

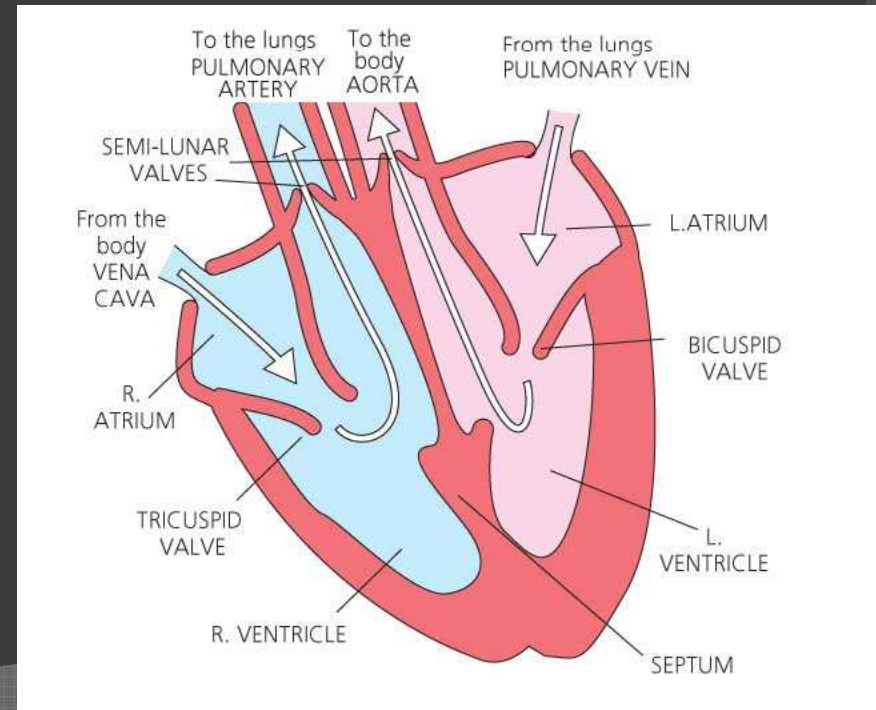
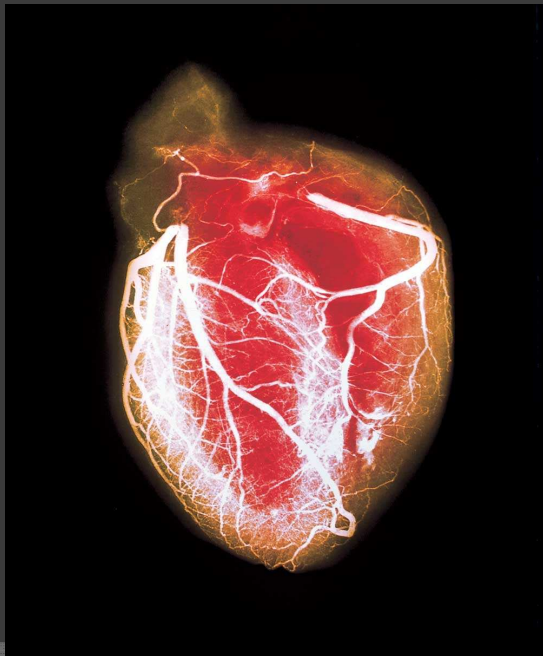
DIFFERENT TYPES OF MUSCLE

Objectives

- Have knowledge of the 3 types of muscle in our bodies and examples of each
- Understand the composition of Voluntary muscles
- Understand fast and slow twitch fibres and their importance in different types of sport

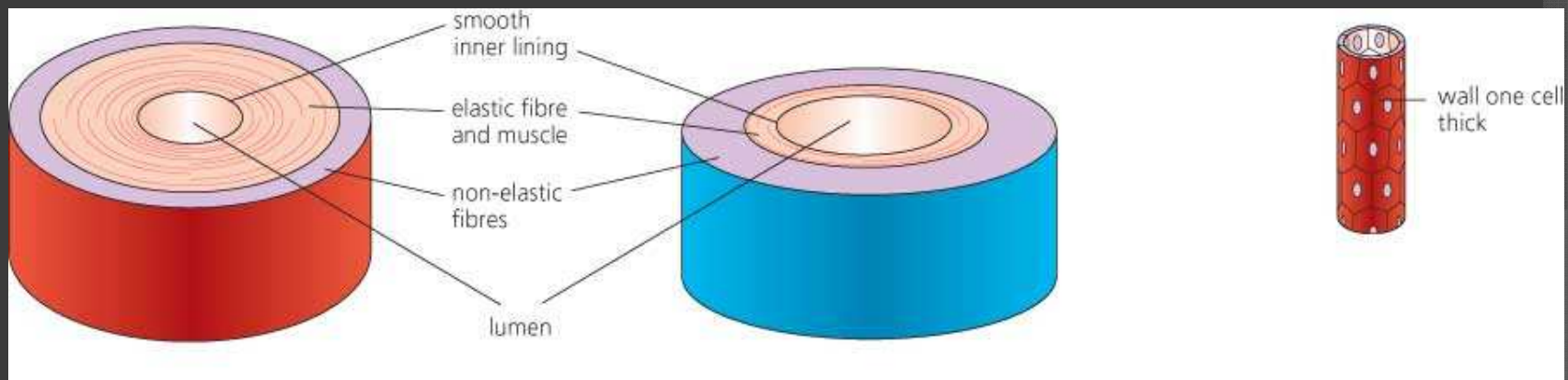
Cardiac Muscle

- In the walls of the Heart
- Contracts and relaxes continuously
- Works without conscious effort



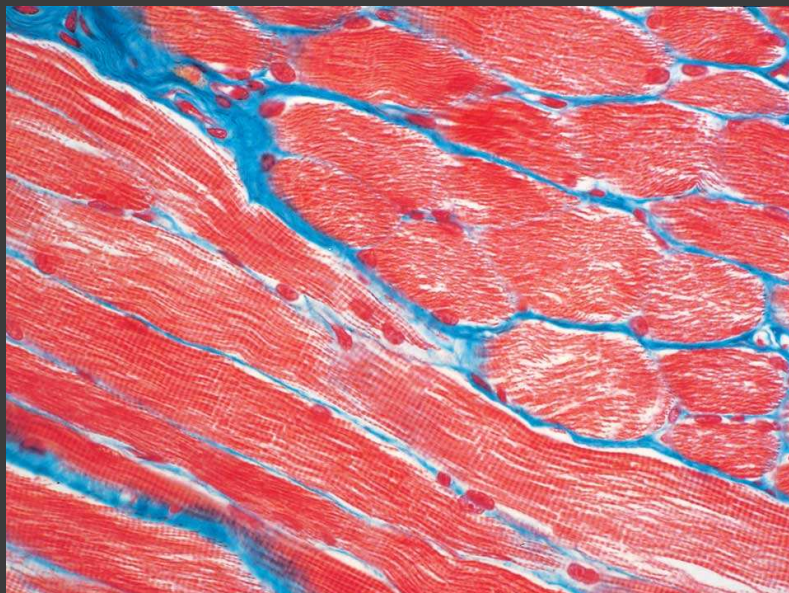
Involuntary Muscle

- In the walls of your internal organs
 - Stomach, gut, bladder and blood vessels
- Works without conscious effort



Voluntary Muscles

- ⦿ Attached to the skeleton
- ⦿ Under your control
- ⦿ Also known as Smooth Muscle



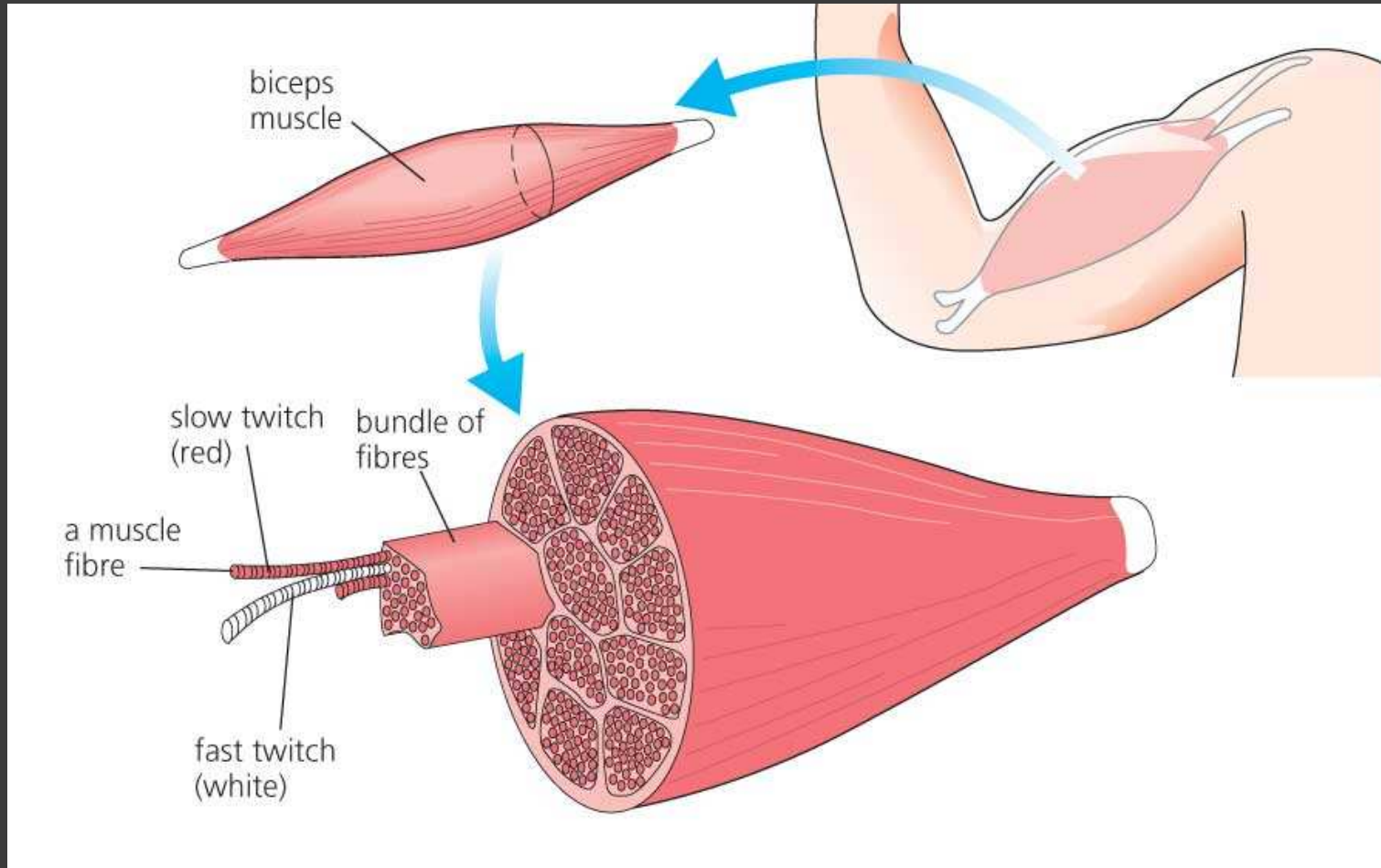
Voluntary Muscles

- ⦿ The red meat around your bones
- ⦿ 40% of your weight = voluntary muscle

Muscle Fibres

- ⦿ Muscles are made of muscle fibres
- ⦿ Muscles contract because the fibres contract
- ⦿ The number of muscles that contract vary depending on the force that is needed
- ⦿ Book v pencil
- ⦿ There are 2 types of muscle fibre
 - Fast and slow twitch

Muscle Fibres



Fast and Slow Twitch Fibres

- Slow twitch Fibres
 - Contract Slowly
 - Less force
 - Slow to fatigue
 - Long distance runners
- Fast Twitch Fibres
 - Contract very quickly
 - Very powerful – lots of force
 - Tire quickly
 - Sprinters, shot putters etc.



Fast and slow twitch fibres

- The mixture is different in different muscles
- Gastrocnemius contains a lot of fast twitch fibres – standing on your toes is tiring



Fast and Slow Twitch Fibres

- ◎ The mixture is different for different people
 - Some distance runners are 80% slow twitch
 - Some weight lifters are 80% fast twitch



Blame your parents

- You are born with a mix of fast and slow twitch fibres. Even with training you cannot change one to another

