



ILFRACOMBE PE DEPT

GCSE PE

6 The Healthy mind and body

TOPIC	NOTES	TRAFFIC LIGHT	REVISION
<p>6. Different Body Types</p> <p>a) Somatotypes b) Optimum weight in sport, why it varies and how weight can effect participation and performance</p> <p>Weight related conditions</p> <p>a) Explain the terms anorexia, obesity, overfat, overweight, underweight b) Explain how these will effect physical activity</p> <p>Drugs</p> <p>a) Understand the different categories b) Explain the impact of performance-enhancing drugs on well-being and performance</p> <p>Smoking and Alcohol</p> <p>a) Explain their effects on general health and physical activity</p> <p>Risk Assessment and Preventing Injuries</p> <p>a) Importance of warm up & cool down b) Checking equipment and facilities c) Clothing and jewellery d) Balanced competition e) Playing within the rules</p>			

Somatotypes

1. ENDOMORPH

Wide hips, narrow shoulders.
Characterised by fatness.

2. MESOMORPH

Wide shoulders, narrow hips.
Characterised by muscularity.

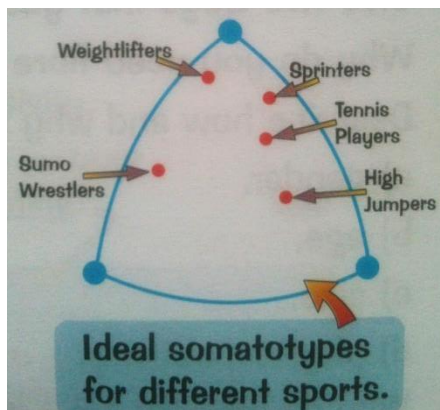
3. ECTOMORPH

Narrow shoulders, narrow hips.
Characterised by thinness.

ENDOMORPHS tend to be involved in sports which depend on power e.g. wrestling and shot put.

MESOMORPHS tend to be involved in sports which require strength and sudden bursts of energy, rather than sustained effort over long distances. Their muscular build often means they are stronger and better able to cope with anaerobic exercise.

ECTOMORPHS tend to excel at high jump and long distance events e.g. Marathon,



Optimum weight

Expected weight – weight you expect them to be

Optimum weight - weight at which you perform your best

Factors affecting optimum weight

Bone structure – some people have a larger bone structure than others, therefore the higher your optimum weight will be.

Muscle girth – measurement of the circumference (distance around) your muscles when they are flexed.

Gender – men and women naturally have different body compositions. Men usually have larger bones structures and more muscles than women.

Genetics – Body weight and shape are largely passed on through the genes from parent to child.

Height – two people of the same height can have different expected and optimum weights for many reasons.

Losing weight - Peoples who want to lose weight usually do so by: decreasing calorie intake (dieting);
- Increasing calorie expenditure (exercise);
- Doing both (dieting plus exercise).

Weight-related conditions

Anorexic – a prolonged eating disorder due to the loss of appetite.

Obese – a term used to describe people who are very overfat.

Overfat – having body fat in excess of normal.

Overweight – having weight in excess of normal (not harmful unless accompanied by overfatness).

Underweight – weighing less than is normal, healthy or required.

Performance-enhancing and recreational drugs

Performance-enhancing drugs

Some athletes use drugs to improve their performance. These drugs are usually banned in sport – and they usually have nasty side effects too. Unfortunately some athletes still think it's worth the risk.

Anabolic Steroids – Drugs that mimic the male sex hormone testosterone.

What they do: Testosterone increases your bone and muscle growth (so you can get bigger and stronger). It can also make you more aggressive.

Side-effects: Increased risk of heart attacks and strokes; high blood pressure; liver disease; increased risk of muscle injury; infertility in women; death.

Beta-Blockers – Drugs that control heart rate;

What they do: Lower heart rate; steady shaking hands; calming and relaxing effect.

Side-effects: low blood pressure; cramp; nausea and diarrhoea; tiredness; depression and insomnia and nightmares.

Diuretics – Drugs that elevate the rate of urine production

What they do – cause weight loss; can mask traces of other drugs in the body.

Side-effects – dehydration, which can cause dizziness, muscle cramps, headaches and nausea, long-term effects such as kidney problems.

Narcotic Analgesics – Drugs that can be used to reduce pain.

What they do – kill pain, so injuries and fatigue don't affect performance so much.

Side-effects – addictive with unpleasant withdrawal symptoms; feeling less pain can make an athlete too hard; can lead to constipation and low blood pressure.

Peptide hormones – Drugs that cause other hormones to be produced.

What they do – Cause the production of other hormones – most have a similar effect to anabolic steroids

EPO (Erythropoietin) is a peptide hormone that causes red blood cells to multiply which increases aerobic capacity.

Side-effects – they can cause strokes and abnormal growth.

Stimulants – Drugs that have an effect on the central nervous system, such as increased mental and/or physical alertness.

What they do – increase mental and physical alertness

Side-effects – lead to high blood pressure, heart and liver problems and strokes; addictive.

Recreational drugs

Although drinking alcohol and smoking tobacco are legal, they're still drugs and can seriously damage your health and ability to do physical activity. Small amounts of alcohol don't do too much harm, but every cigarette does damage.

Alcohol

1. Affects your coordination, speech and judgement
2. Slows your reactions.
3. Makes your muscles get tired more quickly.
4. Eventually damages your liver, kidneys, heart, muscles, brain, and the digestive and immune systems.

Smoking

1. Causes nose, throat and chest irritations.
2. Makes you short of breath.
3. Causes changes to your cardiovascular and respiratory system, which increases the risk of developing heart disease, lung cancer, and other diseases.

Socially acceptable and unacceptable drugs

Socially acceptable - drugs that are prescribed by a doctor or brought over the counter, such as paracetamol and aspirin, to treat medical conditions.

Socially unacceptable – are illegal and unacceptable to most people. They include heroin, cocaine, LSD amphetamines, barbiturates, cannabis and ecstasy. All of these have negative effects and can be dangerous, in some cases leading to death.

Risks assessment and preventing injuries

There are lots of things you can do before and during exercise to lessen your chances of getting hurt.

Before the activity

Personal readiness – Before you do a new activity or exercise programme, you should fill in a PAR-Q. That way you can be pretty sure you're fit and healthy enough to do the new activity.

Warm-up/Cool down – Warm-up before the activity, making sure you exercise the muscles you're going to use. Cool down after the activity.

Check equipment/facilities

1. Use the right equipment – and check it's not damaged and is in good condition.
2. Use the correct technique when lifting, carrying or placing equipment. These techniques help stop you putting your back out or pulling a muscle.
3. Check for possible dangers in the area you're going to be exerting in – e.g. glass hidden in the grass on a football pitch, or slippery patches caused by bad weather on tennis courts.

During the activity

Balanced competition – Play with people of the same:

1. Size and strength – e.g. make sure you're boxing at the right weight.
2. Skill level – don't try and play rugby against professionals on your first go.
3. Gender – generally men are physically stronger and faster than women, so many sports have separate women's and men's divisions.

Play by the rules

1. Know and follow the rules of the game – be sporting and try not to hurt your opponents.
2. Use the correct technique – e.g. safety tackling someone in rugby or hockey.
3. Use officials (e.g. a referee) to ensure there's fair play and the rules are followed.

Correct clothing

1. Make sure you're not wearing anything that could get caught (e.g. jewellery, watches).
2. Wear suitable footwear – e.g. wearing studded football boots or spiked running shoes will make you less likely to slip and injure yourself.
3. Use protective clothing/equipment where appropriate e.g. mouth guards, cycling helmets.

