

How does  $O_2$  get to organs & tissues?

hemoglobin

How is this  $O_2$  & hemoglobin relationship affected?

①  $P_{O_2}$  (partial pressure)

← ② temperature

③  $P_{CO_2}$

④  $pH = \uparrow$  acidity

⑤ DPG

remind  
about  
denature  
of protein.

} Affects  
shape

These cause the release of  $O_2$ .

Why does  $CO_2$  not need hemoglobin?

it is soluble in water.

Why is carbon monoxide deadly?

Takes away  $O_2$  binding sites...

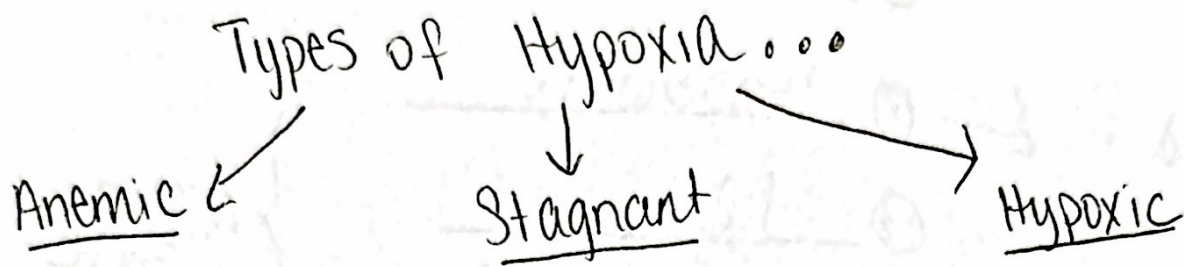
Why is it important to get  $CO_2$  out of body?

So that you don't become acidic

- excess  $CO_2$  = resp. acidosis

What determines the rate of your breathing?

the level of  $\text{CO}_2$  in blood



What might  
you take  
for this?

Iron

What disease  
causes this?

heart disease  
high cholesterol

What disease  
causes this?

Pneumonia