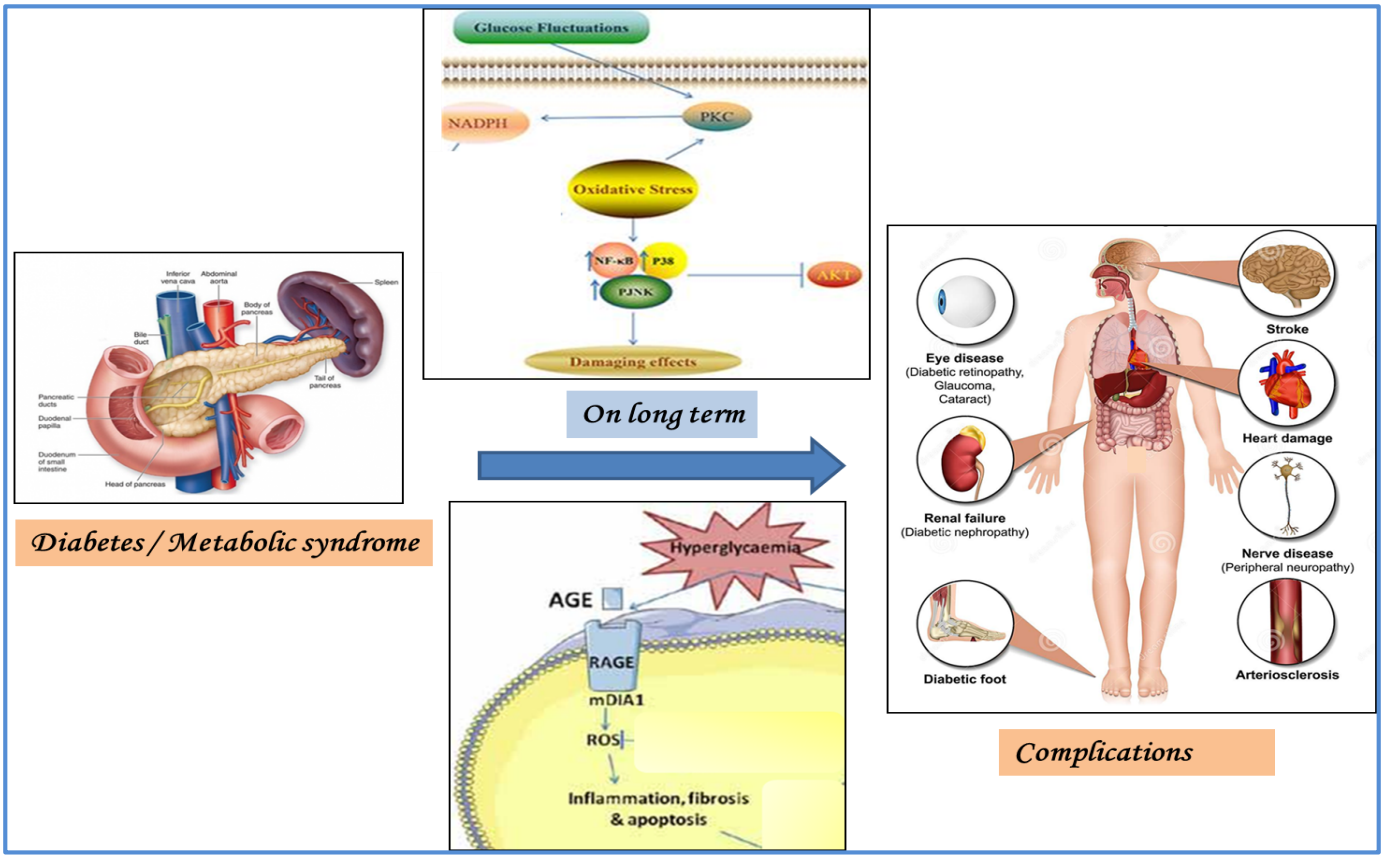
Diabetes and metabolic diseases



Diabetes is a fast-growing health problem in Egypt with a significant impact on morbidity, mortality, and health care resources. Currently, the prevalence of type 2 diabetes (T2D) in Egypt is around 15.6% of all adults aged 20 to 79. Furthermore, diabetes complications are a major cause of morbidity and mortality worldwide, **Pharmacology and Toxicology department focuses** on exploring novel pharmacological interventions that could lower incidence of diabetes, hypercholesterolemia, and metabolic syndrome. Moreover, our research aim at ameliorating diabetic complications. Potential impacts of investigational drugs are being studied experimentally in different animals' models. Our studies aim at investigating the potential effects of many compounds that are capable of targeting novel pathways that have been reported to contribute to diabetes and its complications. These reported pathways include AGE/RAGE signaling, ROS/TXNIP/ NLRP3 inflammasome signaling, and IRS1/PI3K/AKT2 signaling.

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