The Association of Binge and Heavy Drinking on Sugar and Fat Intake among People Living with HIV

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A sugar- and fat-rich obesogenic diet is a main facilitator of morbidity and mortality in the US, especially in obesity-associated metabolic diseases such as metabolic syndrome, diabetes, and fatty liver. Alcohol use, another catalyst of metabolic dysfunction, is thought to be linked with diet, and evidence suggests that simultaneous exposure to alcohol and poor diet further exacerbates these negative health outcomes. This is important in people living with HIV (PLWH), a population more susceptible to metabolic disease with evidence of lower diet quality and higher drinking rates than the general population. The objective of this study was to assess the association between binge and heavy drinking and sugar and fat consumption among a cohort of PLWH. We used data from the New Orleans Alcohol use in HIV (NOAH) Study, a longitudinal study of in-care PLWH. Binge and heavy drinking were identified by Alcohol Timeline-Followback (TLFB) and defined as ³4/³5 drinks/2 hours (females/males) and >3/>4 drinks/day (females/males). Calorie intake, grams of sugar, total fat, and saturated fat were assessed through 24-hour dietary recall. Analyses included 214 participants (64.2% male, 83.4% Black) with a mean age of 51.4±10. Binge and heavy drinking prevalence was 26.8% and 28.6%, respectively. Binge drinkers consumed 618 more calories than non-binge drinkers (p=0.002) and heavy drinkers consumed 607 more calories than non-heavy drinkers (p=0.003). Sugar was significantly (p<0.05) correlated with total fat (r=0.63) and saturated fat (r=0.68), and binge and heavy drinking were significantly associated with higher gram intake of total (bbinge: 23.1; bheavy: 21.7) and saturated fat (bbinge: 7.9; bheavy: 7.8). In this population of PLWH, sugar and fat intake were closely associated, and binge and heavy drinking predicted higher calorie and fat intake. This analysis suggests that nutritional interventions aimed at hazardous drinkers may be useful in reducing the burden of metabolic disease among PLWH.