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FUNCTIONAL STUDIES IN BULIMIA NERVOSA USING FOOD STIMULI: A REVIEW

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Introduction: Compared to anorexia nervosa, bulimia nervosa has received less attention on neuroimaging research. However, in the past decade, more functional resonance imaging studies were done to study bulimia nervosa, by using different types of paradigms, namely symptom-related paradigms.

Objectives: To review functional magnetic resonance imaging (fMRI) studies in bulimia nervosa using food stimuli.

Aim: To discuss recent contributions of functional neuroimaging to the understanding of bulimia nervosa.

Methods: MEDLINE and PubMed databases were searched for peer-reviewed articles, published between 2000 and 2012, by using combinations of the Medline Subject Heading terms functional neuroimaging and bulimia nervosa. A selection of relevant papers to the aim of this review was carried out. The selected studies were reviewed with respect to type of paradigm, participant characteristics, main results, strengths and limitations.

Results: Most studies reported altered functional activation in the frontal, cingulate, temporal, and parietal cortical regions secondary to food-related fMRI paradigms in bulimia nervosa.

Conclusions: The reviewed studies suggest that bulimia nervosa is associated with functional imaging brain abnormalities.