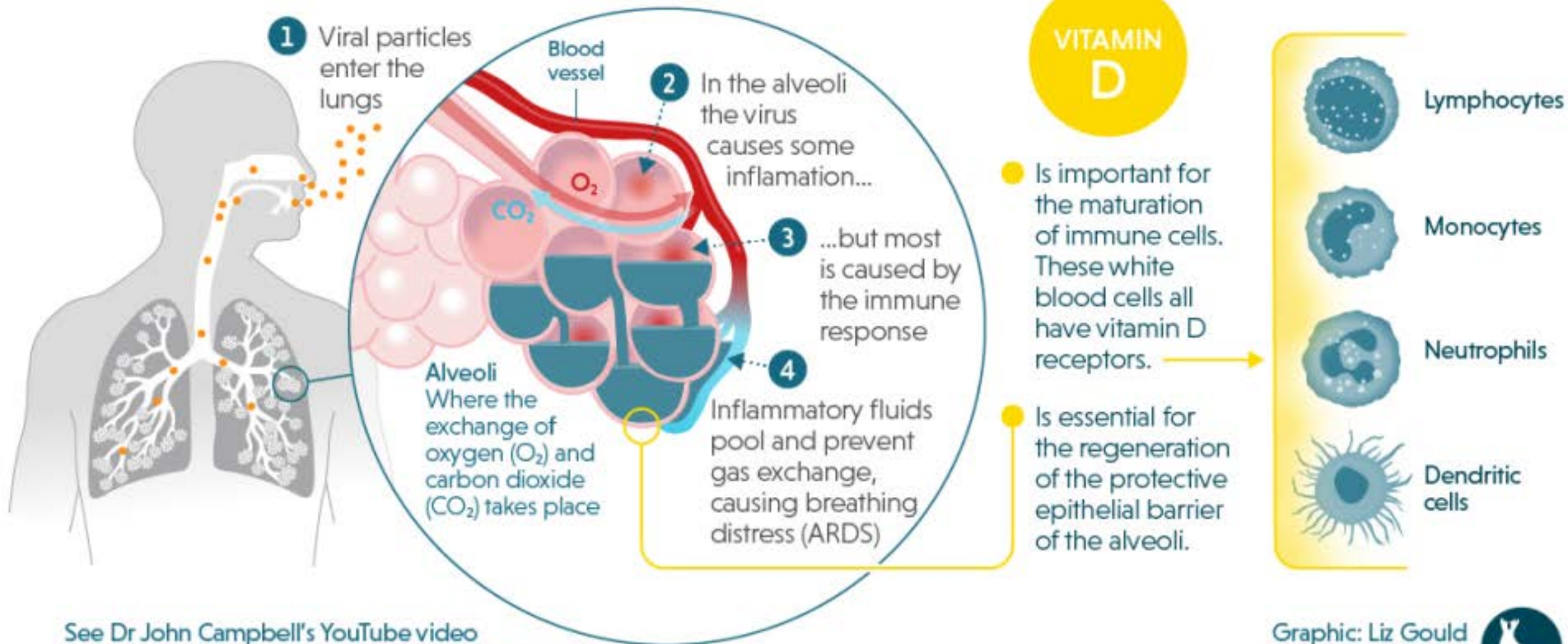# The role vitamin D plays in protecting your lungs

Vitamin D reduces the likelihood of getting viral or bacterial respiratory infections. It also helps prevent the body's immune system from overreacting to an infection and causing Acute Respiratory Distress Syndrome (ARDS).

WHAT IS ARDS?

1 Viral particles enter the lungs

Blood vessel

2 In the alveoli the virus causes some inflamation...

O_2

CO_2

3 ...but most is caused by the immune response

Alveoli
Where the exchange of oxygen (O_2) and carbon dioxide (CO_2) takes place

4 Inflammatory fluids pool and prevent gas exchange, causing breathing distress (ARDS)

VITAMIN D

Is important for the maturation of immune cells. These white blood cells all have vitamin D receptors.

Is essential for the regeneration of the protective epithelial barrier of the alveoli.

Lymphocytes

Monocytes

Neutrophils

Dendritic cells