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Eating patterns and breakfast consumption in obese patients with binge eating disorder ☆

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Abstract

This study examined eating patterns and breakfast consumption, and their relationships to weight and binge eating, in obese individuals with binge eating disorder (BED). One-hundred seventy-three consecutively evaluated men ($n = 46$) and women ($n = 127$) with BED were administered semi-structured interviews and self-report measures to assess the frequency of meals and snacks eaten, as well as binge eating and eating disorder features. Overall, those who consumed more frequent meals, particularly breakfast, and snacks, weighed less. Breakfast, which was eaten on a daily basis by less than half of participants ($n = 74$; 43%), was the least frequently eaten meal of the day. Participants ($n = 56$; 32%) who ate three meals per day weighed significantly less, and had significantly fewer binges, than participants ($n = 117$; 68%) who did not regularly eat three meals per day. Thus, eating more frequently, having breakfast and consuming three meals every day, have potentially important clinical applications for the treatment of BED given that the effectiveness of specific interventions within treatments for BED are unknown, and that weight loss outcome for BED has been poor.

Keywords: Binge eating disorder; Breakfast; Eating patterns; Obesity; Weight loss

Introduction

In 1994, binge eating disorder (BED) was included as a new research criteria set in the DSM-IV (American Psychiatric Association (APA), 1994) following two large-scale multi-site trials conducted by Spitzer et al. (1992, 1993). Since that time, a considerable body of research has accumulated regarding the prevalence, validity, and importance of this clinical problem (Johnson, Spitzer, & Williams, 2001; National Task Force on the Prevention and Treatment of Obesity (NTF), 2000; Wilfley, Wilson, & Agras, 2003). BED, as defined by the DSM-IV (APA, 1994), includes recurrent episodes of binge eating in the absence of inappropriate compensatory weight control methods found in bulimia nervosa (BN). The binge eating must be associated with emotional distress, occur regularly (2 days per week or more), and be persistent (minimum of 6-month duration). Utilizing these research criteria, it is now known that considerable psychological distress and eating

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disorder symptomatology is associated with BED (Grilo, 1998), and that overweight or obesity is commonly found in these individuals (Spitzer et al., 1992, 1993). Patients with BED, unlike patients with BN, are also at increased risk for morbidity and mortality associated with obesity (NTF, 2000), and unlike obese individuals without BED, have elevated comorbid psychopathology and eating disorder symptomatology (Mussell et al., 1996).

A number of psychotherapies and pharmacotherapies have been shown to produce significant and substantial reductions in binge eating among BED patients. Of these treatments, cognitive-behavioral therapy (CBT) has demonstrated efficacy (Carter, & Fairburn, 1998; Grilo, Masheb, & Wilson, 2005; Wilfley et al., 1993) for BED and its effects are well-maintained at least through 12 months (Wilfley et al., 2002). The superiority of various methods of CBT over waitlist control groups (Carter & Fairburn, 1998; Grilo & Masheb, 2005; Wilfley et al., 1993), and behavioral weight loss treatment (Grilo & Masheb, 2005), and pharmacotherapy (i.e., fluoxetine; Grilo, Masheb, & Wilson, 2005) make it the best-established intervention for BED to date (National Institute for Clinical Excellence (NICE), 2004; Wilson, 2005). However, CBT, and other treatments for BED, suffer from two major problems: (1) treatments have not resulted in clinically meaningful weight loss outcomes, and (2) factors within treatments that may be associated with binge remission, and reduction in eating disorder and psychological sequelae, are relatively unknown. In fact, the only known predictor of binge remission and weight loss in BED patients is "rapid response" (i.e., substantial reduction of binge eating that occurs early in treatment; Grilo, Masheb, & Wilson, 2004).

To advance the treatment of BED, the next wave of studies needs to identify the specific interventions within treatments for BED that are effective, particularly interventions that may be associated with weight loss. Tanofsky-Kraff and Yanovski (2004) have advocated for the examination of non-normative eating behaviors (e.g., irregular eating patterns) and their potential implications for informing treatments designed for overweight and obese populations. At the core of the CBT treatment for BED, is the prescription of a pattern of regular eating such that the patient is asked to restrict eating to three planned meals per day, and two or three planned snacks (Fairburn, Marcus, & Wilson, 1993). Inherent in this prescription is the assumption that these patients engage in irregular eating schedules such that the pattern of eating (i.e., the number and order of meals and snacks) varies from day-to-day. Clinically it has been assumed that patients with BED engage in irregular eating patterns, perhaps going long periods of time without eating that are followed by binge episodes. This assumption seems to have emerged based upon the knowledge that individuals with BN, patients for whom this CBT treatment was designed for, do not regularly eat three, or even two, normal meals per day (Mitchell, Hatsukami, Eckert, & Pyle, 1985). However, it has been shown that individuals with BED eat more frequently than individuals who are overweight or obese and do not binge eat (Allison, Grilo, Masheb, & Stunkard, 2005).

Also of particular interest, is the association of breakfast consumption with weight and binge eating given it's documented importance for weight control in obesity (Cho, Dietrich, Brown, Clark, & Block, 2003; Ruxton & Kirk, 1997), and overall food intake and diet quality (Morgan, Zabik, & Stampley, 1986; Ruxton & Kirk, 1997; Schlundt, Hill, Sbrocco, Pope-Cordle, & Sharp, 1992). More specifically, it seems that skipping breakfast may lead to more frequent snacking (Schlundt et al., 1992; Sjoberg, Hallberg, Hoglund, & Hulthen, 2003).

Thus, the purpose of the present study is to explore the frequency, regularity, and associations of meals and snacks eaten by patients with BED. We hypothesize that eating patterns and breakfast consumption will be related to weight and binge eating. Exploratory analyses will be conducted with additional eating disorder features to investigate whether these features may be related to eating patterns and breakfast consumption as well.

Methods

Participants

Participants were 173 consecutively evaluated men ($n = 46$) and women ($n = 127$) who responded to advertisements seeking individuals for treatment studies at a medical school. Inclusion criteria required age between 18 and 60 years, body mass index (BMI) of 30 or greater, and DSM-IV (APA, 1994) research criteria