

Biological Chemistry: Structure, metabolism and medical correlations

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Course contents:

- Introduction to the chemistry of life
- Chemical structure of biomolecules:
- Sugars
- Lipids
- Amino acids and proteins
- Nucleic acids
- Carbohydrate metabolism: anaerobic and aerobic pathways, related abnormalities
- Lipid metabolism: glycerides and steroids metabolism, related abnormalities
- Proteins: metabolic pathways, related abnormalities
- Hemoglobins: Classification and related abnormalities
- Nucleic acids: anabolic and catabolic pathways and abnormalities
- Enzymes: structures, characteristics, applications and physiological abnormalities
- Vitamins: Chemical classifications and applications
- Hormones: chemical categorization and physiological abnormalities
- Biochemical assessment: colorimetric, luminescence, immunoassays, chromatographic and spectroscopic methods