Title:
Anti-aging Theories Part II

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Summary:
Waste Accumulation Theory

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Limited Number of Cell Divisions Theory

This theory is concerned with the number of cell divisions directly affected by the accumulations of the cell’s waster products. As more wastes accumulate over time the cells quickly degenerate thus causing aging and ultimately death.

Hayflick Limit Theory

Dr. Hayflick theorized that the aging process was controlled by a biological clock contained within each living cell. Studies done in 1961 concluded that human fibroblast cells (lung, skin, muscle, heart) have a limited life span.

They divide approximately 50 times over a period of years and then suddenly stop. They also concluded nutrition seemed to have an effect on the rate of cell division. Final conclusion of this theory states that improper functioning of cells and loss of cells in organs and tissues may be responsible for the effects of aging.

Death Hormone Theory (DECO)

Brain cells or neurons are unlike other cells in that they do not replicate. At birth we have roughly 12 billion of them and over a life time about 10 percent die out. Dr. Donner Denckle speculated that as we age the pituitary begins to release DECO which inhibits the ability of cells to use thyroxine. Thyrozine is a hormone produced by the thyroid-governing basal metabolism, which is the rate at which cells convert food to energy. The metabolic rate brings on and accelerates the process of aging.

Thymic-Stimulating Theory

Dr. Alan Goldstein says “the thymus is the master gland of the immune systems.” The size of the gland continues to reduce and shrink to round three grams by age 60. Scientists are investigating the possibility that the disappearance of the thymus contributes to the aging process by weakening the body’s immune system.

Mitochondrial Theory

This is the free radical theory is supported by directed experimental observations of Mitochondrial aging. Our primary source of energy comes from ATP. Mitochondria are the energy-producing organelles in the cells that produce ATP. They produce cell energy by a process that leads to forming potentially damaging free radicals. Evidence seems to tell us that various kinds of accumulated DNA damage over time contribute to disease. New research in mitochondrial repair could play an important role in the fight against aging.

Errors and Repairs Theory

Dr. Leslie Orgel suggested in 1963 that because the “machinery for making protein in cells is so essential, an error in that machinery could be catastrophic.” Since the system is incapable of always making perfect repairs on these molecules, the accumulation of flawed molecules can cause disease and other age changes to occur.

Redundant DNA Theory

This theory is similar to the error-and-repairs theory in that it also blames

errors accumulating in genes for age changes. A difference is that as these errors accumulate the reserve genetic sequences of identical DNA that take over until the system is work out.

Source: The American Academy of Anti-Aging Medicine

Disclaimer: These statements have not been evaluated by the Food and Drug Administration. The information in this article is not intended to diagnose, treat, cure or prevent any disease. All health concerns should be addressed by a qualified health care professional.

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