

Maximum Wellness 7.08. 2020
In Search of the Fountain of Youth – Healthy Aging

Based on research – Calorie Restriction and Aging in Humans – which appeared online in June of 2020 in the Annual Review of Nutrition – “over the past century, the average life span in higher- and lower-income countries has increased by 15 and 30 years, respectively.”

Additionally, “this (outcome) is the result of lessening mortality and morbidity from food shortage, malnutrition, and infectious diseases through improved food supply and quality, as well as, advances in health care.”

Aging, which is associated with a decline in an individual’s physical and physiological capabilities, is part of life – as in death and taxes.

The speed and progression of age can be effected by such variables, as excess food consumption – overweight and obesity, poor fitness – less than 150 minutes of light to moderate weekly exercise, 75 minutes of moderate to vigorous weekly exercise, or a combination of both, or, the extent of an individual’s exposure to disease – all equaling secondary aging, added to or subtracted from (with prevention in place) the normal primary aging process.

According to the Annual Nutrition Reviews researchers from Pennington Biomedical Research Center, Louisiana State University, and Nutrition and Movement Sciences at Maastricht University in the Netherlands, “advanced age is associated with increased mortality and susceptibility to disease. This increase is caused by a progressive decline in physiological function. The slope of this decline over time can be defined as aging,” which, under an optimal scenario, may approach 120 years.

Primary aging, note the researchers, “describes the inevitable age-associated decline in physiological and physical functions due to energy expenditure and oxidative stress.” It appears that individuals with higher metabolic rates have shorter life spans - known as the rate-of-living theory - which the Pennington and Maastricht researchers say is, “still a matter of discussion, and may only apply in species, and not between species.”

It was also noted that average lifespan is reduced to 61 to 83 years – “an acceleration of this process reflects the interaction between innate aging and the extrinsic influences of the environment.”

As aging applies to our functional capacity, I've often commented to many of my athlete clients – when my patience (with age) wears thin - discussing my strategic plan – that age is mandatory, but maturity is optional.

They've also heard me explain from day one that my objective is to make them perform better than before – with a higher quality of health in the years extending beyond their playing career.

I recognize three ages – chronological age, what we're given at birth, performance age, how successful we are at achieving our mental and physical objectives on and off the playing field, and health age, resistance to the effects of chronic fatigue and disease.

With the exception of our chronological age, being the constant, the goal from a health age perspective is to work toward a compressed morbidity, pushing illness to the shortest period of time late in life – which is extended toward a higher quality.

The pillars of life extension – slowing the aging process – has to do with lengthening the telomeres - segments of DNA occurring at the ends of the chromosomes in eukaryotic cells (that containing a clearly defined nucleus), according to Britannica.com.

Notes the website, “once telomeres have been reduced to a certain size, the cell reaches a crisis point and is prevented from dividing further. As a consequence, the cell dies. Thus, the processes of cell aging and cell death are regulated in part by telomeres.”

Calorie restriction (CR) has been shown to increase life span from 1 to 5 years in animal studies - with some human support. However, for those over 60, the potential increase in life span may be offset by the potential for loss of lean muscle mass in light of sarcopenia – the aging loss of muscle. Daily protein intake may need to increase from 0.8 grams per kilogram of body weight to 1.2 grams.

The nutrient resveratrol, found in red grape skins, peanuts, red wine, and in supplement form has been demonstrated to mimic CR, but the optimum dosage and administration is still being investigated.

The key to living a healthier, longer life is to practice healthy eating – the Mediterranean eating style, exercise – using the guidelines outlined earlier in this

column, stress control – opting for meditation, controlled breathing, even prayer, laughing, associating with friends, giving and receiving love – human or pet, and common sense during troubling times. It's not that hard.

Add, a dose of passion – a life force that allows you to reinvent yourself on a daily basis, and you place yourself on the path toward the elisive fountain of youth.

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