

Midterm examination # 1 – Topic list

- Digestion and absorption of lipids. Metabolism of chylomicrons. Essential fatty acids
- Mobilization of fatty acids in adipose tissue, its regulation. Free fatty acids, VLDL, IDL
- Lipid transport
- Oxidation of fatty acids. Ketone bodies
- Synthesis of fatty acids
- Biosynthesis of triacylglycerol, phospholipids, their regulation
- Nitrogen balance. Digestion of proteins. Function of proteases, their regulation
- Absorption of amino acids, amino acid transporters
- Catabolism of amino acids I. Elimination of ammonia, reactions of ornithine cycle. Its regulation
- Catabolism of amino acids II. Catabolism of carbonic skeleton
- Role of vitamins in amino acid metabolism
- Biosynthesis of nonessential amino acids and other amino acid derivatives
- Fructose intolerance
- McArdle's disease
- Insulin signal transduction
- Lipoprotein lipase
- Carnitine deficiency

25 multiple choice type questions and 2 biochemistry problem sets (panels) are asked