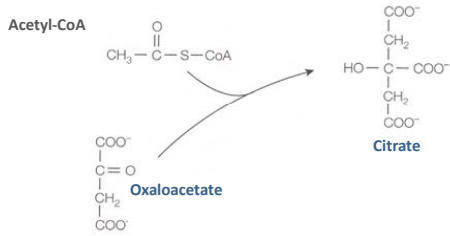
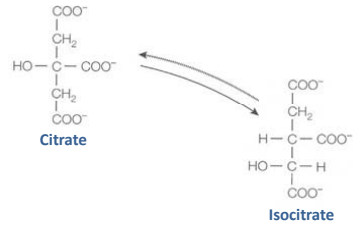


### (1) Condensation reaction



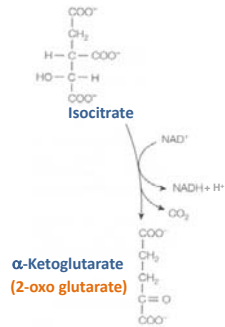
Citrate synthase

### (2) Isomerisation



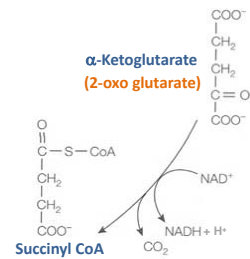
Aconitase

### (3) First loss of CO<sub>2</sub>



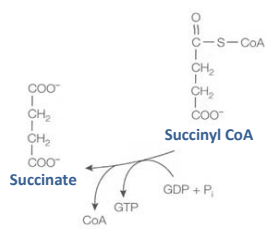
Isocitrate dehydrogenase

### (4) Second loss of CO<sub>2</sub>



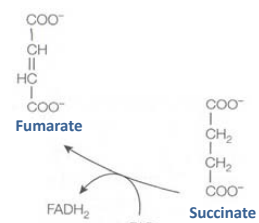
Ketoglutarate dehydrogenase

### (5) Trapping thioester bond energy as GTP



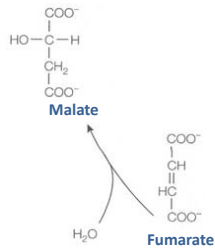
Succinate thiokinase

### (6) Conversion of succinate to fumarate



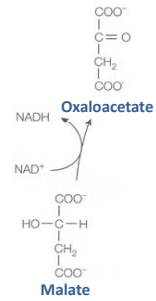
Succinate dehydrogenase

### (7) Conversion of fumarate to malate



Fumarase

### (8) Conversion of malate to oxaloacetate



Malate dehydrogenase

### TCA cycle

