Importance of Lifestyle and Genetic Predisposition for a Healty Life

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Abstract

Today, various genomic studies have identified certain genes associated with the risk of obesity, diabetes, and heart disease. The relationships between these genes and lifestyle and dietary habits are still being investigated. According to current data, it is known that environmental factors and lifestyle, as well as genetic inheritance are influential in the development of various diseases. Studies are seeking to answer the question of whether genetic predisposition or lifestyle habits are more influential in diseases. Data from the American Heart Association shows that, in addition to our genes, our lifestyle during childhood and middle age is influential in the development of cardiovascular diseases. This means that an unhealthy lifestyle can easily trigger heart disease in individuals who are genetically predisposed to it. The synthesis of scientific data shows that health is governed not only by DNA sequencing but also by "epigenetic" processes. Epigenetics is a branch of science that studies how our lifestyle determines how our genes function (turn on and off). For example, having a gene that predisposes to cancer does not necessarily mean that the disease will occur; Healthy eating, exercise, sports, and low stress can help "silence" this gene (methylation processes). Consequently, regardless of our genetic heritage, promoting healthy lifestyle habits at both individual and societal levels will greatly benefit our ability to prevent diseases. Therefore, in addition to our genetic heritage, let's pay attention to our diet, stay away from smoking and alcohol, manage stress, and exercise. This study discusses genetic risk, lifestyle, exercise, and combined effects for a healthier life.