

THE CIRCULATORY SYSTEM

The horse's blood, blood vessels and circulation.

Carries oxygen and nutrients around the body and removes waste products. ❤️

WHAT IS IT?

The circulatory system is the heart, blood and blood vessels. It pumps blood around the body, carrying oxygen and nutrients to all the muscles, organs and tissues, and removing waste products.

WHAT DOES IT DO?



Carries oxygen to muscles and organs.



Carries nutrients and hormones.



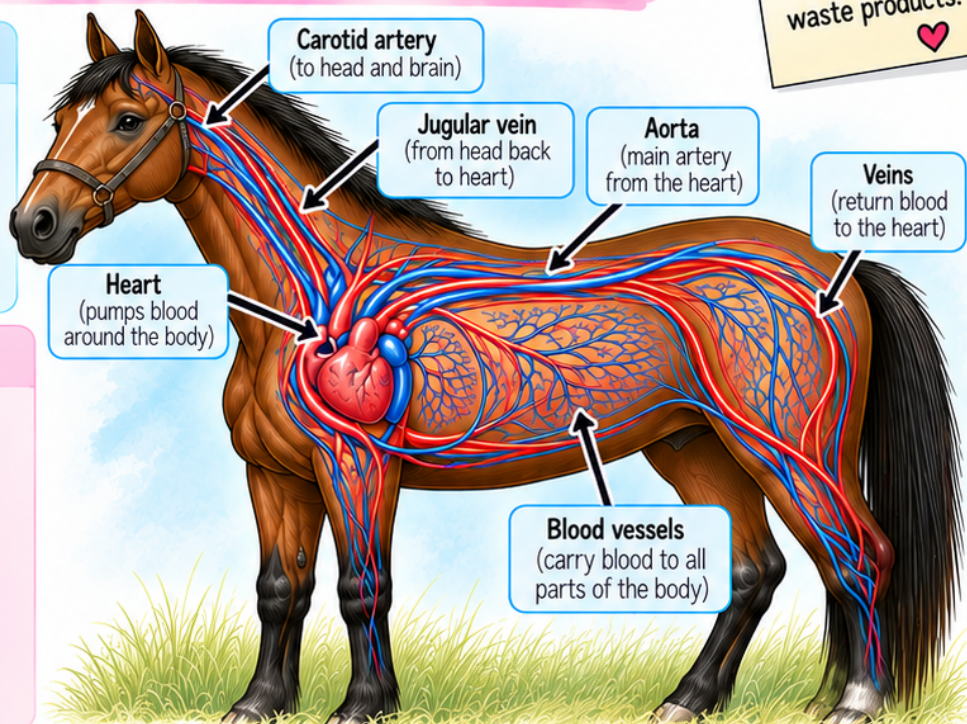
Removes waste products (such as carbon dioxide).



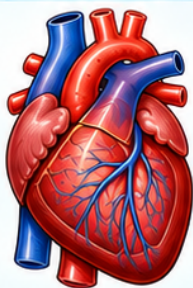
Helps regulate body temperature.



Supports stamina, recovery and performance.



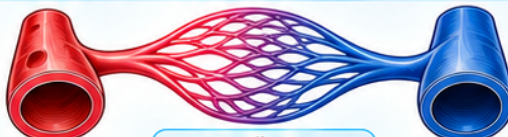
THE HEART



A strong muscle that pumps blood around the body every minute.

A horse's heart can pump up to 30–40 litres of blood per minute during exercise!

BLOOD VESSELS



Arteries

carry oxygen-rich blood away from the heart.

Capillaries

are tiny vessels where oxygen and nutrients move out and waste products move in.

Veins

carry oxygen-poor blood back to the heart.

HOW IT WORKS

- 1 The heart pumps blood around the body.
- 2 Blood travels through arteries to all parts of the body.
- 3 Exchange happens in capillaries (oxygen and nutrients move out, waste products move in).
- 4 Blood returns through veins to the heart.
- 5 The cycle continues, even when the horse is resting.

HOW POOR STABLE MANAGEMENT AFFECTS IT



- ❗ Poor diet (not enough nutrients) can reduce red blood cells and energy.
- ❗ Dehydration makes the blood thicker, so it is harder for the heart to pump.
- ❗ Overweight horses put extra strain on the heart and blood vessels.
- ❗ Poor ventilation and dusty stables can reduce oxygen levels, making it harder to carry oxygen around the body.
- ❗ Lack of exercise can reduce heart fitness and overall health.

YOUR TURN

- 1 What is the main job of the circulatory system?
- 2 Name two things the blood carries to the muscles.
1. _____ 2. _____
- 3 How could dehydration affect the circulatory system?
- 4 Give two examples of poor stable management that could put extra strain on the heart.
1. _____ 2. _____