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Eating Behaviour: From “Normal” to Disordered Eating

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Abstract

Eating is a distinct behaviour in that we must consume foods to supply the body with sufficient energy to fuel bodily function and ensure survival. Behaviour around food consumption can range from healthy to more problematic behaviours (such as binge eating and emotional eating). This is particularly relevant to nurses whose work patterns and occupation-related stress can heavily influence eating behaviour and contribute to the risk of binge or emotional eating. While not everyone will present with these disordered eating behaviours, some may present with eating patterns suggesting a preoccupation with food or weight. This can potentially lead to inappropriate compensatory behaviours or dysphoric mood following food consumption. This article explores how nurses and other healthcare professionals may identify and approach binge eating and address such behaviour.

Keywords: To be drawn from the Nursing Standard taxonomy

Eating is a behaviour defined by frequency (how often food is eaten) and size (how much is consumed) (Blundell, John E. & Gillett, 2001). Eating is a distinct behaviour in that we must consume food to survive (Meule & Vögele, 2013) and as such are constantly making decisions regarding what, when, and how much to eat, which is influenced by a complex interaction of physiological, psychological, genetic, social and environmental factors (Abizaid & Horvath, 2008; Allom & Mullan, 2014a; Blundell, John E., 2006; Grimm & Steinle, 2011; Herman, C. P. et al., 2003). This eating behaviour can be conceptualised into four theoretical domains: homeostatic eating (e.g., satiety cue responsiveness, intuitive eating), reflective eating (e.g., self-regulation, mindfulness), reactive eating (e.g., eating in response hunger or food craving), and disordered eating (Dakin et al., 2023). Such factors either push us towards or pull us away from food seeking behaviour.

The actual behavioural component – eating – is essentially muscular movement under conscious control; foods are selected, placed in the mouth, chewed and the bolus swallowed. However as discussed by Muraven and Baumeister (2000) (p. 247), “Eating a piece of pie... requires various muscular movements of arm, fingers and jaw. Yet most dieters can attest that refraining from such behaviours can seem more difficult and draining than performing them.” This difficulty is likely due to the complex nature of eating behaviour, influenced by a wide range of internal and external factors (Figure 1). Eating behaviour can be considered as a continuum between “normal” eating and eating disorders; while eating behaviour refers to all behavioural responses to food, this is often framed in light of the actual or perceived overconsumption of food and the control of this dietary intake.

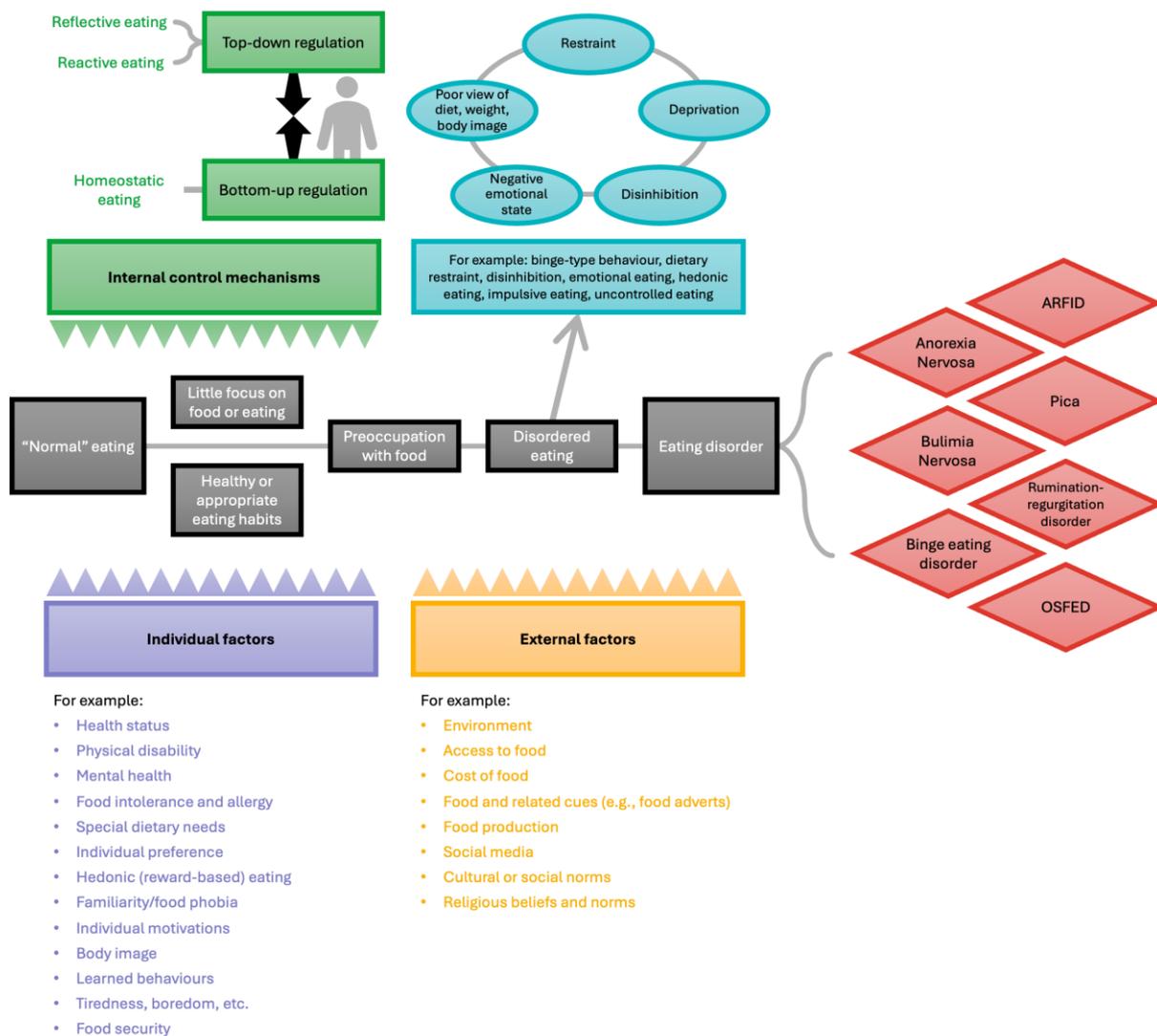


Figure 1: Continuum of eating behaviour.

ARFID, avoidance-restrictive food intake disorder; OSFED, other specified feeding or eating disorders.

“Normal” eating can be defined as the integration of the internal mechanisms controlling food consumption (homeostatic, reflective and reactive eating) to drive dietary intake when in need of calories and resist eating when satiated (Beaulieu & Blundell, 2021; Blundell, J. E. et al., 2015). This can still include habits or rules around

food (such as choosing a lower calorie option to account for consumption of a high-calorie snack), but these do not lead to the preoccupation with food, the restriction of food, negative feelings or associations with consumption (such as guilt from consuming food deemed unhealthy), nor compensatory behaviours (Allom & Mullan, 2014b; Taylor et al., 2005). At the other extreme, the International Classification of Diseases (World Health Organisation, 2023) describe eating disorders as “abnormal eating behaviour and preoccupation with food as well as prominent body weight and shape concerns.” These behaviours are not explained by other health conditions nor are they developmentally or culturally appropriate.

The nature of a nursing role – particularly long working hours, irregular working pattern and occupation-related stress – can heavily impact eating behaviour (Horton Dias & Dawson, 2020). For example, perceived stress is positively correlated with emotional eating (i.e., eating in response to negative emotions) (Gürkan et al., 2022), with higher prevalence of disordered eating behaviour in those in the role for a greater number of years (Gürkan et al., 2022; Kim, Oksoo & Jung, 2021). This, coupled with factors such as the hospital food environment (such as limited access to healthy foods), easy availability of snack items that are high in fat, salt and sugar, and limited time to prepare meals (Marko et al., 2023), make the control of eating behaviour even more difficult. This can result in binge eating, particularly after a long and erratic working hours (Power et al., 2017; Reis et al., 2020). This article specifically explores binge eating, reflecting on disordered eating patterns in response to stress and negative emotions, and how binge-type behaviour can be addressed.

Binge eating

Binge eating is characterised by the uncontrolled consumption of a large quantity of food, with binge eating disorder (BED) recognised as a psychiatric condition (Box 1) (World Health Organisation, 2023). While the prevalence of BED is relatively low – estimated to be up to 3.5% of the adult population – a wider proportion of the general population may experience the emotions, cognitions and behaviours associated with this disorder (Alfalahi et al., 2022; Qian et al., 2013). The rates of BED are much higher in a nursing population, estimated to be around 6.9% (Kim, O. et al., 2018). Those presenting with binge eating may have excessive focus on dietary intake, weight and/or body image which may cause negative feelings (such as anxiety, guilt, shame) and the resulting binges can cause weight fluctuations (Kimberley R Wells et al., 2020; World Health Organisation, 2023). This impacts quality of life (e.g., reduced social, emotional and psychological wellbeing) (Hart et al., 2020; van Hoeken & Hoek, 2020) and can lead to a sense of loss of control around eating.

Box 1: Diagnostic criteria for binge eating disorder (BED) (World Health Organisation, 2023).

- Frequent and recurrent episodes (e.g., once or more per week over a 3-month period) of binge eating, a discrete period during which there is a loss of control over eating where the individual cannot limit the amount or type of food consumed.
- The binge episode causes marked distress and impairment in normal functioning (e.g., personal, family, social, educational, occupational).
- There are no compensatory behaviours in response to the binge episode.
- The symptoms and behaviours are not accounted for by other conditions nor due to the effects of a centrally active substance or medication.

BED is considered a distinct subtype of obesity (Dalton et al., 2013; Davis, C., 2009; Davis, Caroline, 2013), and can affect around one quarter of individuals with obesity who are seeking weight loss treatment (Wilfley et al., 2016). However, while binge eating severity is positively associated with body mass index (BMI) (Finlayson et al., 2011), and those with BED are more likely to be obese (Villarejo et al., 2012), obesity is not a criterion for binge eating behaviour (Bruce & Wilfrey, 1996; Finlayson et al., 2011). While binge eating frequency does not appear to differ between those with healthy weight or obesity diagnosed with BED, there appears to be differences in behavioural patterns between those with healthy weight versus those living with obesity (such as food avoidance, duration of binge eating episode) (Goldschmidt et al., 2011).

Symptoms of binge eating behaviour

Binge eating can either be objective (the amount of food consumed is larger than what most individuals would consume under similar circumstances) or subjective (consuming an amount of food deemed within normal limits but is large for the individual) (World Health Organisation, 2023). During the binge episode, food may be consumed at a more rapid pace than usual, consumed in the absence of hunger, or consumed alone due to embarrassment. This experience can be particularly distressing and lead to negative emotions such as feelings of guilt or shame (Dingemans et al., 2017). A particular focus of those with binge-type behaviour is the impact on weight status and these individuals may frequently measure body weight or size (Davis, Heather A. et al., 2020).

No matter how hard a person may try, it is unlikely that rewarding value of food can be diminished by conscious decision to initiate dietary restraint and instead the behavioural outcome often occurs outside conscious awareness and activated by food or related cues (the sight or smell of food, emotional events) (de Araujo et al., 2020; Higgs, 2016). Dietary restriction does not precede binge eating; meaning this does not occur solely following food restriction (Abbott et al., 1998). Individuals displaying binge and emotional eating behaviour appear to have hyper-responsivity to the rewarding aspects of food, which is associated with reduced dietary self-regulation (Dalton et al., 2013; Davis, C., 2009; Davis, Caroline, 2013). This may lead to more reactive or impulsive consumption of foods in response to internal or external cues and motivations (such as food craving, emotional eating, stress eating) (Dakin et al., 2023; French et al., 2012). This can result in the consumption of perceived “forbidden” foods – often those which are highly palatable and rewarding – which can negatively impact

emotional state following an eating episode (such as creating feelings of guilt) (Johnson et al., 2012; Kelly et al., 2022; Lowe & Butryn, 2007; Seage & Lee, 2017). Longer-term control requires careful juggling of two conflicting goals; eating enjoyment and weight control (Stroebe et al., 2013; Stroebe, 2022).

Measuring binge eating behaviour

Binge eating is underdiagnosed and undertreated (Kornstein et al., 2016). There are numerous questionnaire-based measures that can be used to determine whether an individual presents with binge eating behaviour. One of the simplest and less burdensome is the Binge Eating Disorder Screener-7 (BEDS-7) (Herman, B. K. et al., 2016) (Table 1). For this questionnaire, a “yes” response to question 2 and marking at least 1 shaded box for questions 3 through 7 would signify binge eating behaviour. While this questionnaire was developed specifically to measure BED, it can be applied to measure binge-type behaviour. This is particularly important given the prevalence of these behaviours in nurses and the wider population (Alfalahi et al., 2022; Kim, O. et al., 2018; Qian et al., 2013).

Table 1: Binge Eating Disorder Screener-7 (BEDS-7) (Herman, B. K. et al., 2016)

| The following questions ask about your eating pattern and behaviours within the last 3 months. For each question, choose the answer that best applies to you. | | | | |
|---|-----------------|-----------|-------|--------|
| 1. During the last 3 months , did you have any episodes of excessive overeating (i.e., eating significantly more than what most people would eat in a similar period of time)? | | Yes | No | |
| If you answered “No” to question 1, you may stop here. The remaining questions do not apply to you. | | | | |
| 2. Do you feel distressed about your eating episodes or excessive overeating? | | Yes | No | |
| Within the past 3 months... | Never or Rarely | Sometimes | Often | Always |
| 3. During your episodes of excessive overeating , how often did you feel like you had no control over your eating (e.g., not being able to stop eating, feel compelled to eat, or going back and forth for more food)? | | | | |
| 4. During your episodes of excessive overeating , how often did you continue eating even though you were not hungry? | | | | |
| 5. During your episodes of excessive overeating , how often were you embarrassed by how much you ate? | | | | |
| 6. During your episodes of excessive overeating , how often did you feel disgusted with yourself or guilty after? | | | | |
| 7. During the last 3 months , how often did you make yourself vomit as a means to control your weight or shape? | | | | |

Supporting those with binge eating behaviour

There are many factors that influence what, when and how much food is consumed; internal control mechanisms, discussed above, combine with internal and external influences to drive where people fall on the eating continuum (Figure 1). While it is important to explore the potential impacts of “unhealthy” eating behaviour on health, it is equally important that to acknowledgement the role of food in people’s lives. For

example, food is a source of reward and pleasure, food is used to build social ties, and as an expression of identity, culture or religion (Alonso-Alonso, 2013; Monterrosa et al., 2020; Neely et al., 2014; Reddy & van Dam, 2020). It is important to acknowledge this individuality in food and eating and that there is no one correct way of eating, and instead there are nuances in “normal” and “healthy” eating (Allom & Mullan, 2014b; Verain et al., 2022). As such, there is a need to consider individual heterogeneity when approaching the management of binge eating behaviour (MacLean et al., 2017).

Although originally intended to address successful dieting, the five-item toolkit (Box 2) proposed by Ogden (2018) aligns well with how disordered eating can be approached. When discussing binge eating, it is important to acknowledge that eating behaviours may be difficult or distressing to discuss and individuals may be vulnerable to stigma and shame; when having a conversation be sensitive and show empathy, compassion and respect (National Institute for Health and Care Excellence, 2019).

Box 2: A toolkit for addressing disordered eating (adapted from (Ogden, 2018)).

1. Identify opportunities for change (e.g., life events leading to behaviour change).
2. Change the way patients think and feel about food (e.g., cognitive restructuring, reinforcement, changing associations, self-monitoring).
3. Creating new behaviours (e.g., modelling, repetition, planning).
4. Managing the individual environment (e.g., avoidance of triggers).
5. Moving forward and planning for the future (e.g., mindfulness, self-compassion, reframing failure as an opportunity to learn and adapt).

There is no ‘one-size-fits-all’ strategy; each individual will present with a different pattern of behaviour, caused by a different range of factors, will respond differently to these factors and behaviours, and will have different support frameworks and care needs. What is particularly important to note is such binge eating (and wider disordered eating) can affect all individuals, no matter what gender, age, ethnicity, culture or other background (Mitchison et al., 2014; Pike et al., 2013). Those presenting with binge eating characteristics should not be dismissed regardless of whether they align with a “typical” demographic profile described in research. It is important to be conscious that disordered eating may involve more than the individual (such as family members or peer groups) in both the cause and treatment (National Institute for Health and Care Excellence, 2019).

Conclusion

Eating behaviours are often beyond the conscious and explicit control of individuals, and instead are subject to influence from internal (such as cognitions and homeostatic signals) and external cues (such as the sight or smell of food). Individuals may present with binge eating behaviour, characterised by a preoccupation with dietary intake, body image or weight status, resulting in reduced quality of life and negative emotions in response to food consumption. Addressing binge eating behaviour should involve an evidence-based, person-centred and compassionate approach which addresses the individual needs of the patient and addresses their individual eating behaviour pattern.

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