

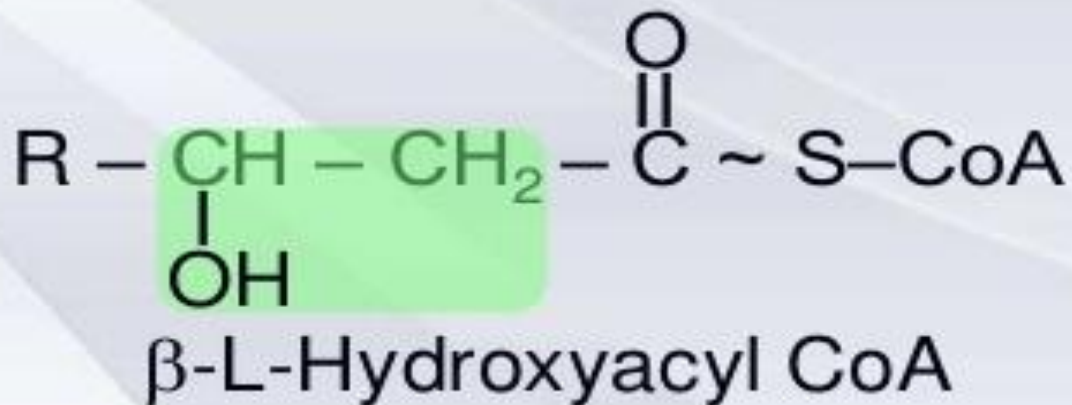
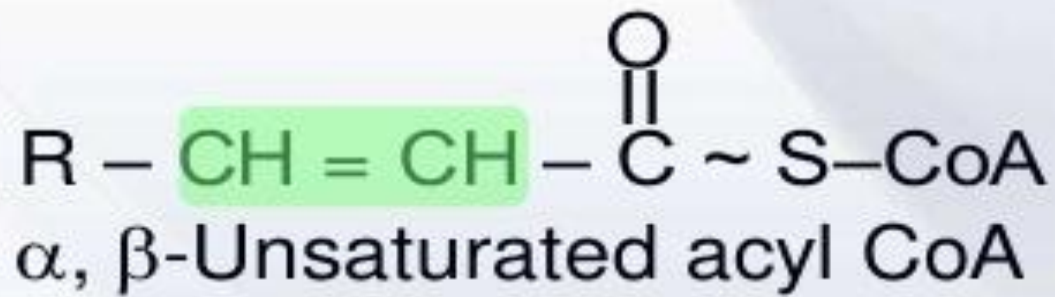
Topic: oxidation of fats
Class: B.Sc Part –III (Hons.)
Paper- V
Group – A

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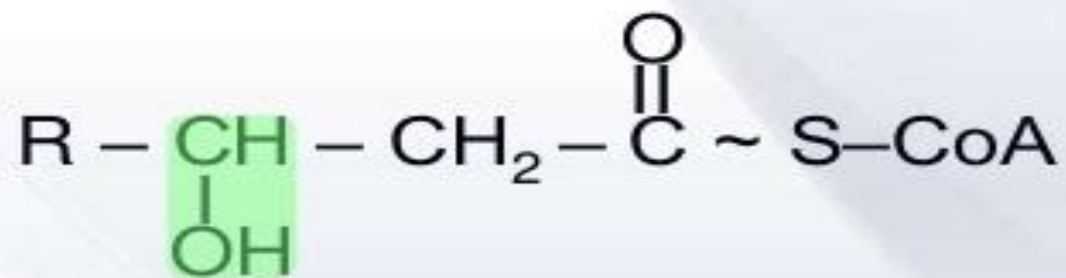
Department: Zoology

College: Dr. L. K. V. D College, Tajpur, Samastipur

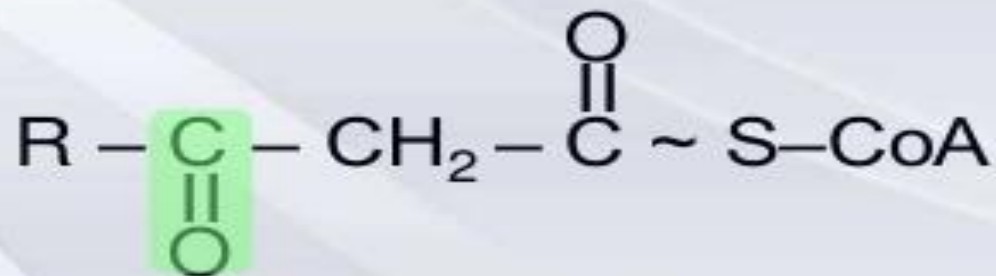
- The second reaction is addition of H and OH
- Crotonase splits H₂O into H and OH
- It adds H to α -carbon and OH to beta-carbon
- α , β -Unsaturated acyl CoA is converted into β -L-hydroxy acyl CoA



- In the third reaction, two hydrogen atoms are removed from the beta-carbon
- These are transferred to NAD⁺
- beta-L-Hydroxy acyl CoA is converted into beta- keto acyl CoA

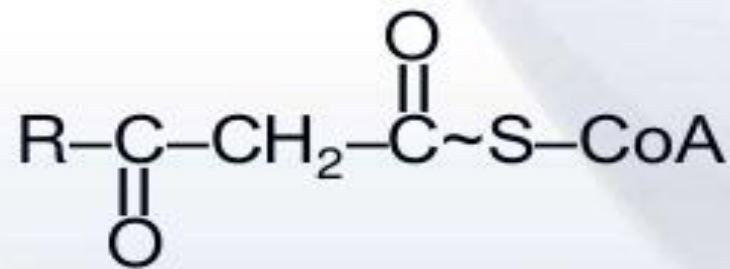


β -L-Hydroxyacyl CoA

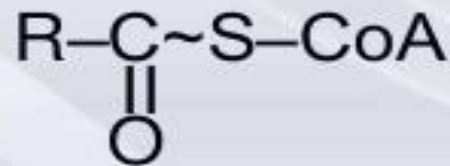
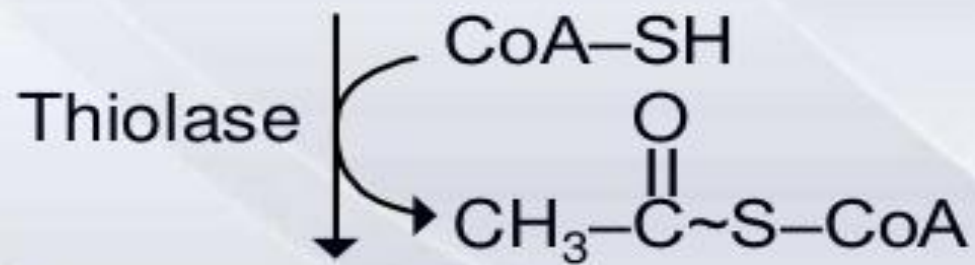


β -Ketoacyl CoA

- The fourth (and final) reaction is catalysed by thiolase
- The last two carbon atoms and CoA are removed from beta-keto acyl CoA as acetyl CoA
- A new CoA molecule is added to the acyl chain
- The product is an acyl CoA shorter by two carbon atoms than the initial acyl CoA



β -Ketoacyl CoA



Acyl CoA (C_{n-2})