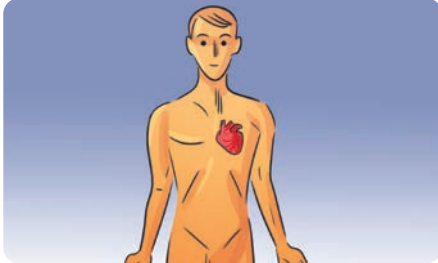


# 16 - Cardiovascular disease

Prolonged poor blood glucose control can eventually result in complications involving the heart, brain and lower limbs that can be prevented with good control of glucose metabolism.

## Heart



The heart is the organ that is most affected by damage due to long-term poor blood glucose compensation. In actual fact, the coronary arteries can become blocked and cause angina and heart attacks.

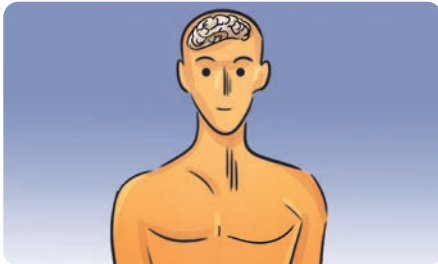


Heart failure, which is more common in women, can arise due to damage to the heart muscle, which can have difficulties contracting normally.



Smoking, high blood pressure, high cholesterol and obesity are among the risk factors to be kept under control.

## Brain



The brain can also be damaged by high and low blood glucose levels, which can cause cerebral vessel ischaemia and obstruction, and result in a stroke.



Hypoglycaemia can mimic a cerebral ischaemia or stroke, particularly in the elderly, and must therefore be recognised and corrected immediately before the damage becomes irreversible.



High blood pressure (> 135/85 mmHg) is an additional risk factor for brain damage and must be controlled.

## Peripheral blood vessels



Damage to the arteries of the lower limbs is common in people with diabetes, especially if they are smokers, who have a higher risk of obstruction of the small arterial blood vessels in the extremities (hands and feet).



Lower limb ischaemia presents with intense pain and cold, pale limbs and can result in gangrene, caused by the complete obstruction of the small vessels that no longer deliver blood to the tissues.



Gangrene can make it necessary to amputate toes in order to prevent the ischaemic damage from spreading and requiring the amputation of the whole limb.