

Chap 4 Class notes

Structure of protein and monomers → hierarchy

[HIGH YIELD]

- the structure of a protein determines its shape. → the shape of the protein determines the function → this is typically relevant to enzymes and denaturing which will be discussed later.
- A protein functions at at least 3 of the 4 structural hierarchical levels.
- primary ; specific arrangement of amino acids → present right after translation when amino acids are being joined through condensation polymerisation
- Secondary ; the alpha helices or beta pleated sheets → describes the LOCAL folding of the amino acids or protein
- Tertiary → this typically accounts for the Active site of enzymes. It is the GLOBAL coiling and folding of a protein to give it a 3D structure. → coiling and folding is stabilised by Hydrogen bonds and disulphide bridges.
- Quaternary ; → whether or not the protein consists of multiple polypeptides

Transcription and Translation

[HIGH YIELD]

Transcription

- RNA polymerase and other transcription factors bind to the promoter region of the sequence
- This sends signals, instructing the unwinding of the DNA helix, leaving the nitrogenous bases exposed