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ABSTRACT

Alcoholic beverages have been used throughout American history but their use has always been controversial. Ethyl alcohol is one of the few alcohols man is able to drink, although it is never full strength. The fermentation process is used to manufacture alcoholic beverages. Wines are made from a variety of fruits. Beer is made from yeast and a malted cereal such as corn, rye, wheat, or barley. Distilled beverages, often called spirits, are mainly flavored alcohol and water. These include whiskey, gin, vodka, rum, brandies, and liqueurs. Alcohol has been drunk by some people since the beginning of civilized man. For most people who drink alcoholic beverages alcohol does not cause problems. About 30 percent of Americans are abstainers. For the most part alcohol is introduced to children in the home, usually between the ages of 10 and 13. Alcohol acts directly on the brain and changes its ability to work with the effects related directly to the concentration of alcohol in the blood. Alcohol is absorbed through the stomach and the small intestine into the bloodstream. Most of the alcohol leaves the body through oxidation and produces calories. Federal laws on alcoholic beverages regulate the production of the beverages and the portion of alcohol contained in the product. Laws related to alcoholic beverages availability are controlled by state and local authorities. Alcoholism is a chronic and usually progressive disease. Fortunately, alcoholism can be successfully treated. (Resources on alcoholism are listed.) (ABL)

About the Author

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What Is Alcohol? And Why Do People Drink?

Revised Edition

by

Gail Gleason Milgram, Ed.D.

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Center of Alcohol Studies Pamphlet Series

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WHAT IS ALCOHOL? AND WHY DO PEOPLE DRINK?

Alcohol in Society

Alcoholic beverages have been used throughout American history, but their use has always been controversial. In 1673, the American Puritan clergyman, Increase Mather, wrote: "Drink is in itself a good creature of God, and to be received with thankfulness, but the abuse of drink is from Satan; the wine is from God, but the Drunkard is from the Devil." The dilemma pointed out by Mather remains a problem today — how to enjoy the benefits of beverage alcohol while preventing the consequences of misuse. Americans have always been ambivalent about the use of beverage alcohol and no one national pattern of drinking has emerged. Part of this confusion stems from the mixture of people from various cultural backgrounds in this country. Each ethnic group has its own patterns of alcohol use and attitudes toward drinking and drunkenness.

Many methods for controlling the use of alcoholic beverages have been proposed. Some aim only to prevent excessive drinking, others seek to eliminate the use of alcoholic beverages entirely. In 1919, in response to a vigorous anti-alcohol campaign, Congress passed the Eighteenth Amendment to the Constitution and the Volstead Act, which prohibited the manufacture, sale or transport of all alcoholic beverages. Enforcement proved to be an impossible task, however, and the amendment was repealed in 1933. The controversy continues to this day on how to achieve an acceptable balance between the extremes of Prohibition, on the one hand, and of complete laissez-faire, on the other.

This pamphlet attempts to provide some basic information about alcohol, for those who do and do not drink — what it is, why people drink it, and its effects on the body.

In the following descriptions of how alcohol affects a person, the pronoun "he" is used for simplicity, but the reader should keep in mind that these effects apply to women as well.

What Is Alcohol?

There are actually many types of alcohol, such as amyl, butyl, isopropyl and methyl alcohols, ethylene glycol, and glycerol. These alcohols have many industrial and chemical uses.

Ethyl alcohol (ethanol) is one of the few alcohols that man is able to drink. But it is never full-strength in any alcoholic beverage. Ethanol is the subject of this pamphlet, and from now on it will be referred to as "alcohol."

Alcohol is a clear, thin, odorless liquid that boils at 173° F (78°C) and can burn. It can also mix with water in any proportion. Alcohol is a product of a natural process called fermentation. If the juice of fruits or vegetables is left in the air, the process will begin. A microscopic plant called yeast floats freely in the air and reacts with the sugar in the juice. This reaction produces alcohol and releases carbon dioxide. The process stops naturally when about 11 to 14% of the juice is alcohol, and the product is called wine. The process stops because the amount of alcohol is enough to stop the action of the yeast.

The fermentation process is also used to manufacture alcoholic beverages. When alcohol is made commercially, special sorts of yeast are added to the juice. Fermentation by this method also stops when about 11 to 14% alcohol is present. The flavor and color of the fermented liquid depend on what remains from the juice when fermentation stops. A similar fermentation process is used to make beer.

To make beverages with a higher alcohol content, a process called distillation is used. Distillation is the heating of a liquid until it turns into a vapor and then cooling the vapor until it condenses into a liquid again. When wine or beer are heated to 173°F in a still (vessel used for distillation), the alcohol boils off as a vapor and the water and most of the other ingredients of the wine or beer remain in the still. The vapor is then cooled, becoming a liquid which can be almost pure alcohol. The distillation process is used to make alcoholic beverages that contain 40 to 50% alcohol. These are called distilled beverages or spirits (e.g., whiskey, gin, vodka and rum). Distilled spirits are sometimes referred to as "liquor" or "hard liquor."

Wines are made from a variety of fruits, such as peaches, plums and apricots, but the most common wines are produced from grapes. The soil in which the grapes are grown and the weather during the growing season affect the quality and taste of the grapes. The grapes are gathered, crushed and fermented in large vats.

If there is only a little sugar left from the juice when the process of fermentation stops, the wine is called "dry." If a lot of sugar remains, the wine is called "sweet." If a lot of carbon dioxide remains in the mixture, the wine is called "sparkling." There are also other types of wines and for each an additional step is added to the manufacturing process. A wine can be given a bubbling effect by pumping carbon dioxide into it after the process of fermentation has stopped. Sometimes additional alcohol is added to the wine, raising the alcohol

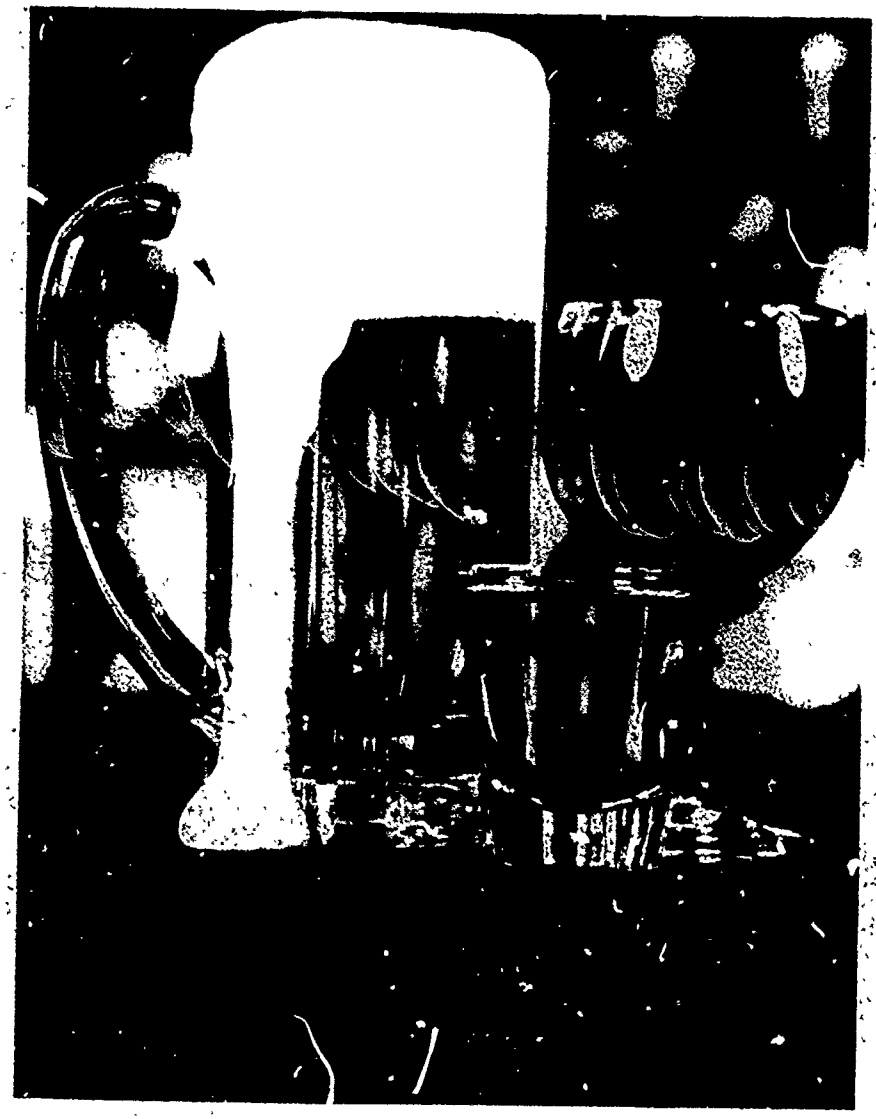
content to 20%. Wines to which alcohol has been added, such as sherry, port and muscatel, are called "dessert" or "fortified" wines. Wines that have no added alcohol are referred to as "table" wines. The new "light" or "low-calorie" wines have an average alcohol content of 7% and the alcohol content of "wine coolers" ranges from 4 to 6%.

Beer is also made by the process of fermentation. A liquid mix, called wort, contains yeast and a malted cereal, such as corn, rye, wheat or barley. Fermentation of this liquid mix produces alcohol and carbon dioxide. The process of fermentation is stopped before the yeast completes its work to limit the beverage's alcohol content. The beverage, now called beer, contains 3 to 6% alcohol; however, regular American beers average about 4.5% alcohol and 150 calories. "Light" beers contain less alcohol (approximately 4%) and fewer calories (85 to 95 calories per serving) and low-alcohol beers contain even less, but the amount in each kind of beer varies considerably from brewer to brewer. Hops, tiny dried buds of the hopvine, are added to beer for flavor and to help preserve it. Ale is a fermented beverage made by a slightly different process but with the same ingredients as beer. Ale may have a higher alcohol content than beer, but most of the alcohol is then removed; near-beer contains less than ½ of 1% alcohol by volume.

Distilled beverages, often called distilled spirits, are mainly flavored alcohol and water. They are made by distilling the fermented juice of fruit or grain. The liquid produced contains a high amount of alcohol, water and flavoring. More water then is added to this liquid so that the alcohol content is not more than 50%. The distilled beverage is then placed in wooden barrels and aged. Whiskey (e.g., rye, scotch, bourbon), gin, vodka, rum, brandies and liqueurs are distilled beverages which contain between 40 and 50% alcohol. The amount of alcohol contained in a beverage is expressed in degrees of "proof." The percentage of alcohol in the beverage is one-half the poof, e.g., a beverage which is labeled as 100 proof contains 50% alcohol.

Whiskey is made by distilling the fermented juice of cereal grains such as corn, rye and barley. Although there are many kinds of whiskey in the world, rye, bourbon and scotch are the three most common in the U.S.A. Rye is made from a mixture of fermented grains (rye, barley, other grains) of which at least 51% is rye. Scotch originated in Scotland and is made mainly from fermented barley and colored with caramel. Bourbon, first made in Bourbon County, Kentucky, in 1739, is made mainly from fermented corn (at least 51%), but rye and barley may also be added.

Gin, also a distilled beverage, is a combination of alcohol, water and various flavors. Juniper berries, orange or lemon may be added for



BEER (Regular American)
12 ounces
Approximately 4.5% Alcohol Content

WINE
5 ounces
11% to 14% Alcohol Content
(except when fortified to 20%)

DISTILLED SPIRITS
1½ ounces
40 to 50% Alcohol Content

flavor. Gin does not improve with age so it is not stored in wooden casks or aged for any length of time. It is sometimes placed in old sherry casks to color it, or caramel may be added for color.

Vodka is distilled mainly from fermented potatoes in Eastern Europe and from fermented grains in the U.S.A. It is mostly a mixture of alcohol and water and is almost colorless, odorless and tasteless.

Rum is a distilled beverage usually made in the Caribbean and the West Indies, though some rum is made in the U.S.A. Rum is produced from fermented molasses or sugar cane juice and is aged at least three years. Caramel is sometimes added for coloring.

Brandies are distilled from fermented fruit juices and contain between 40 and 50% alcohol by volume. Brandy is usually aged in oak casks. The color of brandy comes either from the cask or from added caramel. Cognac (made from grape wine in the Cognac region of France), Slivovica (plum brandy), and Kirsch (cherry brandy) are common types of brandy.

An aperitif is usually consumed before dinner to stimulate the appetite. A vermouth mixed with flavoring or fortified wine is frequently consumed as an aperitif.

Liqueurs are made by adding sugar and flavoring such as fruits, herbs or flowers to a brandy or to a combination of alcohol and water. Most liqueurs contain from 20 to 65% alcohol by volume. They are usually drunk in small quantities after dinner and are often called "cordial," which is synonymous with liqueur.

It is the alcohol content of a beverage, not the taste, or the color, which has an effect on those who drink alcoholic beverages. Wine, beer, and distilled beverages all contain different amounts of alcohol so some are considered "stronger" than others. All of the illustrated drinks would have about a ½-ounce of alcohol in them, though their size is quite different.

It is important to know the alcohol content of the various beverages because the effects of alcohol on the body are directly related to the amount of alcohol consumed, not the number of drinks.

Why Do People Drink?

Alcohol has been drunk in beverages for centuries There has been no time since man has been civilized that alcohol has not been drunk by some people. Even during Prohibition in the U.S.A. (1919–1933), many people drank alcohol. Approximately 70% of adults in the U.S.A. (77% of the men and 60% of the women) drink alcoholic beverages. Reasons for drinking include: as part of a religious ceremony, as a beverage with a meal, to relax, to be social, etc.

For most of the people who drink alcoholic beverages, alcohol does not cause problems for themselves or others. People who drink in an inappropriate or damaging manner are called problem drinkers; some problem drinkers become alcoholics. More information about alcoholism will be found in the last section of this pamphlet.

About 30% of the adults in the U.S.A. are abstainers. Some abstainers never drank alcohol and others drank it for a time and decided not to drink it again. Just as there are many reasons for alcohol use, there are also many reasons for not drinking. Some abstainers come from families where alcohol was not consumed because of cultural, religious or other reasons. Others belong to religious denominations that do not approve of drinking. Some people do not like the taste of alcohol or how it affects them. Recovering alcoholics abstain from alcohol as part of the recovery process from the illness. The reasons for abstaining are just as acceptable as are most reasons for drinking. If this fact is remembered no one will ever feel that he or she has to accept an alcoholic beverage and no host will feel unsociable if alcoholic beverages are not served or if a guest refuses a drink.

Introduction to Alcohol

Americans learn about alcohol and drinking in a variety of ways, such as part of a religious ceremony, with a meal, etc. Most of us don't even consider some of these activities to be drinking occasions since the consumption of alcohol is but a small part of another event. Yet drinking did occur and should be acknowledged because the use of alcohol ought to be the result of a conscious decision-making process.

For the most part, alcohol is introduced to children in the home, usually between the ages of 10 and 13. The parents share a beverage for the same reason that alcohol is being consumed by them: this may be sips or a small amount of beer while a parent is watching television, it may be a small glass of wine or champagne at a meal or a special occasion or it may be a taste or part of a mixed drink being served to guests.

This introduction to alcohol, rooted as it is in family, cultural or religious activities, often occurs unknowingly. Some adults may not consider the consumption of a small amount of alcohol as "drinking," or realize that all three types of beverages — beer, wine and distilled spirits — contain alcohol. Some adults may think that "drinking" means to become intoxicated or occurs only if some problem results from the drinking.

The family plays a significant role in a child's introduction to alcohol and thus it is important for the family to consciously consider whether it has discussed the question of drinking before the child begins drink. This is an issue for family consideration. Both the fami-

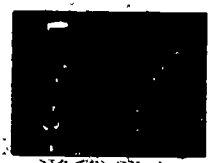
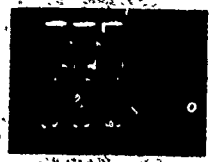
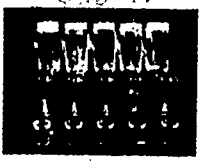
ly's importance in influencing the decision to drink and the early introduction to alcohol are areas which society should be aware of in general and are fitting topics for school alcohol education programs. They provide the rationale for learning about alcohol and for constantly re-evaluating our feelings about drinking and patterns of use.

Our attitudes about alcohol use, alcohol problems and alcoholism are the result of many factors. The family's pattern of use or non-use is important: how and why alcohol is consumed, by whom, and to what extent forms the basis of how we think about drinking. Our religious beliefs also play a part in shaping our attitudes toward alcohol as do the drinking habits and attitudes of our friends. The situations in which we are served, and how and what we are served, also affect our feelings about alcohol. Knowing an alcoholic or someone with an alcohol problem will have a significant impact on our attitudes. If a loved one is drinking problematically and at risk of injuring him- or herself or others, then we may feel angry toward the drinker, toward alcohol, toward drinkers in general, etc.

We need to consider the role alcohol plays in family life: how much is consumed, for what purpose, and to what consequences. At parties and other occasions, the amount of alcohol consumed, the availability of nonalcoholic beverages and food, and how alcohol affects the guests provide learning experiences and models of use for the children present. Whether guests are allowed to leave in an intoxicated state or if they are detained so that they can't drive will have a significant impact on the children. This provides significant aspects regarding alcohol that are learned at home.

Outside the home drinking occurs in many different settings. Alcoholic beverages are served in restaurants and clubs; they are often available at sporting events, bowling alleys and other recreational sites; they are sometimes brought along on boat trips and other outings. Many adults may include drinking as part of these and other activities. Though the young may not have reached the minimum age to purchase alcoholic beverages legally, society's use of alcohol is apparent and offers additional contexts of alcohol use and explanations of why people drink.

CHART 1

Number of Drinks*	Blood Alcohol Concentration	Effects of Alcohol	Time to Leave the Body
1 	0.03%	Relaxed, slight feeling of exhilaration	2 hours
2 	0 06%	Slowed reaction time. Poor muscle control, slurred speech, legs wobbling	4 hours
3 	0.09%	Judgment clouded, inhibitions and self restraint lessened, ability to reason and make logical decisions impaired	6 hours
4 	0.12%	Vision blurred, unclear speech, stumbles when walking, hands do not work well together	8 hours
5 	0.15%	All behavior affected, unable to remove clothes, staggers when walking without help, bumps into objects, drops things, activity requiring coordination cannot be performed, difficulty staying awake	10 hours

*Each drink contains ounces of whisky gin or other distilled spirit or 5 ounces of wine or 12 ounces of beer

Chart 1.—Number of Drinks, Blood Alcohol Concentration, Effects of Alcohol, and Time for Alcohol to Leave the Body, in a Person Weighing about 150 Pounds.

Note: The concentrations of alcohol in the blood reported in this Chart would be reached if a person drank these amounts of alcohol in one gulp and the alcohol was absorbed almost at once into the bloodstream. But most people take time to drink, and since the alcohol starts to leave the body soon after it is drunk, the blood alcohol concentrations will generally be lower than shown in the Chart (see Figure 1). Keep in mind that these concentrations are approximate. They are based on an average, and the metabolism rate varies from person to person. In addition, the alcohol levels will be proportionately higher in a lighter person and lower in a heavier person; and lower in someone who drinks after eating a big meal; and the effects of alcohol may be different in enced and inexperienced drinkers.

What Are the Effects of Alcohol?

The effects of alcohol on an individual depend on a variety of factors. These include:

How one feels before drinking:

If a person is upset and tense, he or she may tend to gulp drinks and actually drink more alcohol than planned. The same may happen to someone who is very excited, sad, nervous or even extremely happy.

What the drinker expects alcohol to do:

Some people expect a drink to help them feel relaxed, happy, angry or sad. Quite naturally, these feelings can be produced by the drink for a time. How you expect or want to feel helps you feel that way.

How much one drinks:

If a person has one drink during dinner he is not likely to feel the effects of alcohol. But if he has six drinks before and during dinner, he might not make it to dessert.

How long one drinks:

This is a critical factor: four drinks in one hour will have an obvious effect on the drinker, but the same four drinks over a four-hour period will probably have a very slight, if any, effect.

Type of alcoholic beverage:

Some beverages have more alcohol in them than others. Beer has about 4.5% alcohol, "table wines" average from 11 to 14%, "fortified" or "dessert wines" (such as sherry or port) have 16 to 20%, and distilled spirits range between 40 and 50%. However, if normal size drinks are consumed (12 ounces of beer, 5 ounces of wine and 1½ ounces of distilled spirits), each drink contains approximately the same amount of alcohol.

Size of the drinker:

Because of the way alcohol circulates in the body fluid, the size of the drinker is also a factor related to the effects of alcohol. A person weighing 220 pounds will not feel the effects of one glass of distilled spirits as much as a person weighing 120 pounds (see page 12).

Food in the stomach:

The alcohol does not affect the drinker until it has been absorbed from the stomach into the bloodstream (see page 11). Food in the stomach slows the rate of absorption so a drink after eating a meal will have less effect than one drunk on an empty stomach.

Experience in using alcoholic beverages:
Someone drinking a glass of wine for the first time may feel a light-headedness, but probably not on subsequent occasions. An experienced drinker knows what to expect from alcohol and can learn to adjust his reactions to small or moderate amounts.

Alcohol acts directly on the brain and changes its ability to work. The effects of alcohol on the brain are quite complex, but alcohol is usually classified as an anesthetic. Judgment is the first function of the brain to be affected. The drinker's ability to think and make decisions becomes impaired. As more alcohol is consumed, the motor functions of the body are affected. The individual may wobble or sway and not be able to "walk a straight line." Speech becomes slurred and thick. He may have trouble focusing his eyes. He may need help in walking or putting on a coat. If he continues drinking he may eventually become unconscious. He might experience a hangover. The hangover most often results in headaches, a sick feeling or vomiting, loss of appetite, and feeling of tiredness.

The effects of alcohol are directly related to the concentration (percentage) of alcohol in the blood. In the following description, the blood alcohol concentrations are those that would probably be found in a person weighing about 150 pounds. However, the effects might vary among individuals and in the same individual at different times.

At a blood alcohol concentration of 0.03% (after about one cocktail, one glass of wine, or one bottle of beer) the drinker will feel relaxed and experience a slight feeling of exhilaration; at 0.06% (after two cocktails, two glasses of wine, or two bottles of beer), the drinker will experience a feeling of warmth and mental relaxation, there will be a decrease of fine motor skills and the drinker will be less concerned with minor irritations; at 0.09% (after three cocktails, three glasses of wine, or three bottles of beer), his reaction time will be slowed, his muscle control will be poor, his speech will be slurred and his legs will feel wobbly; at 0.12% (after four cocktails, four glasses of wine, or four bottles of beer), his judgment will be clouded, his inhibitions and self-restraint lessened and his ability to reason and make logical decisions will be impaired; at 0.15% (after five cocktails, five glasses of wine, or five bottles of beer), his vision will be blurred, his speech unclear, his walking will be unsteady and his coordination impaired; at 0.18% (after six cocktails, six glasses of wine, or six bottles of beer) all of his behavior will be impaired and he will find it difficult to stay awake; at a concentration of about 0.30% alcohol in the blood (after 10 to 12 drinks) the drinker will be in a semi-stupor or deep sleep. Most people are not able to stay awake and reach blood alcohol concentrations higher than 0.30%. If the blood alcohol does reach 0.50% the drinker is in a deep coma and in danger of death. As the alcohol level reaches 1% in blood the breathing center in the brain becomes paralyzed and death occurs.

In many states an alcohol concentration of 0.10% in the blood is legal evidence that an automobile driver is intoxicated and not capable of driving safely. In some European countries the legal blood alcohol limit for drivers is 0.05%.

As soon as someone drinks an alcoholic beverage, the body starts to get rid of the alcohol (see page 12). As Figure 1 shows, alcohol does not leave the body very quickly. Even if a person's blood alcohol concentration is as low as 0.03%, some of the alcohol will remain in the body for two hours. At higher blood alcohol levels the alcohol remains in the body for longer periods. The drinker still experiences the diminishing effects of alcohol during this time.

How Does Alcohol Enter and Leave the Body?

When someone drinks an alcoholic beverage it flows into the stomach. While it is in the stomach, the drinker does not feel the effects of the alcohol. Alcohol does not remain in the stomach very long. Some of it is absorbed through the walls of the stomach into the bloodstream. Once this happens the alcohol reaches the brain and the drinker begins to feel the effects of the alcohol. The alcohol that has not been absorbed passes into the small intestine. Most of the alcohol is absorbed from the small intestine into the bloodstream and is circulated throughout the body. This is how alcohol reaches the brain and the drinker feels the effects of alcohol. The reason that a larger person does not feel the effects of a drink as quickly as a smaller person is because the larger person has more blood and other body fluids and will not have as high a level of alcohol in the blood after drinking the same amount of alcohol.

The body disposes of alcohol in two ways: elimination and oxidation. Only about 10% of the alcohol in the body leaves by elimination from the lungs and kidneys.

About 90% of the alcohol in the body leaves by oxidation. Oxidation is the union of a substance with oxygen to produce heat and energy. When alcohol is oxidized by the body, it forms carbon dioxide and water. The liver plays a major role in the body's oxidation of alcohol. When alcohol in the bloodstream enters the liver, some of it is changed to a chemical called acetaldehyde. When acetaldehyde is combined with oxygen, acetic acid is formed. When the acetic acid is further combined with oxygen, carbon dioxide and water are formed.

The oxidation of alcohol produces calories. An ounce of pure alcohol contains about 163 calories — or about 105 calories in a 1½-ounce glass of whiskey or gin. Although alcohol contains calories, it does not contain the vitamins and other nutrients of food.

FIGURE 1.
BLOOD ALCOHOL CONCENTRATION

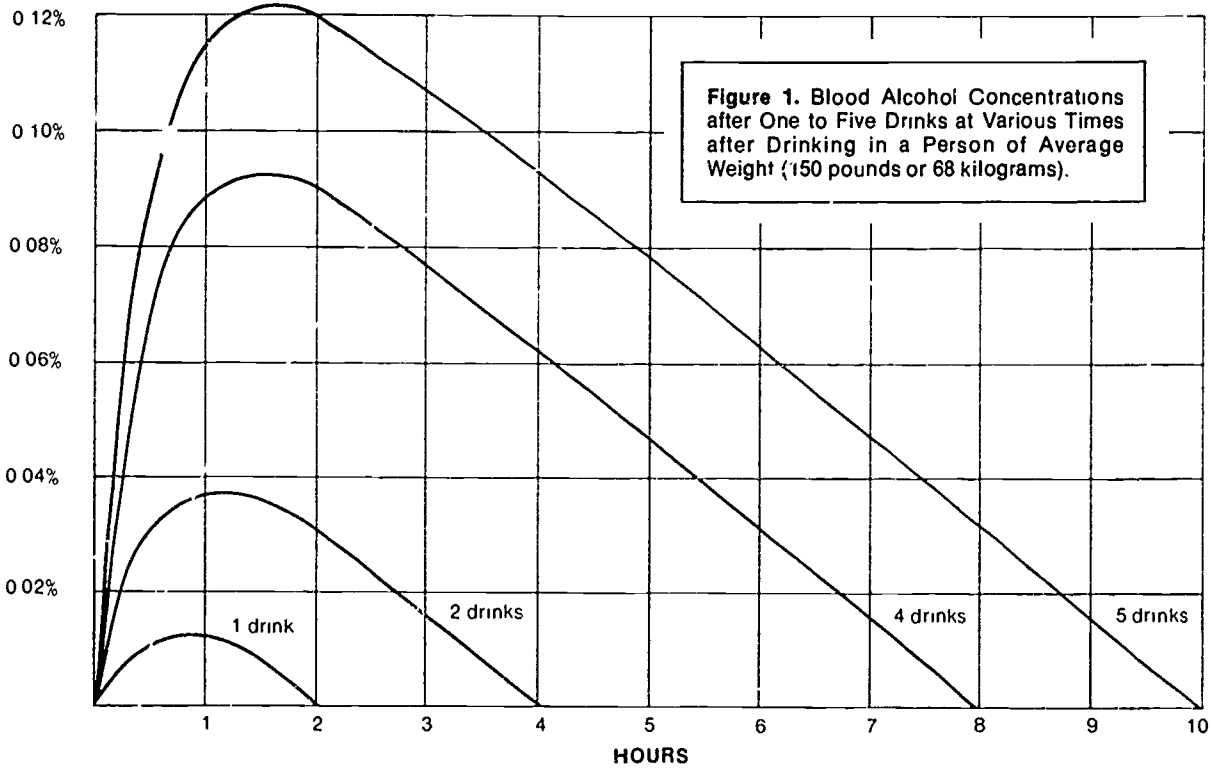


Figure 1. Blood Alcohol Concentrations after One to Five Drinks at Various Times after Drinking in a Person of Average Weight (150 pounds or 68 kilograms).

Each drink contains 1½ ounces of whisky, gin, or other distilled spirit, or 5 ounces of wine, or 12 ounces of beer

The liver can only oxidize a certain amount of alcohol each minute. The oxidation rate of alcohol in a person weighing 150 pounds is about 7 grams of alcohol per hour. This is equivalent to about ¾ of an ounce of distilled spirits, 2½ ounces of wine, or 7.75 or 8 ounces of beer per hour. If a person drank no more than ¾ of an ounce of whiskey or half a bottle of beer every hour, the alcohol would never accumulate in the body and he would feel little of the effects of the alcohol; he would not become intoxicated.

The process of oxidation continues until all the alcohol has left the body. As shown in Figure 1 on page 12, alcohol does not leave the body very quickly. This is why people are advised to drink slowly since the body can only remove a small amount of alcohol at a time. Slow drinking results in a low level of alcohol in the blood and the drinker does not become intoxicated.

Helpful Hints for Minimizing Problems Related to Alcohol Use

If one chooses to serve beverage alcohol, the following helpful hints are offered to minimize problems related to use.

1. Bear in mind throughout the party that enjoying friends is the primary goal; it is not to see how much alcohol can be served or consumed. Since no one enjoys an intoxicated individual, it is a host's responsibility to assure that alcohol is consumed without problems.
2. Serve appetizing and appealing non-alcoholic beverages as well as alcoholic ones. That is, punch, soft drinks, juices should be available as alternatives for guests who don't drink, as well as for drinkers who feel they've had enough but still want to have a glass in their hand.
3. Food should always accompany the serving of alcohol. The best type of snacks are pieces of cheese, small chunks of meat (e.g., hot dogs, meatballs), cheese dips, etc. These slow down the rate at which alcohol is absorbed into the bloodstream. Salty snacks such as peanuts, chips, and pretzels tend to make drinkers thirsty and may cause them to drink more.
4. Make sure that the amount of alcoholic beverage for a drink is measured, either by a measuring device on the bottle or yourself. This assures the host and guest that the amount of alcohol in a drink is the desired and expected amount. Individuals can metabolize about a 12-ounce can of beer, 5 ounces of wine or 1½ ounces of distilled spirits in approximately one and one half to two hours. If more alcohol is put into the drink the individual who is spacing his drinks so as not to become intoxicated may wind up drunk without knowing why. Avoid mixing alcohol with carbonated beverages, as carbonation speeds absorption.

5. Since only time enables the body to eliminate alcohol, individuals should feel free to space their drinks. It is not hospitable to always make sure a guest's glass is full. Often a guest winds up with an undesired drink because he did not want to refuse a host.
6. Close the bar about an hour to an hour and a half before the party is to end. During this time, cake and coffee or other non-alcoholic beverages and food should be served. Though it is not the coffee or the food which returns a guest to a sober state, the additional time it takes to prepare and serve will help.
7. *Never, never, never* serve one for the road. It takes about twenty minutes for the alcohol in a drink to be absorbed into the bloodstream and the individual to feel the effects of that drink. A person who was not intoxicated at the party's end but has one for the road may wind up in no condition to drive as he is driving home.
8. If your best efforts are subverted and a guest becomes intoxicated, do not let him drive; convince him to let someone else drive, call him a cab, arrange for a ride with a friend, drive him yourself, let him sleep over, etc. Some individuals may act as if its unmanly to relinquish their keys, but this is a misinformed ego trip and one which if allowed could fill a host with guilt for the rest of his life.

Laws and Liabilities

Federal laws on alcoholic beverages regulate the production of the beverages and the proportion of alcohol contained in the product, some of the taxes assessed on the manufactured beverage, the labeling of the product, and its distribution across the country. For the most part, a bottle of distilled spirits or wine or can of beer sporting the same major label will be available throughout the United States. Although some products are only sold locally, the national brands make liquor stores across the country look alike. In addition, the consistency in look and label helps the consumer know what is being purchased.

The laws related to alcoholic beverage availability are controlled by state and local authorities. The laws covering the purchase and consumption are complex and can differ state by state, county by county, and even city by city within the same county. For example, the minimum age at which alcoholic beverages may be purchased legally has differed across state lines for years, ranging from 18 to 21 years (in all states the age of purchase is established by the state legislature). Some states had two ages (a higher age for the purchase of distilled spirits and a lower one for the purchase of beer and wine). Although a major national lobby exists to establish the age of 21 for the purchase of all types of beverage alcohol throughout the country (and most states have complied), it is a matter of state's rights and will be enacted only by legislative vote in each state, not by a national decree.

It should be emphasized that although this is often called the "drinking age" or age of "legal drinking," it is the age at which alcoholic beverages may be purchased legally. Most states' laws indicate that parents and guardians have the right to serve their own children in the home; this allows for religious activities, family events, special celebrations, etc. Obviously, the law does not allow parents to place their children in jeopardy and standards of responsibility must be upheld. Parents are not allowed to serve other peoples' children who are under the minimum age of purchase regardless of the ceremony or activity.

Most states also have laws which outline fines and/or penalties for individuals who are underage and attempt to or purchase alcohol by misrepresenting their age and using false identification. Individuals who purchase alcohol for those under the minimum age and those who supply false ID or allow underage individuals to use their ID are subject to a disorderly persons charge and a fine in most states.

As mentioned, beverage alcohol is taxed by the federal government. It is also taxed by the state and the percentage of tax varies from state to state. Thus it is cheaper to purchase alcoholic beverges in some states and consumers may cross state lines to make their purchases. The quantity one may purchase and/or bring into a state is also regulated, as is the reason for purchase. That is, certain quantities may be purchased for individual use but not for resale in another state.

Another statute which differs across state lines is the Driving While Intoxicated (DWI) law. Throughout the country, the blood alcohol level considered to be the legal definition of impairment is .10%, but the penalties differ. In New Jersey, for example, court-imposed fines and penalties take the number of offenses into consideration. For the first offense, the driver license is revoked for six months to a year with a fine of $250.00 to $400.00, attendance at an educational resource center for 12 hours and a possible jail sentence of 30 days. With a second offense, the license is revoked for two years, the fine is $500.00 to $1,000.00, with 30 days of community service, resource center attendance of 48 hours for education and evaluation of an alcohol problem, and a possible jail sentence of 90 days. A third conviction can mean loss of license for 10 years, a $1,000.00 fine and 180 days in jail. In addition, anyone who is convicted in New Jersey of DWI or refusing to submit to a chemical test is subject to an additional insurance surcharge of $1,000.00 per year for three years. (Court costs and legal fees are not included in the above.) As one can see, the penalties attempt to impact on many aspects of the individual's life and, though the DWI laws differ in specifics throughout the states, the common goal is to remove intoxicated drivers from behind the wheel.

Some states also have laws prohibiting open containers of beverage alcohol in automobiles, to attempt to eliminate the practice of drinking as one drives a vehicle. Places of sale, hours, and price policy are also matters of state regulation. Some states — "monopoly" states — only allow alcoholic beverages to be sold in state-owned stores, while others allow their sale in liquor stores and supermarkets. Days and/or hours of sale are also governed by state guidelines and in some states, prices are regulated.

Possession of and public consumption of alcohol are governed by local ordinances. It is possible to carry open containers of beverage alcohol outside a restaurant, walking down a street or at a block party in some communities and be penalized by a fine and/or jail term for the same action in a neighboring community. Local ordinances also set the closing times of bars and restaurants that sell alcoholic beverages.

The issue of liability related to beverage alcohol is rooted in both law and in public policy. Being responsible and careful not to harm others is part of our social fabric and, as such, makes us responsible (liable) for knowingly hurting another or causing another to be hurt.

Dram shop liability has been part of the law in many states since the 1800's. This law states that tavern owners are liable (financially responsible) for damages caused by individuals who have been served when they were obviously intoxicated. Many lawsuits, especially cases which involve drunk driving, use dram shop liability to try to recover damages against establishments in which an obviously intoxicated individual was served. Some suits seek to establish that even though the person might not have been obviously intoxicated, the quantity of alcohol served would have resulted in intoxication. Bartenders who serve an intoxicated patron can also be held liable for a customer's injuries or accident involving other individuals.

Until recently the concept of liability for the actions of an intoxicated individual only extended to public establishments such as bars, taverns, and restaurants, and the servers of alcohol employed by the establishment. However, the New Jersey Supreme Court decided in 1984 in *Kelly v. Gwinnell* that a host or hostess who serves alcohol to an intoxicated guest can be held liable for injuries inflicted by the guest. The implications of this decision are far-reaching. Individuals who are planning to serve alcoholic beverages in their home must understand that not only do they have a moral and social responsibility to not cause harm to others, but that they could be held financially responsible for alcohol-related injuries to their guests and others. The social host must think about the party, prepare for serving alcohol in the most responsible fashion and consider a plan of action if an individual becomes intoxicated. At the very least, an alternative to allowing intoxicated guests to leave and drive automobiles is necessary.

Alcoholism

Alcoholism is a chronic and usually progressive disease. Its identifying characteristics include a dependence on alcohol for relief from emotional or physical distress and consumption of increasingly larger amounts of alcohol that cause damage to the person's mental and physical health and his or her family and social life.

There are an estimated 10 million alcoholics in the U.S.A. today. Perhaps another 8 million individuals are problem drinkers — persons whose excessive drinking is interfering with various aspects of their lives. Many of these problem drinkers may eventually become alcoholics.

There is no one type of alcoholic — alcoholism is found in males and females of all social classes, all races, all ethnic and religious groups, and in all occupations. The specific causes of alcoholism are not known, but they are probably a complex interaction of emotional, social and physical factors.

Fortunately, alcoholism can be successfully treated. Many different kinds of help are available to alcoholics and their families. Hospitals provide emergency, short-term and long-term medical and psychological treatment on both an in-patient and out-patient basis.

Most communities have alcoholism treatment facilities. Alcoholics Anonymous, a worldwide fellowship of alcoholics, provides support and encouragement for recovering alcoholics. Al-Anon and Alateen offer help for the families of alcoholics. Halfway houses help recovering alcoholics readjust to society. Voluntary agencies, such as the National Council on Alcoholism and its affiliates, provide information and referral services. With help, alcoholics can recover and lead full, productive lives.

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Resources

Al-Anon Family Group Headquarters, Inc.
P.O. Box 182
Madison Square Station
New York, NY 10159-0182
Tel. (212) 254-7230

Alateen
P.O. Box 182
Madison Square Station
New York, NY 10159-0182
Tel. (212) 254-7230

Alcohol and Drug Problems Association
of North America, Inc. (A.D.P.A.)
444 North Capitol Street, NW - Suite 181
Washington, DC 20001
Tel. (202) 737-4340

Alcoholics Anonymous (A.A.)
World Services, Inc.
P.O. Box 459, Grand Central Station
New York, NY 10163
Tel. (212) 686-1100

American Council on Alcoholism (A.C.A.)
National Executive Offices/Suite 301
8501 LaSalle Road
Towson, MD 21204
Tel. (301) 296-5555

American Medical Association (A.M.A.)
535 North Dearborn Street
Chicago, IL 60610
Tel. (312) 645-5000

Association of Labor-Management Administrators
and Consultants on Alcoholism, Inc (A.L.M.A.C.A.)
1800 North Kent St./ Suite 908
Arlington, VA 22209
Tel. (703) 522-6272

National Clearinghouse for Alcohol
and Drug Abuse Information (N.C.A.D.A.I.)
P.O. Box 2345
Rockville, MD 20852
Tel. (301) 468-2600

National Council on Alcoholism, Inc. (N.C.A.)
12 West 21st Street
New York, NY 10017
Tel. (212) 206-6770

National Institute on Alcohol Abuse
and Alcoholism (N.I.A.A.A.)
5600 Fishers Lane
Rockville, MD 20852
Tel. (301) 443-4733

National Institute on Drug Abuse (N.I.D.A.)
11400 Rockville Pike
Rockville, MD 20852
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North Conway Institute
14 Beacon Street
Boston, MA 02108
Tel. (617) 742-0424

Rutgers Center of Alcohol Studies
Rutgers — The State University
New Brunswick, NJ 08903
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About the Center of Alcohol Studies

The Center of Alcohol Studies was founded at Yale University in 1940. The center has been a leader in the interdisciplinary research on alcohol use and its effects and has been in the forefront of the movement to recognize alcoholism as a major public health problem. Dr. E.M. Jellinek was the center's first director, and the prestigious *Journal of Studies on Alcohol*, still published by the center, was founded by Howard W. Haggard, M.D. In 1962, the Center of Alcohol Studies moved to Rutgers University.

The center's faculty have been trained in biochemistry, economics, physiology, psychology, psychiatry, sociology, political science, public health, education, statistics and information science. The faculty teach undergraduate, graduate and continuing education courses, including the world famous Summer School of Alcohol Studies. The SSAS alumni have assumed leadership positions in research, prevention and treatment of alcohol problems.

The center's major areas of concern are: research, education, treatment, prevention and information dissemination. As part of the center's educational mission, this pamphlet series presents information on important topics in the alcohol studies field.