





LENScience I Love My Heart

WORKSHEET 6

Looking after your heart and reducing your risk factors Some of us inherit risk factors and these cannot be changed. Other risk factors can be managed through lifestyle choices.

Each heartbeat is a contraction, which squeezes blood to the lungs and the body. The heart beats about 70 times a minute, more if you are younger. The fitter you are the lower the heart rate will be.

During exercise the heart rate increases in order to supply the cardiac muscles with more glucose and oxygen. This allows sufficient energy to contract.

Regular exercise is important to keep the cardiac muscles in good tone, allowing the heart to be more efficient in maintaining blood pressure and reducing the risk of heart disease and stroke.



Reduce your risk factors

Cause	Explanation	Preventative measures
Poor diet with too much saturated (animal) fat	Leads to cholesterol building up in arteries, eventually blocking the blood vessels or allowing a blood clot to form.	Cholesterol-free diet Plenty of fruit and vegetables Balanced diet
Smoking	Nicotine damages the heart and blood vessels.	Stop smoking or Don't start smoking
Stress	Tends to increase blood pressure, which can result in fatty materials collecting in the arteries.	Find ways to relax. Identify causes of stress and manage them.
Obesity	Being overweight puts extra strain on the heart as well as making it more difficult for a person to exercise.	Controlled diet with regular exercise
Lack of exercise	Heart muscle loses its tone. Becomes less efficient in pumping blood.	Start taking regular exercise
Inherited factors	In some families heart disease appears to be passed from one generation to another.	Monitor health. Make sure other factors do not increase the risk of heart disease.

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Bringing Schools and Scientists Together

Year 9-10 Heart Resource Pack Worksheet 6
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This worksheet can be photocopied for use in schools

Reduce or minimise your stress





Limit yout energy intake

Enjoy your exercising - increase your use of energy

Eat a balanced, low fat diet



Using the internet, books, the library and other available sources produce a powerpoint presentation or a poster explaining how to manage **three** risk factors for heart disease.

- Provide detail about the biology behind the risk factor (ie how does it alter the way in which your body works)
- Provide details of how to manage the risk factor
- One of the factors must be diet. In this section you are to include an appropriate menu plan for yourself for one day.