

Appetite Control and Core Body Temperature are Linked to Autoimmune Disease and the Global Chronic Disease Epidemic

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Keywords

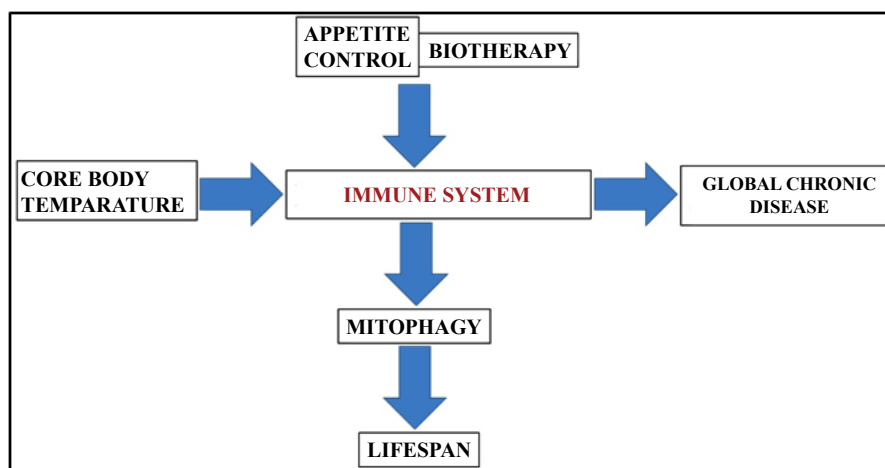
Lifespan; Heat Shock Gene; Sirtuin 1, Diabetes; Appetite; Autoimmune Disease; NAFLD; Global; Core Body Temperature; Mitophagy.

The competency of the immune system changes over a human's lifespan with a process known as immunosenescence. The immune theory of aging may now contribute to autoimmune disease and relevant to the global diabetes epidemic. Major interests to increase human longevity require assessment of appetite and core body temperature control that are associated with autoimmune disease and the induction of non alcoholic fatty liver disease (NAFLD) and diabetes (1). The discovery of genes such as the heat shock gene Sirtuin 1 (Sirt 1) has become important to immunology with inactivation of the gene linked to inactivation of the immune system and mitochondrial apoptosis (2). Nutrition and appetite control are critical to maintain

the immune system with activation of Sirt 1 associated with the prevention of programmed cell death. Immunosenescence and the global chronic disease epidemic are not closely linked with Sirt 1 activation associated with biotherapy (3) and core body temperature that determines the human's lifespan in the developing and developed world [Fig 1].

To ensure research is properly verified with relevance to Sirt 1 and immunosenescence recent research has shown that Sirt1 is a critical regulator of both the innate, adaptive immune response and autoimmune disease (4). Sirt 1 pathways control lymphocyte metabolism and function and Sirt 1 epigenetic reg-

Figure 1. The immune system is closely linked to the global chronic disease epidemic with appetite and core body temperature associated with mitophagy and the adaptive immune response.



ulation (5) is now important to lymphocyte function and a significant role in immunity (6). Sirt 1 and its role in its regulatory role of the immune system (7) has attracted critical attention with relevance to longevity and human lifespan. Inactivation of Sirt 1 will induce autoimmune disease and linked to the global diabetes and NAFLD epidemic (1).

Appetite and core body temperature are now connected to immunosenescence and longevity with inactivation of the heat shock gene Sirt 1 connected to uncontrolled immune reactions and mitophagy (8-11). Activators of Sirt 1 are essential to prevent autoimmune disease and Sirt 1 inhibitors should be carefully controlled to maintain lymphocyte function that determines longevity and lifespan. Sirt 1 may have primary effects on the immune system that lead to the immune theory as the main regulator of longevity and lifespan with secondary Sirt 1 effects on metabolism that is linked to global chronic disease (12).

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