

Respiration-

Krebs Cycle and Other Metabolic Pathways

(i) Common Pathway. It is common pathway for oxidative breakdown of carbohydrates, fats and proteins.

(ii) Acetyl CoA. It is raw material for synthesis of carotenoids, terpenes, gibberellins, aromatic substances, steroids and fatty acids, α -oxidation of fatty acids produces acetyl CoA.

(iii) Succinyl CoA. It is raw material for formation of chlorophylls, cytochromes, phytochrome and other pyrrole substances.

(iv) α -Ketoglutarate and Oxaloacetate. They undergo reductive amination and produce amino acids. The two are, therefore, raw materials for protein synthesis. Proteins also undergo respiratory breakdown through them by the process of deamination of their amino acids. Ammonia released during deamination is used in urea formation.

(v) Oxaloacetate. It forms alkaloids and pyrimidines.