

Alcohol

Its effects on the body

What is a unit of alcohol?

A unit of alcohol is 10 millilitres (or 8 grams) of ethanol (pure alcohol) and takes 'on average' about one hour to be broken down by the liver after being absorbed.

UK daily limits

The UK has recently revised its daily limits to a maximum of 2 units per day for both male and female, which amounts to a maximum advisory limit of 14 units per week!

The World Health Organisation (WHO) defines 6 units per day as chronic use. As a guide, there are 9.75 units in a bottle of 13% wine.



Pint of Bitter (ABV 5%)	Pint of Cider (Abv 5.3%)	Pint of Lager (Abv 5.2%)	White wine 175ml (Abv 13%)	Single Gin & Tonic (Abv 40%)
2.3 UNITS	3 UNITS	3 UNITS	2.3 UNITS	1 UNIT

Eating with Alcohol

The rate of alcohol absorption is slowed when food is ingested, that's why alcohol affects you more quickly on an empty stomach but once it's in your system it's down to the liver to break the alcohol down. Remember there is no way to speed up this process!

Size and weight

People who are smaller and weigh less will feel the effects more quickly because they have less tissue to absorb it.

Gender

Women are generally smaller and lighter than men so have less body tissue, they also have less water and genetically more body fat so the alcohol percentage in the blood is higher than males after consuming the same amount. Therefore females may get intoxicated faster and feel the effects for longer, also women have less of the enzyme which breaks down the alcohol in the liver which contributes to these factors.

Age

Young people again have less body weight so the effects are quickly felt. Alcohol can also be damaging to their brain development especially with teenagers. As we get older we slowly lose some of the enzymes in the liver that process alcohol, so it makes alcohol more difficult to tolerate as we age, which can lead to serious health problems in later life for both male and female.

The long-term Physical effects of Alcohol

1. Nervous system

Aggressive irrational behaviour, anxiety, depression, trembling, clamminess, Insomnia, memory lapse, decision making, lack of self-control, uncoordinated, burning sensation hands and feet, loss of libido, Dementia.

2. Circulation and breathing

Palpitations, chest pains, lower resistance to infections, bronchitis, bloodshot eyes, fat deposit on the heart impairing its function precipitating heart attacks (Alcoholic cardiomyopathy). Permanent large blood vessels or redness of the skin, especially on the face or chest.

3. Digestive system

Indigestion, heartburn, vomiting, internal bleeding, Certain cancers, (mouth, throat, oesophagus).

4. The liver

The liver becomes enlarged with fat deposits and can develop hepatitis with excessive consumption.

It can develop cirrhosis or damaged tissue which will be replaced with more tissue and acids enlarging the liver. Ultimately there are no pain receptors in the liver so problems are only detected often when substantial damage has already occurred and the liver maybe unable to perform its metabolic function and go into failure. Excessive drinking may cause primary liver cancer (Hepatoma).

5. Muscles, bones and skin

Backache, rheumatism, gout, athlete's foot, sweat rash, obesity, breast swelling (men).



*These brief notes have been compiled to accompany Screen4's Drug and Alcohol Testing and Support Solutions. For further information about this and other drug and alcohol courses, please visit www.screen4.org