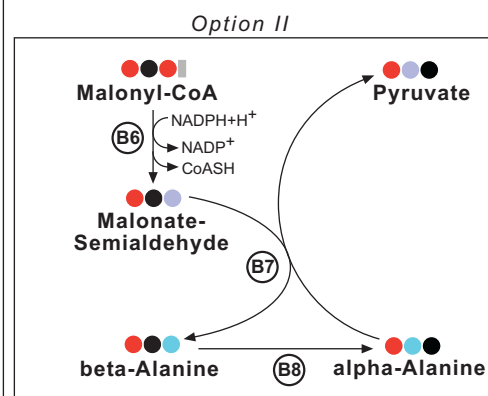


Option I MODULE B



LEGEND:

● Carboxyl

● Carbonyl

● Hydroxyl

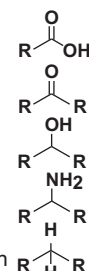
● Amine

● Hydrocarbon

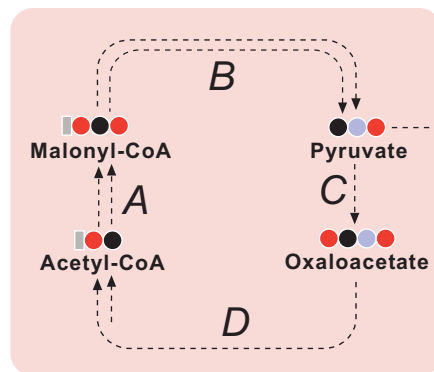
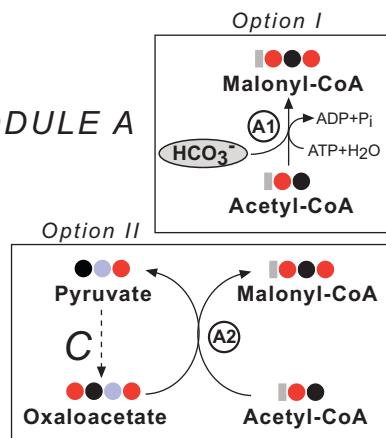
■ Phosphate

■ CoA

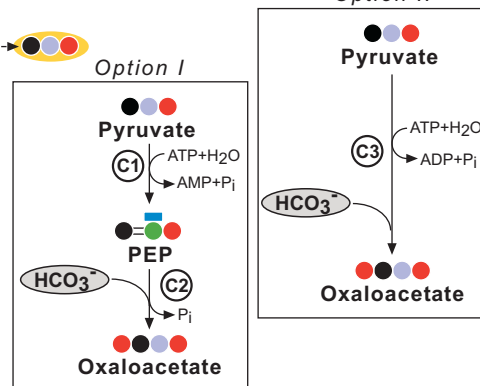
● Cycle's product



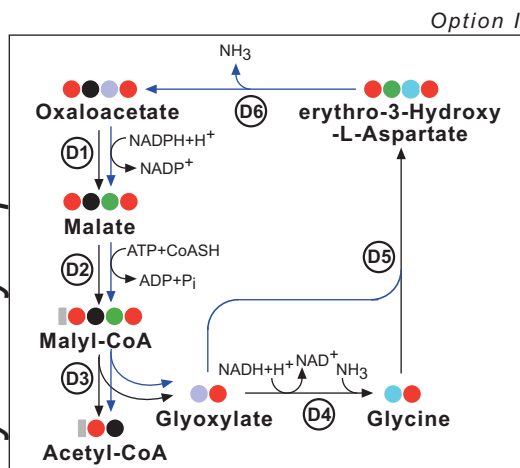
MODULE A



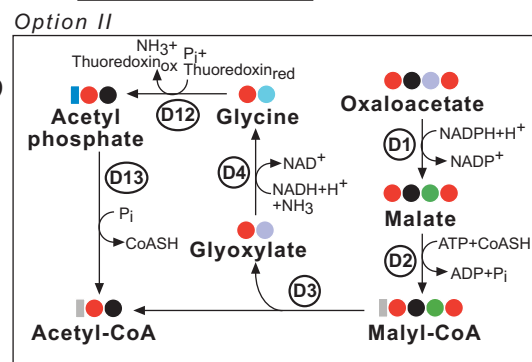
MODULE C



Hydroxyaspartate

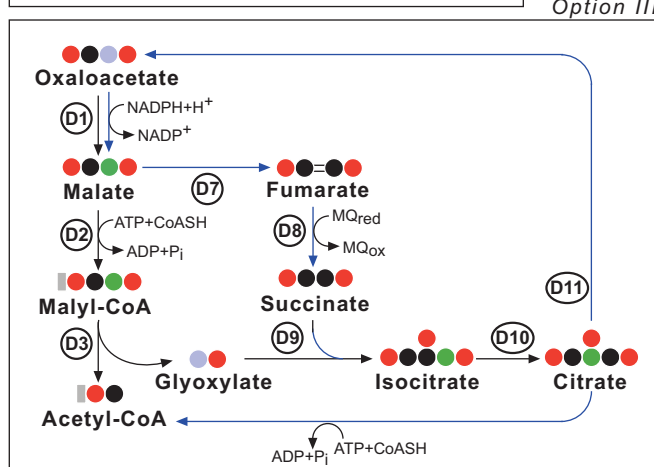


MODULE D

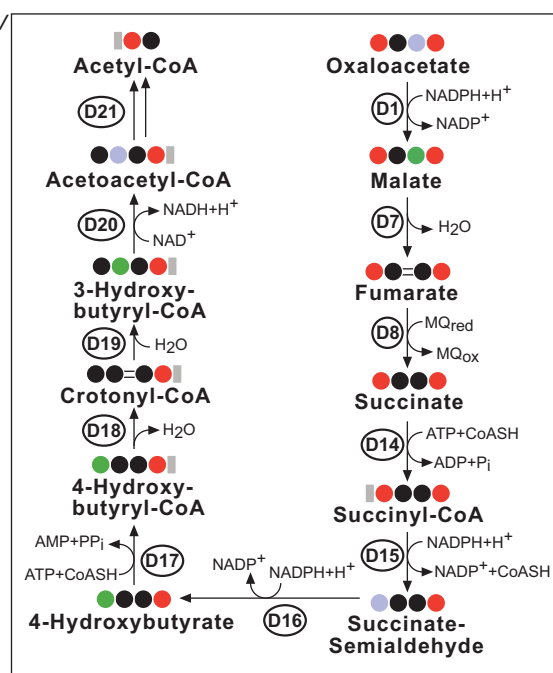


Acetyl-phosphate

Citrate



Option IV



4-Hydroxybutyrate

The PEPC-Lactate/Citramalate (MOP)

