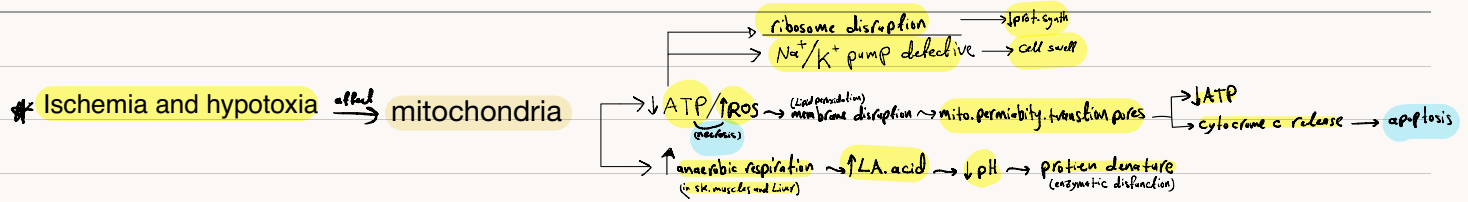
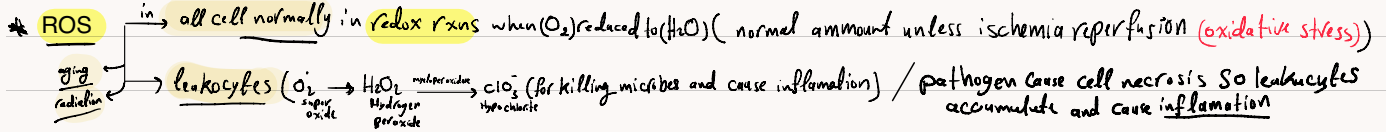


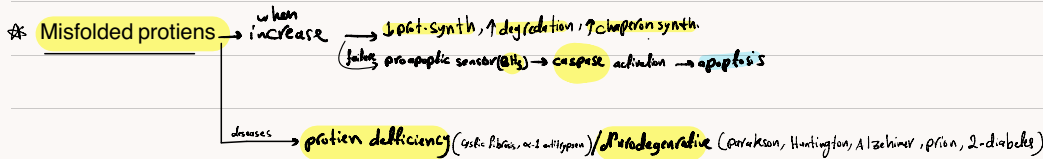
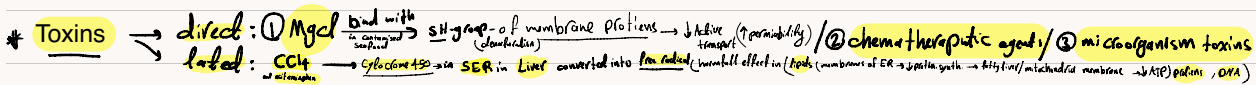
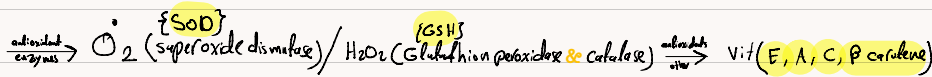
Cell injury mechanisms



Ischemia reperfusion → (restoration blood supply after ischemia) → mitochondria metabolic → ↑ ROS [oxidative stress because of the high metabolic reactions making ROS more than cell capacity of antioxidant defense system]



→ **ROS effects** → lipid peroxidation (membrane disruption) / proteins denaturation / DNA damage



DNA damage increase (mutation, radiation, ROS, chem. agent) → p53 activate → stay in G1 or apoptosis
 → p53 mutation → mitosis replication → neoplastic changes

