Nutritional therapy activates the anti-aging process to reverse accelerated global diseases

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The global obesity and diabetes epidemic has indicated that projected health care costs to related medical expenses to be 344 billion dollars to the year 2018 and may account for 21% of health costs in the United States. The rate of the most prevalent chronic disease such as NAFLD has become of global (20-30%) concern with its links to the metabolic syndrome and neurodegenerative disease. The gene-environment interaction may involve the consumption of food that induces insulin resistance and involves alteration in nuclear receptors such as Sir2uin 1 (Sirt1) that is connected to senescence in obesity and diabetes. Dietary calorie restriction activates the anti-aging gene Sirt1 that is regulated by various transcription factors with the activation of other genes essential for reversal of chronic diseases such as obesity, diabetes, stroke and neurodegenerative diseases in various communities. Activation of Sirt 1 in the liver leads to rapid clearance of bacterial lipopolysaccharides (LPS) and lipophilic xenobiotics associated with fat absorption. High fibre diets have become important for the treatment of NAFLD with the reduction in the content of tissue LPS and xenobiotics. Nutrigenomic diets have become important to the design of specific foods for therapeutic purposes with activation of Sirt 1 connected to rapid hepatic LPS and amyloid beta metabolism with the prevention of NAFLD. Early nutritional intervention with calorie restriction will delay NAFLD with anti-aging therapy involved in tissue maintenance of cells and reversal of cellular senescence relevant to global metabolic disease.

Biography
Ian James Martins is a Reviewer for various journals and was appointed as the Chief Editor for Scientific and Academic Publishing (2013/2014). Research Gate's analysis of his publication stats place the RG score higher than 93% of the international researchers. He has completed his PhD in 1987 and is a Fellow Edith Cowan University/ Honorary Fellow (University Western Australia).

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