



## World Congress on **Diabetes and Pediatric Endocrinology**

### **The effects of inflammation, aging and oxidative stress on the pathogenesis of diabetes mellitus (type 2 diabetes)**

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**D**iabetes mellitus is seen to be prevalent among the different epidemics. The prevalence rate of the diabetes mellitus is seen to be increasing in different regions of the world. Type 2 diabetes mellitus is the most common form of the disease that causes the defect in the production of insulin. It is associated with the disruption in the metabolism of fat, proteins and carbohydrates. Different complications that are associated with T2DM includes the retinopathy, neuropathy, nephropathy and weakness and other issues. Due to the loss of the function of the insulin, the metabolism is disturbed. It is needed to consider the effects of inflammation aging and the oxidative stress on the diabetes mellitus. Therefore, this review has dealt with this particular issue in great detail. The predominant aim of this review was to evaluate the effects of inflammation aging and oxidative stress on the T2DM. It was achieved through correlating and comparing the studies of different researchers. This review article has reviewed this topic in great detail considering the different researches related to the inflammation aging, oxidative stress and their impact on the diabetes mellitus.

**Key words:** Diabetes mellitus, inflammation, aging, oxidative stress, pathogenesis

#### **Biography**

Michael Halim graduated top in my class in MBBS from Fudan University in 2019, earned a distinction in MSc Biomedical Science from the University of Salford in 2020, and am also an active member of the Royal Society of Public Health (MRSPH) since 2020. Michael Halim have been working with renowned professors in medically related research projects since 2014. I managed to secure an extremely competitive university grant for my undergraduate research project on the P53 gene and hepatocellular carcinoma in 2016; published many papers in peer reviewed journals under reputable publishers including Frontiers and Taylor & Francis, received accreditation by the University of Salford for an outstanding publication aiming to promote a healthy lifestyle during the unprecedented COVID-19 pandemic, for which I was interviewed, and the interview was published in the University's news; and has been serving as a peer reviewer or an editor in various prestigious journals since 2021. Michael Halim was also invited to present my research in international science conferences and invited to talk about my research experiences and share effective strategies with regards to securing research grants and authorships in seminars conducted by both Indonesian and International Medical Students Association. I have been guiding my peers and juniors extensively in research, dissertation and MSc course works since 2019. In 2021, I received the International Young Scientist Award on Engineering, Science and Medicine.