Memory Biases for Television Advertisements and Female Dietary Restraint

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Introduction
Female attitudes for eating and body size/shape have been associated with information processing biases for food and body size/shape-related information (Green & Rogers, 1993). Computer-based response tasks, such as Stroop color-naming, are the primary measures for detecting these associations. Still, responses to common environmental cues (i.e. television advertisements) may also expose these biases and provide additional insights which are applicable to everyday activities. The aim of this study was to test the relation between dietary restraint, a cognitive construct that affects eating behavior and body weight, and the ability to recall a set of television advertisements (ads) which included ads for foods.

Method
Female participants (n=24) were asked to complete a questionnaire assessing cognitive constructs for dietary restraint and disinhibition (Stunkard & Messick, 1988). They were also asked to watch a television program that included ads for foods, while consuming an ad libitum meal in the laboratory. Later, participants were given a list of ads and were asked to recall those that were or were not viewed during the television program. These responses were scored and participants were given points for correct ad recognitions.

Results
Correlation analyses indicated that dietary restraint negatively correlated with ad recognition (r= -.43, p=.04). When weight was controlled with partial correlation, this relationship remained significant (r= -.42, p=.05). Correlation analyses for dietary disinhibition were not significant (r=.02, p=.94).

Conclusions
This study demonstrates that females who are unrestrained, or who score low on dietary restraint, recall more advertisements than restrained females. Hence, dietary restraint is associated with a possible memory bias that could result in unrestrained females recalling more information about food. These females may be more susceptible to the influence of television ads, especially those which are food-related. Therefore, this memory bias could produce unhealthy dietary behaviors such as frequent fast-food consumption or hyperphagia, resulting in negative health consequences. Recent studies suggest that cognitive constructs for dietary restraint may function independently of those for dietary disinhibition (Neale, Mazzeo, & Bulik, 2003). This may account for the lack of significant findings between dietary disinhibition and ad recognition.

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References