


Lifestyle Medicine Around the World

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Lifestyle Medicine and Japan's Longevity Miracle

Abstract: *With Japan's economic growth, its life expectancy increased from 1965, and since 1980, Japan has become one of the longest-lived countries in the world. Strong government-led initiatives such as low-cost health insurance, widely distributed health screenings, a new law to prevent non-communicable diseases established in 1956, Shokuiku (Japanese culinary education), and stress-measuring systems in the workplace contributed to the population's longevity. In addition to these public initiatives, Japan has benefited from evolving lifestyle practices over its long history. These include Washoku (Japanese traditional food), which utilizes the complex interaction of individual nutrients unique to Japan as well as numerous metabolically active compounds, the interrelation of Japan's population levels with its plant-dominant diet, a mindful culture connected with nature, and the principle of hara-bachi-bu (Confucianism-based caloric restriction habit; "eat until 80% full"), and so on. In 2002, Japan took the remarkable action of stipulating by law that citizens must deepen their interest in and*

understanding of the importance of healthy lifestyle habits, be aware of their own health status, and strive to improve their health throughout their lives. Today, to protect its future, Japan must face a new challenge: a population that is declining and is the world's fastest-aging.

Lifestyle modification became a healthcare priority in the 1980s and early 1990s.¹⁻³ Though influenced by this general trend, the Japanese Society of Lifestyle Medicine (JSLM)⁴ was born in 2017 from a somewhat unique context: the obesity rate in Japan is low (BMI over 30: only 3.8% for females; 4.5% for males)⁵ and death

 **"To support the world's top aging society in an environment of prolonged deflation, Japan must expand early detection of illness and preventive medicine."** 

Keywords: lifestyle medicine; Japan; longevity; non-communicable diseases

Background and Purpose of This Article

The growing interest in lifestyle medicine worldwide began for the most part with the fall in mortality rates from cardiovascular disease (CVD) and greater obesity control in Western countries as prevention.

from CVD is only 15.3% of the population (CVD is not the first cause of death).⁶

The world's views of Japanese life tend to focus on: its longevity; its cultural habit of eating raw fish such as sushi; its ongoing struggle with natural disasters (earthquakes, typhoons, and volcanic eruptions); its cutting-edge technology such as the popularity of Japanese automobiles and the first portable WalkMan; and perhaps even for its

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karoshi (death from long working hours).⁷ Building upon this view of Japanese life as seen from the outside, this article aims to introduce the characteristics of Japanese medicine, the development of lifestyle modification to combat non-communicable diseases (NCD), how Japan's longevity was achieved, and the country's current priorities.

History of Medicine in Japan—From the Pre/Postwar Period to the Super-Aging Society

Prior to the arrival of Western medicine in Japan around 460 years ago, Japanese medicine had been dominated by Eastern Asian medicine practices for many centuries. When Buddhism came to Japan in 538,⁸ the Buddhist monks helped the sick cope with the health effects of poverty and disability and treated leprosy patients in their temples. The oldest medical text (*Ishinbo* 医心方) in Japan was published in 982 AD. Written by Yasuyori Tanba, *Ishinbo* was based on the medical knowledge of Tang period China.⁹ There is a record of a monk named Ninsho who took care of 240 poor people and leprosy patients per month in 1287.¹⁰ Since Buddhism was the religious foundation of this period, Japanese people did not ingest meat and milk¹¹ and emphasized the positive effects of hot bathing for recovery from illness and injuries.¹² The medicine that grew out of these practices was later called Kampo medicine to distinguish it from Western medicine. Kampo doctors examined patients using traditional Chinese medical methods, such as diagnosis using pulse reading, abdominal palpation and tongue examination, and they prescribed and treated them with herbal medications. (Acupuncture developed separately in Japan as a different profession.)¹³

The first Japanese general hospital was established in 1557 in Oita, southern Japan, by a Portuguese missionary, Luis de Almeida, and Japan's first surgical operations were performed there.¹⁴ In 1639, Japan closed the country (with exceptions for China and Holland) to prevent invasion mainly from Portugal and Spain through these nations' Christian missionaries. Japan remained closed until 1854, when Commodore Perry arrived from the US. After more than 200 years of isolation, in 1857, Japan officially invited Johannes Lijdius Catharinus Pompe van Meerdervoort from Holland as a medical trainer to Nagasaki. From that point, Western medicine officially became part of Japanese medical education.^{15,16} In 1872, Japan chose Germany as the model for its medical system, and universities and research institutions with an affiliated hospital became a standard configuration that survives to this day.^{17,18} In 1906, Japan's medical law was updated, and Western medicine became the first form of mandatory Western knowledge. The number of Kampo doctors consequently diminished in Japan; Kampo medicine is only now being reintroduced into medicine.^{19,20}

Following World War I and II, the latter ending with the destruction of two atomic bombs in Japan, the United States' General Headquarters assigned Crawford F. Sams, a military doctor, to lead the reform of the Japanese medical system.²¹ Sams reformed Japan's medical education by upgrading the country's college education system and launching a national medical school entrance examination. He also separated doctor, pharmacist, and nurses' roles, and brought complete nursing care to the hospital as well as the new concept of hospital management. (The first lecture on hospital management was conducted at Tohoku University in 1953.)²² At that time, Japan's economy, infrastructure and facilities were devastated, and the priority was escaping the crisis of basic

hygiene, hunger, poverty, and infectious disease. From 1955 to 1973, Japan experienced over 10% economic growth every year.^{23,24} In order to maintain a skilled labor force, Japan promoted lifetime employment in workplaces.^{25,26} With the economy's growth, Japan instituted a remarkable achievement: in 1961, health insurance was extended to the entire population, as had already been achieved in countries as diverse as Chile, the Soviet Union, Norway, Sweden, Hungary, and other communist countries in Europe.^{27,28}

Furthermore, Japan established a combination of universities, hospitals and medical schools in each prefecture, enabling medical treatment across the nation including remote areas.²⁹ Another unique aspect of Japan's hospital development is that, historically, doctors have been free to open their own clinics with the local government's permission.³⁰ This practice made possible various management forms distinct from government or university-owned hospitals, such as private or company-owned and union-managed hospitals. Thus, even today Japan has many small clinics compared with other developed countries. In addition, in Japan, patients can freely choose a hospital or clinic by directly approaching their outpatient departments; they do not need to be referred by a primary care doctor.³¹ In the 1990s, more graduate schools in health sciences were also launched to meet the society's broader medical needs.³² Finally, with a declining birthrate and extended longevity, Japan's population plunged into the "super-aging society" of the 2000s.³³ Consequently, in 2000, Japan launched a long-term care insurance system for elderly.³⁴ Japan also established a regional medical cooperation network in order to provide home care as well as a local comprehensive care system.³⁵ Due to the aging society's escalating medical health insurance costs, efficiency and

quality of care were emphasized more than ever.

Development of Lifestyle Medicine—LM Started Early in 1713 With a Best-Selling Book, Established Official Committee in 1956

The first and most comprehensive lifestyle medicine monograph in Japan was the best-selling book *Yojokun* (養生訓), published in 1713, by Ekiken Kaibara (1630-1714), a medical doctor and Confucian scholar.^{36,37} *Yojokun* showed how illness could be prevented through lifestyle changes, for example, “don’t make your stomach full and reduce meat in diet, walk after the meal and don’t sit at one place for long time, get up early and work hard, don’t be lazy”³⁷—all of which are similar with current elements of lifestyle medicine. The notable features of *Yojokun* are 1. Mind, body, environment, and nature are one (current concepts of planetary health and mind-body medicine were already involved); 2. Controlling desires and negative emotions leads people to be happier and live longer (current positive psychology and idea of moderation were included); and 3. This book became popular among people in Edo-period as a moral in living based on Confucianism ideas (it was widespread as moral not medical purpose in Japan). *Yojokun*’s philosophy has transferred to modern Japan and live on in everyday Japanese ideas between health and lifestyle.³⁶

Perhaps the first diet-based disease identified in Japan was beriberi, a result of vitamin B1 deficiency. In the 19th century, beriberi became prevalent in urban areas such as Tokyo and port towns where the Japanese Army had been located since 1870.³⁸ It is estimated that 10,000 to 30,000 people died each year from beriberi including

infants. Japanese grains such as millet (hie) and setaria italica (awa) were the main food eaten during this period. When Japan’s major agricultural business shifted to the sericulture industry around 1890,³⁸ farmers expanded their proportion of sericulture business, leading to a rapid decrease in the consumption of millet and setaria italica. At the same time, Japanese began preferring to eat white rice rather than other mixed grains or barley with rice.³⁸ Baron Kanehiro Takaki, a navy doctor, studied the frequent deaths from beriberi among Japan’s naval sailors. In place of white rice, he changed providing bread (a foodstuff originating in Japan from England) as the main meal for sailors of Tsukuba, a Japanese training ship. The result was zero deaths among 330 men from beriberi on Tsukuba in 1884, while a previous training ship Riujo whose main meal was white rice experienced 25 deaths from beriberi out of 376 sailors in 1883.^{39,40} In 1879, Christian Eijkman of Dutch found that peripheral neuritis in birds was cured by administering rice bran, which contains vitamin B. Finally, the disease of beriberi was conquered in Japan.⁴¹ Nevertheless, although white rice is less nutritious than other grains, Japanese people continue to treat white rice as their stable food to date.

Another development in Japan’s progress toward lifestyle medicine was exercise. In 1928, a radio exercise program called *Radio Taiso* (ラジオ体操) for the general public was launched in order to improve physical strength and protect people from tuberculosis. This program, called “radio exercise,” instructed listeners in basic exercises accompanied by piano. It has since evolved to include television, cable TV and now YouTube and slower version for seniors, providing Japanese with easy access to exercise.⁴²

Lifestyle medicine also evolved as Japan’s leading causes of death changed after the war. In 1951, high blood pressure from high salt intake caused stroke to dramatically replace tuberculosis as the leading cause of death in Japan.^{26,43} Indeed, Japan’s stroke-related death rate was the highest in the world based on age-adjusted mortality rate.^{26,44} Furthermore, in 1953, cancer became the second leading cause of death; by 1958, CVD ranked third.⁴² Among Japanese 40 to 59 years old, the number of deaths from cerebrovascular disease, cancer and CVD almost doubled from 1947 to 1965.⁴² Observing that these diseases occurred with aging, the government named these diseases *Adult Disease* (成人病).⁴⁵ In 1956, the Adult Disease Prevention Measures Consultation Liaison Committee, which consisted of academic experts, was established to prevent these rising new diseases.⁴² This was the beginning of Japanese medicine’s efforts to take serious consideration of non-communicable diseases. Since 1996, the “Adult Disease” designation was replaced by the new name, *Seikatsu shukan byo* (生活習慣病), which means lifestyle-habitual diseases.⁴⁵

Japan’s ability to reduce the mortality rate from stroke by 70% from 1960 to 1990 was a significant achievement.^{46,47} The main factor contributing to this success was reducing salt intake from food, which lowered blood pressure.^{26,48} In the 1950s, people consumed about 25 g of salt per day, which was extremely high. (In comparison, today Americans are recommended to consume under 2.3 g of sodium.)⁴³ No doubt, Japan’s economic growth, established distribution of fresh food and the dissemination of refrigeration enabled Japanese after the 1950s to access fresh food products and reduce the consumption of food preserved with salt.⁴³ Reducing smoking (83.7% of Japanese men

were smokers in 1966)⁴⁹ and broadly disseminated medical examinations provided by companies through Japan's lifetime employment system may also be factors in Japan's 70% reduction in mortality from stroke.⁴² After participating to the Ancel Key's Seven Countries Study,⁵⁰ in 1961 Kyushu University began a cohort study (known as the Hisayama study) to identify a reason for the high prevalence of stroke in Japan.⁴⁴ Shiga University of Medical Science also participated the Intersalt Study to identify relations between electrolyte excretion and blood pressure among 32 countries.⁵¹ The Hisayama study showed a rapid and consistent decrease in the incidence of stroke until the 1990s.⁵² The Intersalt Study has been pivotal in revealing the characteristics of lifestyle-related disease among Japanese.

Because of its rapid economic growth, from 1965 on, Japan's life expectancy increased. Since 1980, Japanese have been one of the longest living people in the world.²⁶ From 1981 to date, the leading cause of death in Japan has been cancer.⁴² Today, one of every two Japanese will experience cancer in their lifetimes. From 2000, Japan's falling stroke rate flattened. It is likely that based on the increase of dyslipidemia and abnormal glucose metabolism in Japan, the types of stroke most common in Japan were changing from lacunar infarction to atherothrombotic cerebral infarction and cardiogenic cerebral infarction. Dyslipidemia and abnormal glucose metabolism are also the major causes of stroke in Western countries.^{44,48}

In response to Japan's changing lifestyle-related health conditions in 2000, the government set nine core improvement areas to prevent lifestyle-related diseases: 1. Healthy diet; 2. Increased physical activity; 3. Rest/mental health promotion; 4. Smoking cessation; 5. Numerical targets for alcohol consumption;

6. Dental health; 7. Prevention of diabetes; 8. Prevention of cardiovascular disease; and 9. Prevention of cancer.⁴⁵ Two years later, it became a legal obligation in Japan for citizens to maintain their health, with the cooperation of local governments and medical institutions.

In addition, with its strong government-led food and nutrition initiative, Japan also launched a unique food education campaign called *Shokuiku* (食育) as well as a basic law on food education in 2005.⁵³ *Shokuiku* aims to help people develop an understanding of food and diet for health. Specifically, it focuses on school-based education for children on how to raise vegetables and how to cook and on encouraging local farming including promoting local produce.^{53,54} Unlike the Let's Move campaign by Michelle Obama in the US, which sought to prevent obesity, *Shokuiku* was born and developed with several different concerns: Japan's low self-sufficiency in food production; reducing Japanese consumption of its staple food, white rice; increasing globally diversified food available in Japan; preserving Japanese culinary culture; and encouraging dining with family and home-cooking in Japan's modern urban lifestyle.^{53,54}

Health checkups to diagnose lifestyle-related diseases became available in April 2008 for all public health insurance subscribers aged 40 to 74. This lifestyle-related checkup screens the individual's degree of risk into levels based on their blood sugar, lipids, blood pressure and smoking habits, abdominal circumference and BMI. Based on these levels, people receive health guidance.^{42,46} In 2011, the Japanese government then launched a national public health promotion, "Smart Life Project," to promote four focused initiatives—exercise (adding 10 minutes of walking every day), adequate diet (having balanced, tasty meals), tobacco

cessation (preventing second-hand smoking) and regular medical checkups (understanding your health)—in order to extend not only Japan's life expectancy, but also its healthy life expectancy. In 1985, the government also launched a new committee to prevent *karoshi* (death by overwork) and suicide from burnout syndrome and depression. In 2015, a new stress-measuring system was launched in workplaces.⁵⁵

Currently, a major issue affecting Japan's lifestyle-related health is a rapidly increasing elderly population and shrinking birthrate.⁵⁶ By 2065, Japanese longevity is expected to extend to 91.35 years old for females and 84.95 years for males.⁵⁷ At that time, about 40% of the population will be over 65 years old.⁵⁸ Thus, Japan has identified maintaining "healthy and successful (functioning, independence, without disability, quality of life) longevity" as very important. This has resulted in increasing interest in reducing sarcopenia, whose risk factors include frailty, dementia, Alzheimer's disease, and diabetes. In particular, because Japanese easily develop abnormal glucose metabolism, there is a concern that a rapid increase in cancer, dementia, Alzheimer's disease, and diabetes will occur.^{59,60}

Diseases caused by environmental pollution resulting from Japan's economic growth should be emphasized in lifestyle-induced illnesses in Japan. Itai-itai disease (literally "it hurts, it hurts" disease) was the first recognized pollution-caused disease, occurring in Toyama prefecture from 1910 to early 1970.⁶¹ Cadmium discharged from Toyama's Kamioka mine flowed into the local river and accumulated in the downstream rice paddy soil. People, mostly local female farmers, who drew their water primarily from this river and ate rice harvested in the village downstream suffered itai-itai disease. It is thought that the

cadmium caused abnormal renal tubular function (Fanconi syndrome) and led to osteomalacia and osteoporosis, with factors such as childbirth and malnutrition (low protein, low calcium) contributing to the condition. The number of Japanese certified with itai-itai disease by 2015 was 200.⁶¹

Another environmentally caused disease, Minamata disease, was spread in water polluted by industrial mercury in Kumamoto prefecture (south Japan) in 1956 and in Niigata prefecture (north Japan) in 1965.⁶² Minamata disease, which affects the central nervous system, is caused by eating fish and shellfish contaminated with methylmercury compounds discharged from factories. The main symptoms are sensory deficits in the extremities, ataxia, afferent visual field stenosis and central nervous system disorders. (Similar pollution and symptoms occurred in Ontario, Canada, in the 1960s.)⁶³ By late May 2013, 2,275 people along the sea coast in the Kumamoto area had been identified with Minamata disease and 702 people along the Agano River in Niigata had been certified as Minamata disease patients.⁶⁴ Both groups still require care and support. Minamata disease attracted global attention and led to the Minamata Convention on Mercury, which in 2013 agreed to protect human health and the environment from the dangers of mercury (Hg).⁶⁵

In the 1960s, Japan endured another form of air pollution affecting health. Called Yokkaichi asthma, it occurred in Yokkaichi city, an urban area where an oil complex emitted a large amount of sulfuric acid gas (sulfuric acid mist) into the air, causing a rapid increase in chronic obstructive pulmonary disease such as asthma.⁶⁶ By 1971, 710 patients had been identified as suffering from Yokkaichi asthma, 21.9% of whom were elementary school children.⁶⁶

Finally, Japan has also experienced lifestyle-related conditions resulting from nuclear technology. The victims and survivors, called Hibakusha, who survived the atomic bombs dropped on Hiroshima and Nagasaki suffered from atomic bomb sickness. This condition includes a variety of symptoms, not only malignant tumor, leukemia and hyperparathyroidism but also myocardial infarction, hypothyroidism, chronic hepatitis/cirrhosis and radiation cataracts. The number of patients identified with atomic bomb sickness peaked at 368, 259 in 1983, but in 2019, there were still 136,682 patients with atomic bomb sickness.⁶⁷

In 2011, Japan endured another tragedy impacting lifestyle-related health in the massive earthquake and tsunami disaster in the country's northeast region, Tohoku, which led to a nuclear power plant accident in Fukushima.^{68,69} It was another global awakening that “fail-safe” mechanisms can fail, and that health professionals are essential to provide timely, accurate advice. Although the radiation produced by this disaster is not known to have killed anyone, internal exposure to radiation will persist and should be carefully monitored over the long-term. Both the natural and manmade disasters in Tohoku radically changed the lifestyle of the region's people. Their prolonged evacuation and relocation to different locations induced weight gain, hypertension, dyslipidemia and many psychological issues.^{70,71}

Because Japan is frequently hit by natural disasters such as typhoons, earthquakes, and volcanic eruptions, medical care for natural disasters is an essential skill set for Japanese healthcare professionals to be trained in.

Characteristics of Japanese Lifestyle Medicine

The true inception of lifestyle medicine in Japan came in 1956,

when the government launched an initiative in response to concerns over potential increases in non-communicable diseases.⁴² Since then, the discipline has evolved uniquely in Japan based on its history and nature. Longevity, which resulted from multiple factors over the course of the country's revival after the massive wartime damage, can be linked to: 1. Economic prosperity; 2. The introduction of a mandatory, low-cost health insurance system with widely distributed health screening;²⁶ 3. Strong government and academic evidence-based initiatives to prevent lifestyle-induced illness and the laws mandating them;⁴² and 4. The natural evolution of Japan's lifestyle practices over the country's long history. In this fourth factor, Japan's diet has played a key role in supporting longevity.⁷² Specifically, Japanese have benefited from a lifelong, complex interaction of individual nutrients unique to Japan, numerous metabolically active compounds and the interrelation of Japan's overall levels of population food intake with the history of its plant-based diet.⁷² Even today, Japanese follow the traditional meal structure of 1 bowl of rice, 1 bowl of soup, and 3 additional dishes drawn from Japan's distinctive topography of ocean and forest (over 65% of its landmass).⁷³ This traditional meal has historically meant consumption of a variety of fish and other seafood and seasonal vegetables, both of which are low in lipids. This dietary content has been consumed within a Confucianism-based caloric restriction habit known as “hara hachibu” (eat until you're 80% full).⁷⁴ The traditional meal has also included green tea, a staple of the Japanese diet, containing high polyphenols (called catechin), which provide a variety of health benefits.^{75,76} The profound success of Japan's diet is reflected in its low consumption of sugar and fat vis-à-vis other high-income countries,

notwithstanding the increased consumption of meat and dairy products during the period of postwar economic growth.⁷²

Research also suggests that another lifestyle factor impacting Japan's longevity is lifelong employment, which has produced a less stressful society than in cultures such as Britain or America, where life employment is not assured.²⁶ Adult education in Japan is largely limited to training in the workplace because loyalty to the workplace is valued and rewarded.⁷⁷ Many Japanese workplaces are still based on seniority-based salaries and an emphasis on harmony and hierarchy rather than individual ability. This reflects a unique aspect of Japanese society where belonging to the group is much more important than individual identity.⁷⁷

Japan's socio-centric society brings a sense of responsibility toward and fulfillment from family and community.⁷⁷ This concept, called *ikigai* (purpose in life 生きがい), is a positive psychological factor behind the Japanese lifestyle.⁷⁷ Japanese also benefit from a special relationship with nature, which in Japan has historically been unstable and sometimes violent in Japan.⁷⁸ The volatility of nature in Japan complements the Buddhist idea of *shogyo mujo* (nothing is permanent 諸行無常),⁷⁹ which is linked to an invisible polytheism. (Originally, Japan's gods were thought to be deeply buried in nature such as mountains, forests, rivers, and oceans.)

On the Japanese archipelago, the seasons contrast sharply: leaves fall in autumn, nature "dies" in winter, but spring brings life again. It equates to a continuous cycle. Even though things change, you will have another opportunity. This idea of impermanent cyclicity is reflected in human life as well: we are born, grow, mature, and the shadow of death approaches. Japanese quietly accept this and

return to the soil and nature. This view of life encourages Japanese to adjust to whatever the current condition is, cultivating an attitude of quiet, tenacious, accepting patience.⁷⁸

Japan Legally Mandates LM to Protect Its Longevity and Future

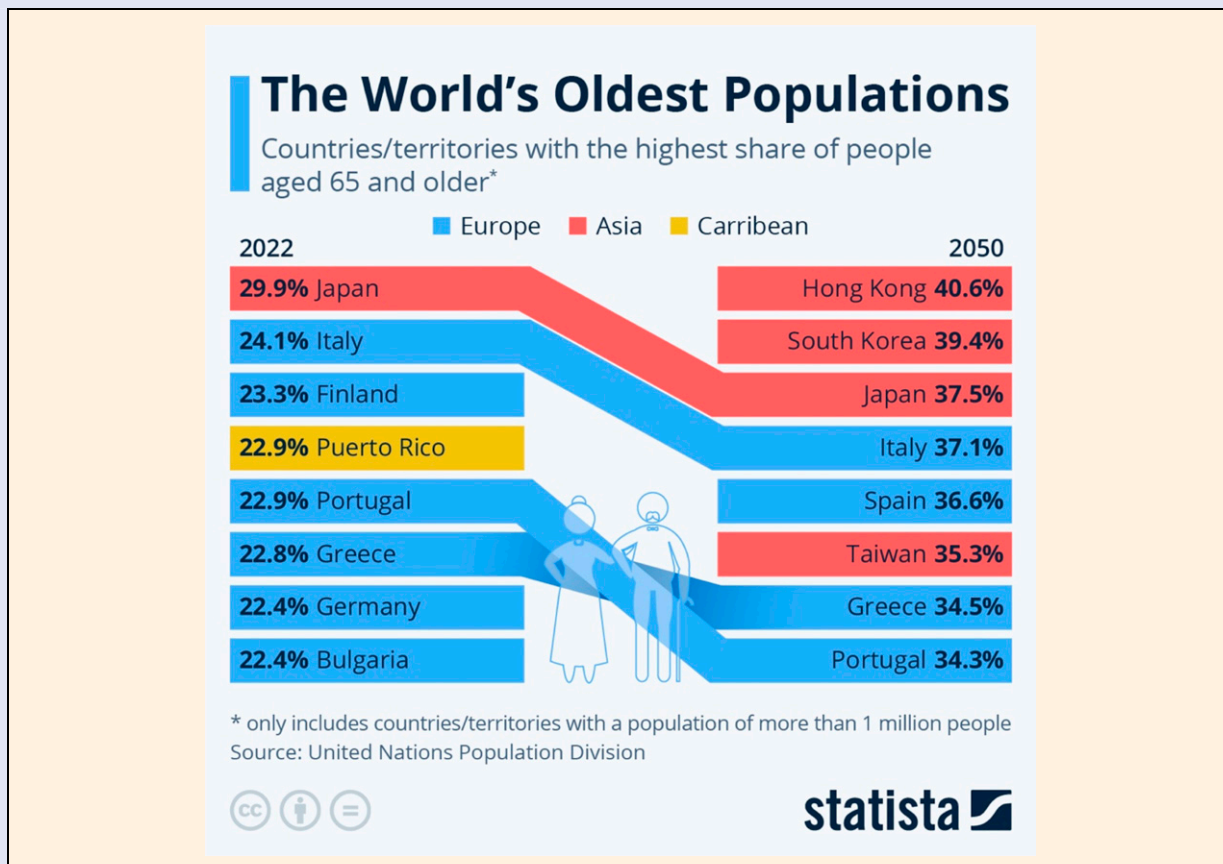
The most urgent issue facing Japan is its rapidly aging population. Japan is now the country with the oldest population: over 29.8% of all Japanese are over 65 years old (Table 1),^{80,81} and Japan is the first country ever to have more than one in 10 people over age 80.⁸² Japan's population is already in decline and is expected to fall further in the coming decades. Moreover, in a trend shared by many developed countries, 34.53% of Japanese lived alone in 2015, and single-person households are projected to grow.^{83,84} To ensure that Japan remains a successful country despite aging, the government shifted its healthcare focus specifically to preventing seniors from developing disabilities, by launching a local comprehensive care center system in 2006.⁸⁵ This system is a localized team care system involving multiple caregivers such as doctors, nurses, social workers, pharmacists, physical therapists, local care managers and assisting services, all focused on sustaining older people's independence and successful/healthy lifestyle in their community. The key concepts behind the local comprehensive care center system are: 1. Prioritizing human dignity and quality of life towards the end of life; 2. Visits by medical team members and service providers to elderly persons' homes to provide at-home care once they are disabled; 3. Providing seamless care services across medical, rehabilitation, nursing and palliative care; and 4. Creating a smooth and comfortable care system that adjusts to the local community's priorities

and needs. This long-term comprehensive local care system was fully promoted in 2018 by simultaneously launching both medical and nursing care plans and by revising medical fees, nursing care fees, and disability service fees.⁸⁶

The second major issue facing Japan is prolonged deflation—falling prices over time impede economic growth. To support the world's top aging society in an environment of prolonged deflation, Japan must expand early detection of illness and preventive medicine. Together, these efforts will encourage the elderly to avoid sickness, be independent and active, and extend their working years. Japan must also safeguard its social security system while shifting to a realistic new medical system. Toward these objectives, Japan's Ministry of Health, Labour, and Welfare (MHLW) continues to conduct NCD prevention and awareness activities, and furthermore, and today Japan can be said to be implementing health and economic development simultaneously. Established in July 2015, the Nippon Kenko Kaigi is a private sector-led organization that promotes advanced prevention and health initiatives nationwide in collaboration with the MHLW, the Ministry of Economy, Trade and Industry, and other ministries.⁸⁷ For example, this partnership provides financial incentives to insurers and local governments to accelerate the elimination of NCDs and prevent illness from becoming more severe. In addition, this partnership distributes certification logos to recognize high-value companies that have introduced health management programs and that actively work to improve the health and productivity of their employees. As a result, these companies can also capture higher value in the stock market.⁸⁸ Similarly, the Japan Medical Association, the Japan Chamber of Commerce and Industry, the Federation of Economic Organizations, local governments, insurers, and corporations are working together

Table 1.

The World's Oldest Populations.



aggressively to promote health and optimize medical costs.

These efforts notwithstanding, Japan still confronts the most serious problem: how a country with a declining population and an aging population can continue to develop its economy. In January 2024 a private panel proposed to the prime minister that to maintain economic growth Japan must aim to stabilize its population at 80 million by 2100.⁸⁹ Japan's miraculous achievement of longevity after World War II was clearly supported by strong government leadership, the nation's continuous economic growth and its increasing population. Today, with a population that is both declining

and aging (approaching an elderly population of 40% of the total), Japan needs new policies, including the introduction of workers from overseas, that it has never undertaken before, as well as new businesses that can drive economic growth under this circumstance.

Blessed by its location as a small, isolated island nation in the Far East, over its long history Japan has been able to preserve its language and unique culture while cultivating wise knowledge about food and living in nature. As a result, longevity was achieved. Culminating this long history, in 2002 Japan took the remarkable action of stipulating by law that citizens must deepen their interest in and understanding of the

importance of healthy lifestyle habits, be aware of their own health status, and strive to improve their health throughout their lives.⁹⁰ We hope that the historical fact that Japan has become the country with longest average lifespan will serve as a positive reference point for other countries that are on the path to achieving longevity and eradicating NCDs. We also hope that the policies and measures that Japan is now painstakingly developing may help countries that like Japan, will soon become aging societies.

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