Federal State Budgetary Educational Institution of Higher Education «North-Ossetia State Medical Academy» of the Ministry of Healthcare of the Russian Federation

Department of biological chemistry

Approved Head of the department, associate professor Contace A. E. Gurina 14 "March 2022 year.

Schedule of additional classes to eliminate the difference in hours in biological chemistrybiochemistry of the oral cavity for students of the dentistry faculty

N⁰	Date	The title of the topic	Teacher
1.	10.02.22	Introductory lesson. Proteinogenic amino acids: structure, properties,	Kaitukova D.I.
		classification. The role of oxy-amino acids in the formation of connective tissue	
		proteins.	
2.	17.02.22	Chemistry of simple proteins, structural organization of a protein molecule.	Kaitukova D.I.
		Physico-chemical properties of simple proteins.	
3.	24.02.22	Chemistry of complex proteins: classification, representatives, characteristics of	Kaitukova D.I.
		prosthetic groups.	
4.	22.02.22	Glycoproteins, their role in the formation of bone and tooth tissue. Proteoglycans	Kaitukova D.I.
		and glycosaminoglycans of oral cavity tissues.	
5.	03.03.22	Structure and properties of collagen proteins of oral cavity tissues. Collagen,	Kaitukova D.I.
		structure, biosynthesis.	
6.	10.03.22	Structure and properties of noncollagen proteins of oral cavity tissues. Adhesive	Kaitukova D.I.
		and anti-adhesive proteins.	
7.	17.03.22	Structure and general properties of enzymes. The mechanism of enzymatic	Kaitukova D.I.
		catalysis. Classification of enzymes.	
8.	24.03.22	Vitamins as coenzymes. Water-soluble vitamins.	Kaitukova D.I.
9.	31.03.22	Regulation of enzymes activity. Enzymes activators and inhibitors. Medical	Kaitukova D.I.
		aspects of enzymology.	
10.	07.04.22	Lipid composition of biological membranes. Structure and classification of lipids.	Kaitukova D.I.
		Transmembrane transfer of substances, signal transmission into the cell.	
11.	14.04.22	Fat-soluble vitamins. Participation in the formation of oral cavity tissues.	Kaitukova D.I.
12.	21.04.22	Reactive oxygen species. Lipid peroxidation. Its role in norm and pathology.	Kaitukova D.I.
13.	28.04.22	Energy exchange. Biological oxidation. Oxidative phosphorylation.	Kaitukova D.I.
14.	05.05.22	Tricarboxylic acid cycle. Determination of succinate dehydrogenase activity.	Kaitukova D.I.
15.	12.05.22	Structure, properties and functions of carbohydrates. Digestion of carbohydrates	Kaitukova D.I.
		in the gastrointestinal tract.	
16.	19.05.22	Anaerobic oxidation of glucose: glycolysis, stages, the concept of glycolytic	Kaitukova D.I.
		oxidoreduction.	
17.	26.05.22	Aerobic glycolysis: direct oxidation of glucose.	Kaitukova D.I.
18.	02.06.22	Aerobic glycolysis: indirect oxidation of glucose. The pentose cycle and its	Kaitukova D.I.
		biological significance.	
19.	06.06.22	Regulation of blood glucose. Synthesis and mobilization of glycogen in the liver.	Kaitukova D.I.
		Gluconeogenesis.	

20.	09.06.22	Disorders of carbohydrate metabolism: diabetes mellitus. Glycogenoses.	Kaitukova D.I.
21.	13.06.22	Digestion and absorption of lipids in the gastrointestinal tract: conditions, factors.	Kaitukova D.I.
		Characteristics of the stages.	
22.	13.06.22	Metabolism of higher fatty acids: oxidation and biosynthesis.	Kaitukova D.I.
23.	16.06.22	Ketone body metabolism: biosynthesis and catabolism. Determination of ketone bodies in urine.	Kaitukova D.I.
24.	16.06.22	The exchange of simple and complex lipids: TAG and phospholipids.	Kaitukova D.I.
25.	20. 06.22	Cholesterol metabolism. Quantitative determination of cholesterol in blood serum. Transport forms of lipids. Pathology of lipid metabolism.	Kaitukova D.I.

Assistant of the department *Assistant* Kaitukova D.I. *March* 2022 year. 11/4 11