

Live Lesson Week Beginning 22.3.21

# The Heart and Disease

# Your Amazing Heart

Your heart is an amazing muscle that beats many millions of times in your life.

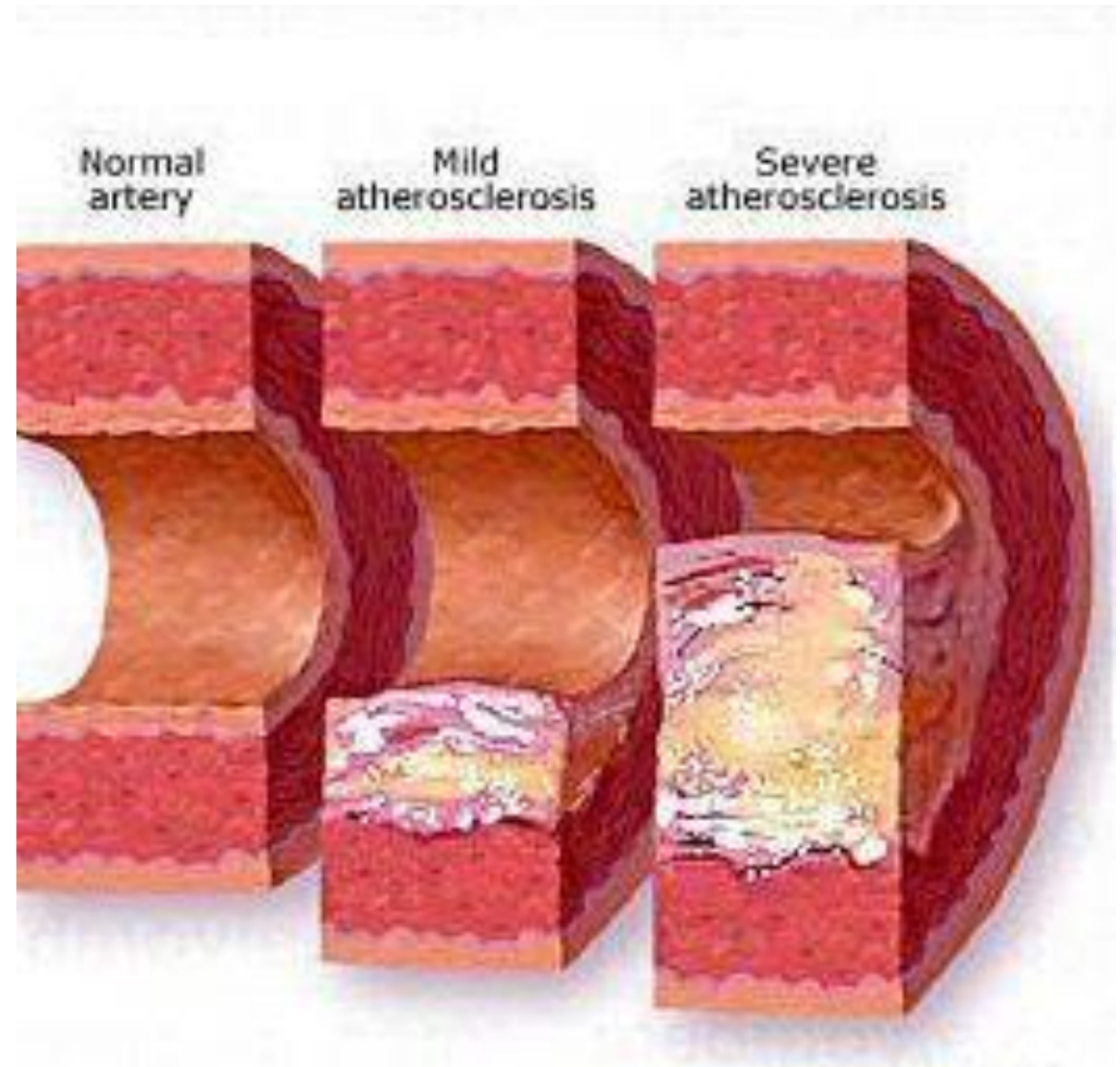
Your heart grows with you and it can continue to get stronger even after the rest of your body has finished growing.

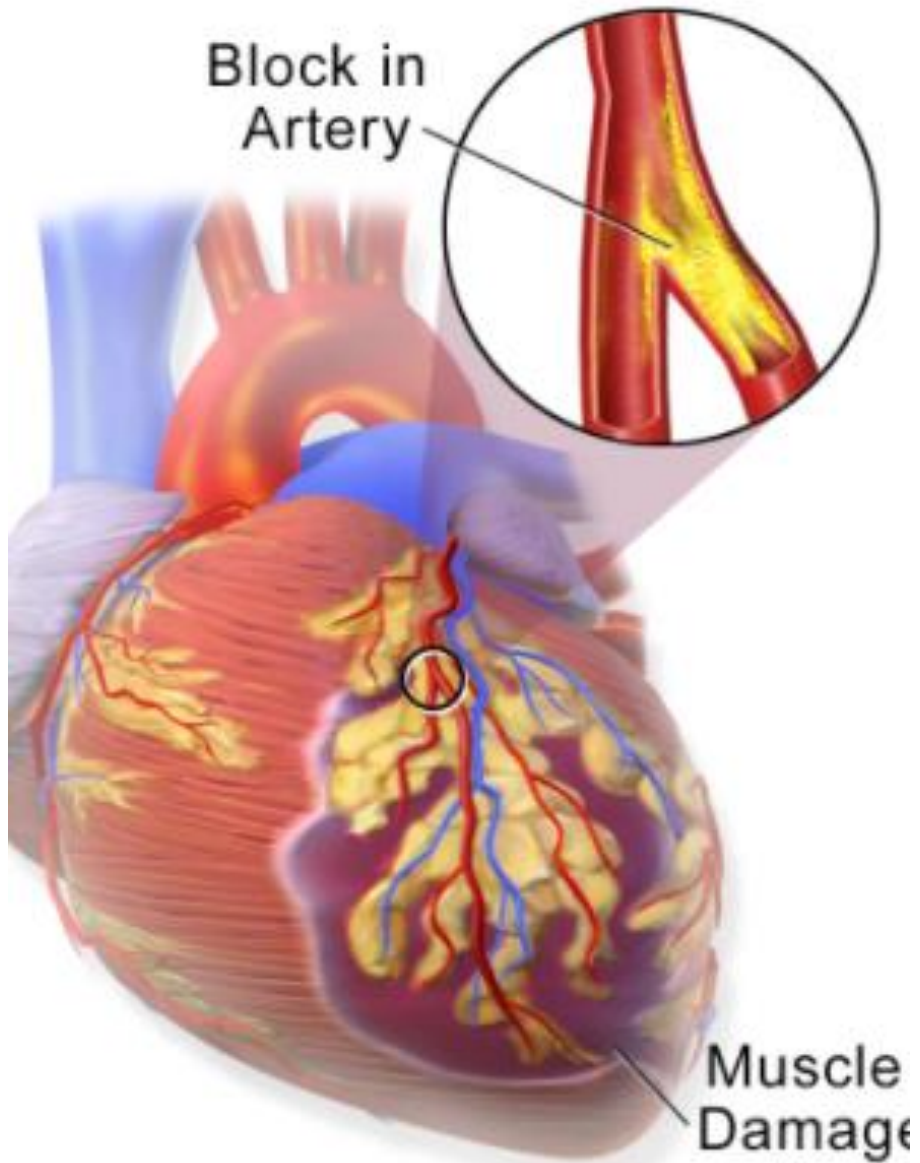
Your heart pumps 6000-7500 litres of blood through 60,000 miles of blood vessels every day!

Your heart is one of your vital organs and to be a fit and healthy person you need a fit and healthy heart.

# What is heart disease?

- Everyone has heard the term “heart attack,” but what does it mean?
- The heart pumps blood full of oxygen and other nutrients to all parts of the body, but the heart muscle needs oxygen and nutrients too.
- The arteries that supply the heart muscle with blood to keep it working are called coronary arteries. In a healthy person, blood flows freely through the coronary arteries.
- Over time, unhealthy habits like not getting enough physical activity or a high cholesterol diet can clog arteries. When this happens, fatty deposits called plaque build up inside the artery walls — this is called atherosclerosis.





**Heart Attack**

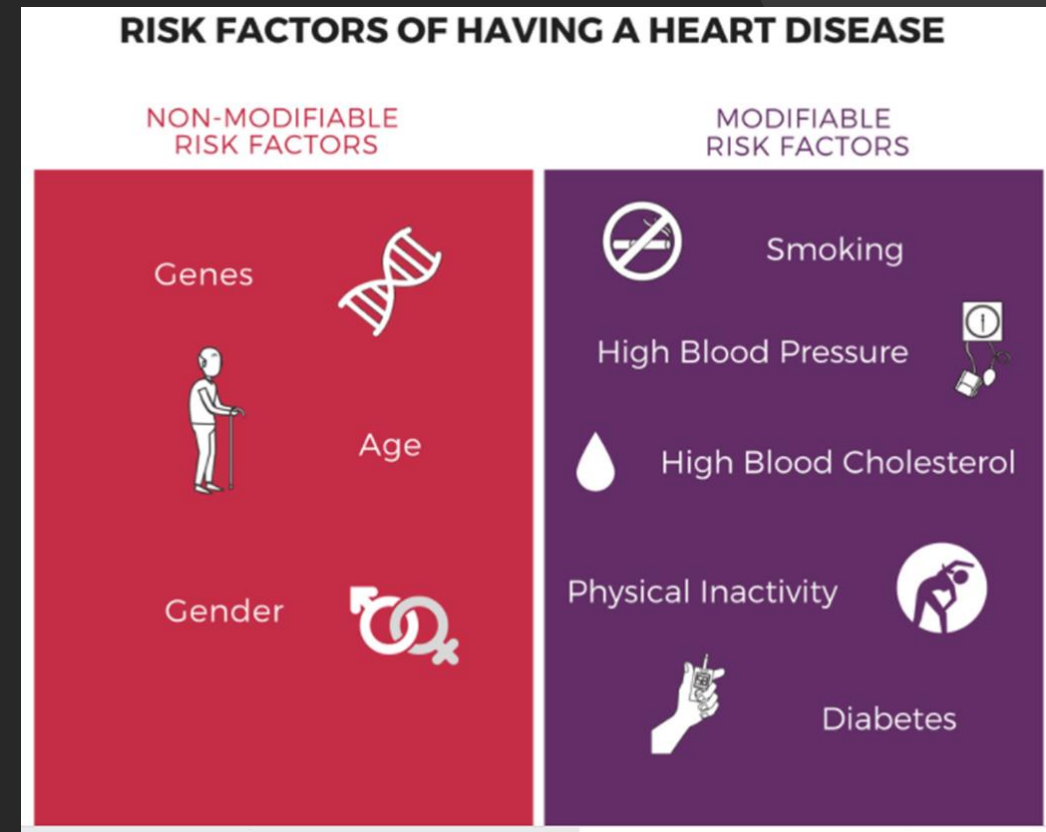
# What is heart disease?

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- If enough plaque builds up, the arteries — which are normally flexible and elastic — can become hard. Blood flow can become partially or totally blocked in the coronary arteries supplying the heart muscle.
- If the heart muscle cannot get the oxygen and nutrients it needs, it starts to die. This is called a heart attack.
- Several factors can increase the risk for heart disease, but the good news is that some of these factors are within your control.
- If you eat right, exercise and stay tobacco-free, your heart will thank you. The most important thing you can do is to start now because it will be a lot easier to form heart-healthy habits for life if you start at a young age.

# Cardiovascular Heart Disease Risk Factors

- A risk factor is something that increases the chance of getting a condition. There are several risk factors for cardiovascular disease (CVD).
- Smoking
- Stress
- Alcohol
- High blood pressure
- High blood cholesterol
- Being physically inactive
- Being overweight
- Diabetes
- Family history of CVD
- Men are more likely to get CVD earlier than women
- The older you are, the more likely you are to get CVD.



# What are the symptoms of CVD?

- chest pain
- pain, weakness or numb legs and/or arms
- breathlessness
- very fast or slow heartbeat, or palpitations
- feeling dizzy, lightheaded or faint
- fatigue
- swollen limbs



# How is heart disease diagnosed?

- **Tests can include:**
- **Blood tests to check for cholesterol levels**
- **Chest x-rays to see large blood vessels**
- **ECG to check for normal heart rhythms**
- **Echocardiogram to see images of your heart beating**
- **CT scans (computerized tomography) and MRI scans (magnetic resonance imaging) are used to see detailed images of the heart and any blockages or damage**

# Heart Disease Statistics



**Every 8 minutes**

someone in the UK dies from coronary heart disease

Around **50%**



of heart attacks and strokes are associated with high blood pressure



**Every 3 minutes** someone in the UK goes to hospital due to a heart attack



**7 out of 10**

Survival rate for heart attacks in the UK today



Around

**7 million**

people live with heart and circulatory diseases in the UK



People with heart failure are **2-3 times more likely** to have a stroke

**40%**

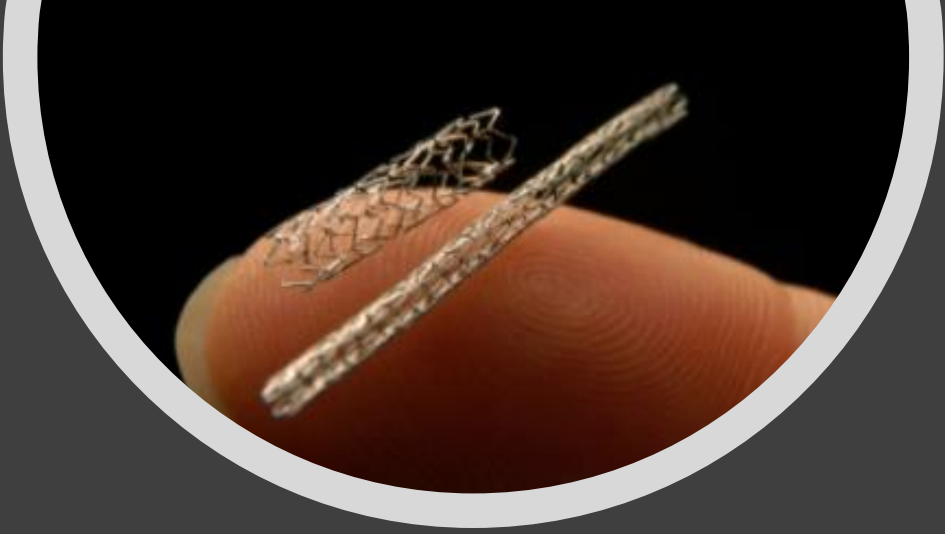


of adults in the UK do not meet physical activity recommendations



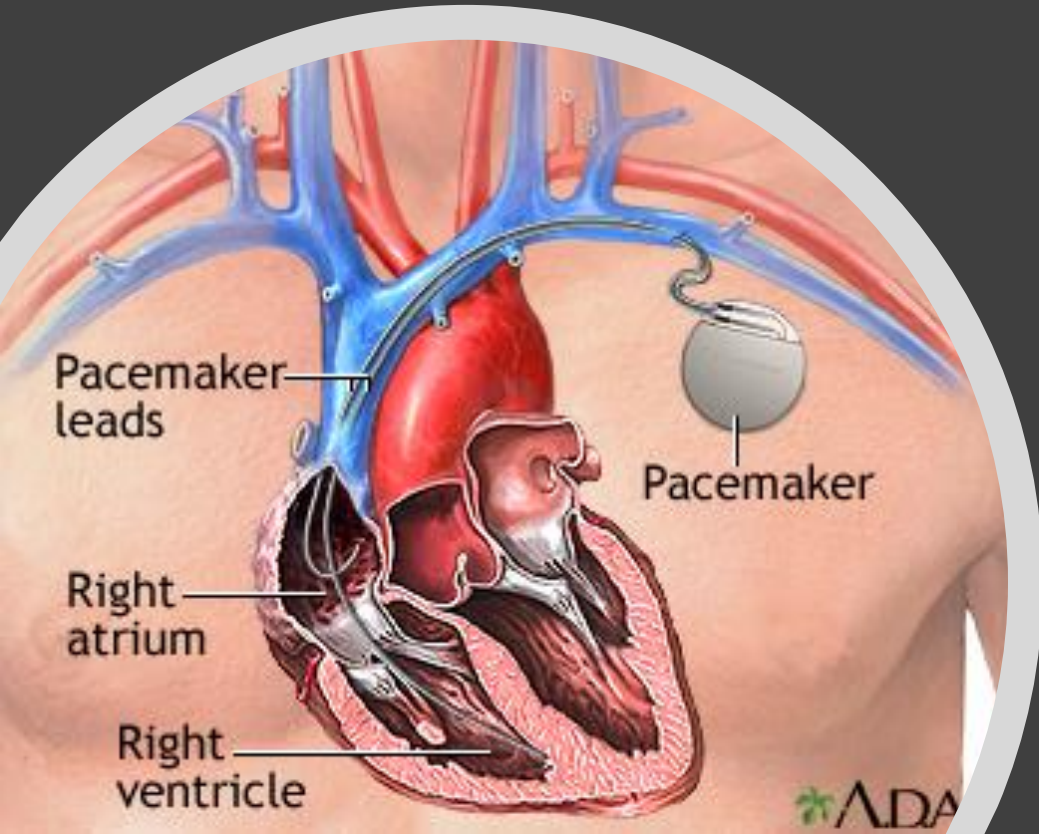
There are more than **30,000** out-of-hospital cardiac arrests in the UK each year





# How is heart disease treated?

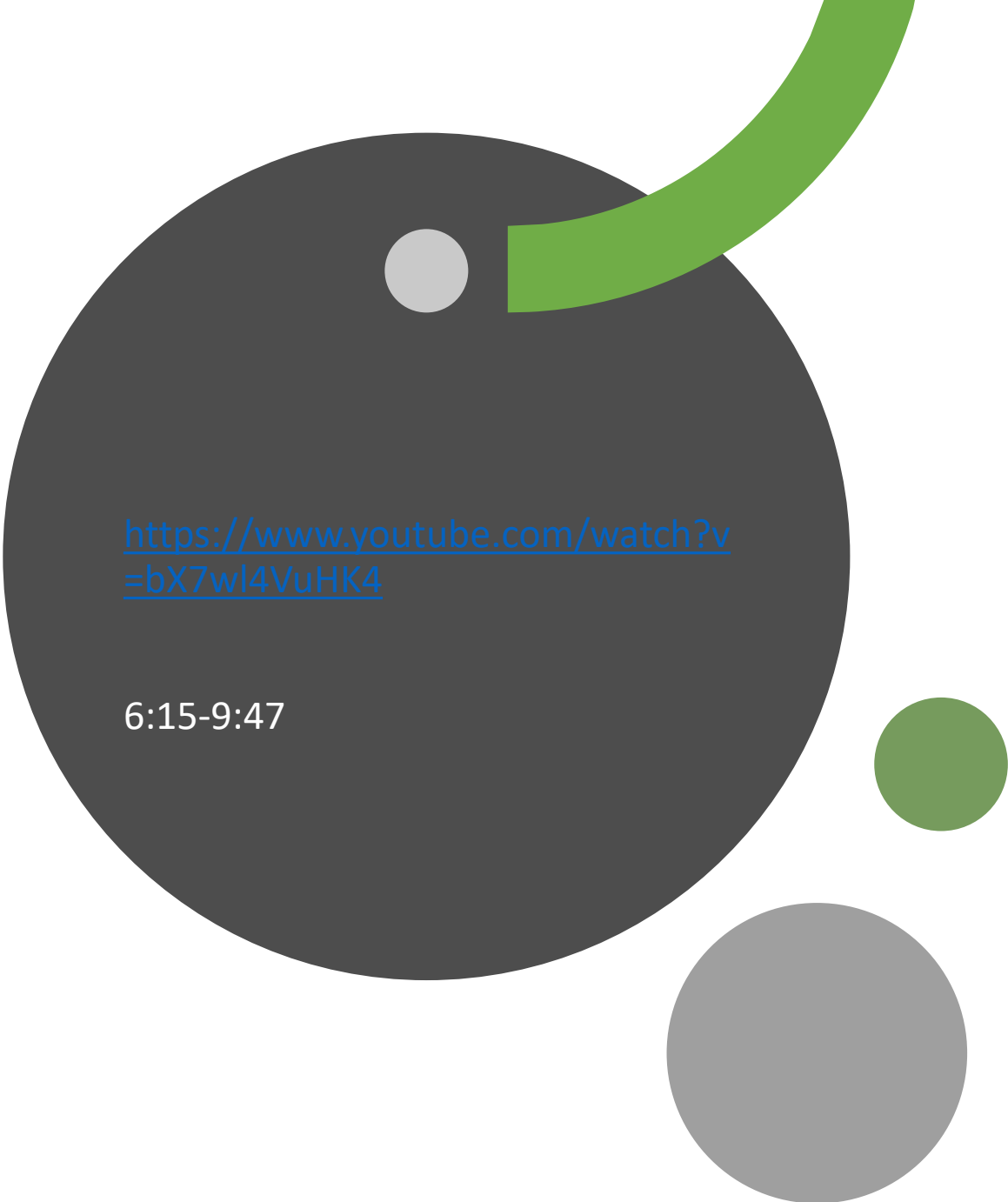
- **Treatment depends on what is wrong with someone's heart but includes things like...**
- Lifestyle changes (stop smoking, lose weight, get fitter)
- Medication (to reduce blood pressure, widen arteries or prevent blood clots)
- Heart surgery (to replace valves or treat narrowed or blocked arteries)
- A pacemaker (a device fitted in the chest which stops the heart beating too slowly)
- Stents (mesh tubes inserted into blocked vessels to keep them open)



# Improving Heart Health



# Operation Ouch Heart Problems



<https://www.youtube.com/watch?v=bX7wl4VuHK4>

6:15-9:47



register



# Independent Task on Teams and WHEC Home Learning Hub

Design an information leaflet on Heart Disease.



This can be on an A4 sized piece of paper or an electronic copy on a device.

Things your information leaflet should contain:

- A clear title.
- Symptoms of heart disease.
- Risk Factors.
- Ways to improve heart health.



Tips for producing your information leaflet:

- Information should be easy to read and well organised on the page, e.g. bullet points and subheadings.
- Include images if you can, pictures or drawings.
- Statistics are a useful way to convey information quickly.
- You do not have to use the statistics below but can research your own.

## RISK FACTORS OF HAVING A HEART DISEASE

