

Biological Clock: The Mystery Behind Aging and Longevity

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Death has been a threat to mankind and the greatest challenge to every Tom, Dick, and Harry. Many leave the planet at the prime of their life, and some willing to sacrifice billions in order to avert the peril of death. Many researchers with Nobel prizes are no more; great number of powerful world leaders are no more; many money magnets, billionaires, and philanthropist are no more. There is endless list of great men of honour who have lived and are no more. Hence the quest by the church, astrologists, societies and the scientists to divulge the mystery of death.

Scientists have discovered the clandestineness of aging and longevity. Heritable information in DNA is protected by a protein molecule otherwise called telomere. Over the last few decades, scientists have worked tirelessly to unveil the role of telomere in management of genetic information encoded in DNA. Generally, animal cells regenerate themselves repetitively throughout their lives. However, as they rejuvenate themselves, telomeres get squatter. This results in gradual aging of the cells. The rate at which telomeres shorten determines the speed of cellular aging. Some researchers have maintained that biological age is linked to the length of telomere which vary with chronological age. According to the researchers, all phases of the aging process is associated with telomere shortening.

Management of cells aging

It is now possible to check-mate the genetic clock as a result of the discovering of the genetic structure of the telomere which is the protective cap at the ends of cellular DNA. Telomeres control the aging of animal cells. When the cells in the body divide, the DNA replicates itself. But each time it does so, the telomeres at the

ends of the DNA get shorter and shorter until they can no longer copy themselves, and the cell dies. Thus, any process that prevents telomeres from shortening will invariably entails immortality of the cell.

An extract called teprenone has been discovered which delays the shortening of telomeres and helps slow down the aging of cells. In fact, one of the researchers maintained that teprenone is capable of increasing the lifespan of cells by 30 percent. Teprenone works on the cellular level to:

- Plump up skin,
- Reduce the appearance of wrinkles and crow's feet and the appearance of sun and age spots,
- Promote skin health by reducing oxidative build-up in skin cells and helps skin produce natural proteins that promote healthy, younger looking skin,
- Protects antioxidant activity that keeps skin glowing.

Teprenone has cyto protective properties, and increases bicarbonate concentrations in the gastric mucosa and that aid in the healing of gastric lesions, without affecting the normal physiological functions of the stomach. Many analogue of this pharmaceutical product are in the market for treatment of ulcer. In addition, a good number of anti-aging creams abound in the market with teprenone as the active ingredient.

Bibliography

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