



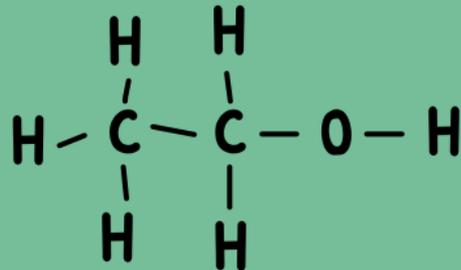
# ALCOHOL - THE FACTS

## WHAT YOU OUGHT TO KNOW ABOUT ALCOHOL

# WHAT IS ALCOHOL?

- ▶ The alcohol we drink is ethanol.
- ▶ Other types of alcohol, such as methanol or glycol, are very toxic even in small quantities.
- ▶ Alcohol is firmly embedded in many societies and is consumed on many occasions.
- ▶ Alcohol is produced by the fermentation of fruit sugars and other sugary ingredients such as potatoes and cereals.

»» The chemical formula of ethanol is  $C_2H_5OH$ .



# WHAT IS AN ALCOHOL UNIT?

An alcohol unit always contains between 10 and 12 g of pure alcohol. This makes it easier to calculate the amount of alcohol. A glass of beer (250 ml) or a glass of wine (100 ml) is equivalent to one alcohol unit.

\*ABV = alcohol by volume



**SHOT OF  
VODKA**  
40 ml  
(38 % ABV\*)

=

12g of  
pure  
alcohol



**LONG DRINK**  
200ml/  
40ml vodka  
(38 % ABV\*)

=

12 g of  
pure  
alcohol



**GLASS  
OF WINE**  
100 ml  
(11% ABV\*)

=

9 g of  
pure  
alcohol



**GLASS OF  
SPARKLING WINE**  
100 ml  
(11% ABV\*)

=

9g of  
pure  
alcohol



**BEER MIX\***  
500 ml  
(2.5 % ABV\*)

=

10g of  
pure  
alcohol



**BEER**  
250 ml  
(5 % ABV\*)

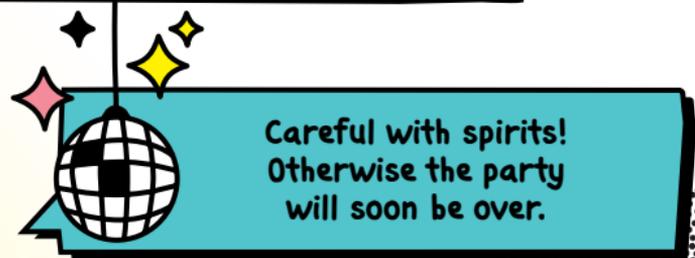
=

10g of  
pure  
alcohol

## \*CAUTION:

The alcohol content in beer mix beverages often differs. Some brands have 2.4 % ABV; others have as much as 5 % ABV\*.

# HOW TO STAY WITHIN YOUR LIMIT



**NO  
THANKS!**

If someone offers you a drink, simply say "no" in a firm but friendly way if you do not feel like drinking.

**DRINK  
WATER!**



Do you have problems or stress? Then it is better to stay sober. Alcohol doesn't solve any problems and is likely to make you even more miserable.

Are you thirsty?  
Then order something that doesn't contain any alcohol first.

Slow down your pace of drinking. It will be easier for you to keep track of what you have consumed and how much.



A round for everyone? Give rounds a miss or order a non-alcoholic drink.



# EFFECTS OF ALCOHOL

»» **ALCOHOL** (ethanol) is a strong toxic poison that can be addictive. Alcohol enters the bloodstream very quickly, and is then pumped throughout the body.



## MENTAL EFFECTS:

**S**mall amounts of alcohol usually have a relaxing and positive impact on your mood – feelings of anxiety are subdued. But drinking too much alcohol clouds your judgement and your critical faculties – your willingness to take risks increases. When the alcohol levels increase, the positive mood can quickly turn into irritability and aggression.



## BRAIN:

**A**lcohol reaches the brain very quickly and alters the transmission of information between the nerve cells. The effects mainly depend on the amount of alcohol consumed. After drinking alcohol, the brain processes diminish more quickly than most people think.



## PHYSICAL REACTIONS:

**W**ith a blood alcohol concentration, or BAC, of just 0.2 per mille (‰) you can no longer correctly assess distances. The more you drink, the smaller your field of vision becomes and the harder it is to concentrate. Movements are slower and less coordinated. Larger quantities can result in alcohol poisoning. Frequent binge drinking can even result in brain shrinkage.

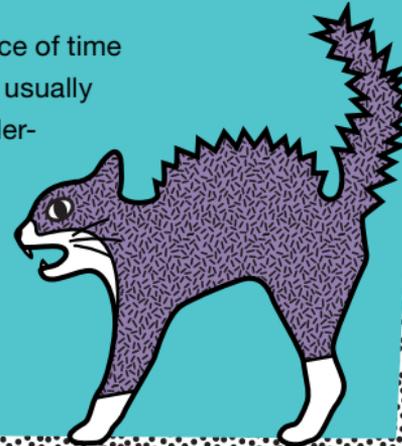
## »» WHAT IS BLOOD ALCOHOL CONCENTRATION (BAC)?

In most European countries, blood alcohol concentration is measured in grammes of alcohol per 1000 millilitres/grammes of blood, given in per mille (‰).

## »» WHAT IS BINGE DRINKING?

The term binge drinking refers to drinking lots of alcohol in a short space of time to get drunk. After drinking five or more alcohol units, most people are usually drunk. Girls and women reach a higher BAC because they have considerably less water in their bodies. This is why women who drink over four alcohol units are classed as binge drinkers. The interactive body map shows the effects alcohol consumption can have:

[www.kenn-dein-limit.info/alkohol-bodymap](http://www.kenn-dein-limit.info/alkohol-bodymap)



# ALCOHOL LIMITS

## »» LOW-RISK ALCOHOL CONSUMPTION IN HEALTHY ADULTS



**WOMEN:**

One alcohol unit per day  
(10–12g of pure alcohol)



**MEN:**

Two alcohol units per day  
(20–24g of pure alcohol)

## »» HOW MUCH ALCOHOL PUTS YOU AT RISK?

As a general rule, alcohol is a risk to your health. Medical studies show that for women health risks increase significantly if they drink more than 10 to 12g of pure alcohol (one alcohol unit) per day. For men, this limit is about two alcohol units per day. People who do not drink much have a relatively low health risk.



**But beware: These limits apply to adults without any health issues. Young people ought to drink as little alcohol as possible – important brain restructuring and development processes take place until the age of 20. Alcohol can endanger these processes. Binge drinking is especially harmful to the young brain.**

### **THIS APPLIES TO BOTH GENDERS:**

Do not drink any alcohol at all on at least two days a week to avoid any kind of habituation.

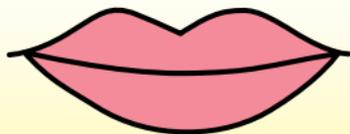
# FROM PER CENT TO BAC

Women have a body water content of approximately 60%.

BOTH CONSUME THE SAME AMOUNT OF ALCOHOL YET THEY HAVE A DIFFERENT BLOOD ALCOHOL CONCENTRATION (BAC).

Men have a body water content of approximately 70%.

## FOR WOMEN?



**10 g of pure alcohol**  
(= 250ml beer)

**33 kg body water content**  
(at 55kg weight)

≈  
**0.3 ‰ (per mille) BAC**

1

**BEER**  
250 ml  
(5% ABV\*)



## FOR MEN?



**10 g of pure alcohol**  
(= 250 ml beer)

**56 kg body water content**  
(at 80 kg weight)

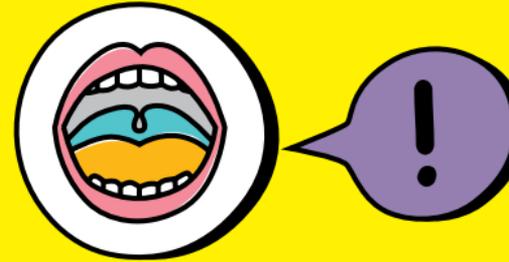
≈  
**0.18 ‰ (per mille) BAC**

# YOUTH PROTECTION ACT

The youth protection act was created to protect children and young people in public places. It defines children as persons under the age of 14 and young people as those aged between 14 and 17.

In Germany, it is forbidden to sell or serve alcohol to persons under 16 years of age. However, if a parent or custodian accompanies them, young persons over the age of 14 may drink wine or beer, but not spirits or beverages that contain spirits.

Persons over the age of 16 can buy beer, wine or sparkling wine for instance. Spirits and beverages that contain spirits can only be sold or served to persons over 18 years of age.



Young persons must be over 16 years of age to go to a pub, club or disco without being accompanied by a custodian or parent. If they are not of legal age, they can only stay there until midnight.



**CLICK HERE:**

Detailed information about the legal regulations

[www.kenn-dein-limit.info/gesetzliche-regelungen](http://www.kenn-dein-limit.info/gesetzliche-regelungen)

# DRINKING AND DRIVING

The drink-drive limit for learner drivers in the two-year probationary period and people under the age of 21 is a BAC of zero. Anyone driving a car, moped or motorbike with a higher drink-drive limit is automatically committing an offence, which is subject to a fine of 250 euros and a penalty point recorded in the central index for traffic offenders in Flensburg.

Anyone who appears to be driving recklessly, is involved in an accident or attracts attention due to “typical alcohol-related behaviour” is committing a criminal offence and will lose their driving licence if their BAC level exceeds 0.3 ‰ (per mille) BAC.



Other drink-drive limits in road traffic: Anyone with a BAC level that exceeds 0.5 ‰ or more and drives a vehicle – irrespective of whether it is a car, a motorbike or a motor scooter – is committing an offence. The result can be a one- to three-month suspension of their driving licence as well as a hefty fine.

Any road user with a BAC level of 1.1 ‰ is committing a crime, which can lead to suspension of their driving licence, penalty points in the central index for traffic offenders and a prison sentence or fine. Anyone using a vehicle with a BAC level of 1.6 ‰ is subject to a medical-psychological assessment (MPA).



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