Exploring the associations between food addiction and dietary patterns

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Running title: FOOD ADDICTION AND DIETARY PATTERNS

Word count: 4,642

Abstract

Food addiction (FA) involves compulsive overeating of palatable, highly processed, energy-dense foods and characterizes the underlying mechanisms of compulsive eating similar to those of substance-use disorders or other behavioral addictions. Yet, it is still unclear how FA symptoms relate to changes in eating behavior over time. This study examined the extent to which changes in dietary patterns (i.e., highly processed food (HPF) intake, sweet taste responsivity, meal preparation and sources) related to changes in FA symptoms among a sample of 153 young adults (age 18-25) with varying risk levels for FA and binge-spectrum eating disorders. Participants completed online surveys at baseline, 3-months, and 6-months. Linear mixed models were used to assess concurrent and prospective associations between FA and dietary patterns over time. Concurrent models showed that between-person FA symptoms were significantly related to higher sweet taste responsivity (B=1.46, p=.002), HPF intake(B=.19, p=.009), frequency of eating fast food (B=.29, p<.001), eating at restaurants (B=.27, p<.001), convenience stores (B=.12, p<.001), heat and serve meals (B=.09, p=.003), and food delivery services (B=.19, p<.001); between-person FA was negatively associated with frequency of cooking from scratch (B=-.12, p=.012). Within-person effects indicated higher FA symptoms at a given assessment were concurrently associated with higher sweet taste responsivity(B=1.25, p<.001) and HPF intake (B=.18, p=.011). There were no prospective effects. Findings suggest that individuals who experience more FA symptoms are more likely to have a higher intake of HPF, a greater preference for sweet taste, and an increased reliance on fast food, convenience stores, and food delivery services.

Keywords: binge eating, food addiction, eating disorder, processed food, dietary patterns