

# **ROLE OF ANTIOXIDANTS AND OXIDATIVE STRESS IN CARDIOVASCULAR DISEASES**

**SURESH A/L RAJOO**

**1001128123**

MASTERS OF SCIENCE (ANTI-AGING, REGENERATIVE MEDICINE  
AND MEDICAL AESTHETIC)

FACULTY OF MEDICINE AND HEALTH SCIENCES

UCSI UNIVERSITY

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## ABSTRACT

**Introduction:** Cardiovascular disease (CVD) is a primary cause of loss in the western world. The world is dignified for the tidal wave of CVDs. The majority of the estimated 32 million heart attacks and strokes that occur every year are caused by one or more cardiovascular risk factors – hypertension, diabetes and etc.

**Objective:** This dissertation mainly focuses on role of antioxidants and oxidative stress in cardiovascular diseases. A search strategy to find publications about CVD and its Oxidative stress management was carried out.

**Methodology:** A search was done in Science Direct, Medline and PubMed bibliographic databases using the key phrases causes of CVD, antioxidants, oxidative stress, management of CVD and drugs under clinical trials.

**Results:** It is rational to postulate that antioxidants would help to prevent the CVDs. There is supportive proof that vitamin C and E exert protective effect against CVDs by reducing OS, and thus makes antioxidants being of central attention in CVDs, especially atherosclerosis, hypertension, myocardial infarction and stroke all over the world.

**Discussion:** Our understanding of CVD has developed from the rather simplistic model of Heart disease being mere pump failure to Heart disease being a multisystemic disorder which affects not only the cardiovascular system but also the musculoskeletal, renal, neurohormonal, and immune systems. Increasing evidence suggests that highly reactive oxygen derived free radicals (ROS) of endogenous or environmental origin play a rational role in the genesis and progression of various CVDs.

Conclusion: In this dissertation the results, list out of clinical research studies done in Oxidative stress and antioxidant status in cardiovascular patients. It has been hypothesized that, evidences suggesting increase intake of antioxidants to be protective in cardiovascular diseases.