

The absorption and elimination of alcohol

- What is alcohol
- How is it absorbed
- How is it eliminated
- What is a unit of alcohol
- How can a unit be calculated
- A unit the drink drive law and you

What is alcohol

- Alcohol is Ethanol
- Naturally occurs in fermentation
- Added artificially (Alco-pops)
- It is a drug
- It is a poison

How is alcohol absorbed

- Swallowed
- Goes through stomach & intestine wall
- Into blood and pumped by heart
- To the brain
- All within 5 minutes

What is ABV



- Alcohol by volume
- 14% ABV
- Means 14% of content is alcohol

What is a unit

- For calculation purposes a unit of alcohol is the average amount of alcohol a healthy body can eliminate in 1 hour

What equals a unit



- Half pint of 3.5% abv beer



- 125ml glass of 9% abv wine



- 25ml glass of 40% abv spirit

How to calculate units



- Volume x ABV divided by 1000
- Example 330ml bottle of 5% abv beer.
- $330 \times 5 = 1650 / 1000$
- $= 1.65$ units.
- For safety always round up $= 2$ units

The Reality

- Driving at the British legal limit can make a driver up to 5 times likelier to crash
- Even small amounts of alcohol can double the risk of crashing
- The legal limit is not necessarily the safe limit
- Highest limit in Europe

The Effects

1 unit of alcohol = 7ug of breath (Maybe!)

HOWEVER

- Gender
- Size
- Fitness
- Medication
- Mood
- Food
- Topping up

The effect

- If 7ug breath = unit
- Large Adult Male
- Small Adult Female
- 5 units = 35ug limit
- 5 units = 65/80 blood
- 5 units = 112/80 blood

The morning after

- Friday night drinks from 9pm to Midnight
- Drinks 5 pints of 4.2% abv Lager and 2 double Jack Daniels
- In bed by 12.30

The morning after

- When would you be happy for this pupil to drive your car?

The morning after

- Lager = 12.5 units
- Jack Daniels = 4 units
- 16.5 units = 16.5 hours approx. to leave body
- Alcohol free 1.30pm next day

Warning

- There are no hard and fast rules for calculating alcohol elimination
- Drink driving offences stay on your licence for 11 years (10 years for re-offending)
- Banned for at least 1 year first offence
- On the CRB register and PNC number for 5 years (in most cases)