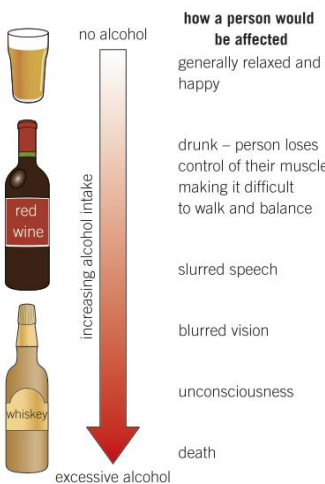


1.7 Alcohol

Learning objectives

After this topic you will be able to:

- describe the effect of alcohol on health and behaviour
- describe the effect alcohol has on conception and pregnancy.



▲ This diagram shows what happens to a person as they increase their alcohol intake.



▲ What is one unit of alcohol?

Many adults drink alcohol but it can be harmful. Drinking even small amounts of alcohol can change your behaviour. It can make some people feel relaxed and happy but others can feel aggressive and depressed.

What is alcohol?

Alcohol contains the drug **ethanol**. When you drink alcohol, ethanol is absorbed into your bloodstream. It then travels to your brain, where it affects your nervous system. This chemical is called a **depressant** because it slows down your body's reactions.

A Name the drug found in alcoholic drinks.

If people drink a lot of alcohol regularly, they may need to drink greater and greater amounts to cause the same effect on their body. They may become addicted. People who have an addiction to alcohol are called **alcoholics**.

B State what is meant by the word alcoholic.

How much alcohol can you drink safely?

Different alcoholic drinks contain different amounts of alcohol. For example, spirits such as vodka and whisky contain more alcohol than beer.

To lower the risk of damage to your body from drinking alcohol, the government recommends that adult women drink a maximum of two **units of alcohol** per day (14 units per week) and adult men a maximum of three units per day (21 units per week). One unit of alcohol is 10 ml of pure alcohol.

However, these are only guidelines because height, weight, and gender affect the way people react to alcohol.

C State the recommended maximum number of alcohol units per week for adult women and for adult men.

Dangers of alcohol

Drinking large amounts of alcohol over a long time can cause stomach ulcers, heart disease, and brain and liver damage.

Your liver breaks down harmful chemicals (including ethanol) into harmless waste products, which are then excreted from your body. As a result of having to break down large amounts of ethanol the livers of heavy drinkers become scarred. This means their liver works less efficiently, taking longer to break down alcohol and other chemicals. This condition is called cirrhosis of the liver, and can result in death.

D Name three conditions that are more likely to occur if a person drinks a lot of alcohol for a long time.

Should pregnant women drink?

The Department of Health recommends that pregnant women do not drink any alcohol. Drinking alcohol increases the risk of miscarriage, stillbirth, premature birth, and low-birth-weight babies.

When a pregnant woman drinks alcohol, it diffuses into the baby's bloodstream. It can then damage the developing organs and nervous system. Fetal Alcohol Syndrome (FAS) affects the way a baby's brain develops. It can result in children with learning difficulties, facial problems, and poor immune systems.

Alcohol can also reduce fertility in both men and women. This means they are less likely to conceive (get pregnant). For example, alcohol reduces the amount of sperm that a man produces.

Units of alcohol

On drinks labels the alcohol content is given as a percentage of the whole drink. Wine that says "10%" on its label contains 10% pure alcohol. Calculate the number of units of alcohol in a 200 ml glass of wine. One unit = 10 ml of pure alcohol.

Key Words

ethanol, depressant, alcoholic, unit of alcohol



▲ Look at the difference in appearance of a diseased liver (left) and a healthy liver (right).

Summary Questions

- Copy and complete the sentences below.
Alcoholic drinks contain the drug _____. This is a _____, because it affects the _____ system, slowing down your body's reactions. Drinking alcohol can lead to brain and _____ damage. (4 marks)
- Explain why it is important that pregnant women avoid alcohol. (3 marks)
- Make a visual summary to show the effects of alcohol on behaviour, health, and life processes such as conception, growth, and development. (6 marks)