

* Branched chain amino acid & CKD

Branched chain amino acid

e.g. Leucine, Isoleucine, Valine

BCAT (Transamination) CKD

Branched chain keto acid

BCKD (Branched chain keto acid dehydrogenase)

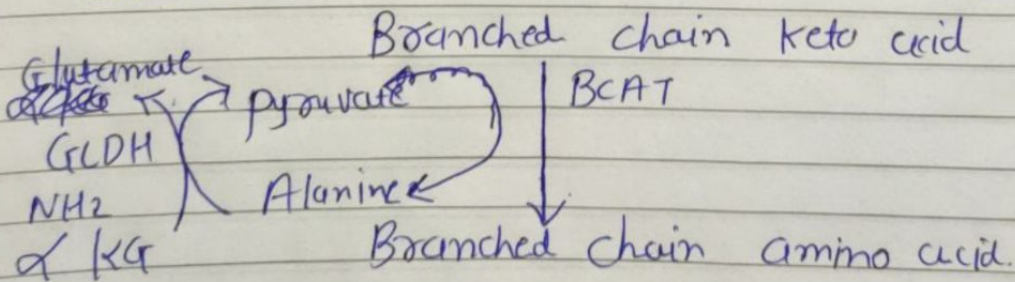
- maple syrup urine disease

Respective Co-A

Succinyl CoA (Valine, Isoleucine) + Acetyl CoA (Leucine, Isoleucine)

- Leucine - ketogenic
- Isoleucine - ketogenic & glucogenic
- Valine - Glucogenic

* In CKD patient, branched chain keto acid given



- This will use NH_2 &
 - ↓ NH_2 toxicity ↓
 - ↓ S-urea level