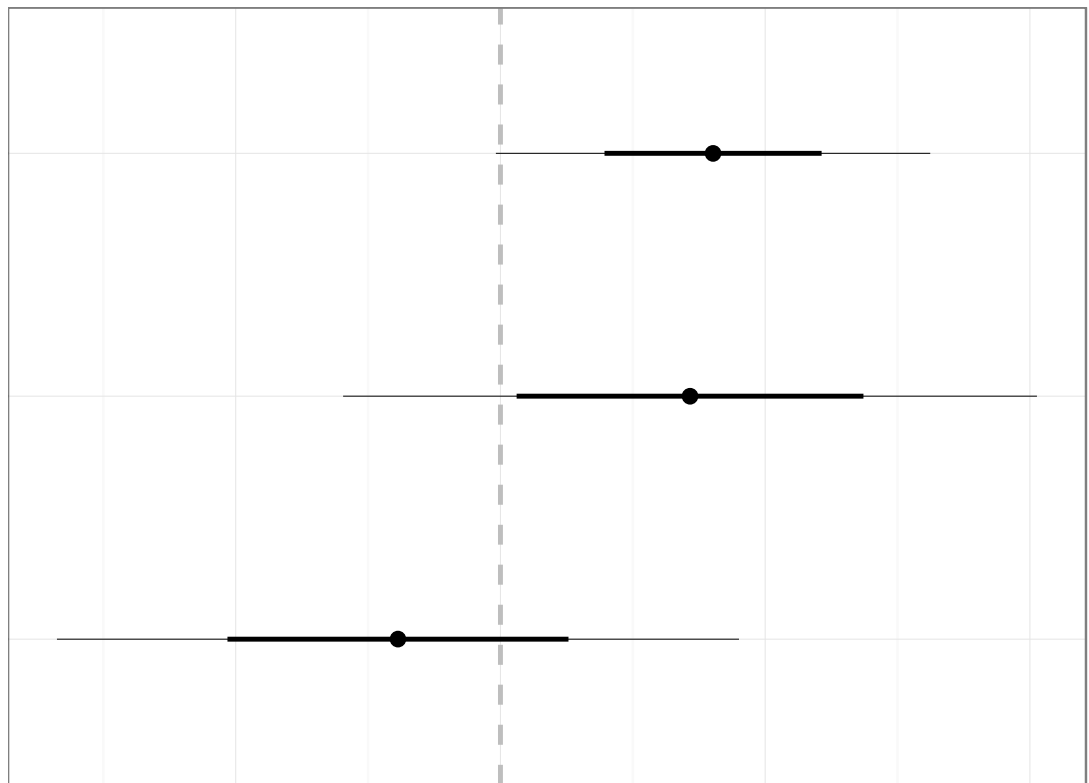


Supplemental Material

Supplemental Figure Caption A.

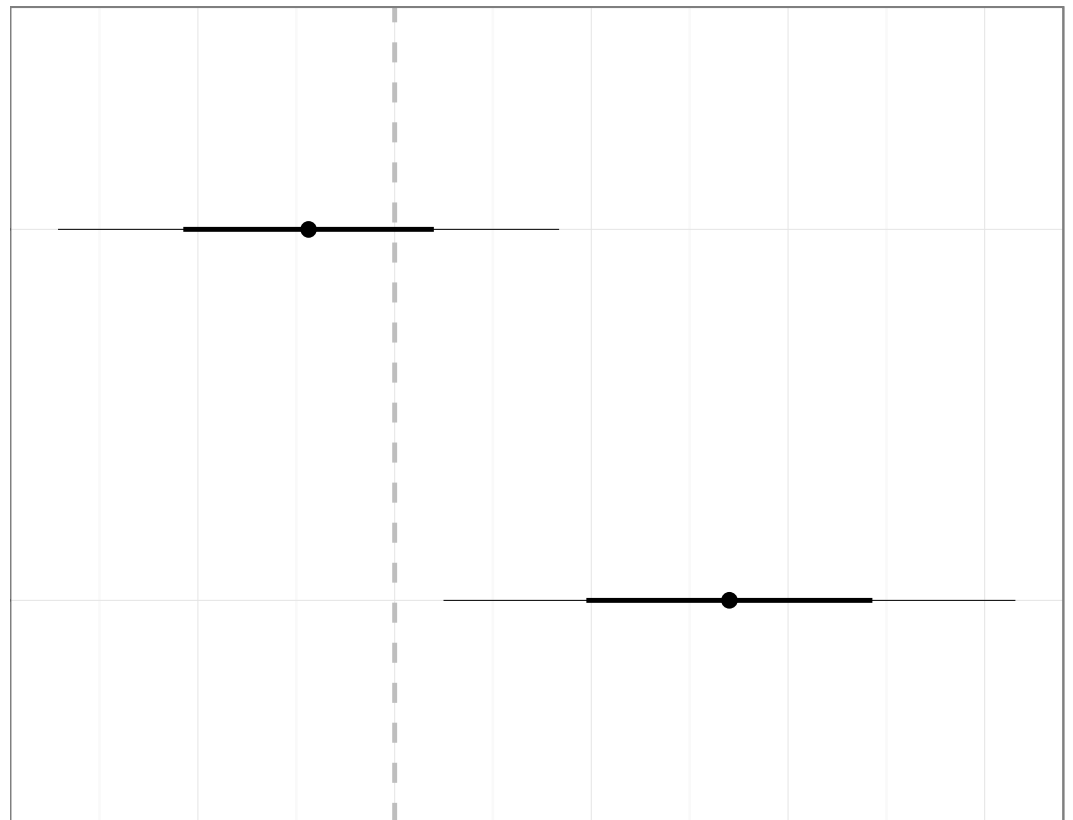
Coefficient plot depicting parameter estimates for ALCOHOL > CONTROL activation in the left OFC and left and right VS as predictors of drinking. When including activation from all three regions of interest in the same model, the OFC marginally predicted drinking ($B = 2.41, p = 0.06$) but the left ($B = -1.16, p = 0.55$) and right VS ($B = 2.15, p = 0.28$) did not. Indeed, when directly comparing the strength of the relationships by testing for a difference in slopes between OFC activation and drinking behavior and VS activation and drinking behavior, the interaction was not significant ($B = 0.48, p = 0.63$), despite a main effect of overall reward activation on drinking ($B = 2.27, p = 0.003$). In a second analysis comparing the strength of the relationship between activation levels and drinking behavior in the three regions of interest, we computed a Fischer's r to z transformation on the correlation values and observed no significant difference between the OFC correlation with drinking and either left or right VS correlation with drinking (OFC vs. left VS: $t(42) = 1.24, p = 0.22$; OFC vs. right VS: $t(42) = 0.57, p = 0.57$). However, we believe this is due to the correlated activations in these three regions (left OFC and left VS: $r(41) = 0.40, p < .01$; LOFC and right VS: $r(41) = 0.41, p < .01$; left VS and right VS: $r(41) = 0.71, p < .001$).

Supplemental Figure A.



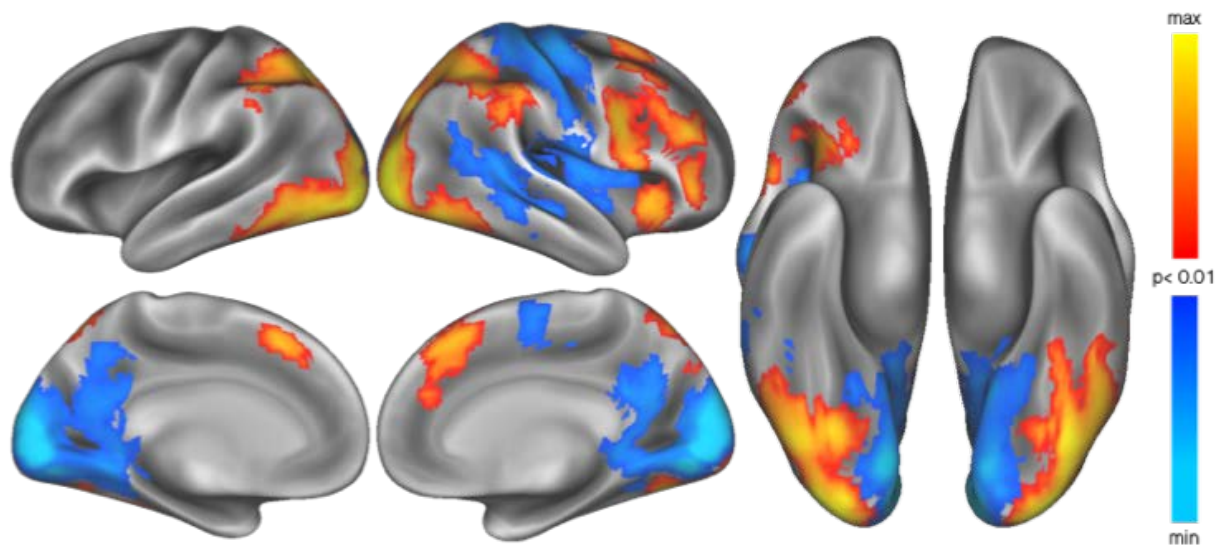
Supplemental Figure Caption B.

Coefficient plot depicting parameter estimates for ALCOHOL > CONTROL and FOOD > CONTROL activation in the LOFC as predictors of drinking. ALCOHOL > CONTROL and FOOD > CONTROL activations were strongly correlated in the LOFC, $r(41) = 0.65$, $p < .001$; but when both were included as independent predictors of drinking, ALCOHOL > CONTROL activation predicted drinking ($B = 3.40$, $p = 0.02$) whereas FOOD > CONTROL activation did not ($B = -0.87$, $p = 0.50$).

Supplemental Figure B.

Supplemental Figure Caption C.

Brain regions activating to ALCOHOL > FOOD advertisements (red) and FOOD > ALCOHOL advertisements (blue). Whole-brain activations ($p < .01$, 518 contiguous voxels) from the ALCOHOL > CONTROL contrast are depicted on an inflated cortical surface (Marcus et al., 2011). Greater activation for ALCOHOL advertisements was observed in the left inferior occipital gyrus, right middle occipital cortex, and right inferior frontal gyrus. Greater activation for FOOD advertisements was observed in the left superior occipital cortex and right postcentral gyrus.

Supplemental Figure C.

Supplemental Table A.

Regions more active (voxel-wise $p < .01$, cluster-corrected to $p < .001$) for ALCOHOL > FOOD advertisements and FOOD > ALCOHOL advertisements.

| Region | Coordinates (MNI) | | | Volume (mm ³) | Peak T |
|--------------------------------|-------------------|-----|----|---------------------------|--------|
| | X | Y | Z | | |
| ALCOHOL > FOOD | | | | | |
| Left inferior occipital gyrus | -33 | -96 | -9 | 2427 | 8.88 |
| Right middle occipital cortex | 36 | -93 | 3 | 2702 | 8.76 |
| Right inferior frontal gyrus | 45 | 6 | 24 | 1573 | 4.93 |
| FOOD > ALCOHOL | | | | | |
| Left superior occipital cortex | -9 | -93 | 3 | 3924 | 16.00 |
| Right postcentral gyrus | 42 | -24 | 54 | 2219 | 5.81 |

Notes: Coordinates reflect peaks of supra-threshold clusters. Region names adapted from Automated Anatomical Labeling in SPM. MNI = Montreal Neurological Institute. X, Y, Z refer to MNI coordinates for the peak voxel in the activated cluster. Peak T value refers to the maximum t-value in the activated cluster.