

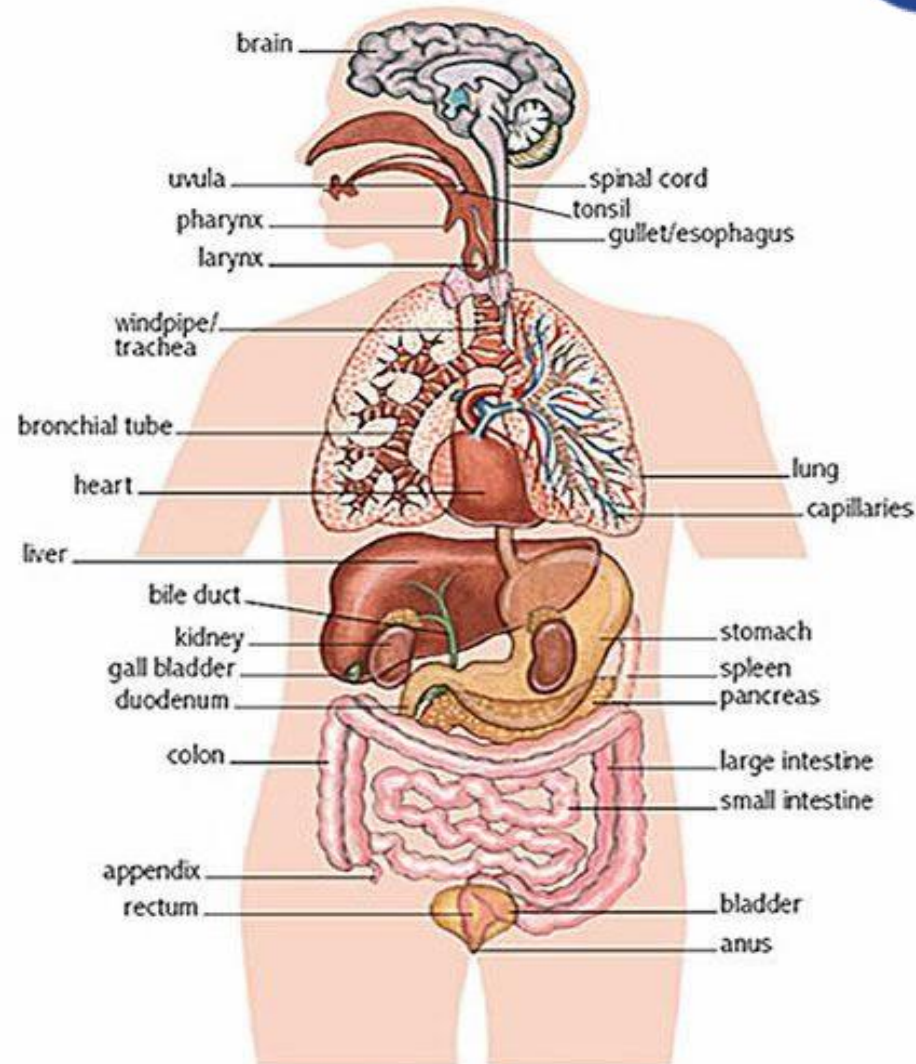


# Understanding Chronic Kidney Disease

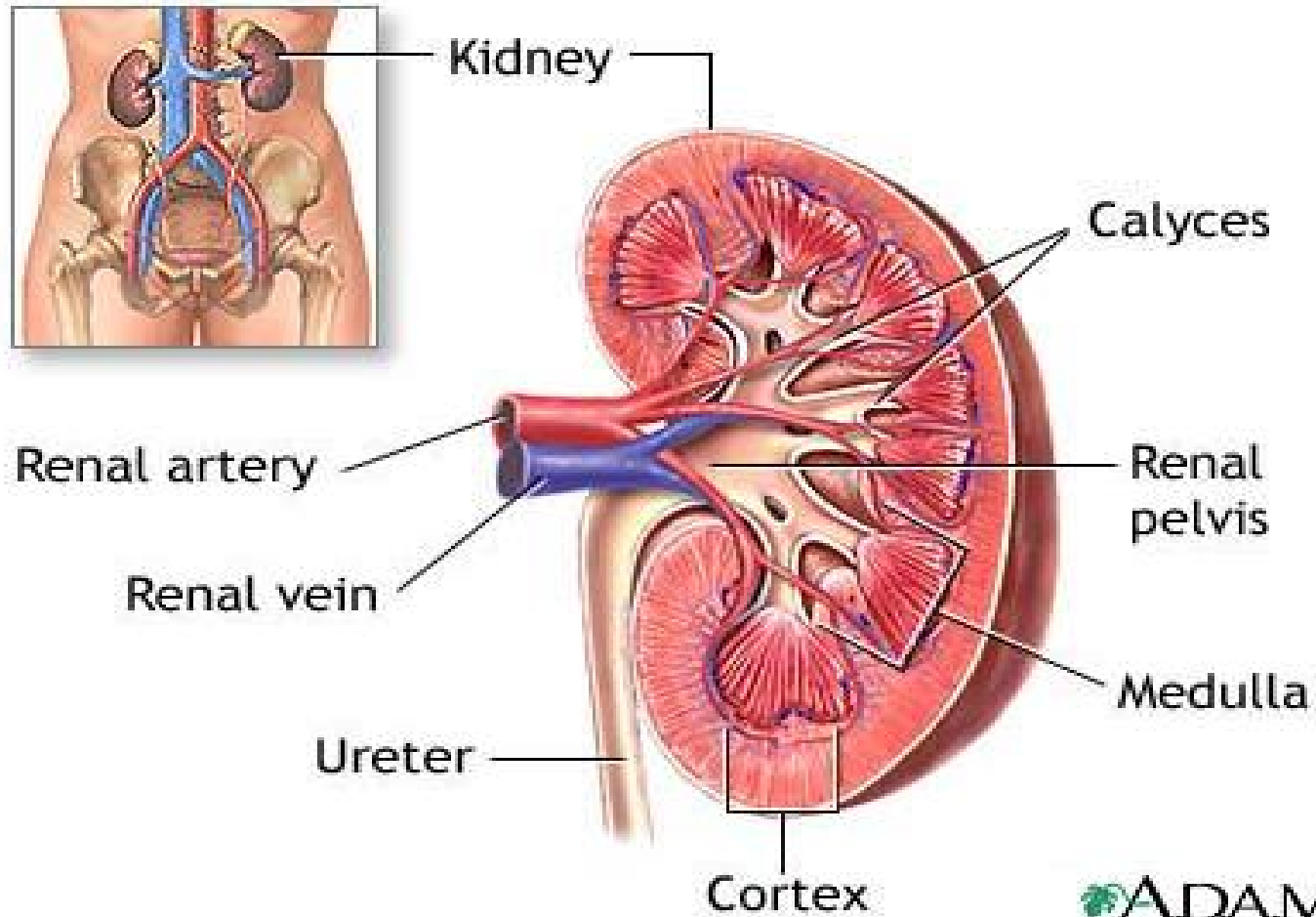
In the context of RF(I)T's health Intervention



# The Human Body



# The Kidney in the Human Body





# Understanding what the kidney does for our Body



- We have 2 Kidneys in our Body
- They are fist sized, just like a computer mouse .
- They constitute about 1/2 % of our body weight
- They perform the function of a strainer in our Body
- Inside each kidney there are about 10 to 20 lakh nephrons , which perform the filter function for our body. If we keep these nephrons horizontally, they will be about 16 Kms long



# Understanding what the kidney does for our Body



- Adults have about 7-8 liters of blood in their bodies. The kidneys filter them around 400 times a day
- Kidneys clean the blood and send clean blood to different parts of our body and send out the waste through urine
- Kidneys make a hormone that regulates Bp by constricting arteries so that due to the increased pressure, blood is sent to different parts of the body



# Understanding what the kidney does for our Body



- Kidneys make a hormone that makes RBC( that is why CKD patients need erythropoietin injections)
- Kidneys produce active Vitamin D, if the skin and the liver fail to do so.
- If one kidney fails or is taken away, and the other works upto 75%, it can sustain life



# Understanding Kidney failure

## How & Why



- Excess blood loss
- Low Blood volume
- Dehydration
- Poor intake of fluids
- Uncontrolled diabetes and Hypertension
- Long, unsupervised use of certain medicines
- Swellings, breathlessness, confusion, weakness, laziness



# Tests



- Blood test
- CBC
- BUN( Blood , Urea, Nitrogen )
- Urine creatinine
- Serum Creatinine





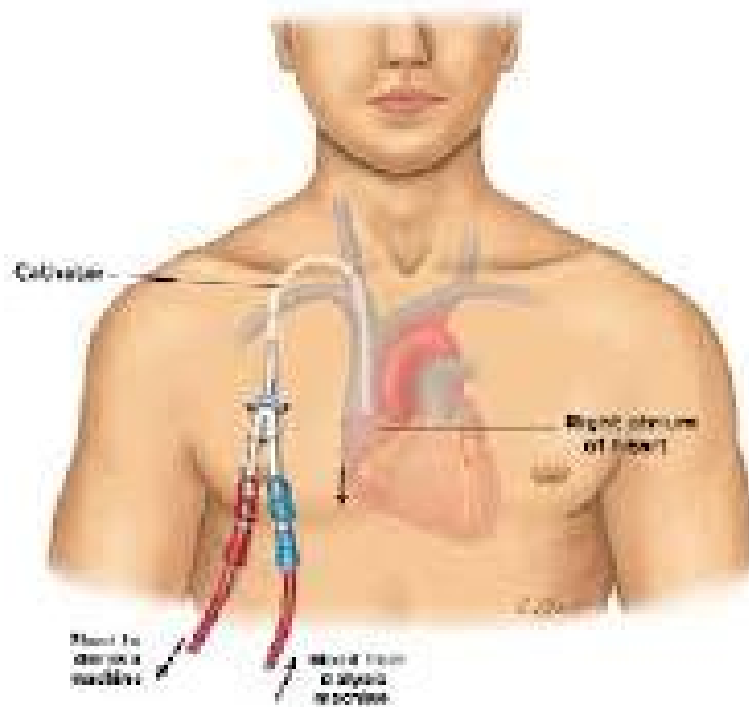
# What happens when kidney fails



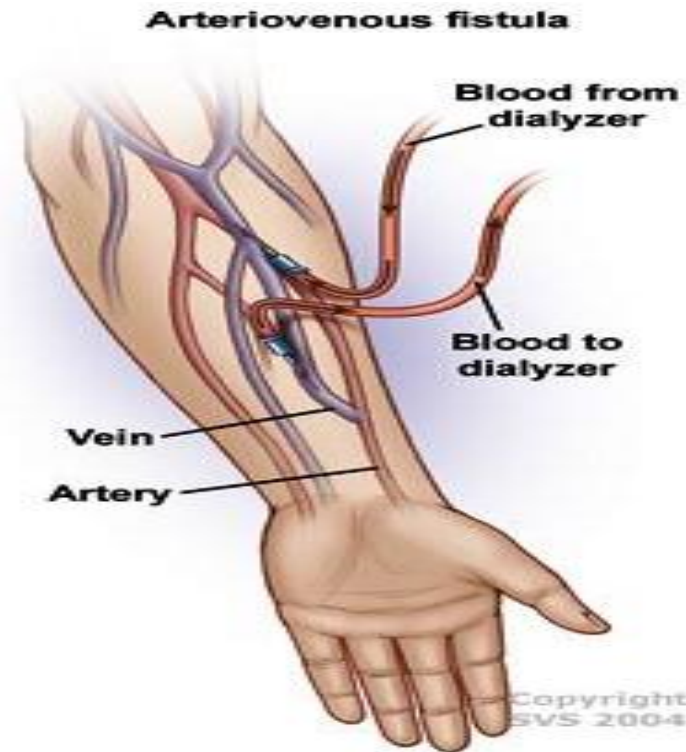
- Blood purification stops
- Patient needs Dialysis or Kidney transplant



# Catheter - an immediate option



# Fistula – required to connect body to dialysis machine . Requires surgery





# Dialyzer Tubing connect fistula to dialysis machine



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# Dialysis machine purifies blood artificially





# What does a CKD patient need



- Regular dialysis , 2 to 3 times a week
- Each dialysis is around 4 hours
- Track creatinine levels
- Take proper complimentary & supplementary medication
- Control fluid intake
- Transplant as an option
- Peritoneal dialysis





## Facilities for treatment



- Low cost dialysis centers
- Trusts that help with costs / medicines/ ration/ education of children
- CM Cell
- Mahatma Jyotiba Phule Jan Arogya Yojana (MJPJAY)
- District Hospitals have 4 machines
- Problems of access in rural and remote areas

# Take care of Kidneys!

## Thank You!

