

Aim

- I can explain the impact of alcohol on the body.

Success Criteria

- I can describe the parts of the body affected by alcohol.
- Most will be able to explain the short and long term effects of alcohol abuse
- I can explain how scientific evidence can change ideas.

STARTER

Alcoholic or non- alcoholic?

Cut out these drinks and then stick them onto two pages: one for alcoholic drinks, and the other for non- alcoholic drinks.



Alcohol is not considered a nutrient but is a source of energy in the diet.

Did you know?

Each gram of pure alcohol provides 7kcal/29kJ of energy.



How is alcohol produced?

Alcohol is produced by a process called fermentation.

During fermentation microbes called yeasts grow by feeding on the sugars (e.g. glucose).

As they grow, the yeasts produce alcohol and carbon dioxide.

Alcoholic drinks

The amount of alcohol in drinks is expressed as a percentage present named as Alcohol by Volume (ABV) and varies from 0 - 50%. Spirits such as whisky and vodka have a higher alcohol content than wines or beers.

Fruits such as grapes and apples are used to make alcoholic drinks such as wine and cider.

Did you know?

Cereals, e.g. barley and rye, are used to make beer and spirits. Spirits are made through the distillation process.



- **Typical alcohol content of drinks**

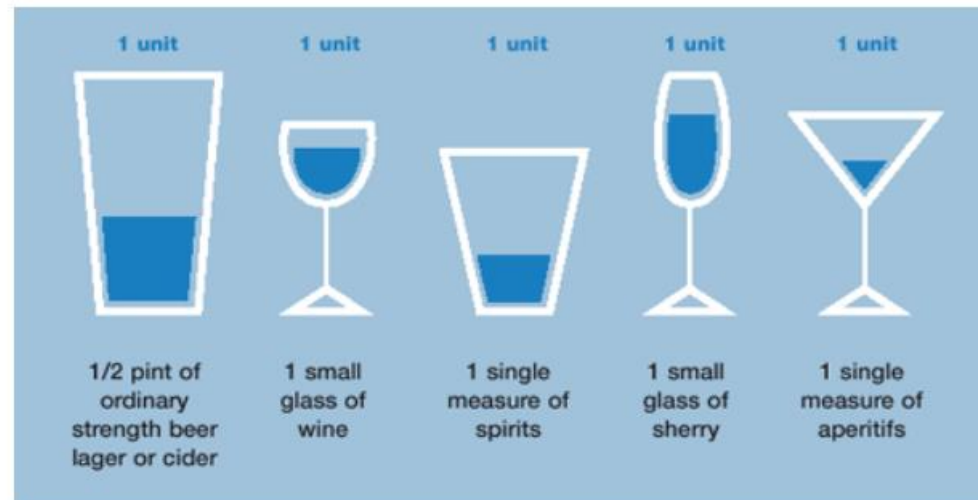
• Drink	% alcohol
• Spirits	40
• Sherry	15-20
• Wine	10-15
• Strong lager, beer or cider	3-6
• Low alcohol lager, beer or cider	1-1.5

Know your limits

Women: up to 3 units per day

Men: up to 4 units per day

1 unit= 1/2 pint of beer, 1 small glass of wine, 1 shot of vodka



One unit of alcohol

A standard way of measuring the alcohol content in drinks is in units of alcohol.

One unit contains 8 grams or 10ml of pure alcohol (ethanol). For example:



A single pub measure of spirits.
25ml ~40% alcohol



A glass of sherry or fortified wine
50ml ~20% alcohol



$\frac{1}{2}$ glass of table wine
100ml ~10% alcohol



$\frac{1}{2}$ pint of regular lager, beer or cider
284 ml ~3.8% alcohol



1 pint of low alcohol beer or cider
568 ml ~2% alcohol

What happens to alcohol in the body?

Alcohol is absorbed from the stomach and the small intestine.

This occurs more slowly if alcohol is consumed with food.

Alcohol is soluble in water and carried around the body in the bloodstream.

Alcohol is removed from the blood by the liver over a period of several hours. The rate at which this happens depends on age, sex, body weight, liver size and how much alcohol was consumed.

Sensible drinking

The government advises that people should avoid regular drinking:

Men – no more than 3 to 4 units per day.

Women – no more than 2 to 3 units per day.

After a large consumption of alcohol (binge drinking) in one session, it is recommended to avoid alcohol for at least 48 hours to allow the body to break down all the alcohol consumed.

TASK

- Complete the task sheet and the note sheet on alcohol. Complete all tasks in your books.