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**URBAN HEALTH THEN  
AND NOW, A REFLECTION**

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# URBAN HEALTH THEN AND NOW, A REFLECTION (PHYSIOTHERAPIST, 15.03.2150)

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*'Urban health then and now, a reflection (Physiotherapist, 15.03.2150)' its starting point in the development of human settlements and population throughout history. On this basis, it envisions a future in which a shift to greener urban cities has led to various improvements in people's health and social conditions, both globally and locally. As more and more people are living in cities and the greening of cities is underway, this vision and its exploration all but a fantasy. With added collaboration from health professionals, urban planning and design could support the creation of even more green spaces and greener buildings, leading to cleaner air, more physical activity, natural insulation of homes, carbon sequestration, local food production, increased biodiversity and ultimately, a time with more social cohesion and healthier and happier people. By never losing focus of people's health, function and physical activity, it reminds us that it might not be wholesale change that is at stake, but that a broadening of our professional identity, roles and responsibilities could contribute more broadly than we have thought so far.*



## From an explosion to the stabilisation of population numbers

It is easy to look back on history from where I sit in the year 2150. It is also necessary to do so, because history explains many of the great challenges we have been through the last centuries. Humans began to cultivate land around 10,000 BC. The change in society was great, and we were then about 2 million people on our planet. At

the same time, we still lived close to nature. The first cities began to emerge about 4,000 years later. From the year 1700, population growth increased exponentially. Industrialisation led to further increase in urbanisation, and from the year 1700, when we were just under 600 million people, population growth increased by 7 times until the

1990s so that we were 7 billion people in 2011. In the year 2100, we passed 11 billion people on earth. After this, the population has remained relatively stable, and today we count just under 11.1 billion.

We still have some migration, but these are low and predictable numbers of people. Virtually all migration is voluntary, because poverty and social and political unrest have been virtually eradicated. The birth rate worldwide has also stabilised, and in the last 20 years has fluctuated between 1.9 and 2.1 children per woman. For many decades, there was a concern regarding

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an ageing population. Targeted work has now ensured good physical and mental health, and technological advances contribute to us living longer and healthier lives. For the oldest in the population, the breakthrough in dementia and Alzheimer's research in the year 2045 was essential. This breakthrough, together with generally better medical treatment and technology, has facilitated and prolonged self-management for the elderly. The improvement of the elderly's physical environment has been an additional contributing factor to good health. In 2020, life expectancy for men and women was 79 years and 83 years, respectively. In 2100, life expectancy was increased to 92 years for men and 93 years for women, while today life expectancy is 96 years for both women and men. The retirement age is also constantly increasing, and as of today the retirement age is 78 years, but many remain employed even longer than this. Just imagine how incredible it is that the current retirement age is close to life expectancy for men in 2020.

### **Our green and blue cities**

Stable population numbers have been essential to building and developing structurally good cities where the needs of inhabitants are covered for. In 2050, 70 percent of the global population lived in urban areas, today, 100 years later, 88 percent of the population are living in cities. The opinions of the health and environmental sectors were increasingly emphasised in the Planning and Building Act in 2034. The fact that

we have included people with degrees and clear voices in science and health into urban planning has had an impact on why our cities look as they do today. Now it is not only required by law, but it has become natural to think about nature and climate in urban planning. This has given good results, both locally and globally.

Within the energy sector, all fossil fuels have been phased out, and new energy comes exclusively from renewable resources. Smart buildings use little energy and are also responsible for energy production. For example, all windows and roof panels now function as solar panels. Our buildings are now self-sufficient in electricity, before the surplus energy is included in a common energy warehouse that supplies the city's infrastructure and common areas with clean and renewable energy. Cars, boats and public transport are fully electric, and within the urban zones a separate network for underground transport has been developed to reduce air and noise pollution and increase safety. This has given us opportunities to move more freely in the urban environment itself. Where there used to be roads, these have been reduced to narrow dedicated cycle paths, and the rest of the area has been taken over by green corridors and parks. Old river paths that were redirected into pipes and down into the ground have now been opened up and brought to light again. The sound of small rivers and streams is heard in urban environments again.

It is not only the networks between the buildings that have become green, but

the city's buildings have also become physically green. Although concrete, steel and wood are still used in the construction itself, the production of these materials is free of pollution and wear and tear on the climate and environment. In addition, the buildings' cladding is organic. Here, local native vegetation is used as positive sensory stimuli, and they simultaneously

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function as the city's green lungs. The vegetation on our cladding forms the basis for extensive biodiversity. It also stores carbon, reduces noise-levels, and has a cooling effect and offers shade on the hottest summer days and natural insulation on the coldest winter nights.

It is really a positive effect that biodiversity has increased so significantly. 150 years ago, it was critical for the population of pollinators worldwide. In the cities, small trials and projects were started where beekeepers placed beehives on roofs, in parks and on roundabouts. Today, they have become a common sight in the urban environment. The decline in pollution and the increase in green areas led to both the domesticated and wild pollinators

gaining a foothold again, and today we have healthy populations of insects that help to keep the city and the surrounding areas green and lush. Larger municipal gardens have been given space in the various districts. Here, communities gather for growing vegetables and plants, socialising and fellowship. Municipal gardens, parks, safe play areas and activity opportunities have created social areas for people of all ages.

The green transition and the stabilisation of population growth gave us the opportunity and time for positive change in society. The high pace, the constant race and pressure that were previously characteristic of life in the cities have changed to what can better be described as collaboration at a safe and steady steady pace. Nature, which is definitely a part of our surroundings, now also in the cities, invites us out but also in, as a natural part of biodiversity. This has contributed significantly to the improvements we have seen in urban health.

Previously major stressors in cities such as air pollution and noise have been reduced. The green areas, corridors and facilities have given us healthier movement patterns. Very few own or use private transport, there is an increase in the use of public transport, many report the use of bicycles as a means of transport and even more just walk. We are seeing a significant increase in the proportion of people who use the specifically adapted green areas and the social arenas for interaction for both children and the elderly, which has resulted in a

decrease in loneliness and depression, among other things. With nature as a backdrop, increased physical activity, improvement of social factors, play and social cohesion, and the opportunity for relaxation and recovery, have contributed to both mental and physical health in urban areas today being good and constantly improving. From shifting nature to make room for us, we have now chosen to wrap ourselves in it like a blanket on cold winter days. By doing this we have really found the place we need.

### **Development of the physiotherapy profession**

The physiotherapy profession has always had body and movement in its focus for good health. Previously, this was only the physical body, but gradually the mental part, social factors and the human external environment have also become important to physiotherapists. The whole person should be seen as a holistic unit in interaction with their surroundings, a holistic approach to good health. The profession has developed. Physiotherapy is a flexible profession that is constantly adapting to human needs, and humanity is constantly facing new challenges, which, in turn, create societal changes. Examples of such societal factors have been war and the aftermath of this in the 1940s, the consequences of viral diseases such as polio until the 1950s and covid-19 in the 2020s. We have been through a 21st century with an increase in lung disease, cancer, obesity, cardiovascular disease and an aging population until the 2060s, through constant medical

revolutions and finally the green transition in more modern times.

Treatment approaches within the health professions were previously targeted at specific patient groups and individually oriented measures. Although this is still important today, the focus gradually shifted to preventative measures at the end of the 20th century, and the education for 'society and nature' from 2020 onwards. Previous health prevention projects are now an integral part of the teaching offered throughout all years of education, even in upper secondary school where public health and general life skills are an integral part of all subjects in school. Here, too, physiotherapists have been part of interdisciplinary groups to adapt the didactic content of public health and life skills. Although climate and the environment were also on the agenda as early as the 20th century, it was not until the 2000s that they became a recognised factor for health. Climate and environment become standard subjects in health education in the 2020s, but it was only recognised in 2030 that the declining worldwide public health was only a symptom of nature's health, and that it was only by focusing on this disease that the symptoms could disappear. This was the beginning of what we know today as the truly holistic approach to good health.

The increases in knowledge and preventative health work have worked well. This is especially visible in patient groups with what we previously called lifestyle diseases. Patients with obesity

problems, type 2 diabetes, heart and lung problems are only a very small group today, compared to the peak we had in the year 2069. Nevertheless, we must not forget the identity of physiotherapy, because even though society has changed, the population has stabilised, and we have a society that takes care of more and more people in better health, physiotherapy is still concerned with the body and movement to ensure good function in the musculoskeletal system. Health clinics still work with individual treatment and with different patient groups, but today the largest patient group are those who need training after various types of physical and mental trauma and acute injuries. In conjunction with that, we also have a large field in neurology and prosthetic technology.

Population numbers have stabilised, we have found balance in age distribution, we are producing ever cleaner and better food, and changes in climate are now pointing in the right direction. Our cities are designed for good mental health and physical activity, we can walk out the door at home to immediately experience nature outside. We can hug a tree, smell grass, taste berries from common gardens, and listen to pollinators and bird life all around. We physiotherapists use this actively in our preventative work - both individually oriented, and as formal participants in urban planning - for closeness to nature and movement makes people lighter at heart and getting out the door is so much more enjoyable than it was in the last century. Individuals have become

better at seeing and utilizing their own resources and the socio-economic benefit of good health and good prevention has been enormous. We have more free time, and thus also more time for our own health, and we physiotherapists can finally work more preventatively, which is in the best interests of both society and individuals.

### **The short but very important thought about the path toward 2200**

When we know what the situation has been like, which mechanisms have been the problem, and how our world looks today, it should be easier to set a course for the future. History has taught us that working to promote the positive link between people and planet as a natural entity is essential for good health at the local and global levels for all biodiversity, humans included. With this in

mind, we as physiotherapists must continue to develop both our profession and the environment and help stake out the course for health-promotion for the next 50 years. We are now looking toward the year 2200, let's keep moving.

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