

Drug absorption and elimination

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ILOs

Define

Drug elimination

Explain

Pathway of drug elimination

References

Discuss

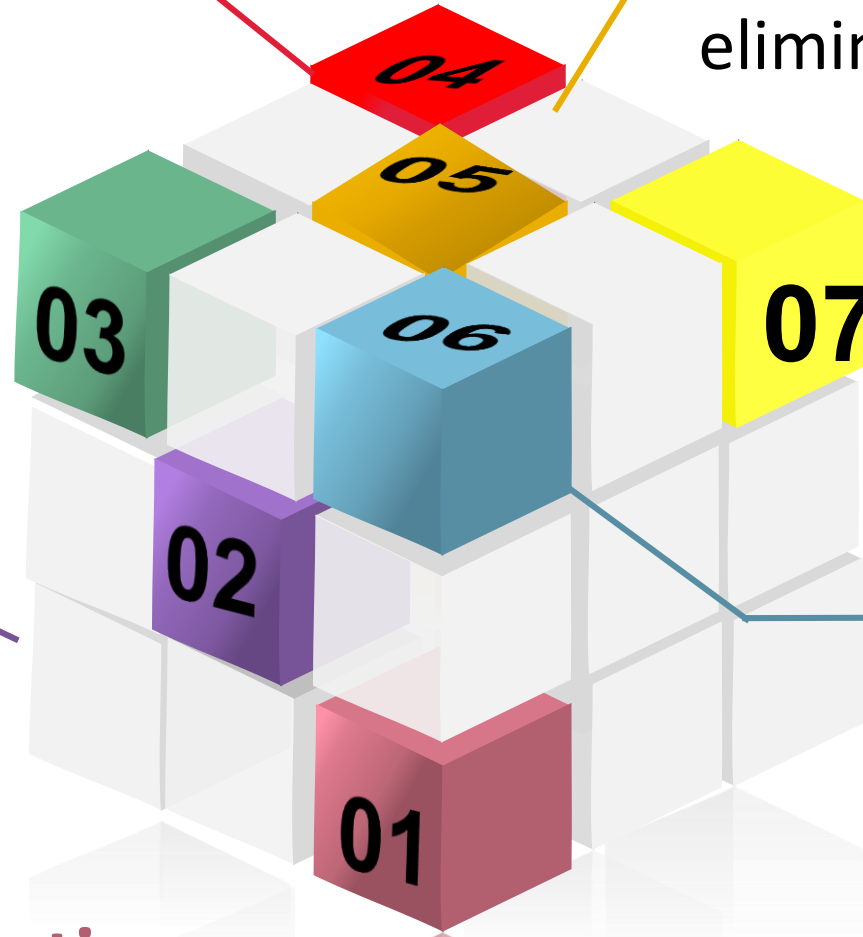
Factors that effect drug absorption

Define

Drug absorption

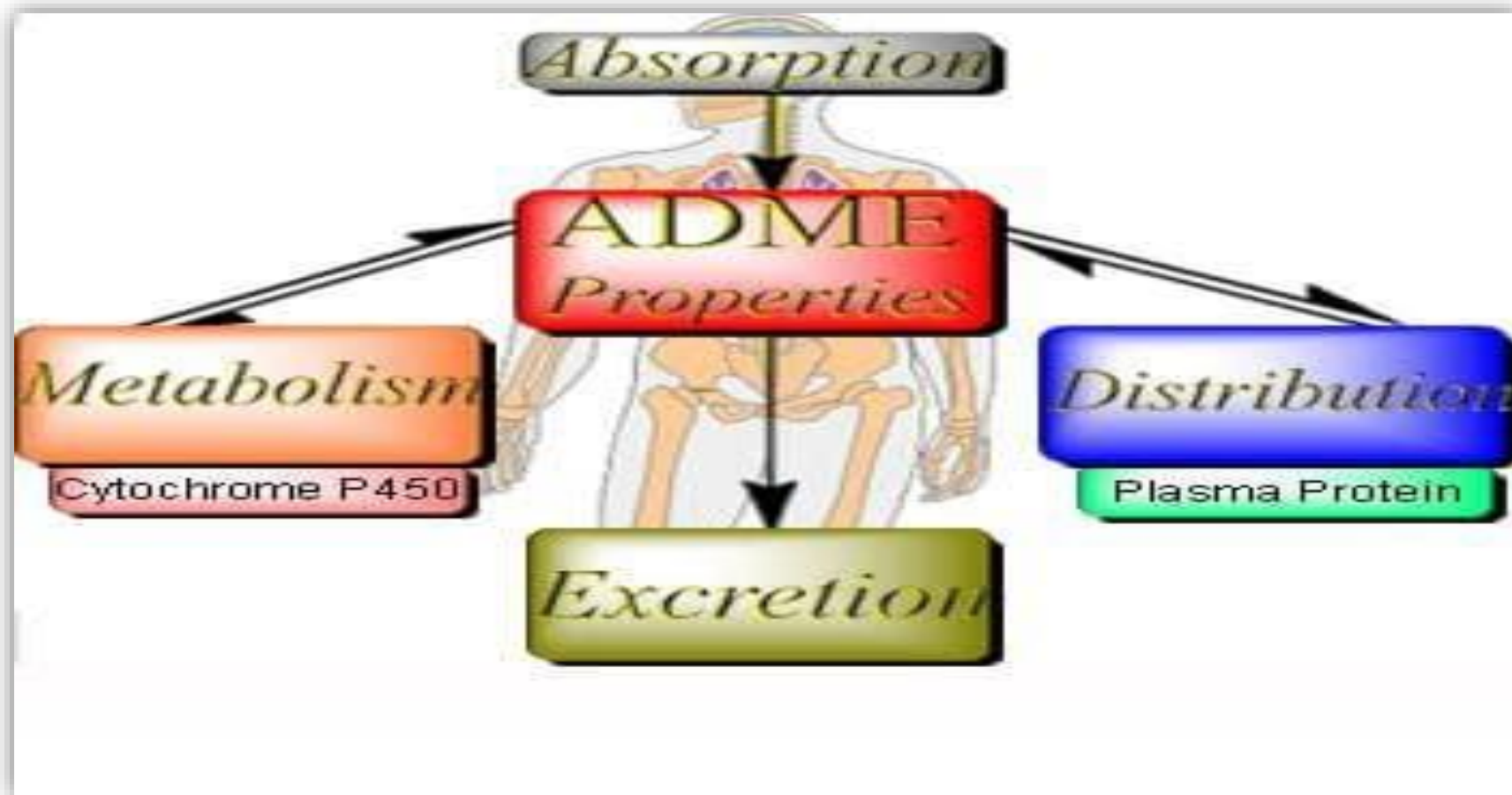
summary

Introduction



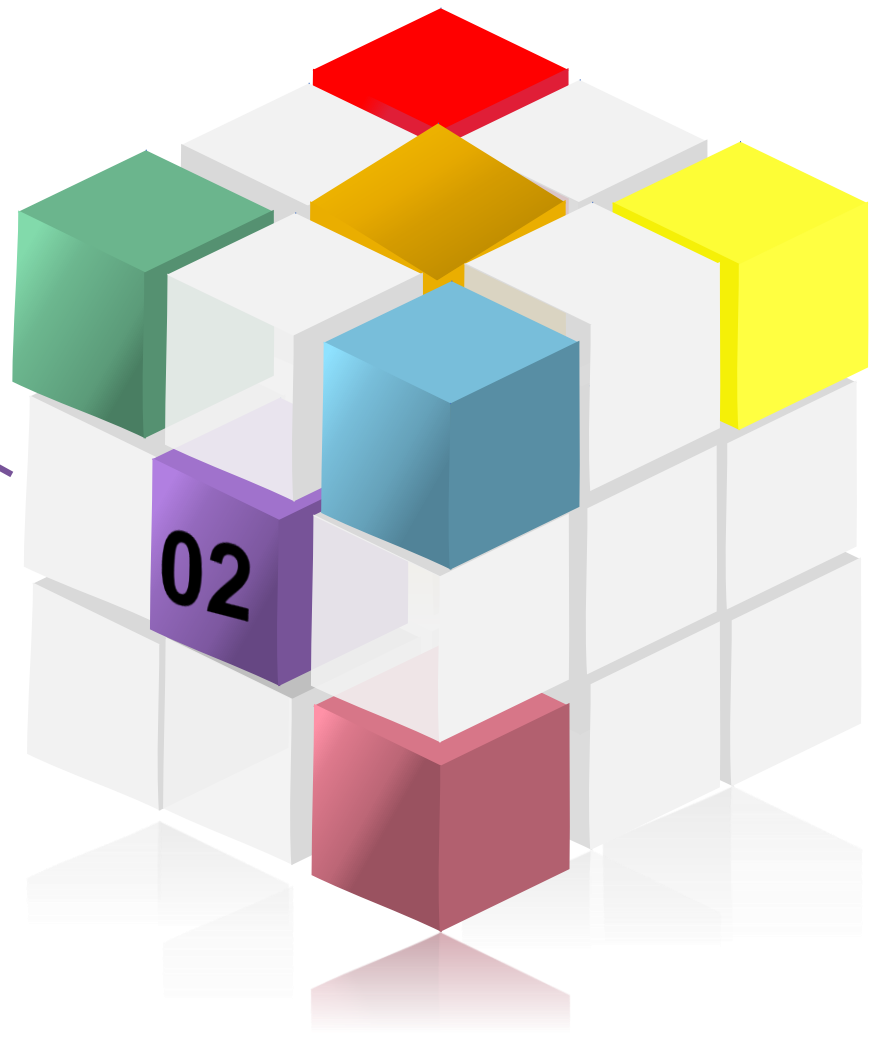
Introduction

Drug pharmacokinetic is defined as the study of the time course of drug absorption, distribution, metabolism, and excretion.



Define

Drug absorption



Define drug absorption

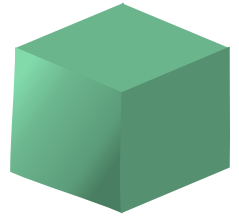
- The transportation of the unmetabolized drug from the site of administration to the body circulation system.
- Absorption is determined by the drug's physicochemical properties, formulation, and route of administration.



Discuss

Factors that effect drug absorption





Factor that affect drug absorption

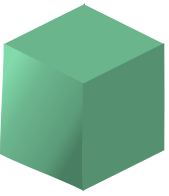
Physiochemical properties

Aqoues solubility



Concentration



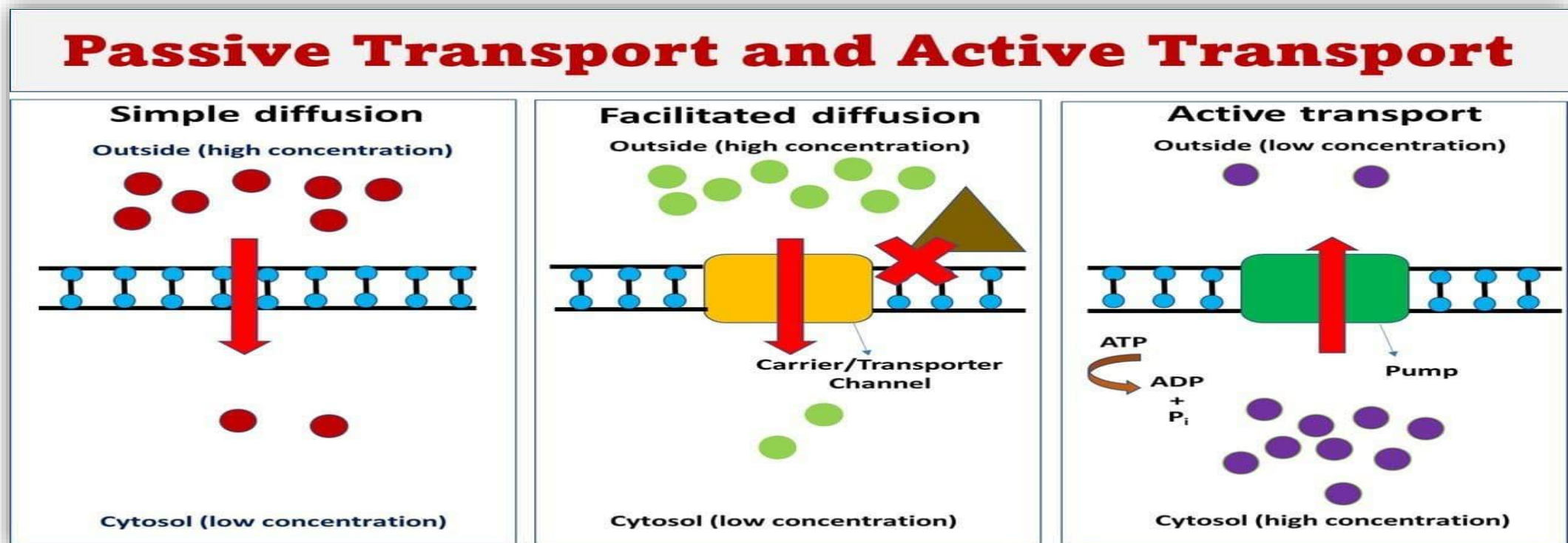


Factor that affect drug absorption

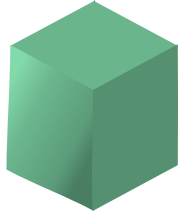
Transportation

Active Diffusion

Passive Diffusion



Factor that affect drug absorption

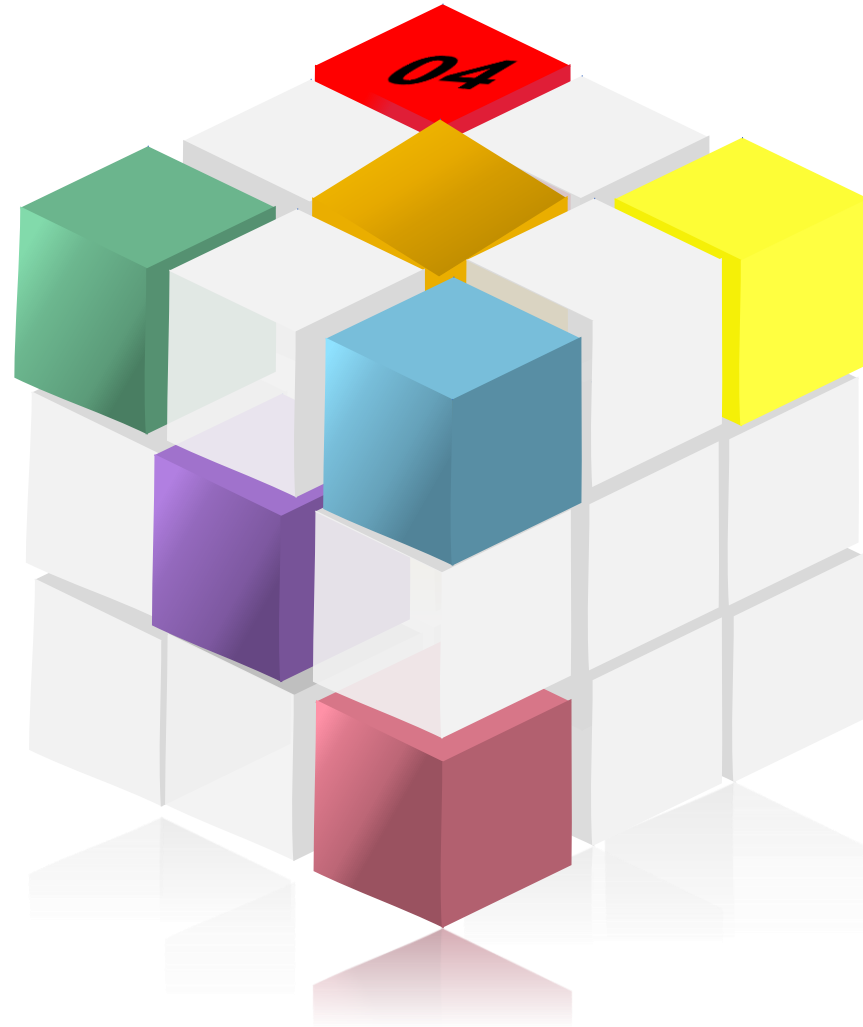


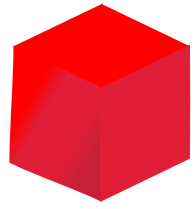
Other factors

- PH
- Protein binding.
- Rout of administration.
- Total surface area available for absorbing.
- Contact time absorption surface.
- Circulation blood flow.

Define

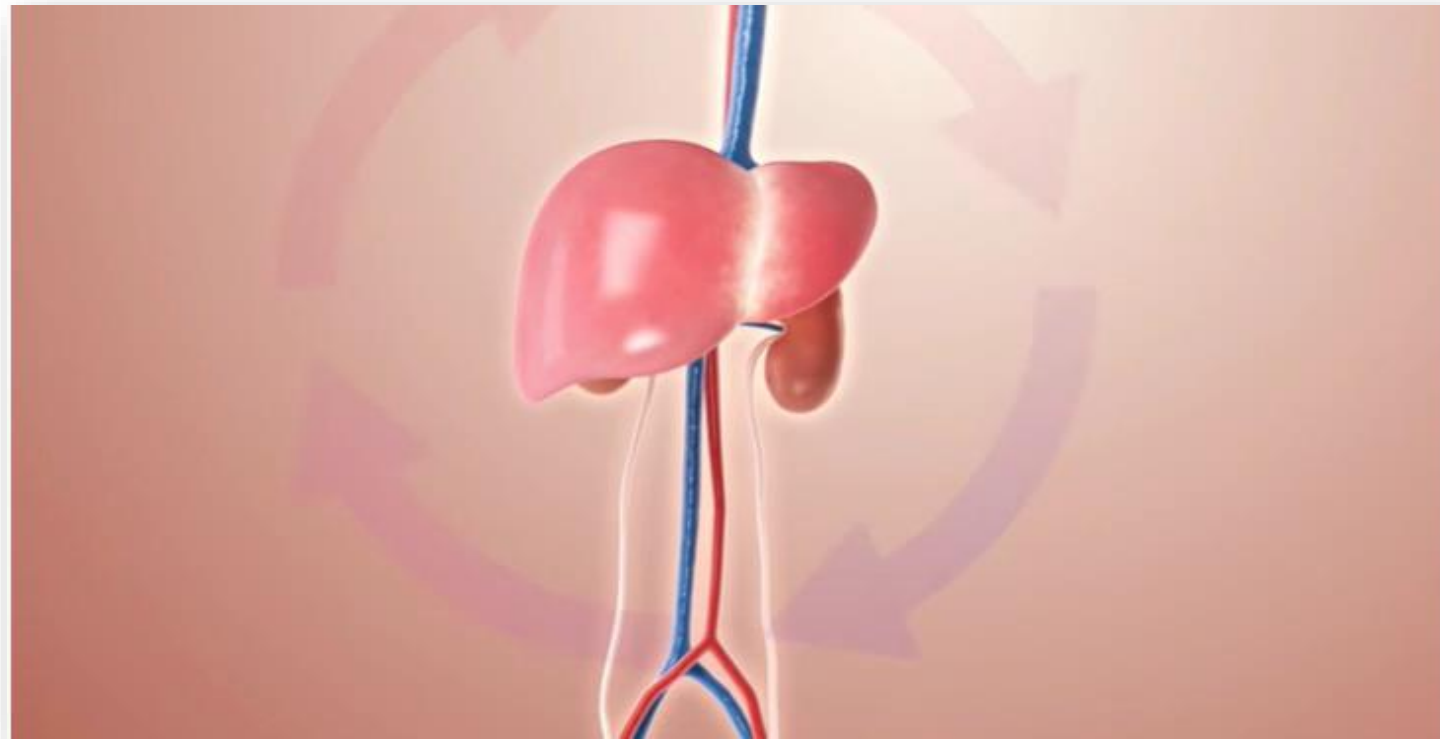
Drug elimination





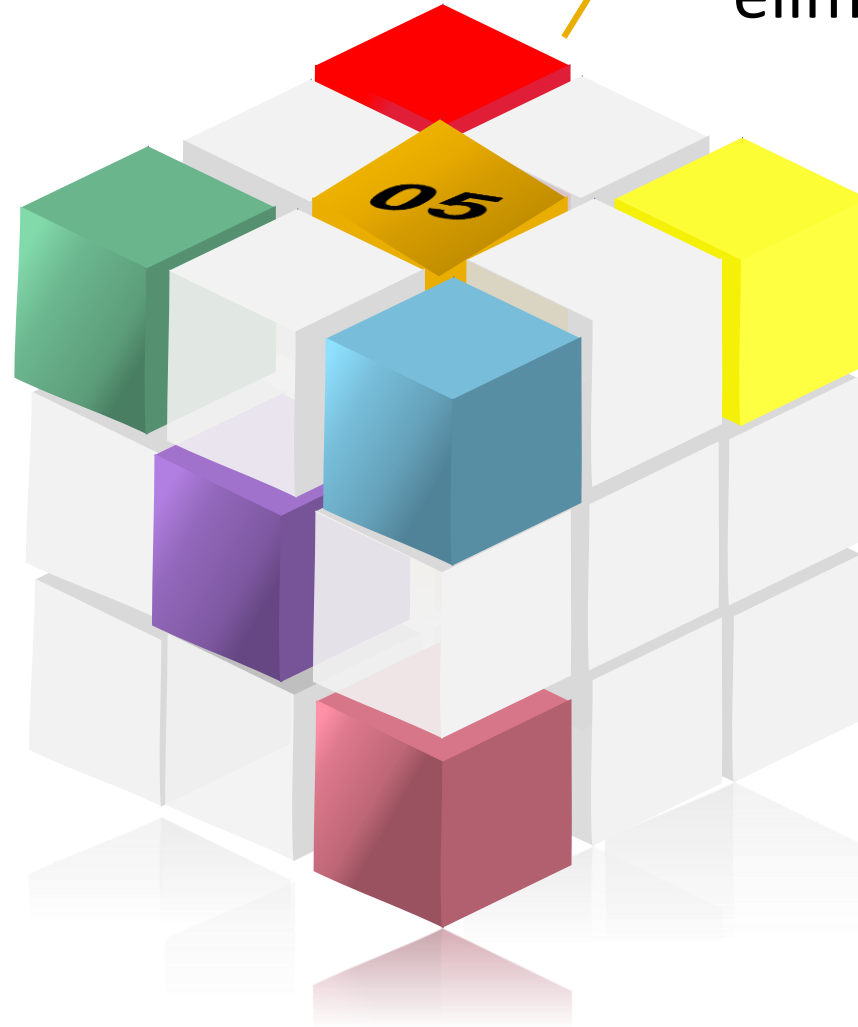
Define drug elimination

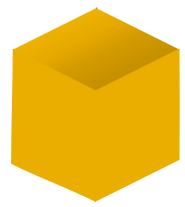
Drug elimination is the removal of drugs from the body, either as a metabolite or unchanged drug.



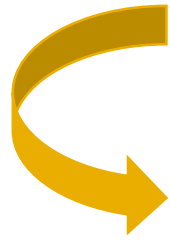
Explain

Pathway of drug elimination





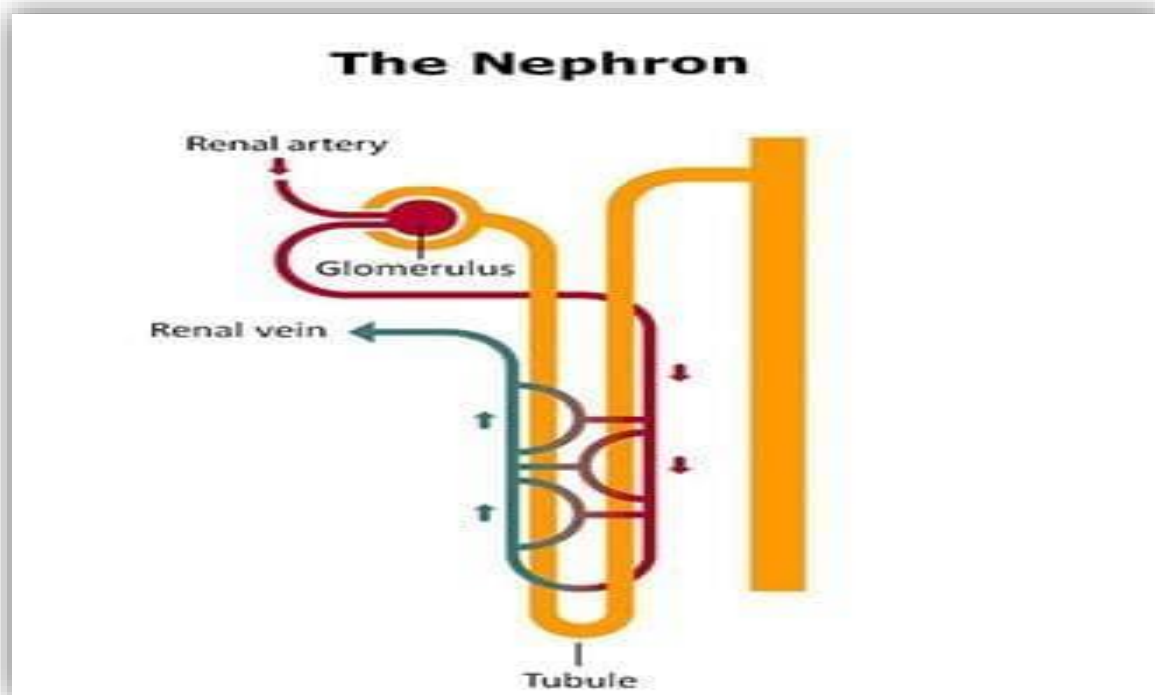
Explain pathway of drug elimination

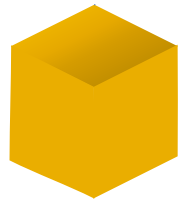


Major routes of elimination

Renal excretion (urine)

Biliary excretion (Feces)





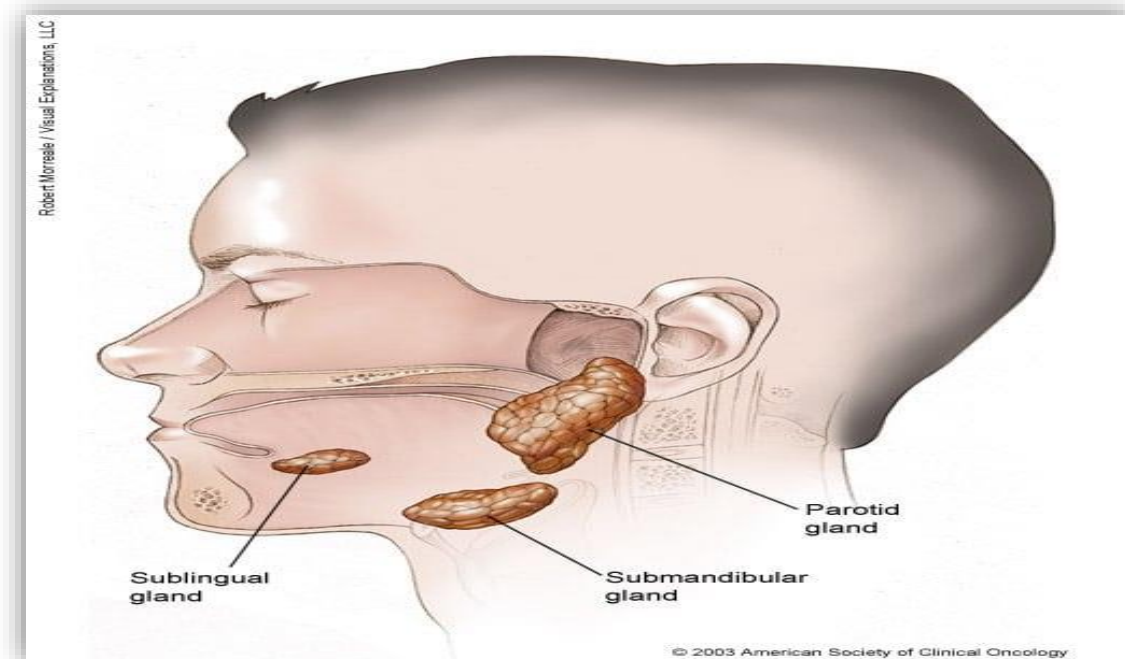
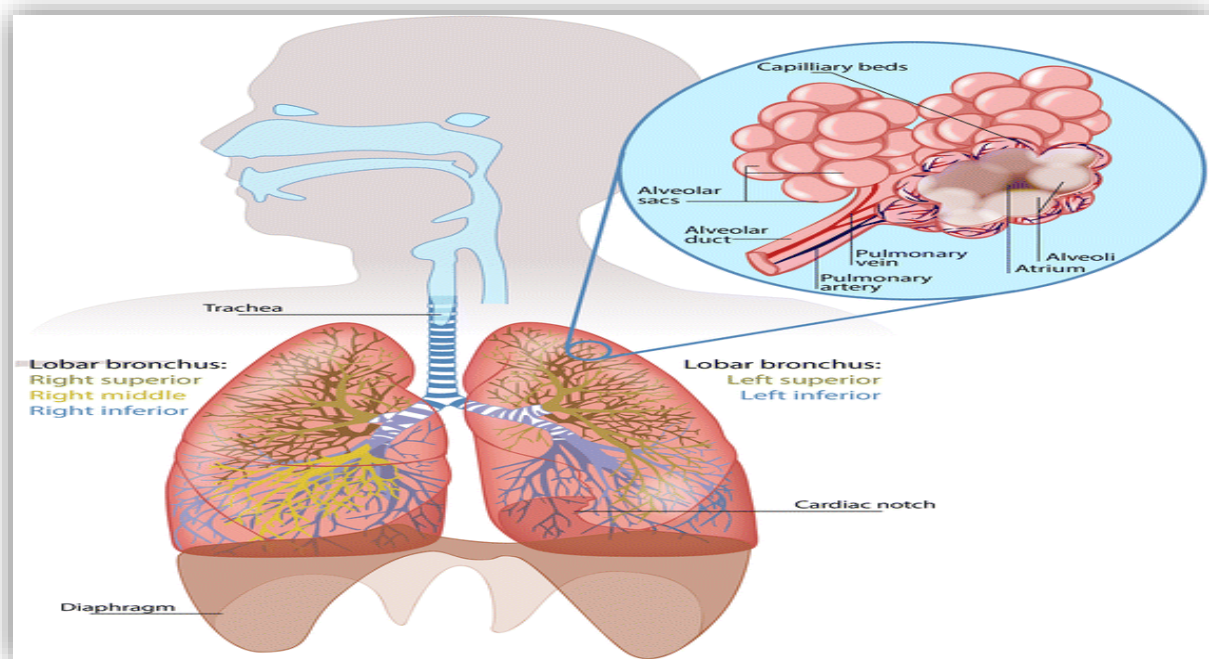
Explain pathway of drug elimination

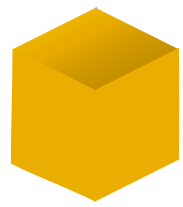
Minor routes of elimination



Pulmonary excretion (Exhaled air)

Salivary excretion (saliva)



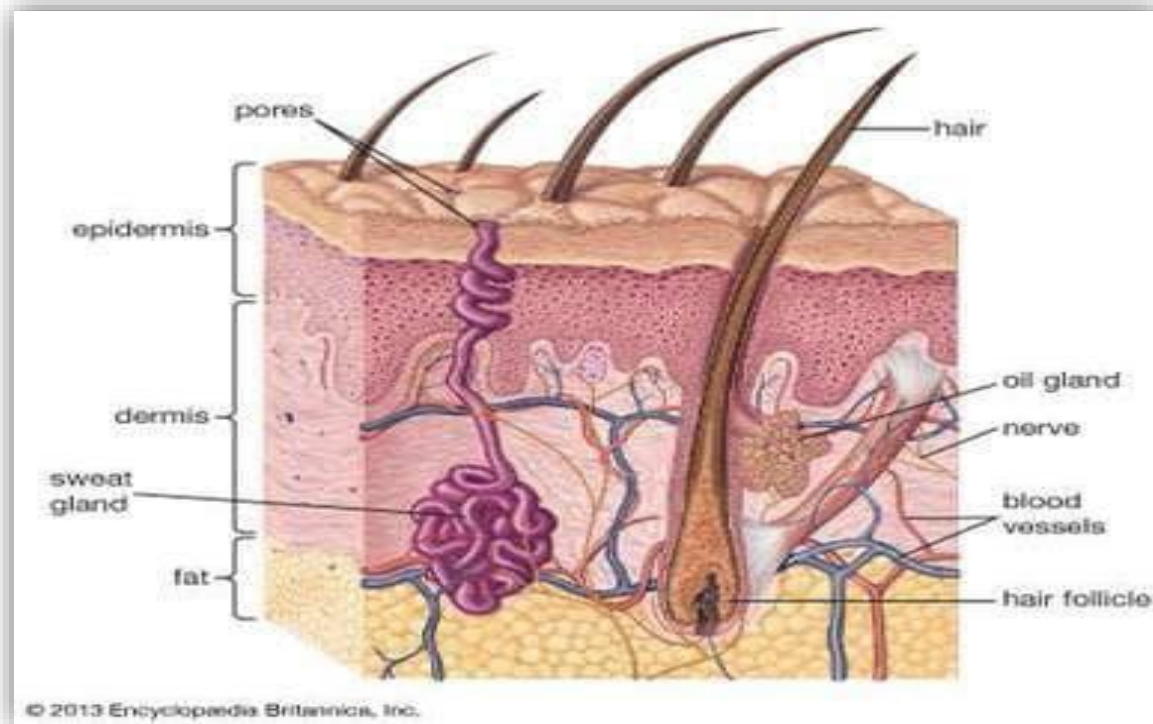


Explain pathway of drug elimination

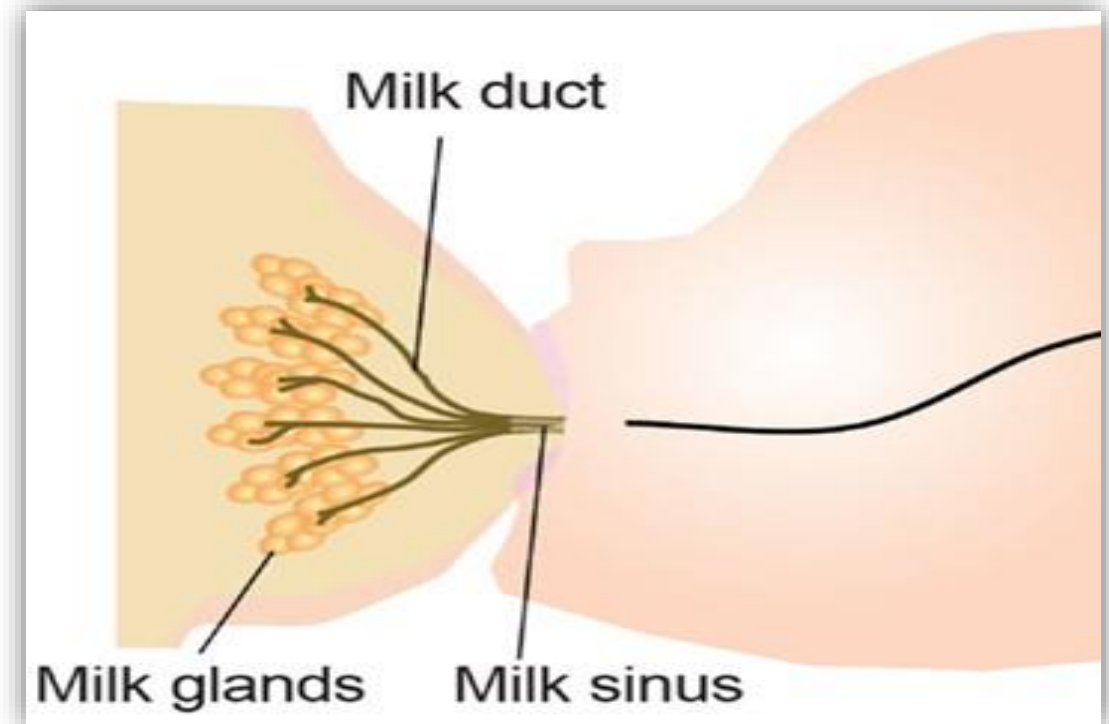
Minor routes of elimination

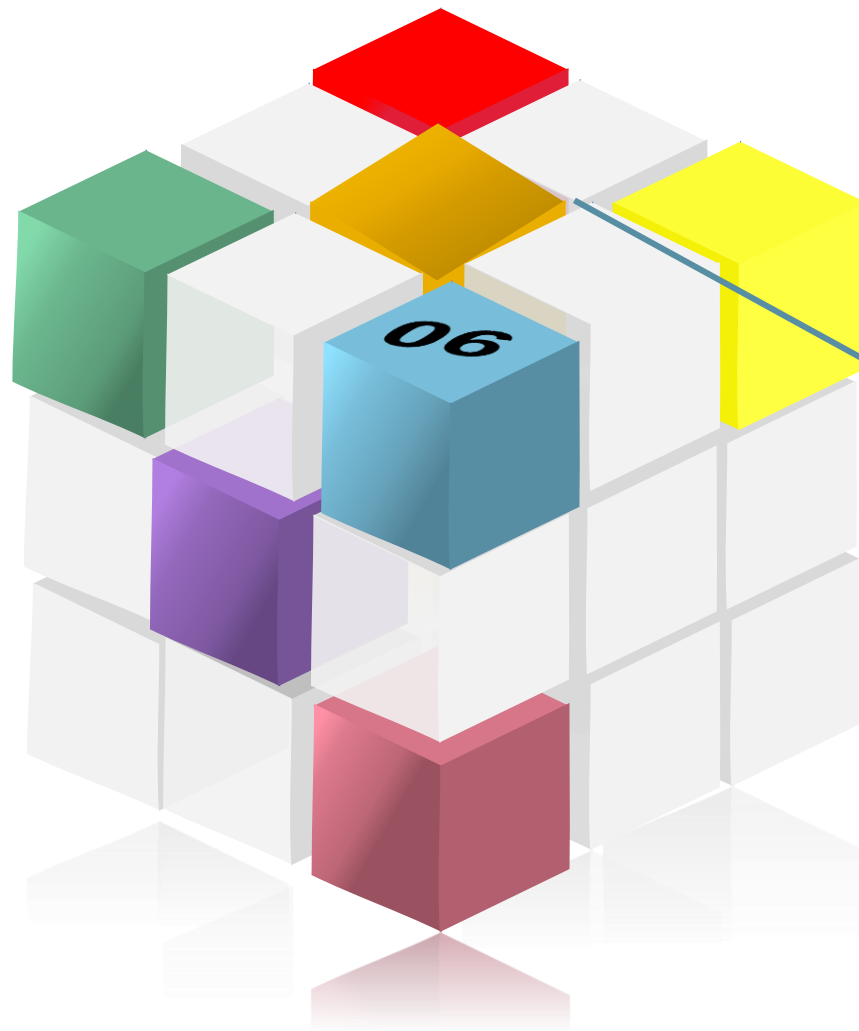


Skin / dermal excretion (Sweat)



Mammary excretion (Milk)





summary



Summary

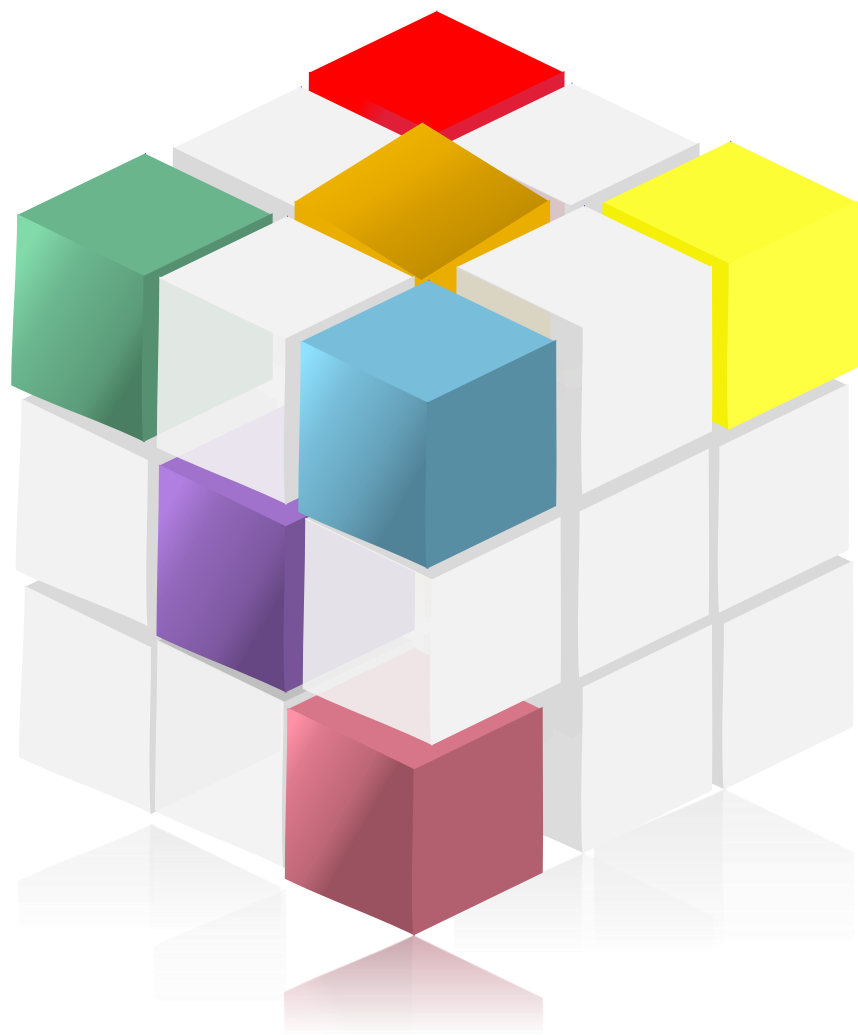
- Pharmacokinetic are ADME .
- Drug absorption is transportation of drug from site of administration to circulation system.
- Factors that affect drug absorption are physiochemical properties , Transportation ,Other factors like pH , protein binding, route of administration .
- Drug elimination is the removal of drugs from the body.
- Pathway of drug elimination are major routes of elimination and minor routes of elimination.



References

References

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THANKS!