

Longevity Medicine - Is This the Future of Healthcare?

Since 1900 the global average life expectancy has more than doubled, and is now above 70 years, due to major advances in healthcare such as antibiotics and vaccines as well as improvements in housing and education.

Although lifespan has increased by 30 years since the 1950s, healthspan (number of years lived in good health or free of disease) has not increased at the same rate.

In fact, in 2020, the gap between lifespan and healthspan in Europe and the UK was 15 years for males and 19 years for females. This means that the average person people is living one-fifth of their life with a chronic health condition.

The increase in lifespan because of modern medicine is mostly due to reduction in deaths from infection through the development of antibiotics, and reduction in deaths from trauma through better access to emergency medicine. Global mortality rates due to causes other than contagious diseases have not changed much since 1900.

Modern medicine (reactive medicine) is excellent at tackling diseases which need fast treatment when a symptom develops. Examples of reactive medicine include doctors prescribing antibiotics for a bacterial infection and orthopaedic surgeons repairing bone fractures after a traffic accident. Reactive medicine is not as effective in the treatment of the chronic diseases of ageing.

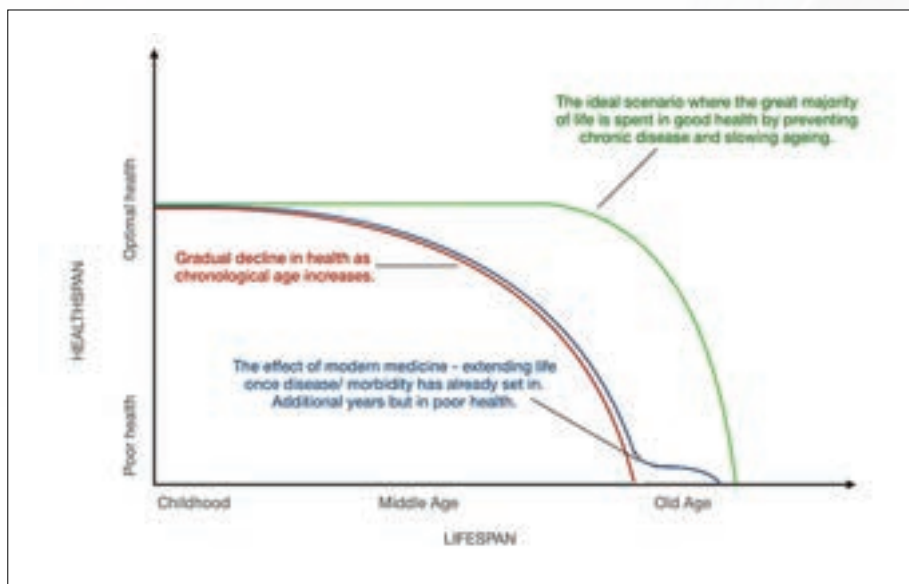
Too often, by the time symptoms of a chronic disease appear, the patient has already suffered an irreversible significant decrease in their healthspan.

THE CHRONIC DISEASES OF AGEING

In recent years, changes in our environment and the way we live have also led to an increase in diseases that were uncommon before the 1900s. For example, the risk of dying of cancer was 5% before 1900 and has increased to 25% today. The current leading cause of death - heart disease - was also an uncommon cause of death before 1900. This is partly due to the fact that people are living longer, therefore increasing the chance of developing chronic disease, however there is a strong link between lifestyle choices and development of these diseases.

So what are the chronic diseases associated with ageing? 80% of deaths in non- smokers above the age of 50 are due to 4 chronic diseases:

- Cardiovascular disease
- Cancer
- Alzheimer’s disease (and other neurodegenerative diseases)
- Metabolic diseases (diabetes and other related diseases)



THE 3 MOST IMPORTANT LIFESTYLE FACTORS WE CONTROL ARE EXERCISE, NUTRITION AND SLEEP ... SLEEPING 7-8 HOURS A DAY INCREASES LIFE EXPECTANCY AND DECREASES THE RISK OF DEVELOPING ALZHEIMER’S DISEASE



The increasing gap between lifespan and healthspan suggests that modern reactive medicine is helping people to survive longer with disease and disability, rather than increasing good quality years of life.

Longevity medicine aims to prevent the onset of these diseases and screen early for signs of disease in the asymptomatic phase when medical and lifestyle interventions can be most effective in maintaining healthspan.

Our lifespan is partly influenced by our genetics, which we cannot control. We can, however, increase our lifespan and healthspan through the lifestyle choices we make.

The 3 most important lifestyle factors we control are exercise, nutrition and sleep.

Maintaining fitness and muscle mass as we age reduces the risk of developing the diseases of ageing. Aerobic and resistance (weight) training are equally important in maintaining cardiac function, mobility, stability, insulin sensitivity, and brain health. In addition, focusing on eating minimally processed, whole foods with a bias towards a plant-based diet and ensuring sufficient protein intake supports the slowing of the ageing process. Sleeping 7-8 hours a

day increases life expectancy and decreases the risk of developing Alzheimer's disease.

We should also consider the economic cost of public healthcare, which is continuously rising. 15% of the European population aged 65 and over consumes 60% of healthcare resources. In developed countries, the over 65 age group accounts for 40-50% of healthcare spending and their per capita healthcare costs are three to five times higher than those under 65. Projections for Europe forecast that the population over 65 years will have increased from around 16% in 2000 to 23% in 2025 and will increase further to 30% in 2050, and, that healthcare costs are likely to grow at an average annual rate of 5-6%, most of this cost attributed to increasing ageing. Through a change in practice from the current model of reactive medicine to longevity medicine, it may be possible to maintain health and reduce healthcare costs.

We all want to live a long life in good health - maintaining mobility, independence and mental well-being by extending the period of your life in which you are physically active, cognitively sharp and socially present.

There is no secret formula to a long and healthy life. Simple lifestyle changes as well as early screening will increase your lifespan and healthspan.