

Lesson 4.

General patterns of behavior of xenobiotics in the body. Receipt, distribution, withdrawal. Factors affecting the distribution of xenobiotics in the body. Toxicokinetics. Basic toxicokinetic parameters of distribution.

1. Write the definition of TOXICOKINETICS.
2. Write the definitions of ABSORPTION (11)
3. What kind MAIN ABSORPTION ROUTES/BARRIERS ARE do you know? 12
4. Structure of a cell membrane 14
5. Describe of BASIC MECHANISMS OF XENOBIOTIC TRANSMEMBRANE TRANSPORT 15-23
6. Factors affecting absorption 24
7. Main exposure routes (Oral (GI tract), Inhalation (lung: respiratory tract), Dermal (Skin). Describe them 32-37
8. DISTRIBUTION 39-43
9. Physiological barriers. The blood-brain barrier . 51 The placental barrier 52
10. ELIMINATION /EXCRETION 56-69
11. Basic toxicokinetic parameters of distribution. Volume of distribution (Vd) 44, Bioavailability 46, half-life of the toxicant, clearance