Obesity

Fast Food Patronage and Obesity Prevalence During the COVID-19 Pandemic: An Alternative Explanation

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In a study recently published in *Obesity*, Ashby (1) examined how unhealthy eating, defined as regular dining to eating establishments serving unhealthy foods (i.e., fast food), was associated with adult obesity prevalence, the food environment, and poverty across counties in the United States during the coronavirus disease (COVID-19) pandemic. Ashby found that while patronage to fast food eating establishments declined, counties with greater adult obesity prevalence saw less steep declines. Ashby framed the study within the context of disordered or emotional eating and its link with obesity, hypothesizing that the pandemic increased feelings of stress and anxiety that led to the emotional eating of unhealthy foods. While emotional eating is a possible explanation for Ashby's findings, we argue for an alternative explanation, one that highlights health disparities laid bare by the pandemic.

Theories of obesity typically focus on one of two broad causes of unhealthy body weight. One theory highlights personal responsibility, in which individuals with obesity engage in behaviors (e.g., emotional eating) that result in weight gain. The other describes systems, environments, and policies that can either limit or promote one's ability to engage in healthy behaviors. For example, lower-income populations are more likely to live in less healthy food environments (e.g., greater density of fast food outlets) (2). Our current food system in which high-fat, high-sugar, processed foods are cheaper and more convenient also creates barriers for healthy eating, and again, lower-income populations are impacted the most (3). The current study appears to equate a "high obesity county" with one having higher numbers of people engaging in emotional eating during the pandemic. However, research shows that high obesity counties are more likely to be in the Southeastern United States (Figure 1), have

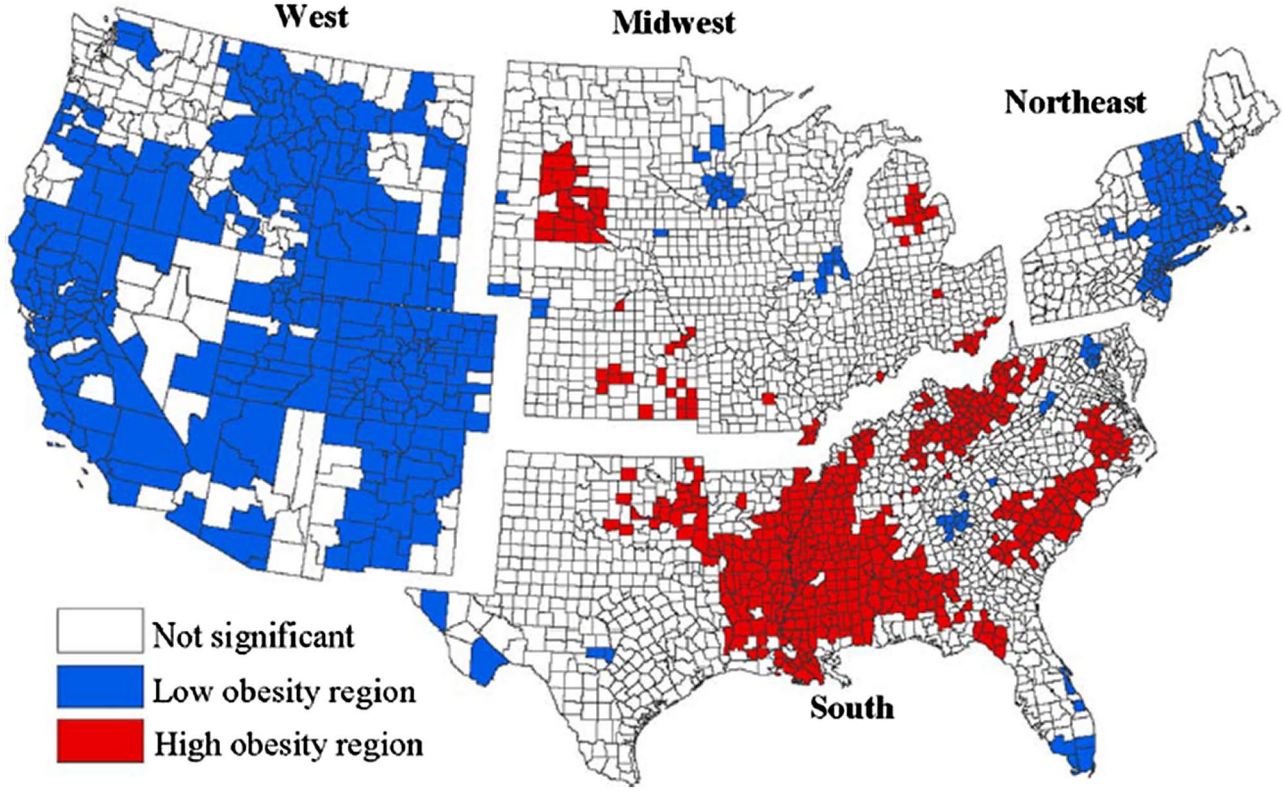

Figure 1 Local indicators of spatial association (LISA) map of significant regional concentration of county-level adult obesity prevalence, 2009. Blue- and red-shaded counties are members of statistically significant ($P < 0.05$) low- and high-obesity regions, respectively. Republished from (4).

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higher proportions of minority populations, have higher proportions of lower-income populations, and have unhealthier food environments (4). Furthermore, while the pandemic certainly heightened anxiety, it also significantly impacted the food system by disrupting local food environments and exacerbating issues of food access and affordability (5). In the United States, stay-at-home mandates caused most restaurants to shutter temporarily. Fast food restaurants were able to restart drive-through and mobile pickup operations, while full-service restaurants shifted to take-out and delivery options. Grocery stores experienced increased demand and subsequent shortages of many staple food items, including milk, eggs, meat, and canned goods. As schools closed, so did reduced or free breakfast and lunch programs that feed many schoolchildren. Given all this, there was unprecedented demand on food banks and food pantries. Consequently, the availability, convenience, and affordability of fast food may have driven patronage to these establishments in order to meet food needs during the pandemic, especially in places with greater at-risk populations (i.e., more obesity, more food insecurity).

In conclusion, Ashby provides an interesting analysis of novel fast-food patronage data that showed changing patterns of consumption over the first few months of 2020, coinciding with the beginning of the COVID-19 pandemic in the United States. While it is possible that fast-food patronage during this time was related to emotional eating, it is perhaps at least as likely that these patterns reflect changes in food availability and affordability, and that eating patterns attributed to stressed-out populations with obesity also reflect broader health disparities related to adult obesity prevalence in the United States. We feel these explanations provide additional context for Ashby's study by broadening his more narrow theoretical argument.

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