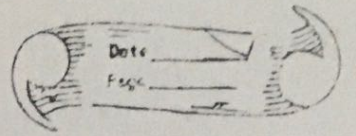


CFR



Radioisotope

In constant infusion / Bolus

- ↓
- ↓
- sub. 500ml water Before
- 'remain' supine
- 1st Bolus then constant infusion

① Constant Infusion

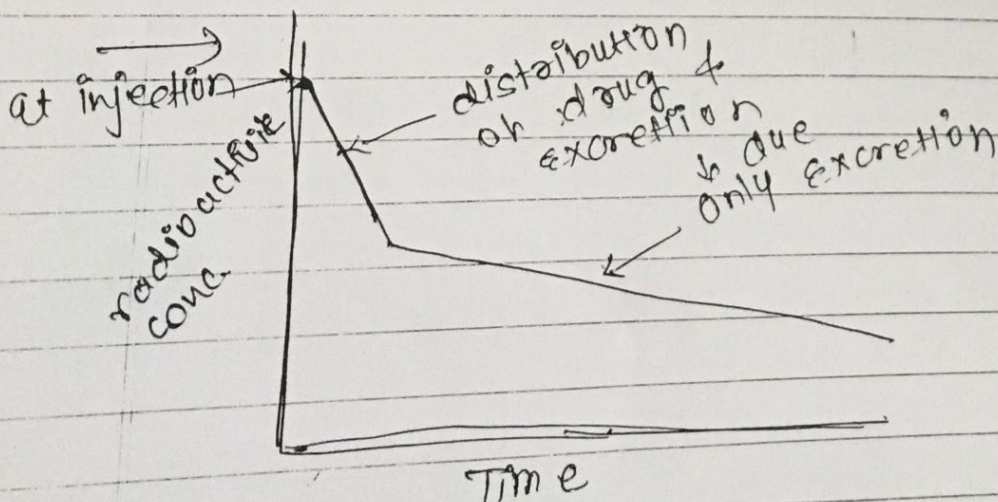
↓
measure urine & plasma conc.

② Single Bolus

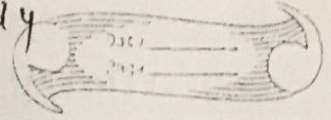
- ↓
- plasma conc. over a time → for at least a time
- don't need to collect urine
- more practical

CFR measures as

→ Amount of marker injected & ↓ in concentration per unit time

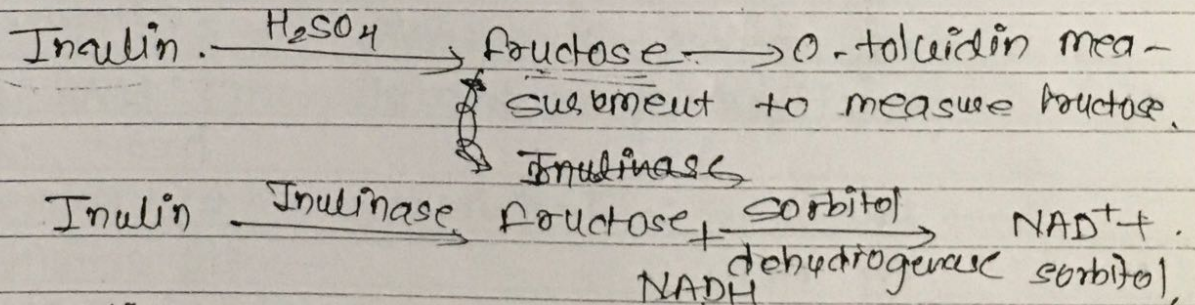


- In our body vein output : 1000 ml/day
- Cr in vein excreted : 1000 mg/day
- Vein conc is 100 mg/dl



* Non radioisotopic markers :-

- (a) Inulin clearance :- Cold standard
- Fructose polymer silver std. → Continuous infusion
 - Cold std. → Iohexol
 - → single Bolus inulin
 - → Constant infusion for make conc. stable at plasma
 - single bolus can be measured
 - Inulin measurement is very diff.



- Calibrated \bar{c} Inulin & fructose
- Endogenous fructose should be measured 1st then subtracted, to avoid interference in both serum & urine
- urine requires dilution b'cz in urine fructose get concentrated.

- (b) Iohexol :- Silver standard
- alternative inulin clearance.