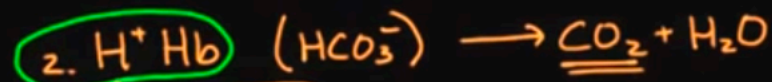


1. Dissolved  $CO_2$



3.  $Hb-COO^- + H^+$

Bohr Effect

$CO_2/H^+$  are affecting  
the affinity of Hb  
for  $O_2$

Haldane Effect

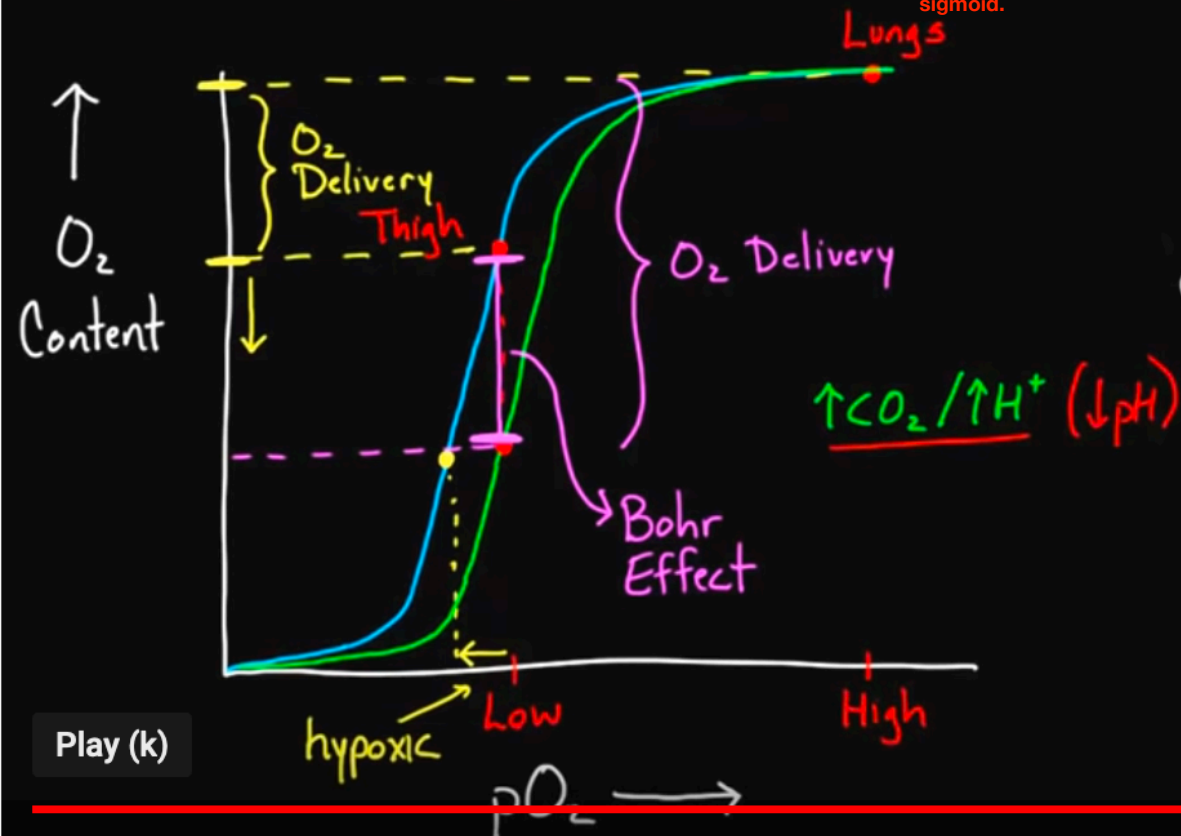
$O_2$  is affecting  
the affinity  
of Hb for  $CO_2/H^+$

## Bohr Effect

$\text{CO}_2/\text{H}^+$  are affecting the affinity of Hb for  $\text{O}_2$



The  $\text{O}_2$  is a sigmoid curve because of cooperativity, i.e., as more  $\text{O}_2$  is attached, it increases affinity for even more  $\text{O}_2$ . This is not seen with  $\text{CO}_2$ , hence it is linear, not sigmoid.



## Haldane Effect

$\text{O}_2$  is affecting the affinity of Hb for  $\text{CO}_2/\text{H}^+$

