

Bio-Chemistry

CHARTS

List No. 9
w.e.f. Jan. 15, 2016

Customised Charts

Size 20"x30" Laminated & Mounted Framed on Board

20"

4"

College Logo & Name

Plant Polysaccharides

Cellulose

Microfibril
Elementary fibril

Starch

Amylose 20%
Amylopectin 80%
Reducing end

Plant cell

Chloroplasts
Golgi apparatus
Endoplasmic reticulum
Mitochondria
Nucleus
Plasma membrane
Vacuole

Extensin
Cellulose microfibril
Hem-cellulose
Pectin

30"

Harish Mahajan
Mob. 09729010431

Chemistry

- DBC 01 Periodic table - Biological Important elements, Electronic Configurations
- DBC 02 Bonds - Orbital hybridization & chemical bonding, Resonance
- DBC 03 Molecular Structure - illustrations, Bond lengths and angles, Bond Polarity, Hydrogen bonds
- DBC 04 Isomerism - Cis-trans-isomers, Conformers, Optical isomers, The aconitase reaction
- DBC 05 Biomolecules I - Important classes of compounds
- DBC 06 Biomolecules II - Acetyl CoA
- DBC 07 Chemical reactions - Redox Reaction, Acid-Base Reaction, Additions eliminations, Nucleophilic substitutions

Physical chemistry

- DBC 11 Energetics - Forms of work, Energetics and the course of processes
- DBC 12 Equilibriums - Group transfer reactions, Redox reactions, Acid-base reactions
- DBC 13 Enthalpy and entropy - Heat of reaction and calorimetry, Enthalpy and entropy,
- DBC 14 Reaction Kinetics - Activation energy, Reaction rate, Reaction order
- DBC 15 Catalysis - Catalysis principle, Catalysis of H₂O₂ - breakdown by iodide,
- DBC 16 Water as a solvent - Water and methane, Structure of water and ice, Hydration
- DBC 17 Hydrophobic interactions - Solubility of methane , The "oil drop effect" water Arrangements of amphipathic substances in water
- DBC 18 Acids and bases - Acids and bases, pH values in the body, Buffers
- DBC 19 Redox Processes - Redox reactions, Reducing equivalents, Biological redox system

BIOMOLECULES

Carbohydrates

- DBC 21 Overview - Carbohydrates overview, Monosaccharides structure
- DBC 22 Chemistry of sugar - Reactions of the monosaccharides, Polarimetry, Mutarotation
- DBC 23 Monosaccharides and Disaccharides - Important monosaccharides, Disaccharides
- DBC 24 Polysaccharides overview - Polysaccharides structure, Important Polysaccharides,
- DBC 25 Plant Polysaccharides - Cellulose, Starch,
- DBC 26 Glycosaminoglycans and Glycoproteins - Hyaluronic acid, Oligosaccharide in immunoglobulin (IgG), Glycoproteins

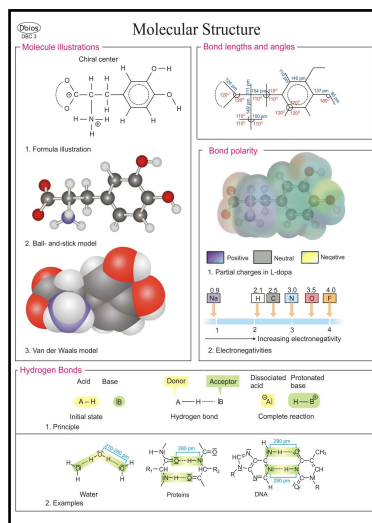
LIPIDS

- DBC 28 Overview - Classification
- DBC 29 Fatty acid and fats - Carboxylic acids , Structure of fats

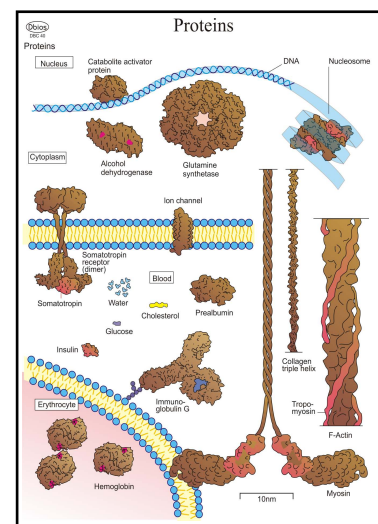
- DBC 30 Phospholipids and Glycolipids - Structure of fats, Phospholipids and Glycolipids
- DBC 31 Isoprenoids - Activated acetic acid as a component of lipids, Isoprenoids,
- DBC 32 Steroid structure - Steroid building blocks, 3D structure, Thin-layer Chromatography
- DBC 33 Steroid : overview - Sterols, Bile acids, Steroid hormones
- AMINO ACIDS**
- DBC 36 Chemistry and properties - Amino acids: functions, Optical activity, Dissociation curve of histidine B27
- DBC 37 Proteinogenic amino acids - The proteinogenic amino acids,
- DBC 38 Non-Proteinogenic amino acids - Rare amino acids, Post-translational Protein modification , Biogenic amines

PEPTIDES AND PROTEINS

- DBC 40 Overview - Proteins
- DBC 41 Peptide bonds - Peptide bonds, Resonance, Peptide nomenclature, Conformation space of the peptide chain
- DBC 42 Secondary structures - Helix, Collagen Helix, Pleated-sheet structures, B - Turns
- DBC 43 Structural proteins - Keratin, Collagen, Silk fibroin
- DBC 44 Globular proteins - Conformation-stabilizing interactions, Disulfide bonds, Protein dynamics, Folding patterns
- DBC 45 Protein folding - Folding and denaturation of ribonuclease, Energetics of protein folding



DBC 03



DBC 40

Size : 20"x26" Thick Laminated both side & attached with Plastic Strips
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- DBC 46 Molecule models : Insulin - Structure of insulin, Insulin (monomer)
- DBC 47 Isolation and analysis of proteins Salt precipitation, Dialysis, Gel filtration, SDS gel electrophoresis

NUCLEOTIDE AND NUCLEIC ACID

- DBC 48 Base and nucleotides - Nucleic acid bases, Nucleosides, Nucleotides, Oligonucleotides, Polynucleotides
- DBC 49 RNA - Ribonucleic acids (RNAs), Transfer RNA (tRNA)
- DBC 50 DNA - DNA: structure, Coding of genetic information
- DBC 51 Molecular model: DNA and RNA - DNA: Conformation, RNA,

METABOLISM ENZYMES

- DBC 52 Basics - Enzymatic activity, Reaction and substrate specificity, The enzyme classes,
- DBC 53 Enzyme Catalysis - Uncatalyzed reaction, Enzyme - catalyzed reaction Principles of enzyme catalysis
- DBC 54 Enzyme Kinetics 1 - Michaelis Menten kinetics, Isosteric and allosteric enzymes
- DBC 55 Enzyme Kinetics 11- pH and temperature dependency of enzyme activity, Substrate specificity, Bisubstrate kinetics
- DBC 56 Inhibitors - Types of inhibitor, Kinetics of inhibition
- DBC 57 Lactate dehydrogenase : structure - Lactate dehydrogenase: structure, Isoenzymes
- DBC 58 Lactate dehydrogenase: mechanism - A. Lactate dehydrogenase : catalytic cycle
- DBC 60 Enzymatic analysis - Principle of spectrophotometry, Assay of lactate Dehydrogenase activity, Enzymatic determination of glucose
- DBC 61 Coenzymes 1 - Coenzymes: definitions, Redox coenzymes
- DBC 62 Coenzymes 2- Redox coenzymes 2, Group-transferring coenzymes 1.
- DBC 63 Coenzymes 3 - Group- transferring coenzymes - 2
- DBC 64 Activated metabolites - Activated metabolites

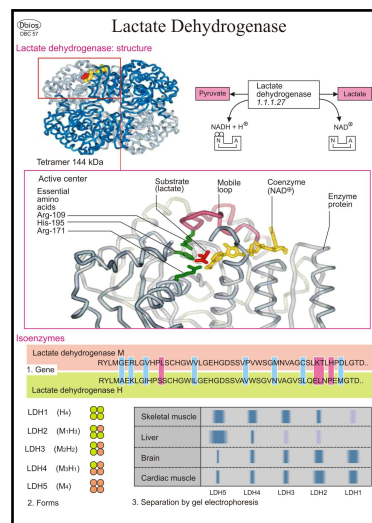
METABOLIC REGULATION

- DBC 66 Intermediary metabolism - Intermediary metabolism : overview,
- DBC 67 Regulatory mechanisms - Fundamental mechanisms of metabolic regulation
- DBC 68 Allosteric regulation - Aspartate carbamoyltransferase : reaction, Kinetics, R and T conformation, Structure of a dimer,
- DBC 69 Transcription Control - Functions of regulatory proteins, Lactose operon
- DBC 70 Hormonal Control - Principles of hormone action, Hormonal regulation of glucose metabolism in the liver

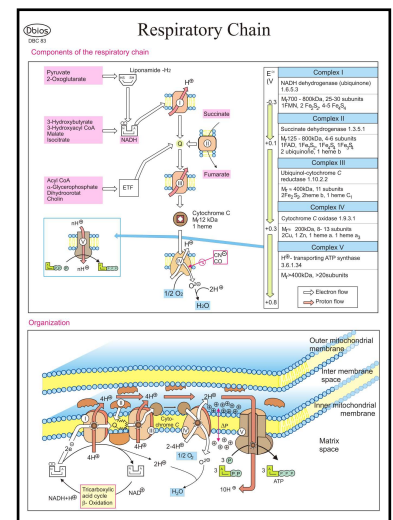
ENERGY METABOLISM

- DBC 73 ATP - ATP : structure, Hydrolysis energies, Types of ATP formation
- DBC 74 Energetic Coupling - Energetic coupling, Substrate level phosphorylation
- DBC 75 Energetic Conservation at Membrances - Electrochemical

- gradient, Proton motive force,
- DBC 76 Photosynthesis : Light reaction - Photosynthesis: overview, Light reactions
- DBC 77 Photosynthesis : Dark reaction - Photosystem II, Redox series, Calvin cycle
- DBC 78 Molecular Model : Membrane Proteins - Cytochrome C oxidase, Photosystem I
- DBC 79 Oxoacid dehydrogenases - Pyruvate dehydrogenase : reactions, PDH complex of Escherichia coli
- DBC 81 Tricarboxylic acid cycle : reactions - Tricarboxylic acid cycle
- DBC 82 Tricarboxylic acid cycle : Functions - Tricarboxylic acid cycle: functions
- DBC 83 Respiratory Chain - Components of the respiratory chain, Organization
- DBC 84 ATP synthesis - Redox systems of the respiratory chain, ATP synthase
- DBC 85 Regulation - Respiratory control, Uncouplers,
- DBC 86 Respiration and Fermentation - Aerobic and anaerobic oxidation of glucose,
- DBC 87 Fermentations - Lactic acid and propionic acid fermentation, Alcoholic fermentation, Beer brewing,



DBC 03



DBC 25

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CARBOHYDRATE METABOLISM

- DBC 90 Glycolysis - Glycolysis: balance, Reactions, Energy profile
- DBC 91 Pentose Phosphate Pathway - Pentose phosphate pathway : oxidative part, Reactions,
- DBC 92 Gluconeogenesis - Gluconeogenesis
- DBC 93 Glycogen metabolism - Glycogen metabolism, Glycogen balance.
- DBC 94 Regulation - Regulation of carbohydrate metabolism, Fructose 2, 6-bisphosphate,
- DBC 95 Diabetes mellitus - Insulin biosynthesis, Effects of insulin deficiency

LIPID METABOLISM

- DBC 98 Over view - Fat metabolism.
- DBC 99 Fatty acid Degrdaton - Fatty acid degradation : B- Oxidation, Fatty acid transport,
- DBC 100 Minor pathways of Fatty acid Degradation - Degradation of unsaturated fatty acids ,Degradation of odd-numbered fatty acids
- DBC 102 Fatty acid synthesis - Fatty acid synthase
- DBC 103 Biosynthesis of complex lipid - Biosynthesis of complex lipid, Reactions of fatty acid synthesis
- DBC 104 Biosynthesis of Cholesterol - Cholesterol biosynthesis

PROTEIN METABOLISM

- DBC 105 Protein Metabolism: over view - Protein metabolism : overview
- DBC 106 Proteolysis - Proteolytic enzymes,Proteasome, Serine proteases
- DBC 107 Transamination and Deamination - Transamination and deamination, Mechanism of transamination ,NH₃ or Ammonia metabolism in the liver
- DBC 109 Amino acid degradation - Amino acid degradation: overview, Deamination,
- DBC 110 Urea Cycle - Urea cycle,
- DBC 111 Amino acid biosynthesis - Symbiotic nitrogen fixation, Amino acid biosynthesis: overview

NUCLEOTIDE METABOLISM

- DBC 114 Nucleotide degradation - Degradation of nucleotides Hyperuricemia (gout)
- DBC 115 Purine and pyrimidine biosynthesis - Components of nucleobases, Pyrimidine and purine synthesis
- DBC 116 Nucleotide biosynthesis - Nucleotide synthesis: overview Ribonucleotide reduction

PORPHYRIN METABOLISM

- DBC 119 Heme bio synthesis - Heme biosynthesis,
- DBC 120 Heme degradation - Degradation of heme groups,

ORGANELLES

BASIC

- DBC 124 Structure of cell - Comparison of prokaryotes and eukaryotes, Structure of an animal cell
- DBC 125 Cell fractionation - Isolation of cell organelles, Marker molecules
- DBC 126 Centrifugation - Principles of centrifugation, Density gradient centrifugation
- DBC 127 Cell components and cytoplasm - Components of a bacterial cell, View into a bacterial cell, Biochemical functions of the cytoplasm

CYTOSKELETON

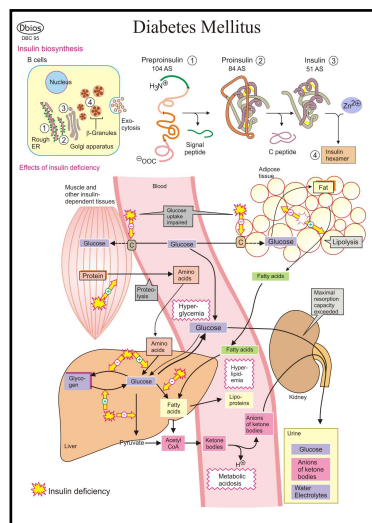
- DBC 131 Components - Actin, Intermediate filaments, Tubulins
- DBC 132 Structure and functions - Microfilaments and intermediate filaments ,Microtubules, Architecture
- DBC 135 NUCLEUS - Nucleus ,Nuclear pores, Interactions between nucleus and cytoplasm

MITOCHONDRIA

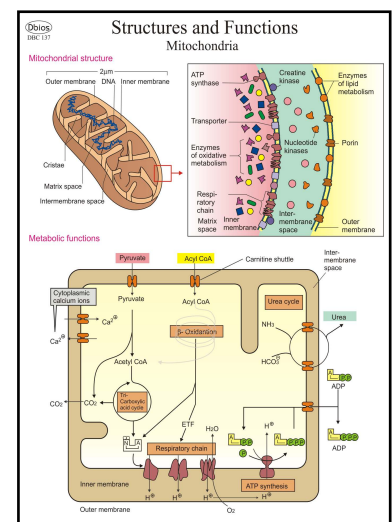
- DBC 137 Stucture and Functions - Mitochondrial structure, Metabolic functions
- DBC 138 Transport Systems - Transport systems, Malate and glycerophosphate shuttle,

BIOLOGICAL MEMBRANCES

- DBC 141 Structure and Components - Structure of the plasma membrane, Membrane lipids, Membrane protein
- DBC 143 Functions and composition - Functions of membranes Composition of membranes,
- DBC 144 Transport Processes - Permeability of membranes, Passive and active transport, Transport processes
- DBC 146 Transport proteins - Transport mechanisms, Glucose transporter Glut-1, Aquaporin-1, Sarcoplasmic Ca²⁺ pump.
- DBC 148 Ion channels - Voltage-gated Na⁺ channel, Nicotinic acetylcholine receptor, K⁺ channel in Streptomyces lividans
- DBC -149 Membrane receptors - Principle of receptor action, Insulin receptor, 7-Helix receptors, T-cell receptor.



DBC 95



DBC 137

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ENDOPLASMIC RETICULUM AND GOLGI APPARATUS

- DBC 150 ER : structure and function - Rough endoplasmic reticulum and Golgi apparatus, Smooth endoplasmic reticulum
- DBC 151 Protein sorting - Protein sorting, Translocation signals, Exocytosis
- DBC 152 Protein synthesis and maturation - Protein synthesis in the rough endoplasmic reticulum, Protein glycosylation
- DBC 153 Protein maturation - Protein folding in the rER, Chaperones and chaperonins, Protein import in mitochondria
- DBC 155 Lysosomes - Structure and contents, Functions, Synthesis and transport of lysosomal proteins

MOLECULAR GENETICS

- DBC 156 Over view - Expression and transmission of genetic information,
- DBC 157 Genome - Chromatin, B. Histone,
- DBC 158 Replication - Mechanism of DNA polymerases, Replication in E. coli,
- DBC 159 Transcription -Transcription and maturation of RNA: overview, Organization of the PEP-CK gene, Process of transcription
- DBC 160 Transcriptional Control - Initiation of transcription, Regulation of PEP-CK transcription,
- DBC 161 RNA Maturation - 5' and 3' modification of m RNA, Splicing of hnRNA, Spliceosome
- DBC 162 Amino acid activation - The genetic code, Amino acid activation Asp-tRNA-Ligase (Dimer)
- DBC 163 Translation 1: initiation - Structure of eukaryotic ribosomes, Polysome Initiation of translation in E. Coli.
- DBC 164 Translation 11: elongation and termination - Elongation and termination of protein biosynthesis in E. Coli
- DBC 165 Antibiotics - Antibiotics: overview, Intercalators, C. Penicillin as "suicide substrate"
- DBC 166 Mutation and Repair - Mutagenic agents, Effects, Repair mechanisms

GENETIC ENGINEERING

- DBC 167 DNA cloning - Restriction endonucleases, DNA cloning,
- DBC 168 DNA sequencing - Gene libraries, Sequencing of DNA,
- DBC 169 PCR and protein expression - Polymerase chain reaction (PCR), DNA electrophoresis, Over expression of proteins
- DBC 170 Genetic engineering in medicine - DNA fingerprinting, Diagnosis of sickle-cell anemia using RFLP, Evidence of viral DNA using RT-PCR, Gene therapy.

TISSUES and ORGANS

DIGESTION

- DBC 171 Overview - Hydrolysis and resorption of dietary constituents.
- DBC 172 Digestive secretions - Digestive juices,
- DBC 173 Digestive processes-Formation of hydrochloric acid, Zymogen activation Fat digestion,
- DBC 174 Resorption - Monosaccharides, Lipids,

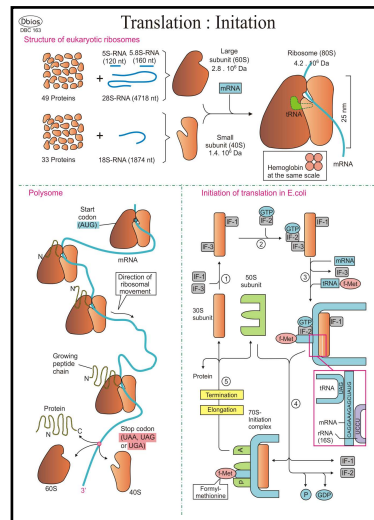
BLOOD

- DBC 175 Composition and functions - Functions of the blood, Cellular elements, Blood plasma: composition
- DBC 175 Plasma proteins - Plasma proteins, Electrophoresis,
- DBC 176 Lipoproteins - Composition of lipoprotein complexes, Transport functions

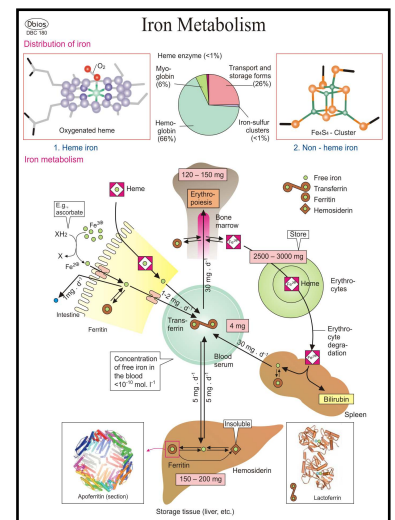
- DBC 177 Hemoglobin - Hemoglobin: structure, Hemoglobin: allosteric effects,
- DBC 178 Gas transport- Regulation of O2 transport, Hemoglobin and CO2 transport, Hemoglobin and CO2 transport.
- DBC 179 Erythrocyte metabolism - Reactive oxygen species, Biological antioxidants, Erythrocyte metabolism,
- DBC 180 Iron metabolism - Distribution of iron, Iron metabolism,
- DBC 181 Acid-base balance - Hydrogen ion concentration in the blood plasma, Acid-base balance, Buffer systems in the plasma
- DBC 182 Blood clotting - Blood clotting,
- DBC 183 Fibrinolysis - Blood groups - Fibrinolysis, Blood groups: the AB0 system

IMMUNE SYSTEM

- DBC 184 Immune response - Simplified scheme of the immune response,
- DBC 185 T- cell activation - Antigen receptors, T cell activation,
- DBC 186 Complement system - Complement activation,
- DBC 188 Antibodies - Domain structure of immunoglobulin G, Classes of immunoglobulins.
- DBC 189 Antibodies biosynthesis - Variability of immunoglobulins, Origins of antibody variety, Biosynthesis of a light chain.
- DBC 190 Monoclonal antibodies, immunoassay - Monoclonal antibodies Immunoassay



DBC 163



DBC 180

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LIVER

- DBC 191 Functions - Diagram of a hepatocyte, Functions of the liver, Liver metabolism
- DBC 192 Buffer Function in organ metabolism - Absorptive state, Postabsorptive state
- DBC 193 Carbohydrate metabolism - Gluconeogenesis : overview, Fructose and Galactose metabolism
- DBC 194 Lipid metabolism - Lipid metabolism, Biosynthesis of ketone bodies
- DBC 195 Bile acids - Bile acids and bile salts, Metabolism of bile salts,
- DBC 196 Biotransformations - Biotransformations,
- DBC 197 Cytochrome P450 systems - Cytochrome P450-dependent Monooxygenases: reactions, Reaction mechanism,
- DBC 198 Ethanol metabolism - Blood ethanol level, Ethanol metabolism, Liver damage due to alcohol,

KIDNEY

- DBC 199 Functions - Functions of the kidneys, Urine formation,
- DBC 200 Urine-Urine ,Organic constituents,Inorganic constituents,
- DBC 201 Function in the acid -base balance - Proton secretion, Ammonia excretion
- DBC 202 Electrolyte and water recycling - Electrolyte and water recycling, Gluconeogenesis,
- DBC 203 Renal hormones - Renal hormones, Renin angiotensin system,

MUSCLE

- DBC 204 Muscle contraction - Organization of striated muscle, Mechanism of muscle contraction
- DBC 205 Control of muscle contraction - Neuromuscular junction, Sarcoplasmic reticulum (SR), Regulation by calcium ions
- DBC 206 Muscle metabolism 1 - Energy metabolism in the white and red muscle fibers, Creatine metabolism.
- DBC 207 Muscle metabolism 1 - Cori and alanine cycle, Protein and amino acid metabolism.

CONNECTIVE TISSUE

- DBC 208 Bone and teeth - Bone, Teeth
- DBC 209 Calcium metabolism - Functions of calcium, Bone remodeling, Calcium homeostasis,
- DBC 210 Collagens - Structure of collagens, Biosynthesis,
- DBC 211 Extracellular matrix - Extracellular matrix, Fibronectins, Proteoglycans

BRAIN AND SENSORY ORGANS

- DBC 212 Signal transmission in the CNS - Structure of nerve cells, Neurotransmitters and neurohormones, Synaptic signal transmission
- DBC 213 Resting potential and action potential - Resting potential, Action potential
- DBC 214 Neurotransmitters - Important neurotransmitters, Biosynthesis of the catecholamines.
- DBC 215 Receptors for neurotransmitters -Receptors for neurotransmitters, Acetylcholine receptors, Metabolism of acetylcholine.
- DBC 216 Metabolism - Energy metabolism of the brain, Glutamate, glutamine, and GABA,
- DBC 217 Sight - Photoreceptor, Signal cascade,

NUTRITION

NUTRIENTS

- DBC 218 Organic substances - Energy requirement, Nutrients.
- DBC 219 Minerals and trace elements - Minerals,

VITAMINS

- DBC 220 Lipid- soluble vitamins - Vitamin supply, Lipid-soluble vitamins.
- DBC 221 Water- soluble vitamins 1 - Water-soluble vitamins I
- DBC 222 Water- soluble vitamins 11 - Water-soluble vitamins II

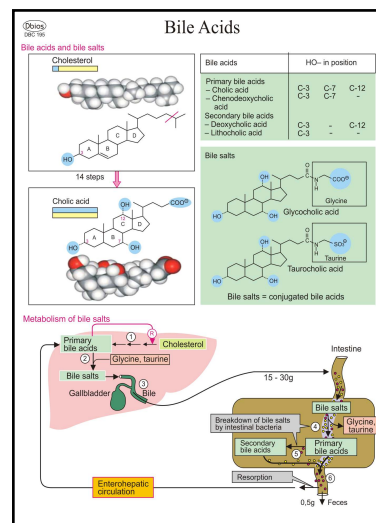
HORMONES

Hormonal system

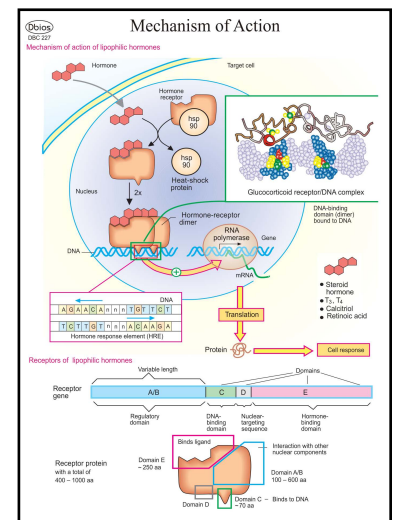
- DBC 223 Basics - A. Hormones: overview, A. Hormonal regulation system
- DBC 224 Plasma levels and hormone hierarchy - A. Endocrine, paracrine and autocrine hormone effects, B. Plasma level dynamics, C. Regulatory circuit, D. Hormone hierarchy

LIPOPHILIC HORMONES

- DBC 225 Lipophilic Hormones-A. Lipophilic hormones,
- DBC 226 Metabolism of steroid hormones - Biosynthesis of steroid hormones Inactivation of steroid hormones
- DBC 227 Mechanism of action - Mechanism of action of lipophilic hormones Receptors of lipophilic hormones



DBC 195



DBC 227

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HYDROPHILIC HORMONES

- DBC 228 Metabolism of Peptide Hormones - Biosynthesis, Degradation and inactivation,
 DBC 229 Mechanisms of action - Mechanisms of action, Signal transduction by G proteins,
 DBC 230 Second messengers - Cyclic AMP, Inositol 1,4,5-trisphosphate and diacylglycerol, Calcium ions
 DBC 231 Signal cascades - Insulin: signal transduction, Nitrogen monoxide (NO) as a mediator,

OTHER SIGNALING SUBSTANCES

- DBC 232 Eicosanoids -Eicosanoids,
 DBC 233 cytokines - Cytokines, Signal transduction in the cytokines

GROWTH AND DEVELOPMENT

CELL PROLIFERATION

- DBC 234 Cell cycle - Cell cycle, Control of the cell cycle,
 DBC 235 Apoptosis - Cell proliferation and apoptosis, Regulation of apoptosis.
 DBC 236 Oncogenes - Proto-oncogenes: biological role, Oncogene products: biochemical functions.
 DBC 237 Tumors - Division behavior of cells, Transformation,
 DBC 238 Cytostatic drugs- Alkylating agents, anthracyclines, Antimetabolites
 DBC 239 VIRUSES - Viruses: examples, Capsid of the rhino virus,. Life cycle of the human immunodeficiency virus (HIV)

METABOLISM CHARTS

- DBC 240 Calvin cycle - Calvin cycle (plant chloroplasts)
 DBC 241 Carbohydrate metabolism - Carbohydrate metabolism, Biosynthesis of fats and membrane lipids
 DBC 242 Membrane liquids
 DBC 243 Synthesis of ketone bodies and steroids - Synthesis of ketone bodies and steroids
 DBC 244 Degradation of fats and phospholipids - Degradation of fats and phospholipids
 DBC 245 Biosynthesis of the essential amino-acids -Degradation of fats and phospholipids
 DBC 246 Biosynthesis of the non-essential amino-acids - Biosynthesis of the non-essential amino acids
 DBC 247 Amino acid degradation 1 - Amino acid degradation I
 DBC 248 Amino acid degradation 11 - Amino acid degradation II
 DBC 249 Ammonia metabolism - Ammonia metabolism
 DBC 250 Biosynthesis of purine nucleotides - Biosynthesis of purine nucleotides
 DBC 251 Biosynthesis of the pyrimidine nucleotides and - Biosynthesis of the pyrimidine nucleotides and C1 metabolism
 DBC 252 Metabolism nucleotide degradation - Nucleotide degradation

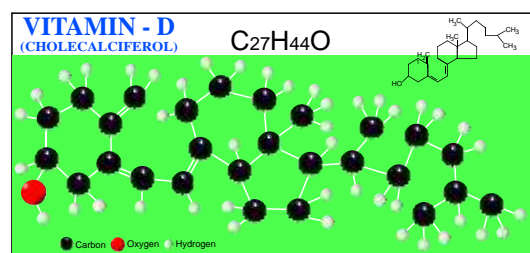


Biochemistry Model



You can choose from the ready made 3-D structural models of the commonly used biochemical compounds in Acrylic Showcase

DBCM 1	Glucose	$C_6H_{12}O_6$
DBCM 2	L-Histidine	$C_6H_9N_3O_2$
DBCM 3	Glycerol	$C_3H_8O_3$
DBCM 4	Adenine	$C_5H_5N_5$
DBCM 5	Guanine	$C_5H_5N_5O$
DBCM 6	Thymine	$C_5H_6N_2O_2$
DBCM 7	Uracil	$C_4H_4N_2O_2$
DBCM 8	Steroid	$C_{19}H_{28}O_2$
DBCM 9	Vitamin D	$C_{27}H_{44}O$
DBCM 10	Cholesterol	$C_{27}H_{46}O$
DBCM 11	Cytosine	$C_4H_5N_3O$
DBCM 15	D.N.A.	
DBCM 16	R.N.A.	
DBCM 17	Protein Structure	



VITAMIN - D
(CHOLECALCIFEROL)

Superior loose molecular models .
 Build Models to show the molecular structure of biochemical compounds with these modeling sets

1. Advanced Jr. Atomic Model (47 balls + 35 links)
2. Advanced Sr. Atomic Model (100 balls + 86 links)

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SP 08 Theodor Schwann
 SB 09 Sir Alexander Fleming
 SP 14 Karl Landsteiner
 SP 18 Sanger Fredrick
 SP 23 Krebs, Sir Hans Adolf
 SP 24 J.D. Watson & H.F.C. Crick
 SP 25 Jacob & Monod
 SC 25 Friedrich Wöhler.
 SP 39 Lehninger
 SC 37 Sir Humphry Davy
 SP 42 Sir Ronald Ross
 SP 44 Joseph Lister

SBC 01 Carl Neuberg, Father of Biochemistry
 SBC 02 B. C. Guha Father of Biochemistry in India

SBC 03 William Astbury.
 SBC 04 Boris Pavlovich Belousov.
 SBC 05 Konrad Emil Bloch.
 SBC 06 Paul D. Boyer.
 SBC 07 Adrian John Brown.
 SBC 08 Eduard Buchner.
 SBC 09 Dean Burk.
 SBC 10 Robert Corey.
 SBC 11 Carl Ferdinand Cori.
 SBC 12 Robert K. Crane.
 SBC 13 Francis Crick.
 SBC 14 Carl Peter Henrik Dam.
 SBC 15 Revaz Dogonadze.
 SBC 16 Jack Cecil Drummond FRS.
 SBC 17 Christian de Duve.
 SBC 18 Akira Endo.

SBC 25 Frederick Gowland Hopkins.
 SBC 26 Arthur Harden.
 SBC 27 Max Henius.
 SBC 28 Herman Kalckar.
 SBC 29 Sir Bernard Katz.
 SBC 30 John Kendrew.
 SBC 31 Sir Ernest Kennaway.
 SBC 32 Arthur Kornberg.
 SBC 33 Roger D. Kornberg.
 SBC 34 Thomas B. Kornberg.
 SBC 35 Maurice Wilkins.
 SBC 36 Phoebus Levene.
 SBC 37 Choh Hao Li.
 SBC 38 John James Rickard Macleod.
 SBC 39 Maude Menten.
 SBC 40 Friedrich Miescher.
 SBC 41 Peter D. Mitchell.
 SBC 42 Leonor Michaelis.
 SBC 43 César Milstein.
 SBC 44 Jacques Monod.
 SBC 45 Kary Mullis.
 SBC 46 Elmer Verner McCollum.
 SBC 47 Marshall Warren Nirenberg.
 SBC 19 Heinz Fraenkel-Conrat.
 SBC 20 Rosalind Franklin.
 SBC 21 Kazimierz Funk.
 SBC 22 David E. Green.
 SBC 23 Frederick Griffith.
 SBC 24 Dorothy Hodgkin.

SBC 48 Paul Nurse.
 SBC 49 Jakub Karol Parnas.
 SBC 50 Linus Pauling.
 SBC 51 Max Perutz.
 SBC 52 Samuel Victor Perry.
 SBC 53 David Andrew Phoenix.
 SBC 54 Jane S. Richardson.
 SBC 55 James D. Watson.
 SBC 56 Selman Waksman.
 SBC 57 Raj Shankar.
 SBC 58 Anatoly Sharpnenak.
 SBC 59 Arne Tiselius.
 SBC 60 Angela Vincent.
 SBC 61 Frederic Vester
 SBC 62 John Craig Venter.



Carl Alexander Neuberg