

# Edexcel (B) Biology A-level 4.6 - Transfer of materials between the circulatory system and cells

Flashcards

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**DOG PMTEducation** 







### What is tissue fluid?







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## A watery substance containing glucose, amino acids, oxygen, and other nutrients. It supplies these to the cells, while also removing any waste materials.







# What types of pressure influence formation of tissue fluid?







What types of pressure influence formation of tissue fluid?

Hydrostatic pressure= higher at arterial end of capillary than venous end.

Oncotic pressure= changing water potential of the capillaries as water moves out.





### How is tissue fluid formed?







#### How is tissue fluid formed?

As blood is pumped through increasingly small vessels, hydrostatic pressure is greater than oncotic pressure, so fluid moves out of the capillaries. It then exchanges substances with the cells.







## What happens to excess tissue fluid?







What happens to excess tissue fluid?

It is removed through vessels into the lymphatic system, then returned to the blood near the heart.



