Attentional bias modification for food cues in obese individuals

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Accumulating research shows that obese individuals selectively attend to food and eating cues. Such biased attentional processing is thought to play a role in the development and maintenance of (over)eating. This study investigated whether attentional biases for food cues in obese individuals can be modified. Using a dot probe paradigm, 60 obese adults were trained to direct their attention either towards (‘attend’), or away from (‘avoid’), food pictures. Attentional bias was assessed before and after training. Following post-training assessment, participants were administered a word stem completion task. In this task, participants were given 3-letter word stems (e.g., ROA_), which could be completed as a food-related word (e.g., roast), or a word that is not related to food (e.g., road). Attentional bias for food cues increased in the ‘attend’ group, and decreased in the ‘avoid’ group. Additionally, the ‘avoid’ group produced relatively fewer food-related words on the word stem task than the ‘attend’ group. These results support the key prediction of incentive salience theory (Robinson & Berridge, 1993) that rewarding stimuli automatically capture attention. They further suggest that targeting the attentional processes that underlie the heightened responsiveness to environmental food and eating cues in the obese could help combat pathological (over)eating.