

### Supplemental: Additional Information for Statistical Analyses

All advertisements	Frequencies related to all advertisements used the full number of ads ( $N=241$ ) when calculating percentages.
Adjusted for multiple racial/ethnic groups – all ads	Proportions conservatively adjusted to account for the representation of multiple racial/ethnic groups within each ad used the denominator 399. We arrived at this number by counting the total number of ads with at least one White actor ( $n=209$ ), total ads with a Black actor ( $n=119$ ), total ads with a Hispanic actor ( $n=36$ ) and total ads with an Asian actor ( $n=35$ ). Because of the presence of crowds in many ads, it was not possible to attain inter-rater or intra-rater reliability on the number of people from each racial/ethnic group in each ad.
US Census data	Proportions for comparisons of racial/ethnic representation in Super Bowl ads compared with US Census data used figures from the 2010 Census <sup>[34]</sup> . The denominator for these analyses was the total US population, $N = 308,745,538$ .
Food and beverage ads	Proportions for food ads used the total number of food ads for the denominator, $n=28$ . Proportions for beverage ads used the total number of beverage ads for the denominator, $n=35$ . These categories were mutually exclusive, thus proportions for food/beverage ads combined used 63 as the denominator, with the exception (as noted) that descriptions of whether the food/beverage was shown being consumed by an actor were calculated with ( $n=63$ ) and without ( $n=48$ ) including alcohol; although not explicitly prohibited <sup>[8]</sup> , by convention alcohol is not shown being consumed.
Adjusted for multiple racial/ethnic groups – food/beverage ads	Proportions of food/beverage ads adjusted to account for the representation of multiple racial/ethnic groups within each ad used the denominator 111. We arrived at this number by counting the total number of ads with at least one White actor ( $n=54$ ), total ads with a Black actor ( $n=32$ ), total ads with a Hispanic actor ( $n=13$ ) and total ads with an Asian actor ( $n=12$ ).
Adjusted for multiple racial/ethnic groups - ads with actors with obesity	Proportions of advertisements that cast actors with obesity adjusted to account for the representations of actors with obesity from multiple racial/ethnic groups within each ad used the denominator 41. We arrived at this number by counting the total number of ads with at least one White actor with obesity ( $n=32$ ), total ads with a Black actor with obesity ( $n=8$ ), total ads with a Hispanic actor with obesity ( $n=0$ ) and total ads with an Asian actor with obesity ( $n=1$ ).