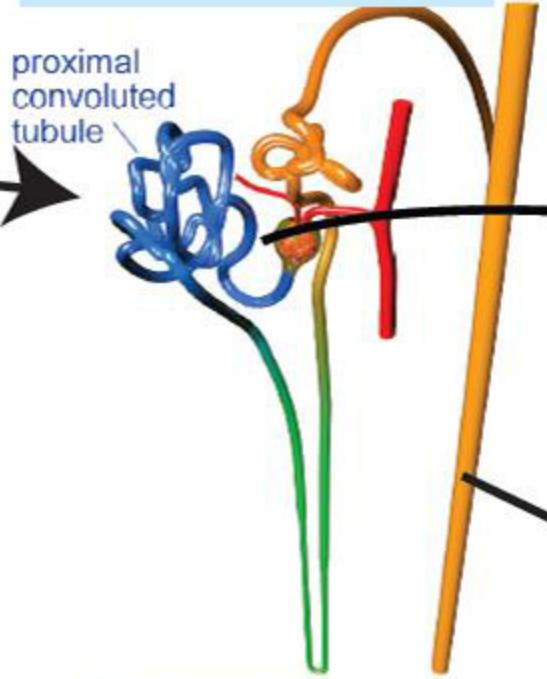
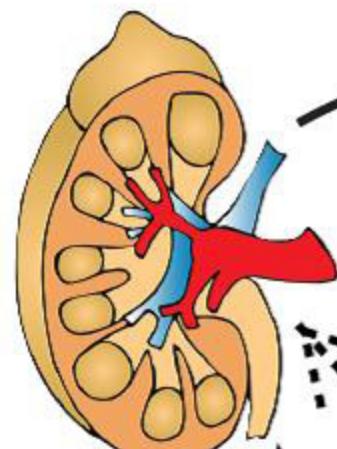


$\uparrow \text{NH}_4^+$, acidic pH

Release of glyphosate,
AMPA, As, Heavy metals

- Oxidative stress
- Nitrosative stress
- Apoptosis
- Necrosis

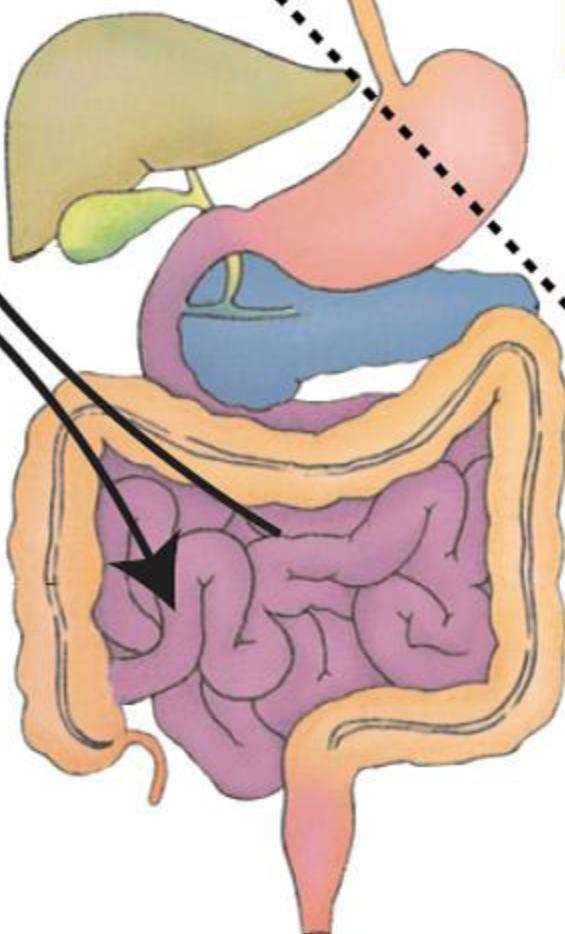
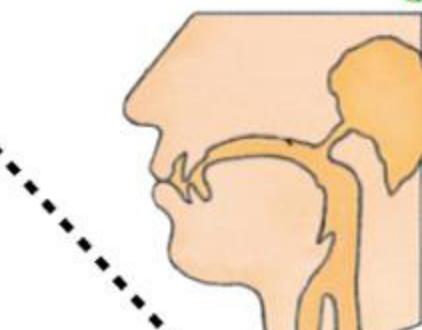


- Glomerular sclerosis
- Glomerular collapse
- Proximal tubular damage
- Intestinal damage



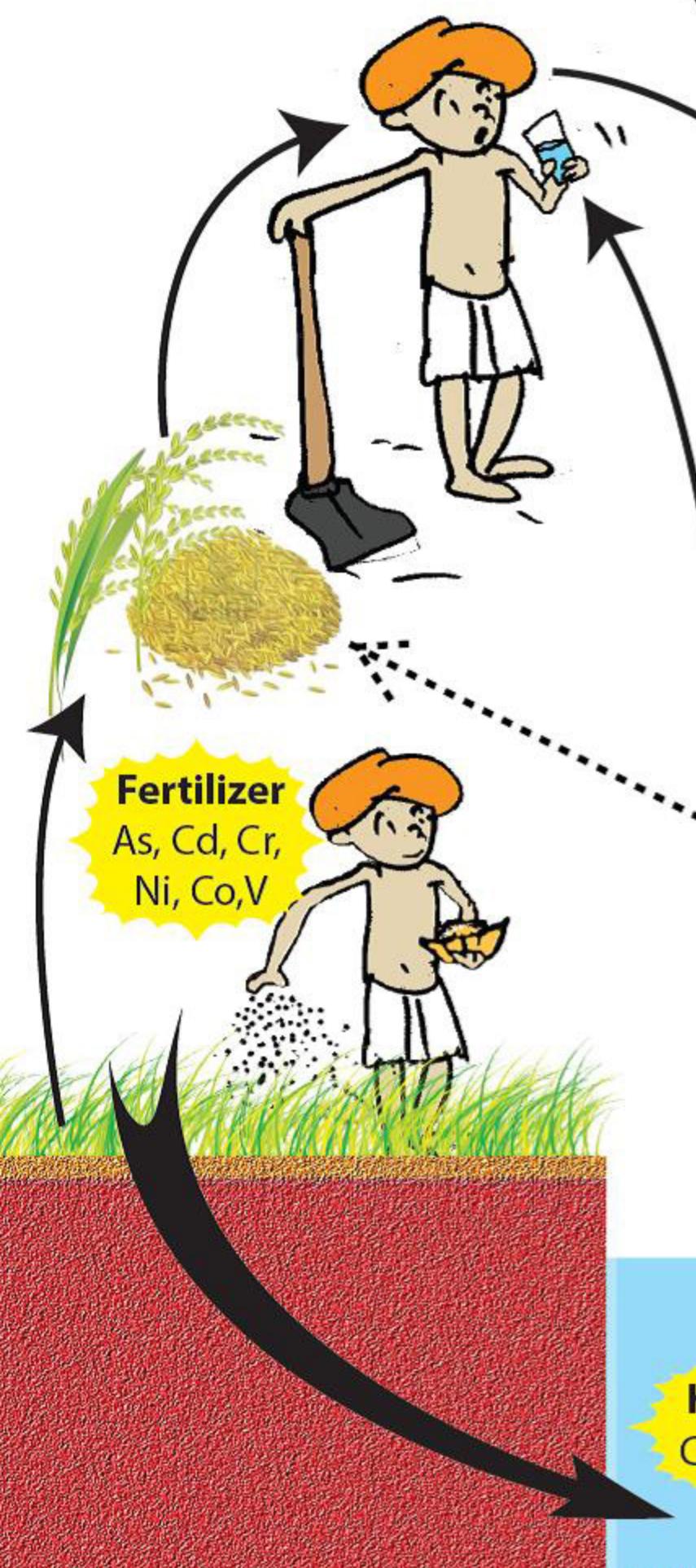
Further formation of
Glyphosate-Metal Complex
Within circulation

As,Cd,heavy metals,glyphosate,AMPA
 \uparrow in healthy individuals
 \downarrow Patients with CKDu



Dermal absorption, inhalation

Glyphosate



Fertilizer
As, Cd, Cr,
Ni, Co,V

Hard Water
Ca, Mg, Sr, Fe

Formation of Glyphosate-Metal Complex