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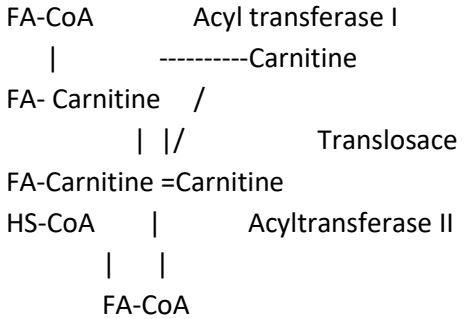
LEVEL 200

1. Activation of fatty acids in the cytosol
2. Transport of activated fatty acids into mitochondria{ carnitine shuttle}
3. Beta oxidation proper in the mitochondrial matrix

1. Activation of fatty acids in the cytosol:
   This proceeds by th fatty acids in the cytosol{ acyl Co A synthetase} present in the cytosol. Thiokinase requires ATP, CoA SH, Mg++. The product of this reaction is Fatty Acid acyl CoA and water.
   Cytosol
   Fatty acid + CoA+ ATP=Fatty Acid-CoA + AMP+2Pi
2. Transport of activated fatty acids into mitochondria:
   Long chain acyl CoA tranverses the inner mitochondria membrane with a special transport mechanism called Carnitine Shuttle.



3. Proper of Beta- Oxidation in the mitochondrial matrix:
   There are 4 steps in Beta-oxidation:
   Step I: Oxidation by FAD linked dehydregenase
   Step II: Hydration y Hydregetase
   StepIII: Oxidation by NAD linked dehydregenase
   Step IV: Thiolytic cleavage Thiolase