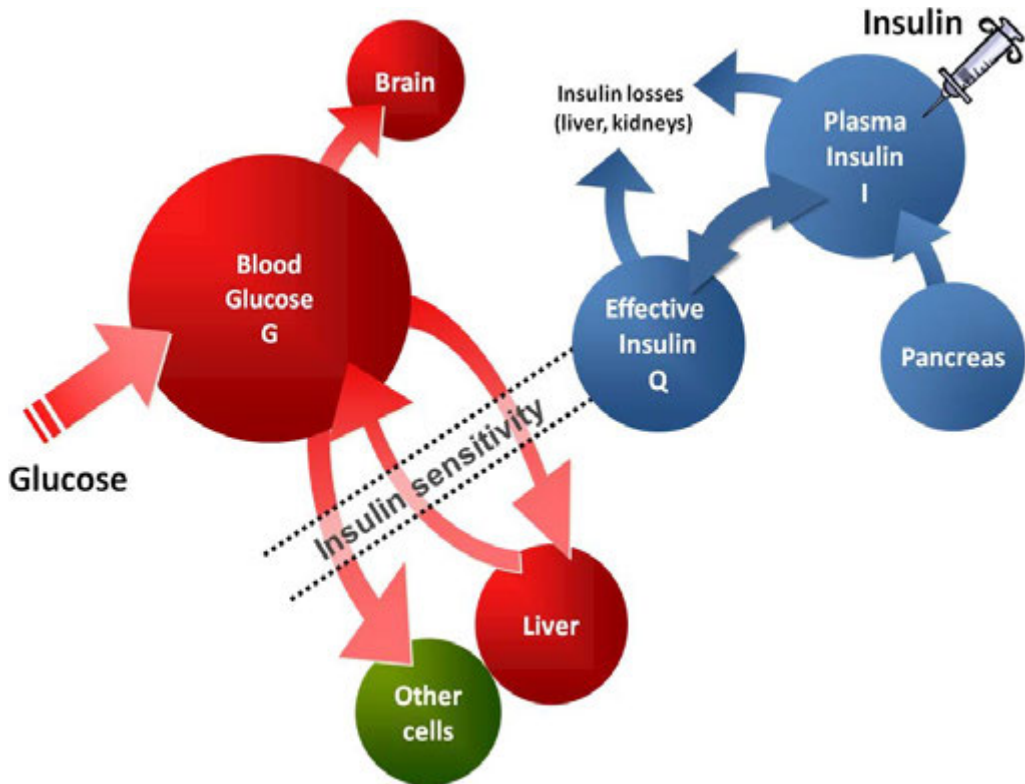


$$\dot{G} = -p_G \cdot G(t) - SI \cdot G(t) \frac{Q(t)}{1 + \alpha_G Q(t)} + \frac{P(t) \circ EGP - CNS}{V_G}$$

$$\dot{Q} = n_I (I(t) - Q(t)) - n_C \frac{Q(t)}{1 + \alpha_G Q(t)}$$

$$\dot{I} = n_K I(t) - n_L \frac{I(t)}{1 + \alpha_I I(t)} - n_I (I(t) - Q(t)) + \frac{u_{ex}(t)}{V_I} + (1 - x_L) \frac{u_{en}(G)}{V_I}$$



$$\dot{G} = -p_G \cdot G(t) - SI \cdot G(t) \frac{Q(t)}{1 + \alpha_G Q(t)} + \frac{P(t) + EGP - CNS}{V_G}$$

$$\dot{Q} = n_I (I(t) - Q(t)) - n_C \frac{Q(t)}{1 + \alpha_G Q(t)}$$

$$\dot{I} = n_K I(t) - n_L \frac{I(t)}{1 + \alpha_I I(t)} - n_I (I(t) - Q(t)) + \frac{u_{ex}(t)}{V_I} + (1 - x_L) \frac{u_{en}(G)}{V_I}$$