



## Information about alcohol

- When a person drinks alcohol, the stomach soaks up about 20%, and the rest is taken up by the small intestine. From here, it enters the blood and is carried throughout the body. The alcohol in the blood then enters the different tissues in our body where it has its effect.
- Alcohol is a depressant drug, and not a stimulating one as many people think. It slows down the activity in many parts of the body, including the brain, affecting concentration and co-ordination.
- Research shows that alcohol affects the brain in a negative way. Alcohol acts mainly on the nerve cells in the brain and affects the way the nerve cells talk with other cells in the body.
- Unlike other drugs, alcohol doesn't act on one part or one receptor in the brain. Rather, it affects many areas of the brain in different ways. For example, it reduces activity in the area of the brain that looks after learning and memory, but increases activity in the area of the brain involved in emotions and reacting to stress.
- Alcohol slows down the messages sent between the brain and the rest of the body, and can lead to seizures, depression, manic depression and other mental problems.
- Alcohol can also upset the part of the brain that picks up on or judges the social signals that people give out. In this way, drinkers may be more likely to feel that someone is posing a threat where no threat really existed.
- Over time and continued use, alcohol has some really serious effects on the body. For example, it can cause liver cell death and hardening of tissue in the liver, reduce the total brain mass, brain damage, lead to ulcers in the stomach and intestines and increase blood pressure along with lots of emotional and social problems. The drawing below shows what some other longer-term effects of alcohol are.

### Long-term effects of alcohol

#### Nervous system

- tingling and loss of sensation in hands and feet

#### Heart

- high blood pressure
- irregular pulse
- enlarged heart

#### Lungs

- greater chance of infections, including tuberculosis

#### Muscles

- weakness
- loss of muscle tissue

#### Liver

- severe swelling and pain
- hepatitis
- cirrhosis
- liver cancer

#### Pancreas

- inflamed pancreas causing pain

#### Sexual organs

##### Males

- impotence
- shrinking of testicles
- damaged/less sperm

##### Females

- greater risk of gynaecological problems
- damage to foetus if pregnant

#### Blood

- changes in red blood cells

#### Brain

- brain injury
- loss of memory
- confusion
- hallucinations

#### Skin

- flushing
- sweating
- bruising

#### Stomach

- inflamed lining
- bleeding
- ulcers

#### Intestines

- inflamed lining
- ulcers

Picture courtesy of Australian Drug Foundation.  
Available at <http://www.adf.org.au/drughit/facts/hdayal.html>

- People who regularly drink heavily may become dependent on alcohol. Dependence can be psychological or physical or both. For example, people who are psychologically dependent on alcohol find that drinking becomes more important than other activities in their life. In these cases, people play all sorts of tricks on themselves. For example, people make themselves believe that their alcohol use is a solution to their problems ("it relaxes me, helps me to switch off"), when really it is making their problems worse.

Information taken from the following publications:

Australian Drug Foundation. Available at <http://www.adf.org.au/drughit/facts/hdayal.html>

June Russell's Health Facts: <http://www.jrussellhealth.com/alcbfm.html>

Marshall Brain's How Stuff Works: <http://www.howstuffworks.com/alcohol.htm>

A primer of drug action. By Robert Julien