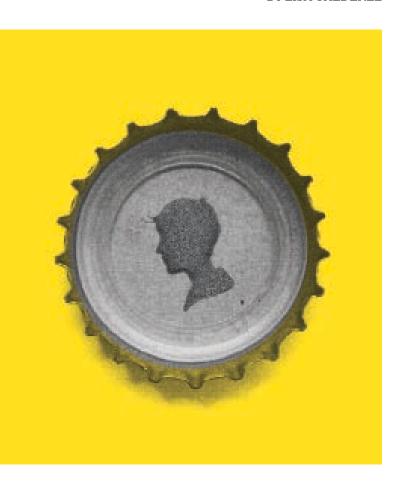
What Underage Drinkers Drink

SPH RESEARCHERS NAME ALCOHOLIC BEVERAGES PREFERRED BY THOSE WHO SHOULDN'T BE DRINKING

BY LISA CHEDEKEL



THE TOP 10 Brands with the highest rates of consumption among underage drinkers

BUD LIGHT	27.9	%
SMIRNOFF MALT BEVERAGES	17.0	
BUDWEISER	14.6	
COORS LIGHT	12.7	
SMIRNOFF VODKAS	12.7	
JACK DANIEL'S BOURBONS	11.4	
CORONA EXTRA	11.3	
mike's	10.8	
CAPTAIN MORGAN RUMS	10.4	
ABSOLUT VODKAS	10.1	

BUD LIGHT, SMIRNOFF, and Coors Light share a distinction that may make their corporate owners wince: they are among a small number of alcohol brands that underage drinkers are most likely to choose.

Those are the findings of a first-of-a-kind report led by researchers at the School of Public Health, published online in *Alcoholism: Clinical & Experimental Research*. The study authors, from SPH and the Center on Alcohol Marketing and Youth at Johns Hopkins Bloomberg School of Public Health, say that it has important implications for alcohol policy.

"We now know, for the first time, what alcohol brands—and which companies—are profiting the most from the sale of their products to underage drinkers," says study lead author Michael Siegel, an SPH professor of community health sciences. "The companies implicated by this study as the leading culprits in the problem of underage drinking need to take immediate action to reduce the appeal of their products to youth."

The study found that the top 25 of nearly 900 brands account for nearly half of alcohol consumption by young people. In contrast, adult consumption is much more widely spread among different brands.

Close to 30 percent of underage youths surveyed reported that within the past month they had drunk Bud Light, 17 percent had consumed Smirnoff malt beverages, and about 15 percent had drunk Budweiser (*see chart*). Of the top 25 brands, 12 were spirits (including 4 vodkas), 9 were beers, and 4 were flavored alcohol beverages.

The research was conducted online, surveying 1,032 people ages 13 to 20. Respondents were asked about their past 30-day consumption of 898 brands of alcohol, spread among 16 alcoholic beverage types, including the frequency and amount of each brand consumed. Among the brands with the highest rates of consumption among underage drinkers were Bud Light, Smirnoff malt beverages, Budweiser, Smirnoff vodkas, Coors Light, Jack Daniel's bourbons, and Corona Extra.

"This report paves the way for subsequent studies to explore the association between exposure to alcohol advertising and marketing efforts and drinking behavior in young people," says David Jernigan, director of the Center on Alcohol Marketing and Youth and a study author.

Alcohol is responsible for the deaths of 4,700 people under the age of 21 each year. Earlier studies reveal that more than 70 percent of high school students have consumed alcohol and about 22 percent engage in heavy episodic drinking. At least 14 studies have found that the more young people are exposed to alcohol advertising and marketing, the more likely they are to drink—or if they already drink, to drink more.

Siegel and the coauthors note that scientific literature has not examined the link between youth

exposure to advertising for specific brands and the consumption of those brands—something the researchers will tackle next, with help from a four-year, \$2.4 million grant from the National Institute on Alcohol Abuse and Alcoholism.

The current research, says Siegel, is similar to work done around smoking, which identified certain companies that were targeting young smokers. After years of pressure from antismoking groups and the Federal Trade Commission, the Camel brand ended its popular cartoon-based "Joe Camel" campaign in 1997. In 1998, the major US tobacco companies and 46 states signed a settlement agreement that specifically banned targeting youth.

"It was this line of research, into the relationships between brand-specific advertising and underage smoking, that provided the strongest evidence that marketing was affecting youth habits," Siegel says.

The study authors say their work could similarly inform policy efforts to reduce underage drinking, writing, "Alcohol prevention programs and policies can now target specific brands, and advocacy efforts can focus on specific companies that manufacture the products most involved in problem drinking behavior among youth."

Siegel says the study showed that several brands of flavored alcohol—among them Smirnoff's malt and Mike's—were very popular with young drinkers, yet not similarly favored by adults. Many other drinks that ranked high in the survey also are popular among adults, as expected.

"It really begs the question: what is it about these brands that makes them disproportionately popular among underage drinkers?" Siegel says. "We want to look into the reasons—and certainly one of the potential reasons is marketing."

TARGETING YOUTH Michael Siegel says the research on youth alcohol marketing is similar to that done on smoking, which in 1998 resulted in an agreement between major US tobacco companies and 46 states specifically banning the targeting of youth.





EARLIEST BARBECUE Clay balls the size of plums, uncovered in Yucatán, Mexico, by archaeologist Stephanie Simms, held traces of starch from maize, beans, and squash, a strong indicator that they had been in contact with food.

Cooking Tips from the Ancient Maya

CLAY BALLS WERE USED TO RETAIN AND DISTRIBUTE HEAT

BY SUSAN SELIGSON

ARCHAEOLOGIST Stephanie
Simms was digging at the Escalera
al Cielo site in a hilly region of
rural Yucatán, Mexico, when she
discovered a trove of clay balls
the size of plums. There were
hundreds of them, buried at the
edge of what functioned as a
Maya kitchen 1,000 years ago.

Ball-shaped artifacts are not uncommon, and Simms (GRS'13) likes to joke that male researchers tend to theorize that they are ammunition, while women envision domestic uses. In this case, the location and appearance of the balls—they were found with burn marks in what was presumably a cooking area—indicate that they were used for distributing and prolonging heat in pit ovens.

Months later, at a College of Arts & Sciences laboratory, an analysis of the balls' mineral composition strongly supported Simms' theory. The ancient narrative etched into their material properties suggests that the balls, crafted from the local, clay-rich earth, were dried in the hot sun and then cooked, like reusable coals, again and again and again, at heat as high as 1,300 degrees Fahrenheit.

"It was this wow moment," says Simms, whose research and dissertation focus is on pre-Hispanic Maya food production, collection, preparation, and consumption.

Like stones, clay is an efficient retainer of heat,