**Peptides and Proteins**

* 20 amino acids are commonly found in protein.
* These 20 amino acids are linked together through “peptide bond forming peptides and proteins (what’s the difference?).
* The chains containing less than 50 amino acids are called **“peptides”**, while those containing greater than 50 amino acids are called **“proteins”**.

**Peptide bond formation**

α-carboxyl group of one amino acid (with side chain R1) forms a covalent peptide bond with α-amino group of another amino acid (with the side chain R2) by removal of a water molecule.

The result is: Dipeptide (i.e. Two amino acids linked by one peptide bond).



* Repetition of this process generates a polypeptide or protein of specific amino acid sequence.
* Each polypeptide chain starts on the left side by free NH2 group of the first amino acid enter in chain formation and termed (N- terminus).
* Each polypeptide chain ends on the right side by free COOH group of the last amino acid and termed (C-terminus).