Alcohol related conditions are one of the most common causes of admission to hospital in the UK and heavy drinking contributes to about 33,000 deaths a year. In Scotland, excessive drinking has become one of the most significant health and social challenges. Deaths from liver disease in England have reached record levels, rising by 25% in less than a decade.

Recommended safe levels for alcohol
If you drink alcohol keep within safe limits. This means a maximum of two to three units a day for women and three to four units a day for men. It is also recommended to have a few “alcohol free days” every week.

What are units and what does ABV mean
Units express the quantity of pure alcohol in a drink. One unit equals 10mls or 8g of pure alcohol which is around the amount of alcohol that an average adult can process in an hour. The number of units is based on the size of the drink as well as its alcohol strength ie. A pint of ordinary strength lager contains just over 2 units, whereas a pint of strong lager contains over 3 units. The alcohol strength of a drink is expressed as alcohol by volume (ABV). Most drinks declare their ABV on the label.

To work out the number of units in a drink multiply the %ABV by the amount of the drink in millilitres. Then divide by 1000.

Volume (i.e. 330mls lager) multiplied by %ABV (i.e. 5%) then divide by 1000
So 330 x 5 divided by 1000 = 1.7 units
Many websites provide drink calculators to help you work this out.

Avoid binge drinking
Recent guidelines highlight the benefits of having a few alcohol free days a week. The guidance is aimed at helping break the regular cycle of drinking and giving the body time to recover between drinking days. Having alcohol free days doesn’t mean you can increase the amount you can safely drink on other days. You cannot save up the units and have them all at once. This is why the recommendations are now based on daily rather than weekly amounts and specify avoiding binge drinking.

Research published in the British Medical Journal helps to illustrate this. People in France and Northern Ireland were found to drink the same amount of alcohol each week. However, French drinkers would spread their alcohol evenly over the whole week, whereas the Irish drinkers would consume their alcohol over a shorter time period i.e. one day. It was concluded that the Irish drinkers who “binged” had nearly twice the risk of suffering a heart attack or dying from heart disease compared to the French drinkers who drank in moderation.

Benefits of Alcohol in moderation
A daily intake of 1-2 units of alcohol is associated with a lower risk of coronary heart disease (CHD) in men aged over 40-45 and in women who have been through the menopause. Scientists believe there are 2 main mechanisms by which alcohol can help in CHD prevention. The main effect is an increase in high density lipoprotein (HDL) or good cholesterol which reduces the risk of fatty plaques or atheroma building up in the arteries. HDL helps to remove cholesterol from the blood and can help stabilize these plaques. Secondly, moderate alcohol intake may help prevent the formation of blood clots, reducing the level of fibrinogen, a protein which is produced by the liver and increases the likelihood of blood clotting. Other components of alcoholic drinks may provide further protection. Ones of interest are flavonoids found in red wine. More research is needed to confirm this before specific advice is given.
While drinking in moderation is thought to offer some protection against heart disease, the effect is small and those who do not drink at all are not advised to start. The safer, healthier ways to protect the heart is to follow a healthy, well balanced diet, low in saturated fat, regular physical activity and to reduce other risk factors such as smoking, raised cholesterol and high blood pressure.

Those who have been diagnosed with a heart condition or who have had heart surgery should check with their doctor for advice on drinking alcohol once their recovery is complete. People with heart conditions such as cardiomyopathy, where the heart muscle is affected, may be advised to avoid drinking alcohol altogether.

**Health effects of excess alcohol**

Usually the damage from drinking too much alcohol only surfaces after a number of years. These include liver problems, reduced fertility, high blood pressure, strokes, increased risk of some cancers (including bowel, mouth, liver, throat, oesophageal and breast), abnormal heart rhythms (arrhythmias), pancreatitis, cardiomyopathy (damage to heart muscle), decrease in blood glucose levels resulting from increased insulin production, and mental health problems. Regular drinking can also cause sleep disturbance, indigestion and headaches.

About 4% of cancers worldwide is caused by drinking alcohol, and 6% of cancer deaths have been attributed to alcohol in the UK. The risk of developing cancer can increase with as little as 3 units of alcohol a day. Individuals with cirrhosis of the liver, a condition often found in heavy drinkers often progresses to liver cancer.

Drinking over the recommended safe levels is thought to result in:

- Men 2-3 times and women about 1 and a half times more likely to get cancer of the mouth, neck and throat. Men were twice as likely to develop cirrhosis of the liver. The risk of women getting breast cancer increases by one fifth.
- Gaining weight and an increase in waist circumference can also result from drinking alcohol. This is because weight for weight alcohol contains almost twice as much energy as the same weight of sugar. It can also lead to increased triglycerides in the blood, a form of storage fat.

<table>
<thead>
<tr>
<th>Calorie values of regularly ordered alcoholic drinks:</th>
</tr>
</thead>
<tbody>
<tr>
<td>Gin or vodka and tonic</td>
</tr>
<tr>
<td>Dark rum and coke</td>
</tr>
<tr>
<td>Medium glass white wine</td>
</tr>
<tr>
<td>Bottle red wine</td>
</tr>
<tr>
<td>Pint of cider</td>
</tr>
<tr>
<td>Pint of lager 5% ABV</td>
</tr>
</tbody>
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**Alcohol and medicines**

It may be necessary to avoid alcohol if you are taking certain medicines. This is because alcohol can interfere with the way a drug is absorbed by the body or broken down in the liver. Examples include sedatives (Diazepam) and anti-depressants (Prozac). Care should be taken with long term medications such as Warfarin and anti-epileptic medication as alcohol may make them less effective. There are also certain types of antibiotics which should not be taken with alcohol as the combination can make you ill. There are no known interactions between statins and alcohol but the recommendation is to stay within safe guidelines as statins may occasionally result in an increase in liver enzymes.

Ask your doctor or pharmacist if you are unsure about drinking alcohol with any medicines you are taking, or check the patient information leaflet that comes with medication.

For those who want to cut down but still enjoy alcohol, the following suggestions can help:

- Opting for a lower strength drink
- Using a smaller glass
- Not drinking before you go out
- Trying a drink with a mixer i.e. white wine with soda or lemonade to make it last longer
- Drinking alcohol with a meal only
- Drinking at a later time
- If you normally drink to unwind try other ways to relax i.e. taking a bath, walking the dog, visit friends, call a friend, indulge in a new hobby

**Alcohol and Pregnancy**

The Food Standards Agency advise women who are pregnant or trying to get pregnant to stop drinking altogether. For those who are pregnant, too much alcohol can seriously affect their baby’s development.

For more information check out the sites below:

- www.drinkaware.co.uk/alcohol
- www.nhs.uk/Livewell/alcohol
- www.nhs.uk/Change4Life
- www.alcoholconcern.org.uk