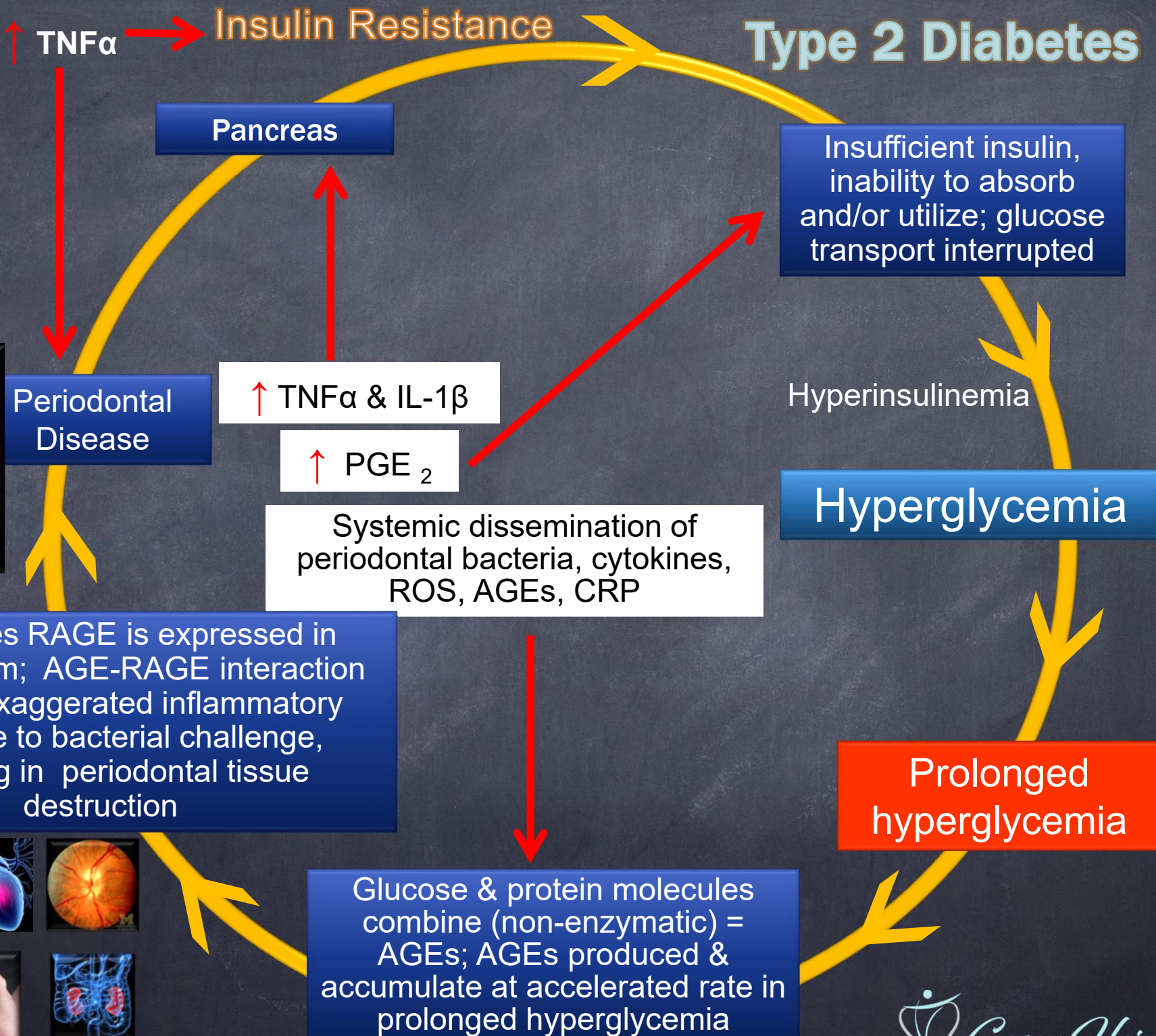


# Type 2 Diabetes



Obesity



Periodontal Disease

Pancreas

Insufficient insulin, inability to absorb and/or utilize; glucose transport interrupted

↑ TNFα & IL-1β

↑ PGE<sub>2</sub>

Systemic dissemination of periodontal bacteria, cytokines, ROS, AGEs, CRP

Hyperinsulinemia

Hyperglycemia

Prolonged hyperglycemia

In diabetes RAGE is expressed in periodontium; AGE-RAGE interaction leads to exaggerated inflammatory response to bacterial challenge, resulting in periodontal tissue destruction

Glucose & protein molecules combine (non-enzymatic) = AGEs; AGEs produced & accumulate at accelerated rate in prolonged hyperglycemia

