

## 20 Personal health - answers

- 1 Sugar, salt, butter and alcohol are not necessary components of a healthy diet.
- 2 At present, the evidence for the beneficial effects of exercise is controversial with respect to prevention of heart attack and avoidance of obesity. There is not much scientific evidence for the effect of exercise on the feeling of well-being apart from a large number of personal observations (i.e. what people say).
- 3 Hay fever and diabetes are not associated with smoking. The other diseases occur more frequently in smokers than in non-smokers.
- 4 (a) (i) Drug tolerance is described by B. Increasing doses are needed to produce the same effect as the initial doses.  
(ii) Drug dependence is described by A. Physical withdrawal symptoms occur if the drug is not taken.  
(b) Addiction is another term for (ii), drug dependence.
- 5 Amphetamine and cocaine are stimulant drugs. The side-effects of amphetamines are high blood pressure; unwarranted self-confidence and reduced accuracy. Cocaine can cause arterial constriction and mental disorders. The after-effects of both drugs can be severe depression.
- 6 (a) Alcohol increases a person's reaction time (responses are slower).  
(b) Alcohol causes vaso-dilation, increase in self-confidence, reduction of accuracy and, in some people, irresponsible behaviour.  
(c) Excessive intake of alcohol over a long period can damage the stomach, liver (cirrhosis of the liver), nervous system and brain. It may also induce dependence (alcoholism).
- 7 A woman who thinks she is pregnant should take no alcohol at all.
- 8 In order of decreasing quantity of alcohol, the drinks are ranged as follows:  
2 pints of cider (4 units), 3 glasses of wine (3 units), a double whisky (2 units), a pint of beer (2 units), a glass of sherry (1 unit). (The beer and the whisky are equal third.)
- 9 Relatively 'safe' weekly levels of drinking are as follows:  
(a) men -30 units (maximum), (b) women -20 units, (c) pregnant women - 0 units (i.e. no safe level), (d) there is no safe level for people who are going to drive.
- 10 Drugs which relieve pain are called *analgesics* (A). Readily available examples of these drugs are *aspirin* (B) and *paracetamol* (C). Morphine and codeine are called *narcotic analgesics* (*narcotics*) (D). They are prescribed with care because their use can lead to *tolerance* (E) and *dependence* (F).

**11** Possible after-effects of solvent abuse are headache, nausea, vomiting, convulsions, runny nose, a rash round the mouth, irritability, lethargy, depression, liver and kidney damage (any four).

Self-assessment questions

20.04

**12** Clinical depression, acute anxiety and claustrophobia are examples of mental illness. Down's syndrome and phenylketonuria are examples of mental handicap.

**Personal health - answers (continued)**

**13** Refined sugar is the most likely cause of tooth decay.

**14** Mouth bacteria use sugar for their metabolism and produce acids as a waste-product. The acids dissolve the enamel and dentine, so causing cavities in the teeth.

**15** (b) Cutting down on sweets etc. is the most effective method of reducing dental decay.

**16** Plaque is a film over the teeth and consists of saliva, mucus, bacteria and the substances they produce. It may also contain mineral salts of calcium and magnesium.

**17** It is most important to remove plaque from between the teeth and from the region where the gum covers the teeth.

**18** Gingivitis (gum inflammation) and periodontal disease (infection of the socket) may result from a failure to remove plaque.