platelets will stick to the damaged site and form a clot – thrombosis. The blood clot can block the artery and cause a heart attack. Part of the clot could break away and get stuck in smaller arteriole walls where they cut of blood supply to muscle which may damage the heart. Artery could be weakened by the wall damage and start to swell due to blood pressure – aneurysm.

## **Myocardial infarction**

It's possible to survive with atheroma for many years without being incapacitated or aware of its existence. A symptom is pain in the chest after vigorous exercise – angina. This is due to atheroma preventing heart muscle from getting increased blood supply during exercise. Regular aspirin can help reduce the formation of blood clots. Most myocardial infarctions occur when a blood clot blocks a coronary artery at the site of atheroma. Without treatment, the clot prevents oxygen from getting to the heart muscle and muscle starts to die off and can disrupt the heartbeat. When both sides of the heart do not contract at the same time it causes fibrillation which means the left ventricle will no longer produce enough force to pump blood out of the aorta.

## **Risk factors**

Age and Sex The older you are the more at risk you are from CHD, men are more likely to get it then women in middle age but afterwards the risk is similar.

*Genetic factors* CHD tends to run in families, especially when heart attacks occur in middle age or earlier.

Smoking Not certain how smoking affects the heart but possibly that nicotine material constrict which causes high blood pressure.

High blood pressure linked to genetic, high salt contine, a key exercise and alcohol. Arteries develop thicker walls with high BP and thirm can the lumen gets natiower. This can damage inner surface and cause an atheroma. It can cause damage to the heart itself too, ventricles can enlarge and heart beat can be the negular and heart itself.

High concentration of low-density lip proteins in the blood