

Introduction

- The Dietary Guidelines for Americans 2020-2025 states a healthy diet includes vegetables, fruits, grains, dairy, protein, and oils and recommends limiting foods and beverages high in added sugars, saturated fat, and sodium, in addition to alcoholic beverages.
- Unhealthy diet patterns are associated with obesity, cardiovascular disease, diabetes, cancer, and reduced bone health and muscle strength.
- Excess alcohol consumption increases the risk of developing insulin resistance, liver & cardiovascular disease.

Aim

This study sought to investigate the role of alcohol-type preference on dietary intake and diet quality in people living with Human Immunodeficiency Virus (HIV) (PLWH) from the Greater New Orleans Area enrolled in the longitudinal, prospective New Orleans Alcohol Use in HIV (NOAH) Study.

Hypothesis

Beer/malt liquor & liquor drinkers may have poorer diet quality and consume more calories than nondrinkers, and wine drinkers may have a higher diet quality and consume less calories than nondrinkers.

Methods

- Study Population:** People living with Human Immunodeficiency Virus (HIV) (PLWH) from the Greater New Orleans Area enrolled in the longitudinal, prospective New Orleans Alcohol Use in HIV (NOAH) Study
- Alcohol Preference:** 30-day Timeline Followback (TLFB) Calendar of Alcohol Consumed
 - Assessment of alcohol use
 - Retrospective estimations of daily alcohol consumption
 - Recent drinking behavior
 - Alcohol type is categorized (liquor, beer, malt liquor, wine)
- Dietary Intake:** Automated Self-Administered 24-Hour (ASA24) Dietary Assessment
 - Macronutrients: Carbohydrate, Fat, Protein, & Alcohol
 - Micronutrients: Vitamins & Minerals
- Nutritional Quality:** Healthy Eating Index (HEI) 2015 Scores
 - Assesses how well a set of foods aligns with key recommendations of the Dietary Guidelines for Americans
- Body Mass Index (BMI) & Waist-Hip Ratio (WHR)**

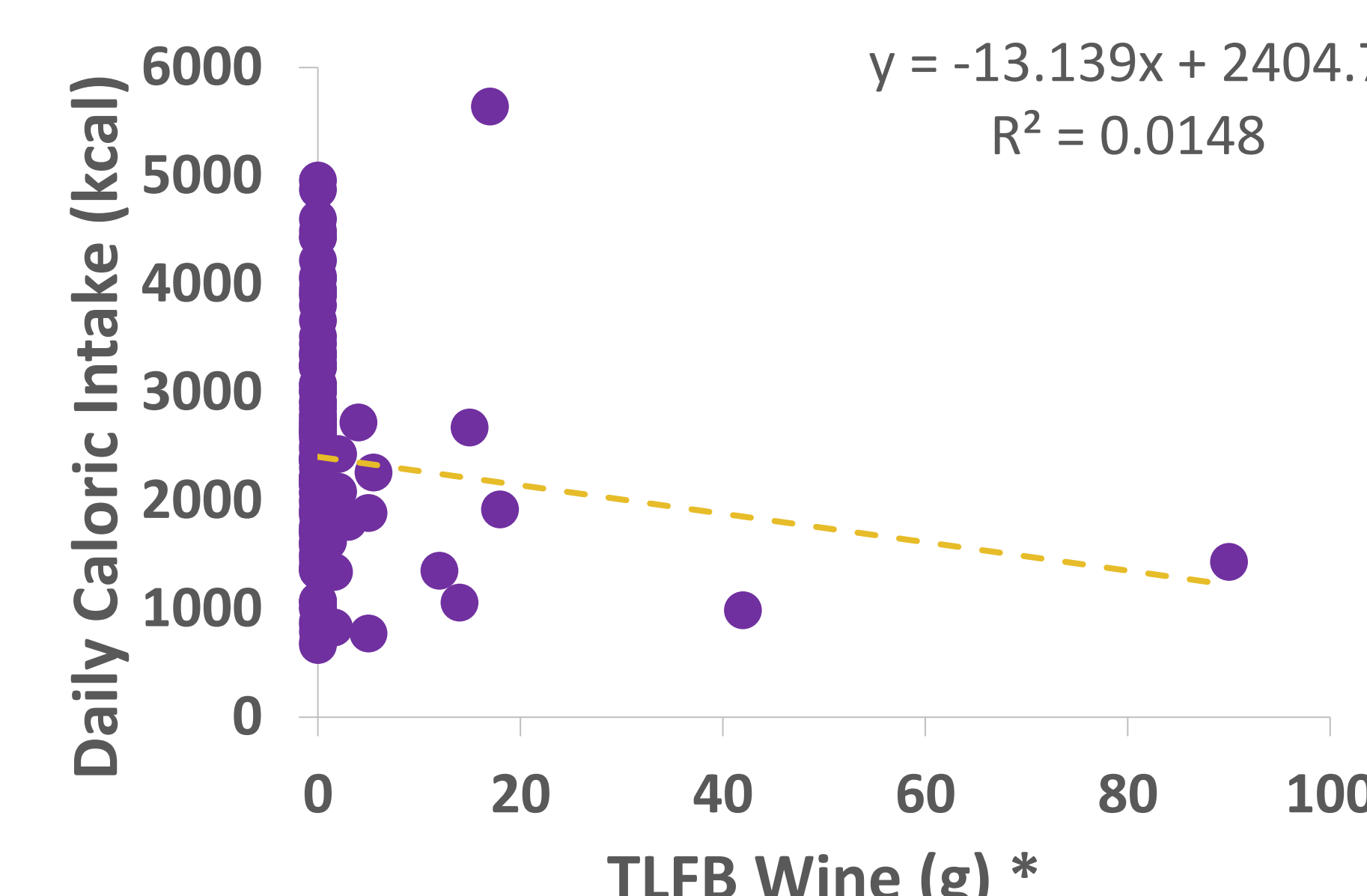
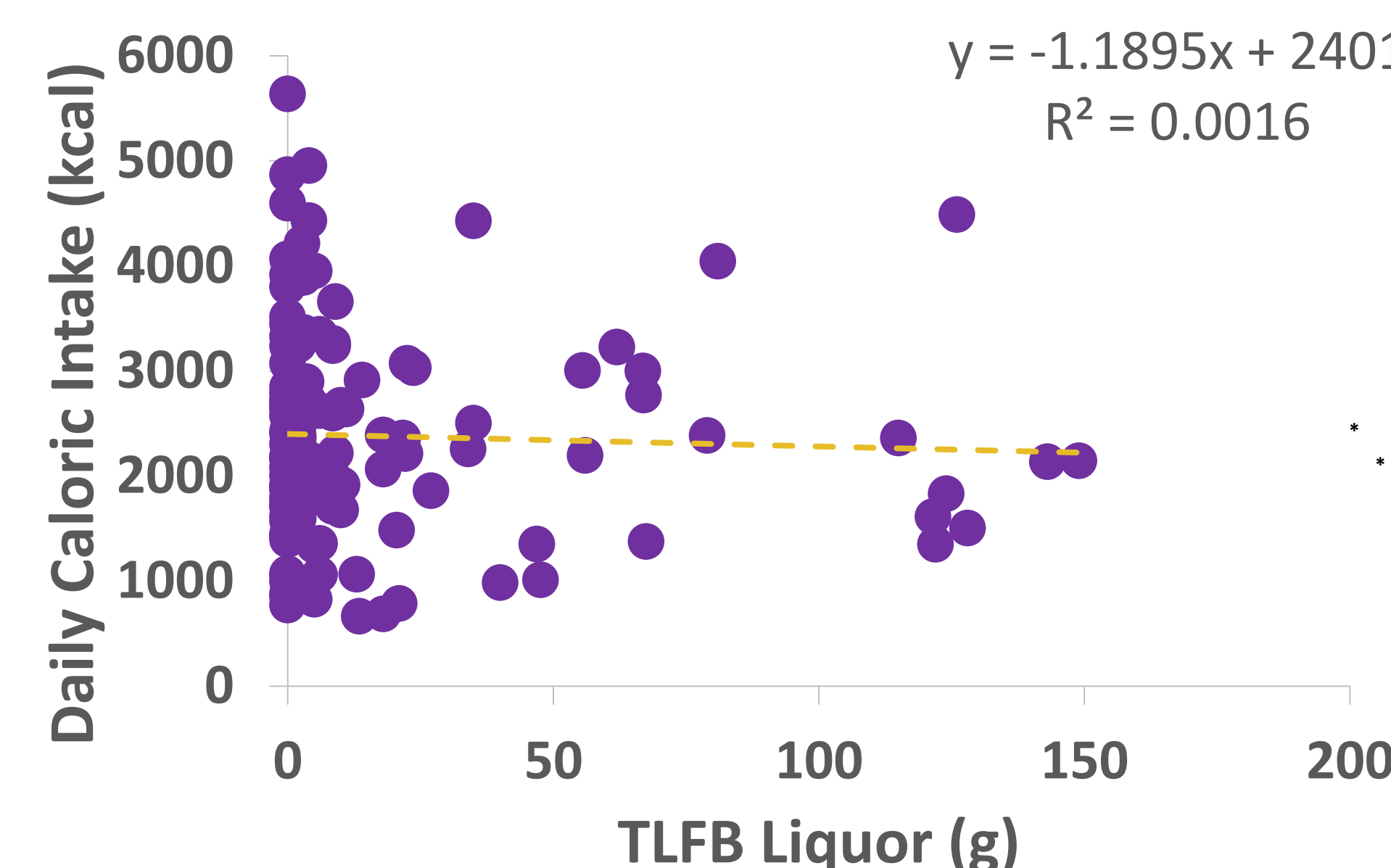
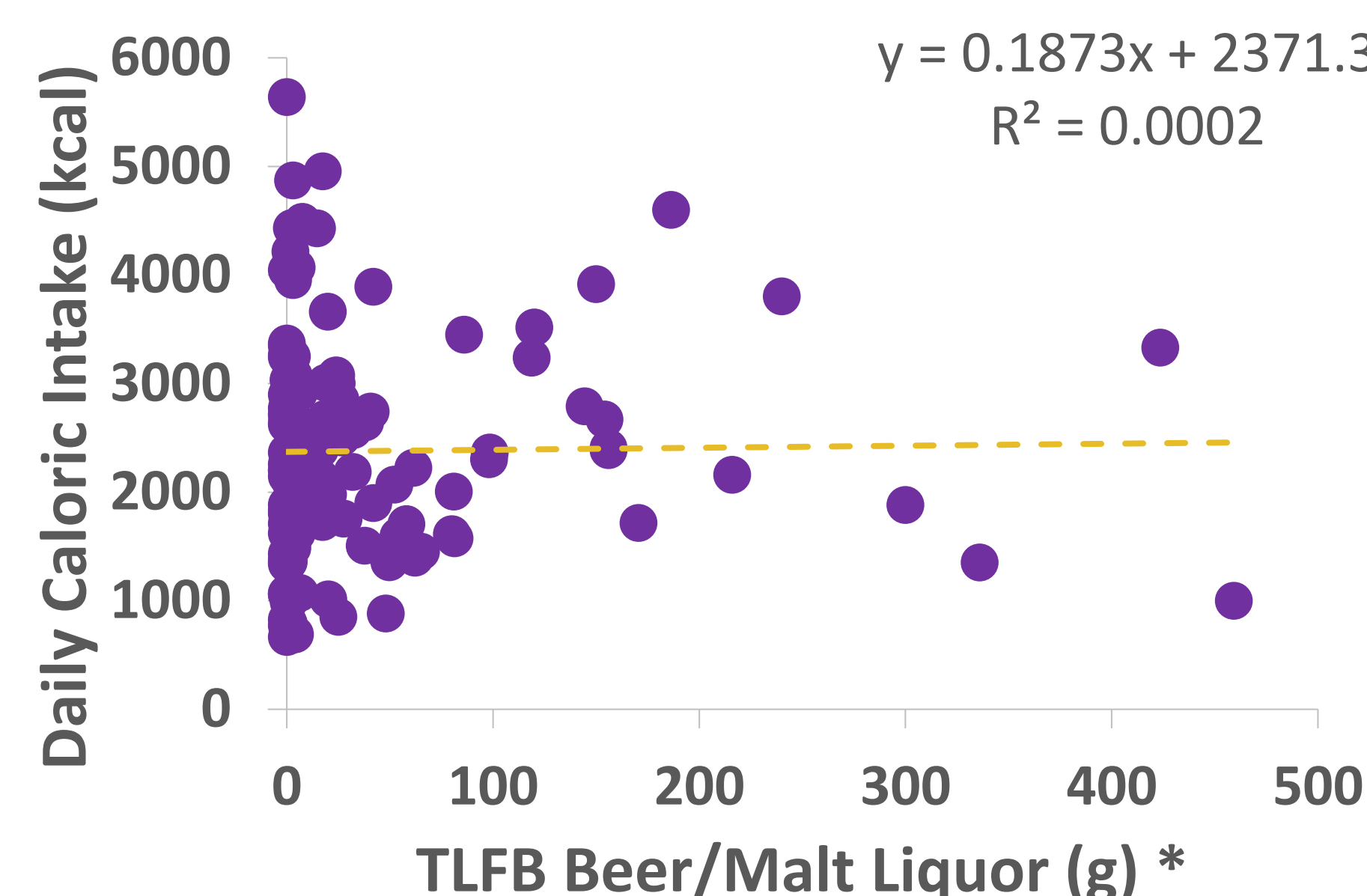
Age, Anthropometrics, and Assessment Scores by Alcohol Preference.

	All (n=203)	Nondrinkers (n=80)	Beer & Malt Liquor Drinkers (n=60)	Liquor Drinkers (n=52)	Wine Drinkers (n=9)
M/F % (n)	66% male	56% male	78% male	69% male	56% male
Age (at enrollment)	49.39 ± 9.95	49.43 ± 9.97	51.02 ± 8.77	47.06 ± 10.92	51.67 ± 10.22
Waist Circumference *	94.90 ± 19.02	99.49 ± 22.27	89.44 ± 12.56*	93.19 ± 18.72	100.42 ± 16.21
BMI *	27.96 ± 7.40	29.88 ± 8.86	25.20 ± 4.21*	27.55 ± 6.58	31.63 ± 8.66
<25.0 %(n)	37 (74)	33 (26)	43 (26)	38 (20)	33 (3)
Overweight %(n)	33 (66)	26 (21)	43 (26)	31 (16)	22 (2)
Obese %(n)	30 (61)	41 (33)	13 (8)	31 (16)	44 (4)
AUDIT	6.32 ± 6.86	2.09 ± 3.43	10.80 ± 7.65	7.96 ± 6.52	4.56 ± 2.35
TLFB-30d *	530.43 ± 1034.21	4.19 ± 8.91	1204.67 ± 1524.68*	585.14 ± 702.26*	397.06 ± 482.01
TLFB-Avg/d *	1.26 ± 2.46	0.01 ± 0.02	2.87 ± 3.63*	1.39 ± 1.67*	0.95 ± 1.15
Total HEI	44.96 ± 11.27	44.36 ± 12.20	44.58 ± 12.00	43.26 ± 9.42	53.66 ± 11.98

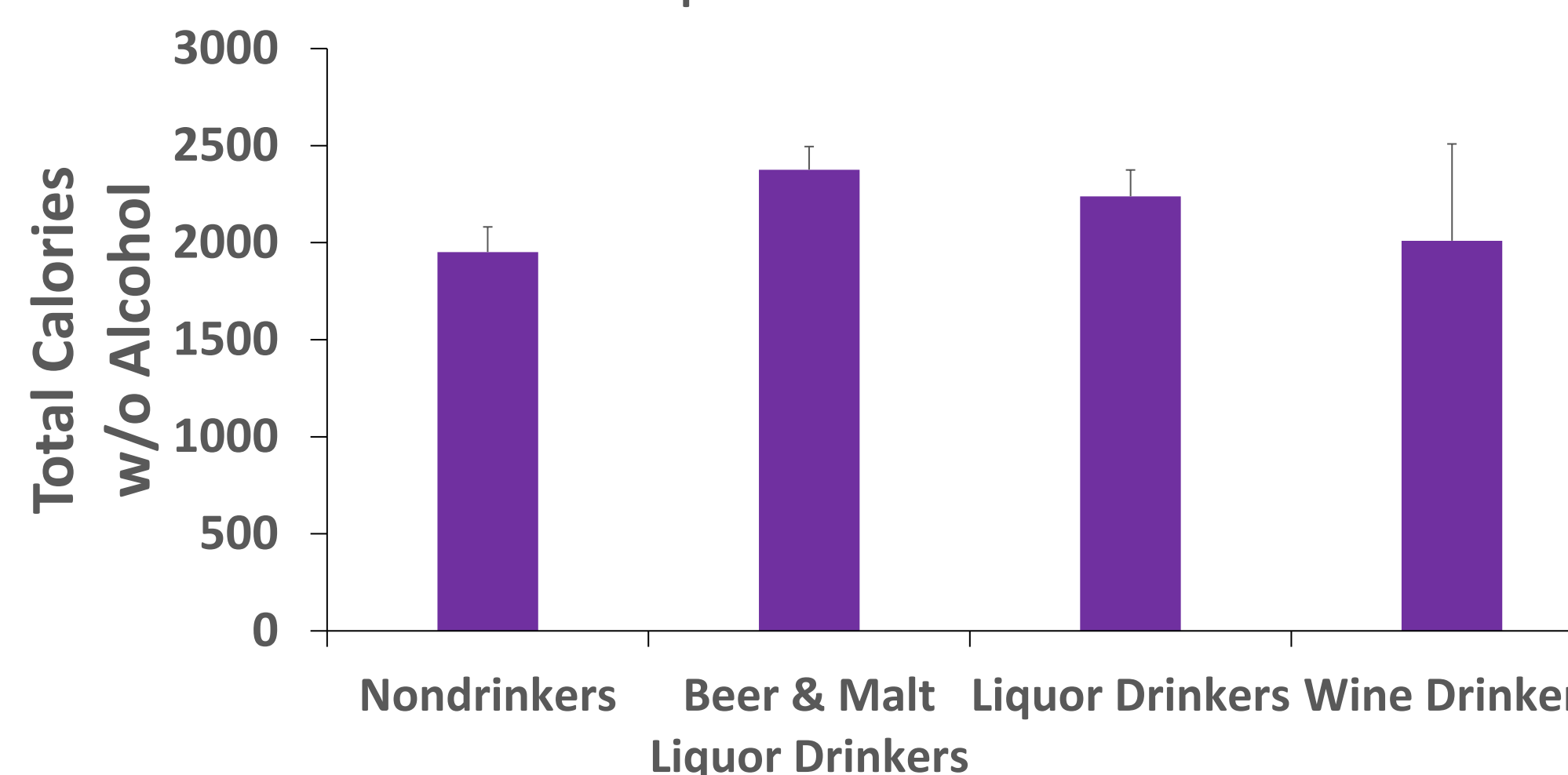
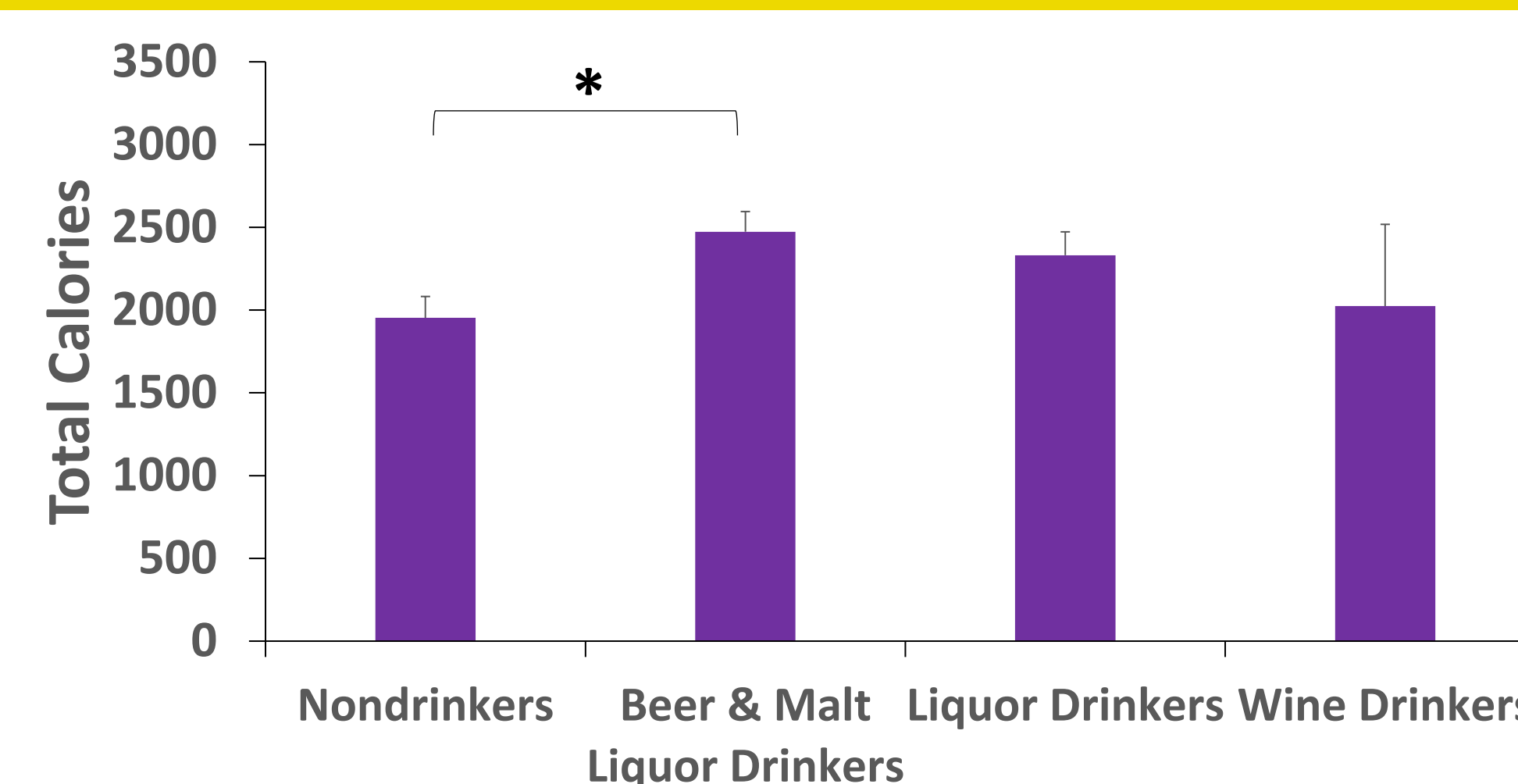
Support: T35AA021097, UH3AA026198, 5P60AA009803

Results

Daily Caloric Intake & Alcohol-Type Consumption

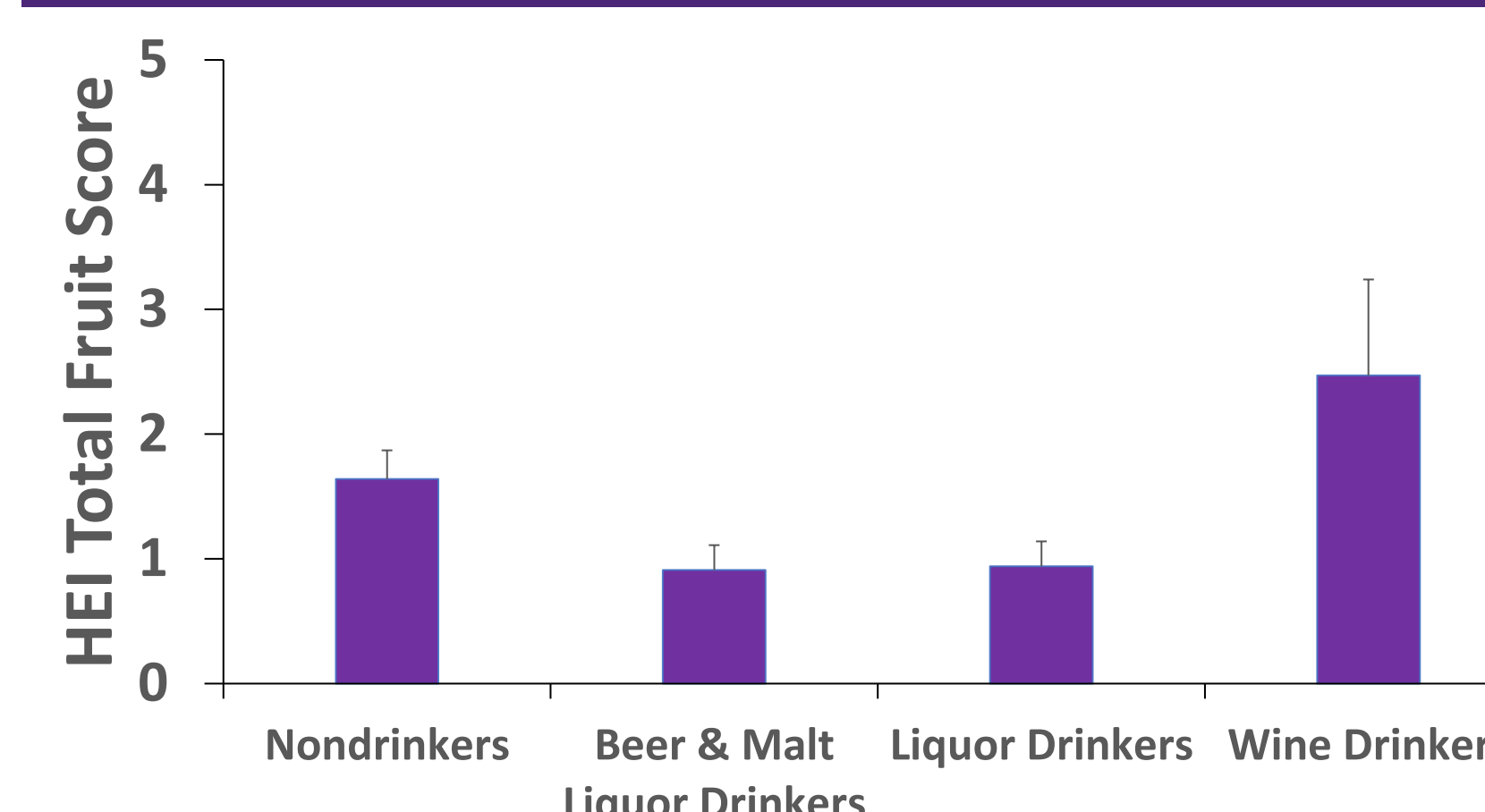


Caloric Intake by Alcohol Preference

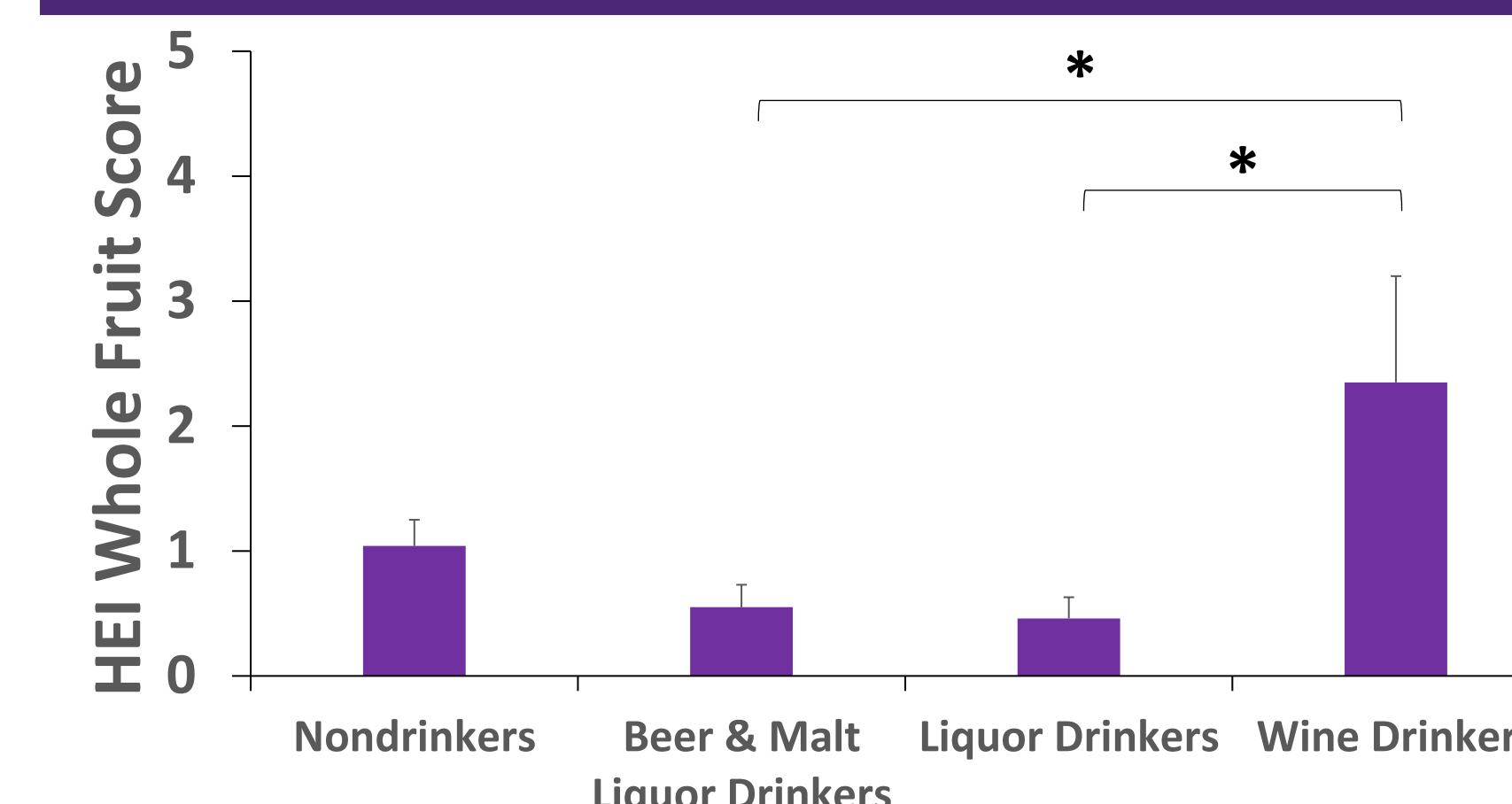


*Beer/malt liquor drinkers consumed more alcohol than nondrinkers in the 24-Hr ASA24 period.

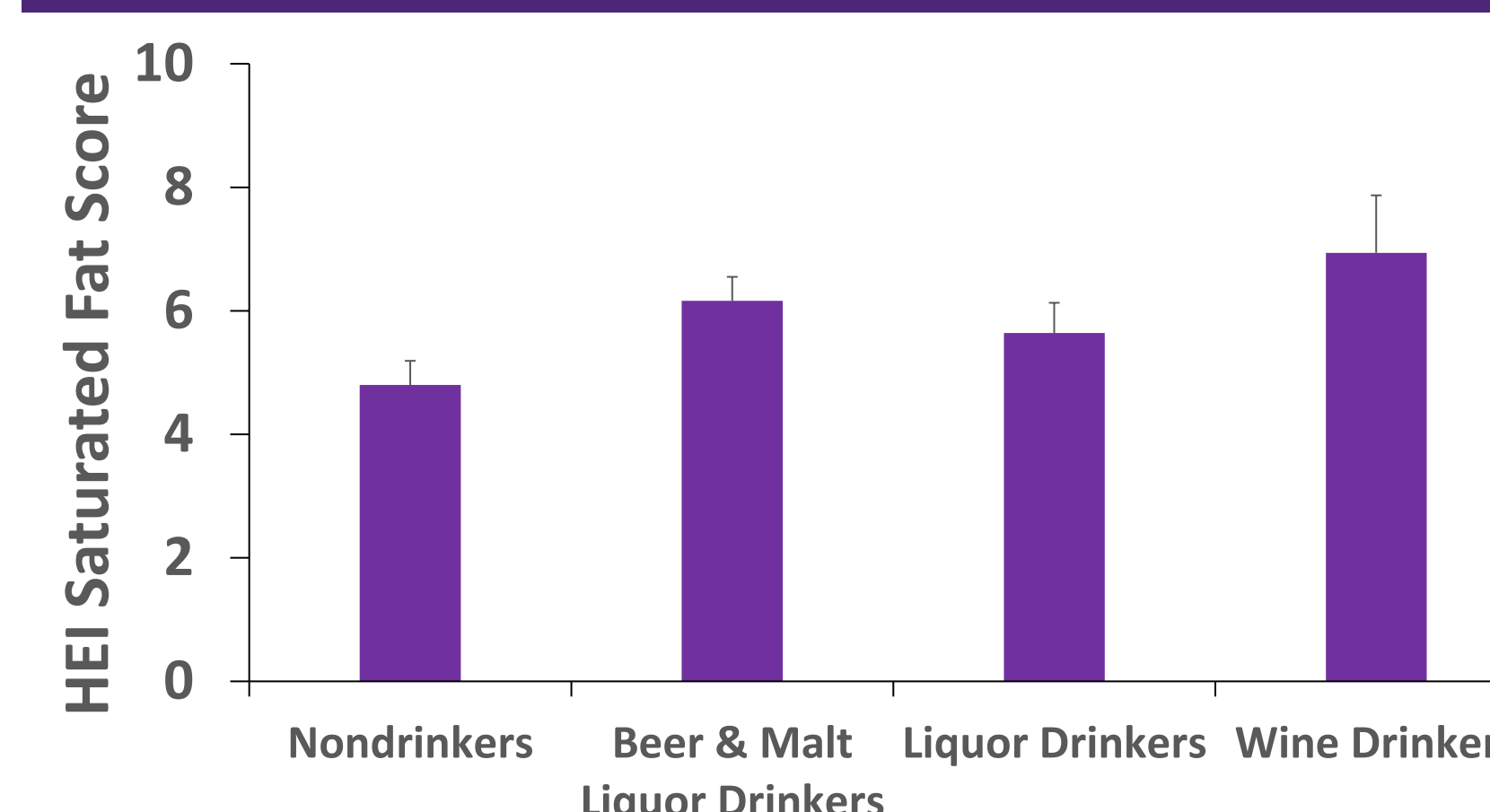
HEI Total Fruit *



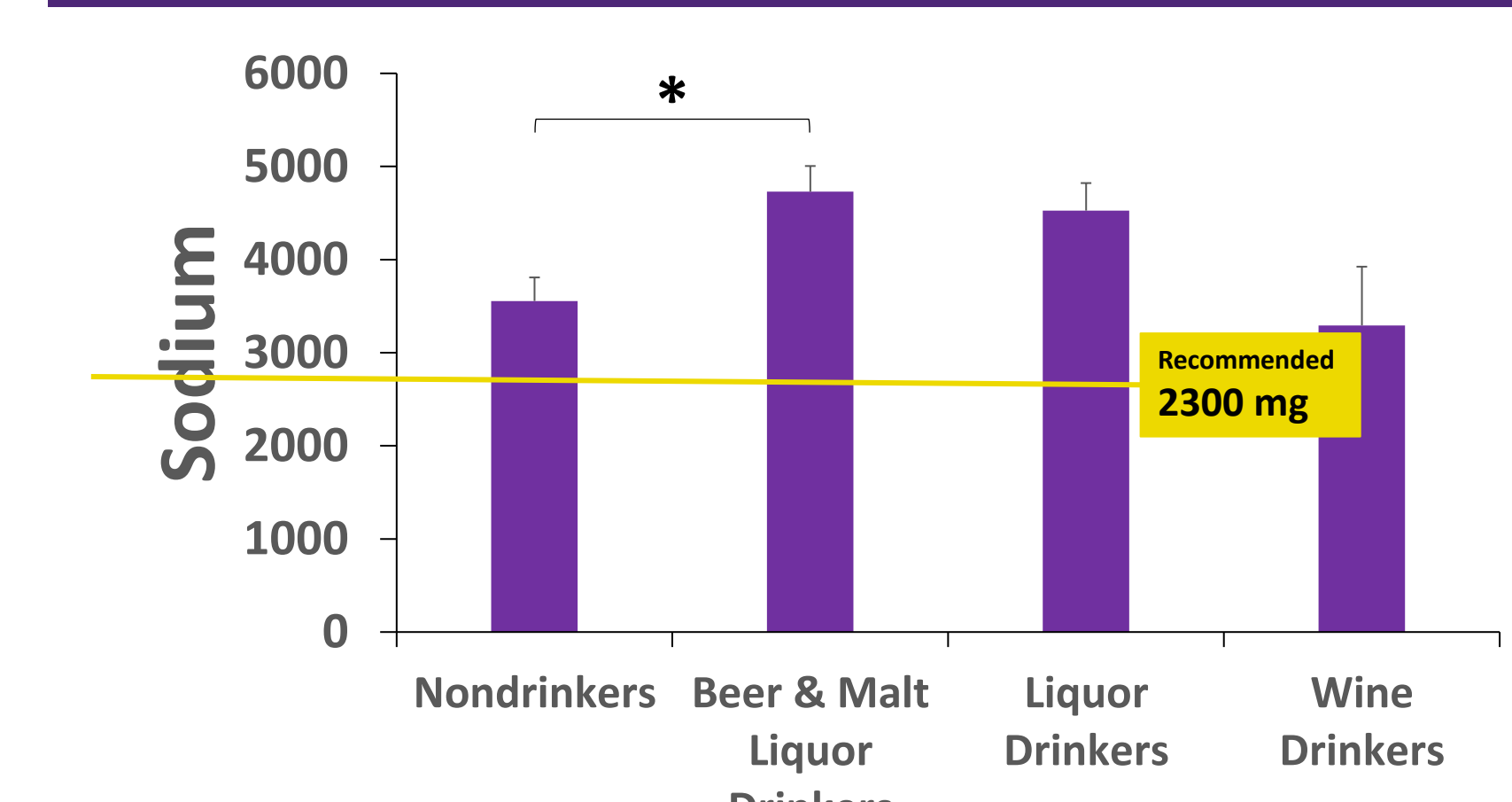
HEI Whole Fruit



HEI Saturated Fat *



Sodium



Conclusions

DIETARY INTAKE

- Regarding dietary intake, correlational analyses revealed a positive relationship between beer/malt liquor consumption and a negative relationship between wine consumption and daily caloric intake.
- Participants with beer/malt liquor preference consume more total calories than nondrinkers, despite having a lower BMI.
 - These results suggest that beer/malt liquor consumption may be associated with a larger dietary intake, and wine consumption may be associated with a smaller dietary intake.
- Beer/malt liquor drinkers were found to consume more sodium than nondrinkers.

NUTRITIONAL QUALITY

- Alcohol preferences significantly affect HEI scores for total fruit, whole fruit, and saturated fat.
- Wine drinkers had a higher HEI whole fruit score, suggesting that they consume more whole fruits.

Caveats to note are demographic factors, such as ethnicity, income, and level of education, which may have confounding effects on alcohol preferences and dietary intake & nutritional quality.

Further analyses may be required to fully understand the complexities of alcohol's effects on dietary patterns that may lead to adverse health outcomes.

