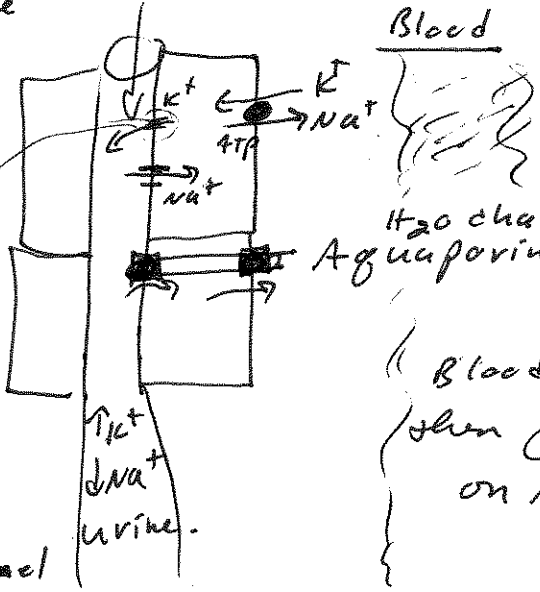
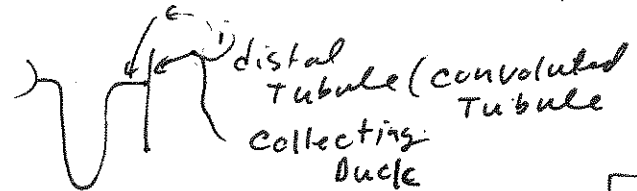


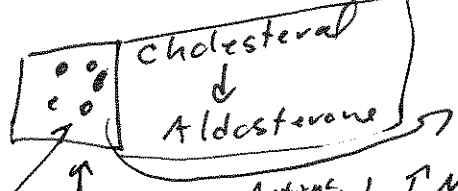
Aldosterone. (Adrenal Cortex)

$Na^+$  Reabsorption  
H<sub>2</sub>O follows.



Blood if low  $K^+$   
stim  $\rightarrow$  feedback  
on Adrenal cortex.

Adrenal cortex



Actions 1.  $\uparrow Na^+$  channel  
2.  $\uparrow K^+$  channel.  
in membrane.

$\uparrow K^+$   
stim.

Angiotensin-2

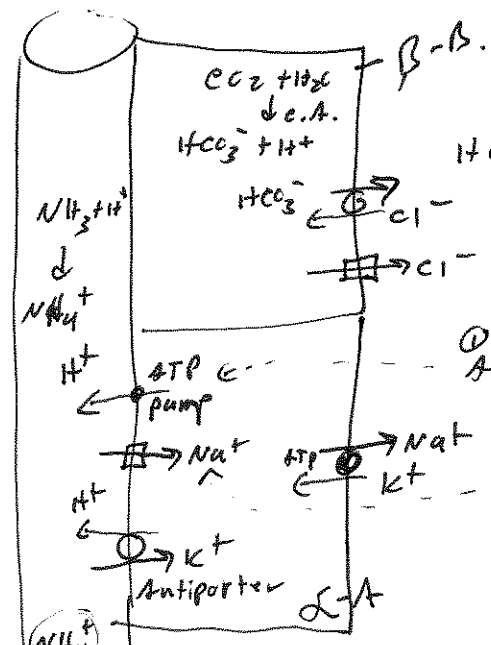
$\rightarrow$  post-pit.

$\rightarrow$  ADH

$\rightarrow$  collecting duct  
 $\uparrow$  Aquaporins.

$\alpha$ -cell acid loss

$\beta$ -Hald acid.



① Aldosterone stimulates  $H^+$  pump.  
② stim  $Na^+$  channel.

$NH_4^+$  leaves in urine  
Trapped in urine when  $NH_4^+$

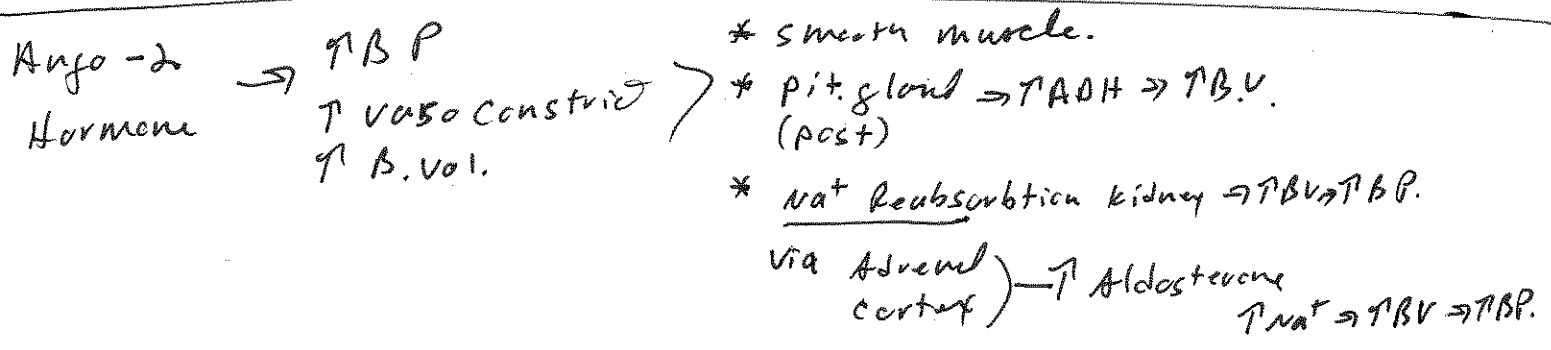
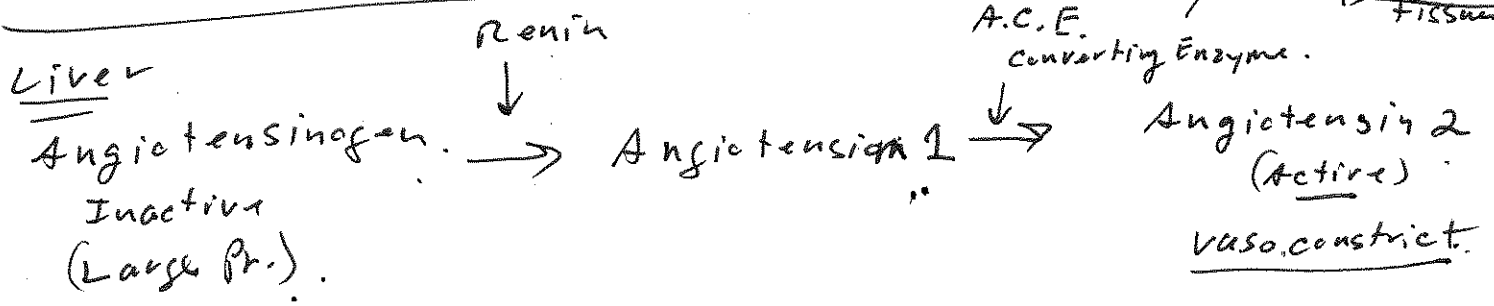
# Juxtaglomerular Apparatus



1. Sympathetic N.S. →  $\uparrow$  Renin.
2.  $\downarrow$  BP →  $\uparrow$  Renin
3.  $\downarrow Na^+$  (macular densa) → prost → granular  $\uparrow$  Renin

ACE inhibitors  $\downarrow$  BP.

A.C.E. converting Enzyme.   
 Lungs/kidneys other tissues.



RAAS  
Renin-Angio-Aldos-system