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Mystification and obfuscation in portion sizes in UK food products

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ABSTRACT

Concern has been expressed as to how obesity is framed as an individual responsibility easily solved with common sense. Such research has questioned the appropriateness of a size-based emphasis to public health. Moving away from the emphasis on the individual, this paper critically reviews consumer marketing techniques in the presentation of portion sizes, given what is known about human cognitive and physical limitations around food choice. Through a micro study of portion size in three products, cereals, cereal bars and yogurts, claims are made regarding marketing techniques of obfuscation in portion size presentation that at a macro level link to earlier critiques of marketing mystification. Findings suggest a number of specific obfuscators that could lead to passive overconsumption. The paper concludes that regulators should shift their emphasis away from the individual to examining marketing mystification and techniques of obfuscation. Information presentation should be more appropriate and consistent across brands within a product category.

1. Introduction

In 2013 Critical Public Health published a special edition entitled 'Obesity discourse and fat politics: research, critique and interventions'. The editorial and many of the papers in the special edition challenge the dominant discourse of an obesity epidemic and in particular moralizing judgements about fatness as individual failure. The editors note that while opportunities for intervention abound, interventions which suggest changing behaviors of others inevitably bring tensions for the researcher (Monaghan, Colls, & Evans, 2013). A common research and policy emphasis is that body size is a proxy for health and that poor diet and lack of physical activity are key explainers for obesity. The focus on individual responsibility may lead to ethical concerns of negative consequences including, stigmatization and eating disorders (Monaghan et al., 2013); responsibility can become inseparable from 'neoliberal norms of self-governance' (Guthman, 2013, 264).

Some researchers challenge how people are socially constructed as 'weight deviants' (Monaghan, Hollands, & Pritchard, 2010, 65), others suggest that size is made real by repeated claims creating an obesity epidemic which is primarily a social and cultural phenomenon (Guthman, 2013). The idea of an obesity epidemic can too easily conflate size with illness to become a health problem (Jasanoff, 2004). This is exacerbated by other social and cultural entities such as the media, where obesity is often framed as 'a problem of culture and environment, couched in the language of traditional biomedical epidemics and yet also a problem that can be solved by simply relying on common sense' (Boero, 2013, 372).

Doubtless social context does shape science and while some will argue that science is ideology free, others regard science as power-loaded, the conclusions of which should not be taken at face value (Reardon, 2005). The production of science can result in the production of social order; in for example what society classes as overweight and obese. Media constructions of health issues too, lead to societies' construction of what should be of most concern and in turn to favored policy initiatives (Boero, 2013). While some find the obesity epidemic a scientific fact, others do not agree leading to unlikely groupings of fat activists, feminists and food industry-funded organizations querying the hype around obesity (Gard, 2010). In response, Guthman (2013, 265) calls for a third way of critical research which examines 'how and for whom scientific knowledge is produced as a way to promote reflexivity about the scientific process'.

While these authors question the appropriateness of a size-based emphasis to public health, another approach can be to move away from the individual to a critical review of consumer marketing techniques (Alvesson, 1994); in this case the presentation of portion sizes. In so doing a more reflective view with regard to the consequences of marketing may be garnered while engaging with scientific phenomena of human responses. This requires recognition of the social consequences of such activity and researchers' limitations in terms of constructing and adding to the existing obesity debate. Nevertheless one technique that marketing does practice is obfuscation, in such areas as pricing for example (Mohammed, 2011), which adds to earlier metaphors for marketing theory suggested by Alvesson (1994) of marketing as mystification and cultural doping whereby marketing selectively constructs and confuses needs and understandings.

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Boero (2007, 51) argues that obesity has become so framed as a 'problem of individual gluttony and sloth' that regardless of content, obesity science inevitably confirms this because ' [a] black box of fatness underlies all of these seemingly divergent perspectives'. In this paper the concern is not to identify correlation but to recognize causal pathways to understanding how marketing contributes to what may or may not be considered a problem. In so doing the paper necessarily engages with science including science that considers human limitations. The aim, however, is to explore how this might be used to better understand mystification and obfuscation approaches used in the marketing of food portions.

1.1. A critical view of marketing

Peattie (2007, 201) describes consumer sovereignty and choice as 'a sacred article of faith within marketing' despite the costs that this may lead to for others, and consumers themselves, who may not in economic terms have perfect information in the choices they make. While critical theory assumes the possibility of autonomy for individuals to challenge the domination of corporations developing preferences (Alvesson, 1994), the scientific route examines the limitations that may exist in humans' abilities to resist this domination, including that increased consumption may not lead to increased satisfaction (Pickett & Wilkinson, 2009). Therefore the paper engages with scientific discussions of human cognitive limitation and preferences to put another light onto the apparently rational information processing individual that consumer sovereignty represents and which marketing targets. Critical marketers suggest the need to study phenomenon at multiple levels and that the zooming in and out process reveals aspects that may be obscured if only studied from one level (Dholakia, 2012). The present study moves between a micro study of portion size and a macro level critique of marketing mystification.

The paper considers portion size as a marketing phenomenon with social and cultural consequences. In so doing the paper engages with the concern regarding the increase in people's size while attempting to refrain from bifurcating issues of individual responsibility. Rather the paper considers, through a study of UK retailers, how portion sizes could reveal problematic representations of needs through forms of mystification (Alvesson, 1994, 304) that reinforce difficulties that people have 'in clarifying and evaluating their needs and wants'. The marketing as mystification metaphor creates smoke-screens which have the ability to lead to greater consumption. Through considering how portion sizes of three products, cereals, yogurts and cereal bars are communicated to consumers, the paper aims to show how products can be constructed as symbols which obfuscate and confuse. The paper begins by reviewing research in two areas important to portion size. Firstly, the paper considers human capabilities in relation to what and how much people eat. This includes physical and cognitive limitations and human bias. Secondly, the paper examines the context in which people engage with food in the twenty first century, where and how food is sold, marketed and consumed. This section also considers business and technological developments which have impacted on the context of food consumption in relation to portion size. The paper then outlines the methods and results of an analysis of three processed foods in terms of their presentation of portion size. The recommendations to remove marketing mystification and specifically obfuscation are limited to improving marketing practice in terms of contribution to social good, nevertheless given that the causal pathways of obfuscation may lead to particular consequences, messages for policy are also possible. The empirical research does not engage directly with consumer behavior but embeds the findings in the context of a large range of existing research on consumers' responses to the food environment.

1.2. Physical and cognitive limitations in managing portion size consumption

Despite continuing discussion of the role and place of self-control in the rise of obesity (Askegaard et al., 2014), research shows that the continuing attempts to educate people with regard to the relation between portion size and calorie intake are likely to fail (Nestle & Nesheim, 2012). Self-control, following education may be impeded by the physical inability to implement such discipline. This is because human beings are limited in their abilities to resist food. Cohen (2008) gives a comprehensive analysis of the range of such human limitations and how business has exploited them. She examines ten cognitive and physical limitations of humans which lead to increased calorie consumption in the presence of calorie dense food. These ten factors include physical responses such as the secretion of dopamine (which motivates desire) when food is perceived; innate preferences for sweet tastes, for example a new-born will drink more sweetened solutions than plain water (Desor, Maller, & Andrews, 1975; Keskitalo et al., 2007) and the activation of the brain's reward system and reduction of satiety when consuming fats (Erlanson-Albertsson, 2005). Other physical factors include hardwired survival responses to consume more in times of abundance, and mirroring, whereby people mimic the eating habits of those in their surroundings (Dijksterhuis, Smith, van Baaren, & Wigboldus, 2005). Cognitive limitations include the inability to judge calorie content and cognitive overload when too much information makes understanding difficult, which may lead to suboptimal choices.

Researchers have examined the nature of information processing during supermarket shopping and found that up to two thirds of purchase decisions occur in store in a time of around 1 h; effectively people are regularly evaluating thousands of products on a range of criteria in a very short time (Caswell & Padberg, 1992; Schwarz, 2004). People do not always prefer more choice (Iyengar & Lepper, 1999, 2000) and decision-making under time pressure deteriorates (Park, Iyer, & Smith, 1989), implying that those in store decisions may often be suboptimal, in some cases leading to what has been referred to as passive overconsumption (Blundell & King, 1996).

1.3. Portion size and calorie consumption

Of the many factors that contribute to high calorie consumption, portion size is critical for two reasons. Firstly, the absolute size of the food portion consumed will contribute to weight gain or loss and portion sizes have increased over time (Chandon, 2012; Young & Nestle, 2003). For example the number of larger sized portions in supermarkets has increased 10 fold between 1970 and 2000 (Wansink & van Ittersum, 2007). Secondly, perceptions of appropriate portion size appear to work in tandem with other factors such as nutrition claims with the usual effect of increasing consumption (Wansink & Chandon, 2006). What Nestle and Nesheim (2012) refer to as 'calorie distractors' – claims of low fat or sugar, added vitamins, organic or antioxidant ingredients - convey to people that what you eat is more important to body weight than how much you are eating, which is not the case.

How food is presented can also impact how much is eaten. A larger pack size will almost always have a price cheaper than smaller alternatives, appearing as better value for the consumer. But the pursuance of value can also be a problem as people's perceptions of an appropriate serving size can vary by around 20% (Wansink, 2004). Larger packs, however, produce greater margins for companies as the marginal cost of the extra food is little in comparison to the perception of increased value for the consumer (Chandon, 2012).

Some products are effectively in portions, such as a bar of chocolate or a standard 330 ml canned soft drink. Estimating what is the appropriate portion size when serving from a box of cereal or a family size bag of M&M's is more difficult. In such situations unless you weigh a portion and calibrate this using the information on the package, you can only infer the appropriate serving size from other cues. Clues can include

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