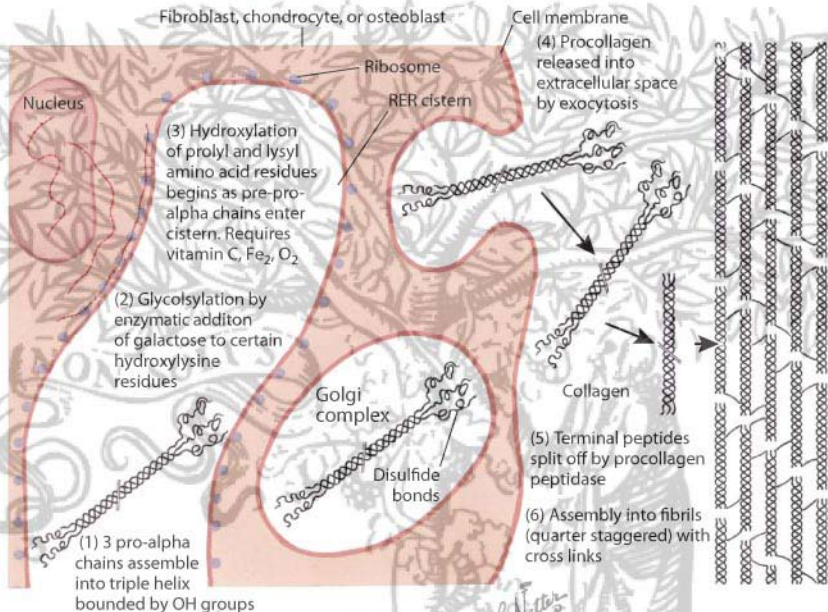


Collagen synthesis



Each alpha chain is made of about 1000 amino acids. Every third amino acid in chain is glycine, smallest of amino acids. Glycine has no side chains, which permits tight coil. X and Y indicate other amino acids (X often proline; Y often hydroxyproline). Proline and hydroxyproline, respectively, constitute about 20% and 25% of total amino acids in each chain.