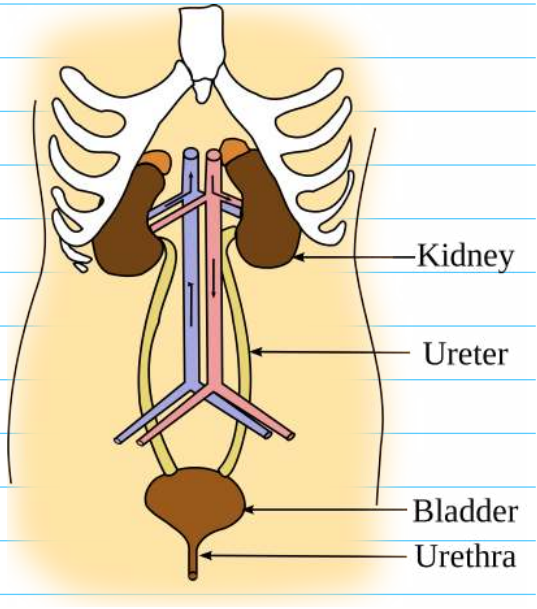
EXCRETORY SYSTEM

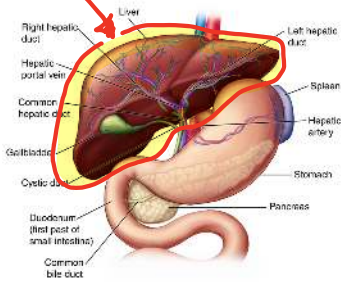
- ALL LIVING THINGS PRODUCE WASTE THAT IS POISONOUS TO OUR BODIES
  - THE EXCRETORY SYSTEM'S JOB IS TO REMOVE THIS WASTE



- USES ORGANS of OTHER SYSTEMS to REMOVE WASTE

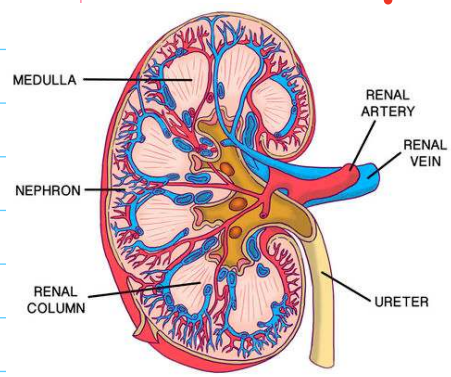
THE LIVER (CLEANS THE BLOOD)

- is an ORGAN in THE DIGESTIVE SYSTEM BUT ALSO HELPS the EXCRETORY SYSTEM.
- TAKES Highly toxic AMMONIA in YOUR BLOOD AND CONVERTS IT to A LESS HARMFUL SUBSTANCE CALLED UREA
  - ↳ LESS HARMFUL BUT MUST BE REMOVED.



RELEASED into BLOODSTREAM

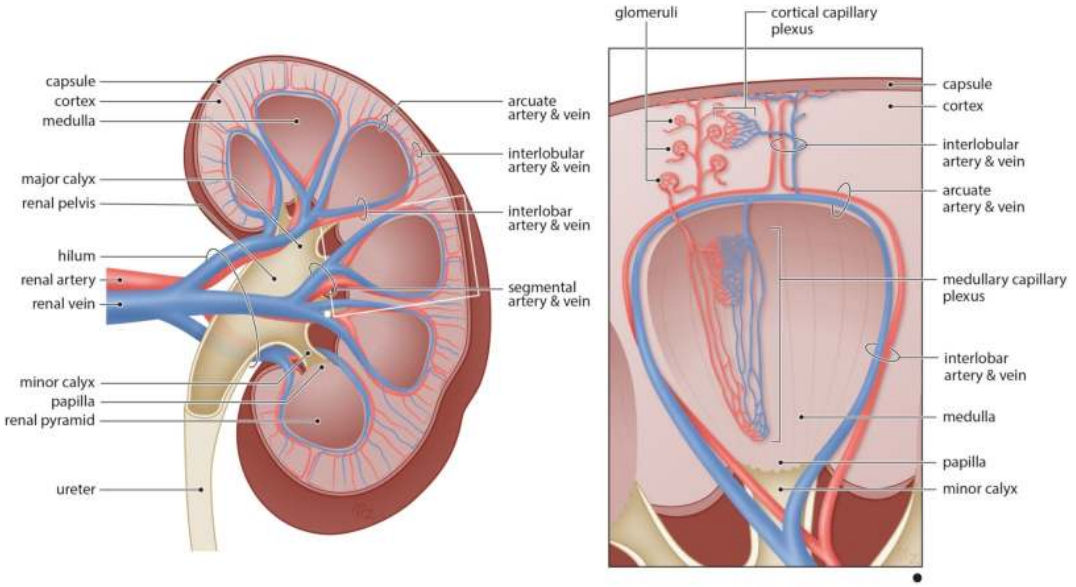
THE KIDNEYS



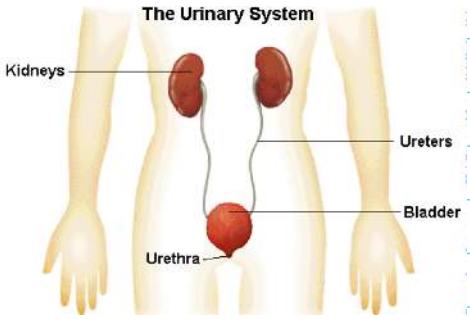
- ABOUT 10cm long & THE MAIN ORGAN of the EXCRETORY SYSTEM
- THE KIDNEY: ACT AS FILTERS to THE BLOOD, STRAINING UNWANTED UREA, H_2O AND OTHER SALTS.
- ALSO PRODUCES URINE

- EVERY drop of BLOOD is FILTERED ±300x A DAY BY KIDNEYS
  - ↳ = ± 180L BLOOD is FILTERED PER DAY
- ONLY 1.5L of URINE PRODUCED PER DAY
  - ↳ can CHANGE BASED on HOW MUCH H_2O you DRANK.

- Your kidneys keep the proper amount of water in your blood. → too much? kidneys excrete more.



ureters: a long tube that connects kidneys to **bladder**.



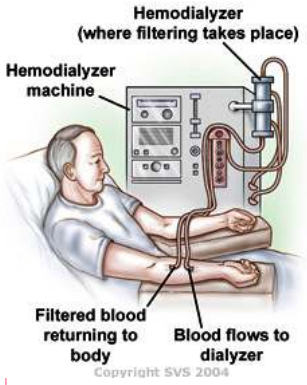
a sac covered in muscle tissue. can store ± 1L of urine

when full... bladder muscles contract and push urine out through the **urethra**

- sweat is salty b/c it helps to **remove excess salt from body.**

- urine analysis can tell us a lot about you!
  - → can help doctors tell if you have certain illnesses or diseases
  - → ex: → people w/ kidney failure have protein in urine
    - → people w/ diabetes often have glucose in urine





Dialysis

- B/c of injury or disease, kidneys may not work
- Dialysis uses a machine called a Hemodialyzer to remove all waste from blood like a kidney would do.

! - Takes ~4HRS to fully clean your blood and needs to happen 3x per week !

Kidney and Urinary Tract Disorders (5)



Arterial Stent
Kidney Stone in the Ureter
Polycystic Kidney Disease: Cysts on Kidney Surface
The Renal Arteries
Urinary System



WATCH: INTRO to URINARY SYSTEM

https://www.youtube.com/watch?v=l128tW1H5a8



WATCH: URINE!

https://www.youtube.com/watch?v=DlqyyyvTI3k