Conformational changes, that is, protein denaturation

Proteins in general have what is referred to as "higher order structure." The amino acid sequence is termed the primary structure, and the polypeptide chain can fold into segments that are helical, β sheet, and random coil, termed secondary structure. The topological folding of the secondary structure into an organized folded structure is referred to as tertiary structure, and the spatial orientation of single folded polypeptide chains is the quaternary structure. An overall drawing showing these levels of structure for a protein is shown in Figure 3.17. Denaturation or unfolding of proteins has been

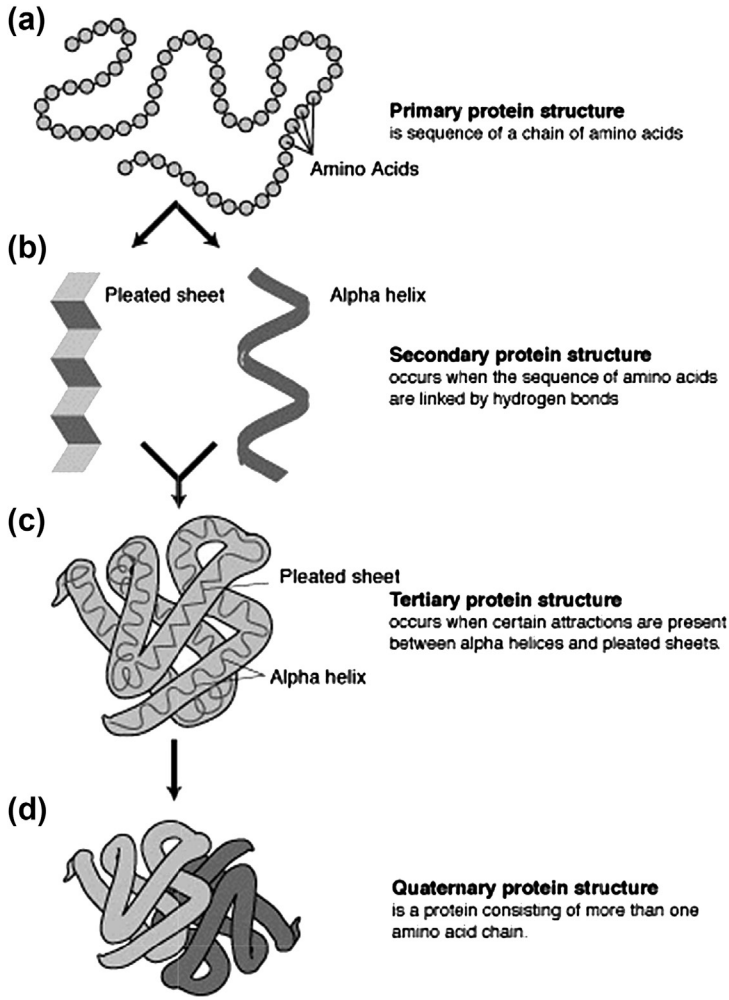

Figure 3.17 Levels of structural organization in proteins: (a) primary structure, (b) secondary structure showing α helix and β sheet structures, (c) tertiary structure (folding of the polypeptide chains with secondary structure into an organized spatial structure), and (d) quaternary, association of different tertiary structures.

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