Pleasure as an ally of healthy eating? Contrasting visceral and Epicurean eating pleasure and their association with portion size preferences and wellbeing

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A B S T R A C T

Research on overeating and self-regulation has associated eating pleasure with short-term visceral impulses triggered by hunger, external cues, or internal emotional urges. Drawing on research on the social and cultural dimensions of eating, we contrast this approach with what we call “Epicurean” eating pleasure, which is the enduring pleasure derived from the aesthetic appreciation of the sensory and symbolic value of the food. To contrast both approaches, we develop and test a scale measuring Epicurean eating pleasure tendencies and show that they are distinct from the tendency to experience visceral pleasure (measured using the external eating and emotional eating scales). We find that Epicurean eating pleasure is more prevalent among women than men but is independent of age, income and education. Unlike visceral eating pleasure tendencies, Epicurean eating tendencies are associated with a preference for smaller food portions and higher wellbeing, and not associated with higher BMI. Overall, we argue that the moralizing approach equating the pleasure of eating with ‘low-level’ visceral urges should give way to a more holistic approach which recognizes the positive role of Epicurean eating pleasure in healthy eating and wellbeing.

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1. Introduction

Different streams of research on food and eating have adopted contrasting conceptualizations of eating pleasure. Research aiming to understand overeating and self-regulation failures has taken a negative view of eating pleasure, equating it with the satisfaction of visceral impulses triggered by the environment or by negative emotions (e.g., Loewenstein, 1996; van Strien, Frijters, Bergers, & Defares, 1986). Simultaneously, research on the social and cultural dimensions of eating has taken a more positive view of eating pleasure by focusing on the “Epicurean” aesthetic facets of eating (e.g., Johnston & Baumann, 2007; Rozin, Fischler, Imada, Sarubin, & Wrzesniewski, 1999).

Drawing on existing classifications of pleasures (Alba & Williams, 2013; Annas, 1987; Brillat-Savarin, 1841; Dube & Le Bel, 2003; Duncker, 1941; Korsmeyer, 1999; Rozin, 1999), we contrast the “visceral” vs. “Epicurean” perspectives, among the many related concepts (e.g., “sensuous” vs. “cognitive” pleasure). We define visceral eating pleasure as the short-lived hedonic relief created by the satisfaction of eating impulses. Visceral eating pleasure is the by-product of relieving a visceral urge, often beyond eaters’ volitional control, and it can be summarized by its valence (pleasant or unpleasant) regardless of the rich aesthetic experience of eating (e.g., Dube & Le Bel, 2003; Loewenstein, 1996).

In contrast, we define Epicurean eating pleasure as the enduring pleasure derived from the aesthetic appreciation of the sensory and symbolic value of the food. This kind of pleasure is unrelated to impulses and within people’s volition, it can be pursued as an end in itself (i.e. it is not the by-product of relieving an urge), and it cannot be summarized by its valence because it is intrinsically linked to differentiated aesthetic, sensory and symbolic eating experiences (e.g., Hirschman & Holbrook, 1982; Rozin, 1999). Further, whereas the “visceral” view assumes that eating pleasure is the enemy of healthy eating and must be controlled or suppressed to avoid overeating — even at the expense of wellbeing — the Epicurean view holds that eating pleasure goes hand in hand with...
moderation and wellbeing.

In order to better conceptualize the differences between Epicurean and visceral eating pleasures, we develop and test a scale of Epicurean eating pleasure tendencies and contrast it with visceral eating pleasure tendencies, captured by the “external eating” and “emotional eating” subscales of the Dutch Eating Behavior Questionnaire (van Strien et al., 1986). We then compare the association of the Epicurean and visceral eating pleasure scales with two related eating traits, restrained eating (van Strien et al., 1986) and health worries (Rozin et al., 1999), as well as with key demographic variables (BMI, gender, age, education, and income). Finally, we study the association between Epicurean and visceral eating pleasure tendencies, portion size preferences and wellbeing. To achieve this goal, we develop another new instrument which measures the preference for large portion sizes.

We find that Epicurean tendencies are associated with a preference for smaller portions and with greater wellbeing, whereas external eating and emotional eating are associated with a preference for larger portions, higher BMI, and lower wellbeing. Further, Epicurean tendencies are found to be orthogonal to health worries (Rozin et al., 1999), as well as with key demographic variables (BMI, gender, age, education, and income). Finally, we study the association between Epicurean and visceral eating pleasure tendencies, portion size preferences and wellbeing. To achieve this goal, we develop another new instrument which measures the preference for large portion sizes.

1.1. Visceral eating pleasure

Although it has older roots, the notion of visceral eating pleasure can be traced to early work on the “physiology of taste” by 19th century French essayist Brillat-Savarin (1841). Brillat-Savarin defined the “pleasure of eating” as a peculiar sensation directed to the satisfaction of hunger, a bodily necessity, not to be confused with the “pleasures of the table” (discussed in more detail below). In his seminal work on the physiology of eating, Cabanac (1971) used the same conceptualization of eating pleasure, consistent with the focus of early work in the field, especially in animal research, which relied on a homeostatic model of eating (Cabanac, 1971, 1985; Herman & Polivy, 2005; Rozin, 1999). In this model, the pleasantness (or anticipated pleasantness) of food increases when one is hungry and decreases when one is sated.

In today’s society of plentiful and cheap food, eating behaviors are no longer determined by hunger and satiety, except in the rare cases when one has fasted or cannot physically eat more (Herman & Polivy, 1983; Wansink & Chandon, 2014). More importantly, the current obesity epidemic has shown that homeostasis alone cannot explain eating behaviors (Stroebe, Papiès, & Aarts, 2008). In the field of behavioral decision-making, Loewenstein (1996) introduced the notion of “visceral factors” to understand how hunger could lead to self-regulation failures such as overeating. These visceral factors encompass physiological needs (such as hunger) but also psychological drives (such as emotions and cravings). Visceral factors are manifested by a direct, usually negative, hedonic sensation (e.g. the aversive response to hunger or cravings), which increases desires and is followed by a short-lived sensation of pleasure when the visceral drive is satisfied (Duncker, 1941; Loewenstein, 1996). More specifically in the domain of food, van Strien et al. (1986) propose two broad categories of non-homeostatic visceral factors that can trigger eating for pleasure: external food sensory cues (leading to “external eating”) and internal emotions (leading to “emotional eating”).

External eating is triggered by the rewarding sensory properties of the ever more palatable foods marketed today (Stroebe, Van Koningsbruggen, Papiès, & Aarts, 2013). Food companies have developed expertise in finding the best combination of sugar, salt and fat to make food most palatable and rewarding, regardless of its satiating properties (Naleid et al., 2008). Many studies have demonstrated that the mere sight, smell or taste of a pleasant food can trigger visceral urges to eat (and the pleasure that accompanies the satisfaction of such urges) even in the absence of hunger (Fedofoff, Polivy, & Herman, 1997; Rogers & Hill, 1989). Neuro-imagery studies have even shown that the mere exposure to pleasant food stimuli can activate the pleasure and reward centers of the brain, leading to experienced or anticipated pleasure (Berridge, 2009; Plassmann, O’Doherty, & Rangel, 2010).

Like external factors, emotions can also trigger visceral eating urges, leading to the anticipation of pleasure and the reward that goes with satisfying such urges. Bruch (1964) argues that people eat in response to negative emotions because of a confusion between internal arousal states and hunger. Other theories suggest that people, especially restrained eaters, actively seek pleasurable foods as a way of regulating negative emotions (for a review, Macht, 2008). For example, people eat more popcorn and M&M’s when watching a sad movie, and more healthy raisins when watching a happy movie (Garg, Wansink, & Inman, 2007). Other studies have shown that threatening people’s identity and ego increases consumption of indulgent foods (Baumeister, Heatherton, & Tice, 1993; Lambird & Mann, 2006). For example, people eat more treats after being socially rejected (Baumeister, DeWall, Ciarocco, & Twenge, 2005) or negatively stereotyped (Inzlicht & Kang, 2010). Similarly, football fans eat more indulgent foods after the narrow and unexpected defeat of their favorite football team (Cornil & Chandon, 2013).

Whether eating pleasure stems from the satisfaction of hunger or of urges triggered by food cues or emotions, a common aspect of visceral eating pleasure is that it can be reduced to its valence, that is, to a summary evaluation of how good it feels to eat. Research focusing on visceral eating pleasure adopts, to use Dube and Le Bel (2003)’s terminology, a “unitary” perspective whereby pleasure is not qualified or differentiated by the subjective quality of the food (e.g., its taste, its preparation, its origin) or by the whole eating experience (e.g., companionship, food rituals). Although people vary in what they consider comfort food (Wansink, Cheney, & Chan, 2003), some preferring sweet and other savory foods (Drewnowski, 1995), “visceral eating pleasure” is unitary in the sense that only counts the pleasurable relief from disagreeable sensations of hunger or cravings (Duncker, 1941; Loewenstein, 1996). More generally, this unitary perspective assumes that, as long as the valence is the same, the pleasure from eating can be substituted by the pleasure derived from any other hedonic or comforting experience. For instance, interventions based on humor and laughter have been suggested to curb emotional eating (Bast & Berry, 2014). Similarly, people exposed to pleasant food stimuli can satisfy their need for a reward by eating a hedonic food, but equally satisfy this need in non-food domains, such as making unplanned purchases of hedonic goods, getting a massage or receiving money (Briers, Pandelare, Dewitte, & Warlop, 2006; Li, 2008; Wadhwa, Shiv, & Nowlis, 2008).

To summarize, visceral eating pleasure can be defined as the short-lived hedonic relief created by the satisfaction of eating impulses. Although hunger, external cues, and internal emotions, can all create visceral eating pleasure, given the relatively lower importance of hunger in today’s rich societies, visceral eating tendencies are mostly driven by external food cues (external eating) or negative internal emotions (emotional eating). Finally, visceral eating has three important characteristics: (1) it is beyond eaters’ volitional control, (2) it is the by-product of the satisfaction of an urge and it is therefore not an end in itself, and (3) it is a unitary phenomenon which can be summarized by its valence.