Drinking Patterns and Their Definitions

Alcohol Research: Current Reviews Editorial Staff

The number of drinks a person consumes and the rate at which he or she consumes them influence how much alcohol enters the brain and how impaired that person becomes. Many people are surprised to learn what counts as a drink. The amount of liquid in one's glass, can, or bottle does not necessarily match up to how much alcohol is in the drink. To facilitate research and clinical care and to help individuals make informed choices about how much alcohol they are consuming, public health agencies in the United States have established a definition of a standard drink, as well as definitions of various alcohol consumption patterns. These definitions facilitate objective assessments of how much a person is drinking, enable comparisons of alcohol consumption within and across studies, and help con-

about 5%

alcohol

sumers follow low-risk drinking guidelines.

What Is a Standard Drink?

In the United States, a standard drink is defined as a drink with 14 grams (0.6 fluid ounces) of pure alcohol. This is found in:

- 12 ounces of regular beer, which is usually about 5% alcohol
- 5 ounces of wine, which is typically about 12% alcohol
- 1.5 ounces of distilled spirits, which is about 40% alcohol

Although the standard drink amounts are helpful for following health guidelines, they may not reflect customary serving sizes. In addition, while the alcohol concentrations listed above are typical, there is considerable variability in alcohol content within and across beverage type (e.g., beer, wine, and distilled spirits). For example, some light beers contain half as much alcohol as a regular beer, while some craft and specialty beers contain twice as much. Similarly, the alcohol content in wines can vary from 5% to 15%.1

Moderate Alcohol Consumption

According to the Dietary Guidelines for Americans, which are intended to help individuals improve and maintain overall health and reduce chronic disease risk, moderate drinking is defined as up to 1 drink per day for women and up to 2 drinks per day for men.²

12 fl oz of 8-9 fl oz of 5 fl oz of 1.5 fl oz shot of regular beer malt liquor table wine distilled spirits (shown in a (gin, rum, tequila, 12 oz glass) vodka, whiskey, etc.) about 12%

What Is a Standard Drink?

Each beverage portrayed above represents one standard drink of "pure" alcohol, defined in the United States as 0.6 fl oz or 14 grams. The percentage of pure alcohol, expressed here as alcohol by volume (alc/ vol), varies within and across beverage types. Although the standard drink amounts are helpful for following health guidelines, they may not reflect customary serving sizes.

about 7%

alcohol

about 40%

alcohol

Drinking Patterns and Their Definitions (continued)

Low-Risk Drinking and Alcohol Use Disorder (AUD)

As defined by the National Institute on Alcohol Abuse and Alcoholism (NIAAA), for women, low-risk drinking is no more than 3 drinks on any single day and no more than 7 drinks per week. For men, it is defined as no more than 4 drinks on any single day and no more than 14 drinks per week. NIAAA research shows that only about 2 in 100 people who drink within these limits meet the criteria for AUD. Even within these limits, people can have problems if they drink too quickly or if they have other health issues.3

Binge Drinking

NIAAA defines binge drinking as a pattern of drinking that brings blood alcohol concentration to 0.08 grams per deciliter (0.08%) or higher. This typically occurs after a woman consumes 4 drinks or a man consumes 5 drinks in a 2-hour time frame.3

The Substance Abuse and Mental Health Services Administration (SAMHSA), which conducts the annual National Survey on Drug Use and Health (NSDUH), defines binge drinking as 4 or more drinks for a woman or 5 or more drinks for a man on the same occasion on at least 1 day in the past 30 days.4

Extreme Binge Drinking

Extreme binge drinking, also known as high-intensity drinking, refers to drinking at levels far beyond the binge threshold, resulting in high peak blood alcohol concentrations.

Though definitions vary, some studies define extreme binge drinking as 2 or more times the gender-specific binge drinking thresholds (i.e., 10 or more standard drinks for men, and 8 or more for women).5 Other studies use a higher threshold that may⁶ or may not⁷ be gender specific.

Heavy Drinking

SAMHSA defines heavy drinking as binge drinking on each of 5 or more days in the past 30 days.4

International Drink Definitions

Standard-drink definitions vary widely across countries, from 8 grams of alcohol in Iceland and the United Kingdom to 20 grams in Austria. To assess the prevalence of high-risk drinking globally, the World Health Organization uses a measure called heavy episodic drinking, defined as consuming 60 grams of alcohol or more on at least one occasion in the past 30 days. In the United States, where a standard drink equals 14 grams, that would be 4.25 standard drinks. In China. France, Ireland, and Spain, where a standard drink equals 10 grams, 6 drinks on a single occasion would constitute heavy episodic drinking.

Because of the risks of drinking, certain people should avoid alcohol completely:

- Individuals under the minimum legal drinking age of 21
- Women who are pregnant or trying to become pregnant
- People who have a medical condition that alcohol can aggravate

- Individuals taking medications that interact with alcohol
- People driving vehicles or operating machinery (or who plan to do so shortly after drinking)

References

- 1. What is a standard drink? National Institute on Alcohol Abuse and Alcoholism (NIAAA) Alcohol & Your Health website. https://www.niaaa.nih.gov/ alcohol-health/overview-alcohol-consumption/ what-standard-drink. Accessed July 14, 2017.
- 2. Dietary Guidelines for Americans 2015-2020. 8th ed. Washington, DC: U.S. Department of Health and Human Services and U.S. Department of Agriculture; December 2015. http://health.gov/ dietaryguidelines/2015/guidelines. Accessed July 14, 2017.
- Drinking levels defined. NIAAA Alcohol & Your Health website. https://www.niaaa.nih.gov/ alcohol-health/overview-alcohol-consumption/ moderate-binge-drinking. Accessed July 14, 2017.
- 4. Substance Abuse and Mental Health Services Administration, Center for Behavioral Health Statistics and Quality. Key Substance Use and Mental Health Indicators in the United States: Results from the 2015 National Survey on Drug Use and Health. Rockville, MD: U.S. Department of Health and Human Services. https://www.samhsa. gov/data/sites/default/files/NSDUH-FFR1-2015/ NSDUH-FFR1-2015/NSDUH-FFR1-2015.pdf. Accessed July 14, 2017.
- Patrick ME, Cronce JM, Fairlie AM, et al. Day-to-day variations in high-intensity drinking, expectancies, and positive and negative alcohol-related consequences. Addict Behav. 2016;58:110-116. PMID: 26922158
- Patrick ME, Terry-McElrath YM. High-intensity drinking by underage young adults in the United States. Addiction. 2017;112(1):82-93. PMID: 27514864.
- 7. Johnston LD, O'Malley PM, Miech RA, et al. Monitoring the Future National Survey Results on Drug Use, 1975–2015: 2015 Overview, Key Findings on Adolescent Drug Use. Ann Arbor, MI: Institute for Social Research, University of Michigan; 2016. http://monitoringthefuture.org/pubs/monographs/ mtf-overview2015.pdf. Accessed July 14, 2017.