

Growing old and Aging

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Men do not quit playing because they grow old; they grow old because they quit playing. ~Oliver Wendell Holmes

Summary

The shift from the development progression to the regressive stage is how aging is seen in the long run. The end of maturation and the beginning of aging tend to overlap.

Premature Aging begins in the early pre-adolescent years. Anti-Aging prevention is not only a promise for people that are aged, it is a promise for the young as well, we can easily state that good quality of care and habits mean a lot for everyone in all stages of life. Premature aging might be reversible; however, the strong belief that human beings are powerless before the chronological factor prevents the search for a long and high quality life from becoming desirable. As a rule, prevention is most effective when it is started as early as possible.

There should be consideration for risk factors that are associated with early aging, increased disease, and premature death. A marked slowing and reversal of premature aging and extended life expectancy should be the personal goal of each human being. Early death, premature aging and disability prevention need to be the most emphasized medical objective nowadays.

Facts and Factors:

It always strikes us with amazement the vision of some women that look as young as their daughters or as old as their mothers. The same phenomenon is observed in men in accord with the preservation of their looks and health condition. Is it all about genetics? Or at least to a certain extent is it the result of good habits unleashing the forces that guide preservation and regeneration?

Growing old is different from aging. Growing old is a natural process of development not necessarily associated with disability, illness or premature death; ideally it should only mean the progressive happy collection of numerous birthdays. By contrast, aging or premature aging is a process responsible for shortened life expectancy and worsening quality of life. It is proper of the human nature the attempt to believe that unfortunate outcomes will never happen to us. Nevertheless, degenerative aging - the result of accumulated, unrepaired damage to the complex machinery of our bodies - brings pain and suffering, a non desirable prospect.

Attempts to classify theories of aging have led to the two major classifications **programmed aging** and **wear and tear aging**. **Programmed aging** would be aging due to something inside an organism control mechanisms that conducts the transformation towards organic losses and gradual impairment of function. This happens in a similar way to the genes programming other life-stages since fertilization, throughout the embryological development, the fetal period, all periods of childhood and sexual maturation at adolescence with organic and functional differentiation, considering the individual cell and all organs and systems. By contrast aging due to **wear and tear** is not the result of any specific controlling program, but is the result of the sum effect of many

kinds of environmental harm caused by chemical toxins, radiation, metal ions, free-radicals, hydrolysis, glycation, disulfide-bond cross-linking etc. Such damage can affect genes, proteins, cell membranes, enzyme function and the structure of blood vessels.

Symptoms and signs of aging are varied and numerous. Among those are fatigue, depression, irritability, the skin presents a lesser degree of elasticity, loss of muscle mass, decrease in strength, inability to sleep, difficulty with walking, changes in concentration, memory loss, decreased stamina and endurance, fragile bones, and fractures. Already in their 50s many people begin to show more clearly some of those signs. Skin changes include thinning, bruising easily, and wrinkling. Men and women frequently lose sexual desire and their ability to have sex. They have a reduced interest in life and are at higher risk of a premature death. The consequences of aging may result in more dramatic medical conditions, like heart attack, strokes, and dementia.

When molecular biologists began hunting for ways to prolong life, they found that life span has a great possibility for extension considering less complex organisms. Can some applied knowledge help humans live longer? And how do we determine whether they will benefit from such experiments? Unlike a treatment program for specific medical problems where measurement of results is possible and comparable with the spontaneous recovery rate, the benefits of anti-aging treatments are quite unclear, making studies difficult to be set up and interpreted. Taking in consideration the present stage of scientific development, it is more reasonable to implement treatments and preventive programs that will slow aging and forestall age-related diseases rather than simply extending life at its most worn-out condition. As a consequence, slowing aging could have profound social effects, it will have for sure an impact on statistical tables and retirement plans. Of course, questions will arise: If anti-aging therapies become more available, who will be receiving and benefiting from them? All things considered, what is the long term cost? Individuals may find they can stretch their life span; however, they will need inner and external resources to make life enjoyable and worthwhile. Actually, there is a great deal that we can do to enhance our quality of life. If we do some of these things, some sure improvement in our life will be obtained.

Some advances in knowledge towards new hope:

Despite amazing advances in understanding and treating age-related conditions (such as cancer, Alzheimer's, diabetes, Parkinson's, and many others), and despite the appeal of the anti-aging ideas, the only proven way to even slightly extend maximum human life span is calorie restriction. No medical technology yet exists that can do the same as or better than this diet and lifestyle choice. Researchers are making progress, but this field of medicine is deplorably considered as not being a priority.

The Mediterranean diet is celebrated for its remarkable health and anti-aging benefits. New research suggests that fish rich in omega-3 fatty acids, olive oil polyphenols, and antioxidant-rich fruits, vegetables and herbs may explain the reduced cardiovascular and cancer risk and other health benefits of that diet.

Tobacco and alcohol use, overweight and obesity, diabetes, abnormality of the thyroid gland, blood hypertension, high blood cholesterol and triglycerides, osteoporosis, arthritis, stress and stressors, sleep disorders are all controllable conditions. The control of each one of them may represent a great impact on the overall health and on the pleasure of living.

Biological Age Reversal is the universal longing for the alchemists' eternal youth fountain and is largely based on the idea of attaining a high degree of whole body regeneration. The normal regeneration is to a limited extent a function that needs to be counted upon in the recovery of all illnesses and body lesions as well as from the ongoing wear and tear. Re-adaptation of the organism to compensate for the more definitive losses is an occurrence that has always met with reasonable success. On the other hand, biological engineering with the stem cell research looks for organ remaking, the production of new body parts to substitute the original but now badly functioning ones. It is more than repair, more than simple regeneration.

Some few hints about helpful attitudes to awaken your will to survive, to overcome difficulties and to recover from losses or illness:

Definitely the will to survive, and keep going has an important role in the process of vanquishing the involution of the aging process. The good thing about life enhancing attitudes is that they are available to human beings in a true equal opportunity type of deal. Complex attitudes as resilience can always be helpful tools.

Whether bad experiences harm or strengthen an individual person will depend on one's **resilience**. **Resilience** is the capability of a strained body to recover its size and shape after deformation caused especially by compressive stress. Resilience in a metaphorical sense is the ability to recover from or to adjust easily to misfortune or change. Resilience is the human capacity to face, overcome and be strengthened by or even transformed by the life adversities. Everyone faces adversities; exemption from them is fictional, it does not belong to the realm of reality. Resilience is developed in the first place from the reliance on supportive persons and/or on the spiritual source of inspiration, in second from the positive attitude towards one's own life and right to fulfillment and in third on the right and duty to search for solutions and help based on available resources and on self control and planning. How each person can create one's own repertoire of positive responses for better and worse days? This is a provocative question that should linger in our mind now and be revived again and again.

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