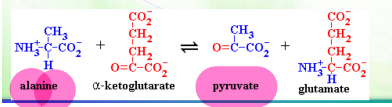
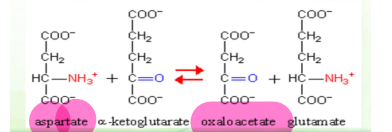
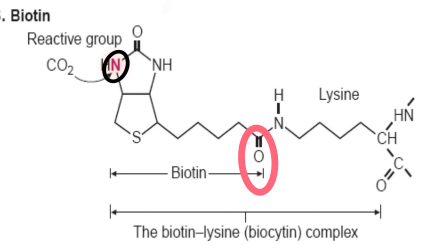


Activation transfer coenzymes

<u>Name</u>	<u>Inactive</u>	<u>active</u>	<u>functional</u>	<u>binding</u>	<u>Rxns</u>	<u>Examples</u>
TPP	Thiamin (vitamin B1)	Thiamin pyrophosphate	N—C--S ↓ Bind to the keto form	pyrophosphate Chelating with Mg +2	decarboxylation Releasing CO2	1) Pyruvate dehydrogenase 2)α – ketoglutarate dehydrogenase
Co-A	Pentothenate (vitamin B5)	Co-A	-SH	Adenosine bisphosphate	Metabolism of sugars / fats/ proteins Attacking the carbonyl Formation of acyl thioester bond	1) Pyruvate dehydrogenase 2) citrate synthase
Pyridoxal phosphate	Pyridoxal Pyridoxamin pyridoxine	Pyridoxal phosphate (vitamin B6)	Aldehyde group	Aldehyde group Don't forget the mechanism	Metabolism of amino acids (transaminase)	 <p>alanine + α-ketoglutarate ⇌ pyruvate + glutamate</p>  <p>aspartate + α-ketoglutarate ⇌ oxaloacetate + glutamate</p>
Biotin (vitamin B7)	Source : Food & intestinal bacteria	Biotin	<p>B. Biotin</p>  <p>Reactive group CO₂</p> <p>Lysine</p> <p>Biotin</p> <p>The biotin-lysine (biocytin) complex</p>	Carboxylation covalently bind to Lys	1)Pyruvate carboxylase 2)Acetyl CoA carboxylase	