves, & Murphy-Eberenz, 1998; Lowe, Witt, & Grossman, submitted for publication).

Research on food cravings has also documented differences between current dieters and non-dieters. For instance, current dieters have been shown to experience greater self-reported frequency and intensity of food cravings compared to non-dieters (Massey & Hill, 2012; Meule, Lutz, Vogeles, & Kubler, 2012). In addition, current dieters were shown to be more likely than non-dieters to experience cravings when in a state of low hunger (Massey & Hill, 2012). While this study did not assess actual quantity of food intake, the results of the analyses of hunger raise the possibility that the increase in food cravings among dieters may not be a consequence of restrictive eating: it is possible that dieters may have experienced frequent food cravings prior to the beginning of the diet. Taken together with the results of laboratory eating studies, research on cravings suggests that dieters may be highly prone to cravings but may, at least in the laboratory, be able to resist such cravings when currently intending to diet to lose weight.

It should be noted that while the intention to diet to lose weight appears to be significant regardless of subjective or objective dieting success, success at regulating food intake and/or producing weight loss may also be relevant to assess. Subjective dieting success is associated with several physiological, cognitive, and behavioral variables, including differential response to food cues (Papies, Stroebe, & Aarts, 2008), size perception of foods (van Koningsbruggen, Stroebe, & Aarts, 2011), and cravings (Meule et al., 2012). Subjective dieting success therefore represents an additional nuance in the measurement and understanding of dieting. Of note, weight suppression provides an alternative

measure of objective dieting success, particularly when information is also available regarding the length of time an individual has maintained a lower weight.

#### *History of dieting*

It has been proposed that dieting and overeating are usually part of a single, cyclical dynamic and that the Restraint Scale may identify individuals with a history of unsuccessful chronic dieting – that is, brief periods of successful food restriction (and possibly weight loss) that are usually followed by bouts of disinhibited eating (and possibly weight regain) and then renewed food restriction (e.g., [Heatherton et al., 1988](#)). The construct of history of dieting was incorporated into the Three-Factor Model to capture such tendencies to go on and off of diets; however, we specifically use “history of dieting” to refer to an individual’s history of having dieted with the intention of losing weight in the past, regardless of “success.” When the Three-Factor Model was developed, a viable hypothesis was that repeated cycles of dieting and over-consumption (disinhibition) caused appetitive dysregulation and perhaps eating disorders and weight gain. Based on accumulating studies since that time, we have argued that the opposite perspective fits the data better – that is, that a predisposition to over-consume energy in our obesogenic food environment prompts repeated attempts at dieting to prevent or reverse weight gains. Thus, at least in normal weight individuals, dieting may represent a consequence of and proxy for weight gain proneness, but – with the likely exception of dramatic weight losses that characterize anorexia or bulimia nervosa – does not appear to cause overeating in those without an eating disorder ([Lowe & Kral, 2006](#); [Lowe & Levine, 2005](#)).

In support of the idea that dieting may be a proxy for weight gain proneness, research on predictors of weight gain has found that dieting predicts later weight gain among adolescents ([Field et al., 2003](#); [Neumark-Sztainer et al., 2006](#)). In addition, weight-loss dieting status at baseline has been shown to be the strongest predictor of weight gain over the freshman year of college, while measures of restrained eating did not predict weight gain ([Lowe et al., 2006](#)). Presence of a history of weight-loss dieting, as assessed at baseline, was the second greatest predictor of weight gain over the freshman year ([Lowe et al., 2006](#)). Thus, while a history of chronic (unsuccessful) dieting does not appear to promote eating dysregulation ([Lowe & Levine, 2005](#)), it does appear to reflect a susceptibility to weight gain. Furthermore, a history of dieting has been shown to be associated with greater self-reported disinhibition of eating and more rigid dietary restraint among adults and adolescents ([Gallant et al., 2012](#); [Provencher et al., 2004](#)). One interpretation of these data is that past dieting, possibly characterized by rigid restraint, produces vulnerability to disinhibition, which motivates a return to rigid restraint in a vicious cycle. However, an alternative interpretation is that individuals with a history of dieting may have a pre-existing proneness toward disinhibited eating and weight gain, which gives rise to the need to diet (and, usually, to diet repeatedly). Thus, the relation between rigid restraint and disinhibited eating may reflect the fact that going on diets to lose weight involves the imposition of dietary rules that are tantamount to rigid restraint.

Because the research on current dieting described above suggests that the intention of dieting to lose weight is important regardless of dieting success, we measure history of dieting by asking about the number of previous weight loss attempts rather than focusing on the amount of weight actually lost during previous dieting attempts. Nevertheless, particularly among individuals with a history of successful dieting to lose weight, the measurement of history of dieting overlaps with the measurement of weight fluctuation. Research on the physiological correlates of weight fluctuation has yielded mixed findings, and while some

studies have found weight fluctuation to be associated with increased mortality and increased cardiovascular risk factors, it is unclear whether there is a causal relationship between weight fluctuation and these outcomes (for a review, see [Brownell & Rodin, 1994](#)). Psychological correlates of weight fluctuation include stress and lower eating self-efficacy, which have been speculated to have bi-directional relationships with weight fluctuation ([Foreyt et al., 1995](#)).

#### *Weight suppression*

Weight suppression, the difference between an individual’s current weight and his or her highest previous weight, has been studied in both non-clinical and eating-disordered populations and is related to a variety of eating and weight-related outcomes. Available evidence suggests that weight suppression may have both adaptive and maladaptive consequences in non-clinical populations, but primarily maladaptive consequences in clinical populations. Individuals high in weight suppression have been shown to have elevated self-reported dietary restraint ([Lowe, 1984](#)), increased physical activity ([French & Jeffrey, 1997](#)), reduced food consumption following a preload relative to individuals low in weight suppression ([Lowe & Kleifield, 1988](#)), and reduced sweetness preferences ([Kleifield & Lowe, 1991](#)). Results from the National Weight Control Registry (NWCR) suggest that having elevated weight suppression may be indicative of a history of successful dieting: participants in the NWCR have maintained major weight losses without experiencing elevations in psychological distress or binge eating relative to community samples ([Klem, Wing, McGuire, Seagle, & Hill, 1998](#)). On the other hand, a study of primarily normal weight college students found that those highest in weight suppression were most likely to develop bulimic symptoms 10 years later ([Keel and Heatherton, 2010](#)). Weight suppression has also been shown to be associated with binge eating, weight gain over a 6-month period, suppressed resting metabolic rate, and reduced total energy expenditure in non-clinical samples ([Lowe et al., 2006](#); [Mitchell et al., 2011](#); [Stice, Durant, Burger, & Schoeller, 2011](#)).

Among individuals with bulimia nervosa (BN), weight suppression is associated with binge eating ([Butryn, Juarascio, & Lowe, 2011](#); [Lowe, Thomas, Safer, & Butryn, 2007](#)), weight gain ([Carter, McIntosh, Joyce, & Bulik, 2008](#); [Herzog et al., 2010](#); [Lowe, Davis, Lucks, Annunziato, & Butryn, 2006](#)), longer time to remission over 8-year follow-up ([Lowe et al., 2011](#)), and poor response to treatment ([Butryn, Lowe, Safer, & Agras, 2006](#)), although findings related to treatment outcome have been mixed ([Carter et al., 2008](#); [Zunker et al., 2011](#)). Notably, while many individuals with BN weigh substantially less than their previous highest weight (e.g., [Butryn et al., 2006](#)), recent evidence suggests that weight is often regained during the course of the disorder and that many individuals with BN eventually surpass their pre-morbid highest weights during the course of their eating disorder ([Shaw et al., 2012](#)). Recent evidence indicates that weight suppression is a robust predictor of symptoms and outcome in anorexia nervosa as well ([Wildes & Marcus, 2012](#)). Taken together, the above evidence suggests that weight suppression has clinical and prognostic significance in both eating-disordered and non-clinical populations, suggesting that it should be assessed in clinical and research settings where eating or weight control are of interest.

#### **Summary of the Dieting and Weight History Questionnaire**

The Dieting and Weight History Questionnaire can be found in [Table 1](#). The following sections describe the standard items that have been used for years to assess the three dieting types as well

as newer, exploratory items that we recommend for inclusion in future research to enhance understanding of the impact of the dieting types. Standard DWHQ items are marked by asterisks in the table.

#### Current dieting

Questions 7 and 8 are both standard items used to assess current dieting; participants are asked whether they are currently on a diet and, if so, the reason for dieting (to lose weight or to avoid weight gain). Questions 9–12 are exploratory items assessing the length and anticipated duration of the current diet as well as the amount of weight lost and further weight loss goals for the current diet.

#### History of dieting

Question 16 is the primary item used to assess history of dieting. This item is based on Friedman and colleagues' measure of weight cycling (Friedman, Schwartz, & Brownell 1998) and asks participants to report the number of times they have dieted and intentionally lost varying amounts of weight over their lifetime. While history of dieting has been analyzed categorically (any history of dieting vs. no history of dieting; Lowe et al., 2006), exploratory scoring options include calculation of the number of previous weight losses or the number of weight losses of a particular magnitude. Questions 13–15 are exploratory items that collect additional information about history of dieting for the purpose of weight control, including age at first diet and recency of last diet.

**Table 1**

The Dieting and Weight History Questionnaire.

- 
- \*1.<sup>a</sup> What is the most you have ever weighed since reaching your current height? (do not count any weight gains due to medical conditions or medications). The most I have weighed since reaching my current height is:
- \_\_\_\_\_ pounds
- 2.<sup>a</sup> What is the least you have ever weighed since reaching your current height? (do not count any weight losses due to medical conditions or medications). The least I have weighed since reaching my current height is:
- \_\_\_\_\_ pounds
- \*3.<sup>a</sup> What is your current weight?
- \_\_\_\_\_ pounds
- 4.<sup>a</sup> Please determine the difference between your answer to number 1 and number 3. If this difference is less than 5 lbs. skip this item and go on to item 5. If this difference is 5 lbs. or more, circle the letter of the statement below that best describes this difference:
- A. The difference between my highest weight and my current weight is due to weight that I lost on purpose.
- B. The difference between my highest weight and my current weight is due to weight I lost even though I wasn't trying to.
- C. I'm not sure why I weigh less than I once did.
- 5.<sup>a</sup> For about how long have you been at or close (within 2 lbs.) to your present weight?
- \_\_\_\_\_
- 6.<sup>a</sup> Which of these statements best describes what has happened to your weight during the past 6 months? (circle one)
- A. My weight has stayed about the same
- B. I've been losing weight
- C. I've been gaining weight
- D. My weight has fluctuated a lot
- \*7.<sup>b</sup> Are you currently on a diet? (circle one)      Yes      No (if no, go to #13).

(continued on next page)

\*8.<sup>b</sup> Are you currently dieting to lose weight or to avoid gaining weight? (circle one)

To lose weight

To avoid gaining weight

9.<sup>b</sup> How long have you been on your current diet? \_\_\_\_\_

10.<sup>b</sup> How much longer do you anticipate being on your diet? \_\_\_\_\_

11.<sup>b</sup> How much weight (if any) have you lost on your current diet? \_\_\_\_\_

12.<sup>b</sup> How much more weight do you intend to lose on your current diet? \_\_\_\_\_

13.<sup>c</sup> Answer #13 only if you are not currently dieting:

Have you ever been on a diet to lose weight?

Yes No  
(if no, skip #14-16;  
you are done)

14.<sup>c</sup> About how long ago were you last on a diet to lose weight?

"(if you are currently dieting, refer to the most recent diet prior to your current diet)" \_\_\_\_\_

15.<sup>c</sup> About how old were you when you went on your first diet? \_\_\_\_\_ years old.

\*16.<sup>c</sup> Please estimate as best you can the number of times in your life you have dieted and purposely lost the amount of weight listed.

How many times in your life have you dieted and lost:

1-4 pounds? \_\_\_\_\_ times

5-10 pounds? \_\_\_\_\_ times

11-20 pounds? \_\_\_\_\_ times

21 or more pounds? \_\_\_\_\_ times

Note: Items not marked with an asterisk are recommended for inclusion in future research designed to better understand the three types of dieting described in the text.

<sup>a</sup> Weight suppression.

<sup>b</sup> Current dieting.

<sup>c</sup> History of dieting.

The significance of these factors is unknown and is an important direction for future research (see Discussion).

#### Weight suppression

As noted above, weight suppression refers to the difference between current weight and highest previous weight. Weight suppression has been defined as reflecting intentional reductions in weight rather than weight loss due to illness or unknown reasons (e.g., spontaneous weight loss due to depression). Questions 1 and 3 of the DWHQ are the standard items used to assess weight suppression. Question 2, which assesses lowest weight since reaching current height, is an exploratory item that can be used to calculate "weight rebound" (difference between current weight and lowest past weight). Weight rebound has been used as a covariate in prior studies of weight suppression to ensure that weight suppression is not merely a proxy for weight fluctuation (e.g., Butryn et al., 2006). In addition, weight rebound provides potentially valuable information about the individual's weight history, as current weight suppression may or may not reflect the degree of weight

suppression of which the individual is capable. Question 4, also exploratory, assesses whether difference between current and highest previous weight is due to intentional or unintentional weight loss; it remains to be determined whether unintentional weight loss is associated with effects similar to those associated with intentional weight suppression. Questions 5 and 6 are exploratory items assessing recent weight fluctuations; while existing research on weight suppression typically assumes that current weight (and therefore weight suppression) is relatively stable, researchers should use caution in interpreting weight suppression data for individuals who report substantial recent weight change.

The reliability of self-reported highest past weights has been supported by a study that found a correlation of .85 between objectively measured weights and recalled weights for the same time period reported approximately 20 years later (Tamakoshi et al., 2003). If obtainable, however, it is preferable to use current measured weight rather than self-reported weight to calculate weight suppression. When interpreting data on weight suppression, it is important to take into account the individual's body mass index prior to the weight loss. Weight loss is likely to have a larger

impact on individuals with lower starting weights (Butryn et al., 2011), thus it is useful to convert weight suppression into percentage of highest previous weight.

## Discussion

Recent research has led to substantial advances in our understanding of the constructs of current weight-loss dieting, history of dieting, and weight suppression, as well as their associations with eating and weight outcomes. In particular, current dieting, unlike restrained eating, is associated with reductions in over-eating in both non-clinical and bulimic samples. However, findings on history of dieting and longitudinal studies employing baseline measures of current dieting suggest that dieting may be associated with propensity toward future weight gain. In addition, the growing body of research on weight suppression indicates that weight suppression is associated with subsequent weight gain and with binge eating. The DWHQ provides a simple and straightforward method of assessing these three dimensions of dieting that avoids the conflation of dieting with other constructs (e.g., disinhibition) and allows for straightforward classification of participants for research purposes.

Although much has been learned about the three types of dieting described in the Three-Factor Model, there are a number of areas that require further study. The exploratory items on the DWHQ were designed to facilitate future research efforts in these areas. For instance, although several studies have now made it clear that restrained eaters do not consume fewer calories in the natural environment than unrestrained eaters (for a summary, see Stice, Sysko, Roberto, & Allison, 2010), little is known about whether self-labeled weight-loss dieters actually achieve a negative energy balance or lose weight over time (Goldstein, Katterman, & Lowe, in press). It is also unknown whether the length (or anticipated duration) of a current diet alters its psychological, behavioral, or physiological effects. Exploratory items 9–12 were included in the DWHQ to facilitate investigation of these questions. The goal of dieting- to lose weight or to avoid weight gain- also appears to be a relevant variable and warrants further investigation, particularly in light of a related study demonstrating that differential motivations for dieting (e.g., to avoid becoming overweight or to become very thin) are highly relevant (Chernyak & Lowe, 2010).

With respect to history of dieting, it is unknown whether the presence of multiple attempts at weight-loss dieting (assessed by DWHQ item 16) has prognostic significance with respect to eating behavior and weight trajectory above and beyond the presence of a single weight-loss dieting attempt. The potential psychological or physiological importance of age at first dieting attempt (DWHQ item 15), the degree to which past dieting has led to weight loss (DWHQ item 16), and typical patterns of weight change following dieting attempts (e.g., maintenance vs. rapid weight regain) are largely unexplored. The fact that a history of weight loss dieting prospectively predicts accelerated weight gain (Lowe et al., 2006) could mean that people who are vulnerable to weight gain in the obesogenic environment are more likely to go on diets as a result. If accurate, recency of the last weight loss diet (DWHQ item 14) could be as important as frequency of past dieting in predicting current susceptibility to weight gain.

For weight suppression, substantial research indicates that it is robustly related to current and future eating and weight problems in both non-clinical and clinical populations. However little is known about the psychological and biological mechanisms through which weight suppression exerts its effects. For example, weight suppression could slow metabolism, increase food intake, or both, thereby spurring weight (re)gain. Past research on weight suppression has not differentiated between intentional and

unintentional weight loss and so it is unknown if the two sources of weight suppression have different correlates. Item 4 on the DWHQ was designed to facilitate exploration of this question. Two other topics that should be investigated are whether length of time spent at a previous, highest weight or at a new, lower weight (DWHQ item 5) influences the effects of weight suppression. Further research on these mechanisms may clarify how research on weight suppression can inform intervention efforts for weight gain prevention and for eating disorder treatment. In addition to exploring areas within each of these domains, future studies should examine the psychological and biological implications of interactions among the three types of dieting (e.g., whether level of weight suppression interacts with current dieting status), as well as their interactions with body weight.

A final topic to consider is the difference between studying dieting as a behavior and restrained eating as a construct. A strength of existing multi-item measures of restrained eating is that they are supported by psychometric testing procedures that examine the reliability and validity of the construct being measured. However, this advantage is balanced by two shortcomings: these measures do not assess *why* the individual is restraining his or her eating (to lose weight, to avoid gaining weight, for health reasons, etc.), and do not reveal the specific behaviors in which respondents are engaging (since any given total score can be obtained by endorsing many different combinations of items). Measuring current or past dieting behavior, in contrast, is based on simply asking respondents about their current or past status on simple and familiar questions about dieting. Furthermore, though researchers often investigate dietary restriction in terms of “restrained eating,” the lay public often refers to dietary restriction in terms of being (or not being) on a diet to lose weight. Thus, by assessing three types of dieting behavior (current, historical, and extent of diet-induced weight suppression) the Three Factor Model assesses dietary restriction in a way that overlaps with but is distinct from the more traditional methods of assessing restrained eating. This conclusion has been supported by numerous research studies showing that, despite the correlation between measures of restrained eating and dieting, they are related to different eating patterns in laboratory studies (e.g., Guerrieri et al., 2009; Lowe & Kleifield, 1988; Lowe et al., 1991) and in studies of disordered eating (Lowe et al., 1998).

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