CONJUGATED PROTEIN (cont-d)

iv) Nucleoprotein:

Nucleoprotein contain nucleic acids as the prosthetic group.
Eg. Nuclein, Nucleohistone etc.

v) Chromoprotein:

Chromoprotein are coloured protein. These are simple protein linked to a metallic prosthetic group which gives the colour to protein.
Eg. Haemoglobin, haemocyanin, cyto chrome, flavoprotein, chlorophyll etc.

3) Derived Protein

Derived proteins are intermediate product formed from simple or conjugated proteins, when they are hydrolyzed by heat, acids, alkalies or enzymes.

Derived proteins are two type. They are ~~Simple~~ primary derived proteins or secondary derived proteins.

i) Primary derived protein:

primary derived protein are derivatives of proteins in which the size of the protein molecules are not materially altered.

There are three types of primary derived proteins.

i) Proteans: proteans are denatured proteins. They are the first products produced by the action of

acids, enzymes, or water on proteins. They are insoluble in water.
Eg. Edastan derived from edastin.
Fibrin derived from Fibrinogen.
Myosan derived from myosin.

ii) Metaproteins: Metaproteins are derived by the further action of acid or alkali on proteins.

iii) Coagulated proteins: Coagulated proteins are insoluble coagulated products produced by the action of heat or alcohol on protein. Eg. Coagulated egg white.

b) Secondary derived protein: Secondary derived proteins are the products of proteins in which definite hydrolysis has taken place. The molecules are smaller than those of the original protein. They may be of three types: Proteases, peptones and polypeptides.

i) Proteases: proteases are soluble in water. They are not coagulated by heat. They are precipitated by saturating their solutions with ammonium sulphate.

ii) Peptones: They are soluble in water and not coagulated on heat.

iii) Polypeptides: They are derivates of proteins containing many amino acid units.