

Longevity

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Longevity, defined as the length of an individual life, is a topic that has been explored by the scientific community as well as across cultures for decades. Health professionals repeatedly encourage individuals to eat more vegetables, exercise more, lose weight, and engage in other health-related behaviors to live a long and healthy life; however, recent literature suggests predictors of extending life are more complex than these recommendations. While there is no specific formula to guarantee a long life, it is well-established that a multitude of factors contribute to an individual's longevity. These factors ultimately break down into three categories- genetics, disposition, and lifestyle choices.

Similar to many other aspects of health, genetics play a role in predicting longevity. However, according to *The Longevity Project*, an 80-year longitudinal study of more than 1,500 children first conducted by Psychologist Lewis Terman and further studied by Friedman and Martin (2011), genetic influences may not be as significant of a contributor to longevity as previously thought. Studies have shown genetics only explain about one-third of the factors that contribute to an individual's longevity, which led researchers to investigate other areas- such as disposition and lifestyle choices- that ultimately predict an individual's likelihood to live a longer life.

The relationship between disposition and longevity is best explained through the role of conscientiousness. Studies have found conscientious people are more likely to have healthier relationships, as well as engage in healthier behaviors, such as adhering to recommendations made by doctors and not drinking or smoking excessively. This disposition not only results in a

decreased risk for death due to illnesses related to drinking or smoking, but also decreases risk for a variety of other diseases which may be explained by levels of hormones such as serotonin in conscientious individuals. Contrarily, optimism is inversely related to longevity. Optimistic individuals are more likely to take risks and ignore details which can lead to addictions or unhealthy behaviors, such as ignoring a doctor's recommendations.

Evidence-based studies have also revealed lifestyle choices have a significant influence on an individual's longevity. One area that is often associated with longevity is physical activity. While it is well established that exercise has many health benefits, engaging in extreme exercise does not necessarily predict longevity. Rather, research suggests that adhering to physical activities you enjoy doing is a better predictor of living a longer, healthier life than engaging in extreme, unenjoyable fitness regimens.

Another aspect of lifestyle choice that is related to longevity is creating and maintaining social ties. Having a strong social network tends to predict a strong support system, which leads to many positive health behaviors. Specifically, those who have a large social network and have good social relations, such as helping others, tend to live the longer than individuals who do not. Conversely, lack of social connections has been correlated with elevated risk of physical inactivity in adolescence, leading to negative health consequences in older age and thus, shorter lifespans.

Literature also suggests that individuals who are successful in their careers and are engaged in pursuing goals throughout their life tend to live longer. In Terman's study, individuals who had stable, successful careers lived the longest. Furthermore, individuals who continued to stay productive and motivated throughout their life and were committed to pursuing their goals outlived their less productive, laid-back comrades. Continuing to work full-time or part-time jobs

in later life, pursuing new educational opportunities, or fulfilling new goals in late life tended to predict a pathway of longer life.

While there is still great mystery as to why some individuals may remain healthy and live a long life, and others may fall ill and die at a young age, evidence suggests a variety of lifestyle choices exist that individuals can engage in to serve as protective factors and potentially increase their life-span. Further, every individual has a unique genetic make-up and disposition, and is predisposed to risks for certain diseases that may affect one's longevity. Fortunately, promising results reveal that healthy lifestyle choices can, in some cases, override genetic predispositions and explanations for longevity. These findings ultimately emphasize the fact that every person has the capability to maximize their chances of living a long life based on common healthy lifestyle choices and the uniqueness of every individual.

Further Reading:

Friedman, H. S. and L. R. Martin (2011). *The Longevity Project: Surprising Discoveries for Health and Long Life from the Landmark Eight-Decade Study*. New York, NY: Hudson Street Press.