

# Self-Care 2030

Insights Report  
*Transforming Health Through  
Physical Activity*  
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**David Skinner**

President, International Self-Care Foundation [davidskinner@isfglobal.org](mailto:davidskinner@isfglobal.org)

**Prof. Nikos Ntoumanis**

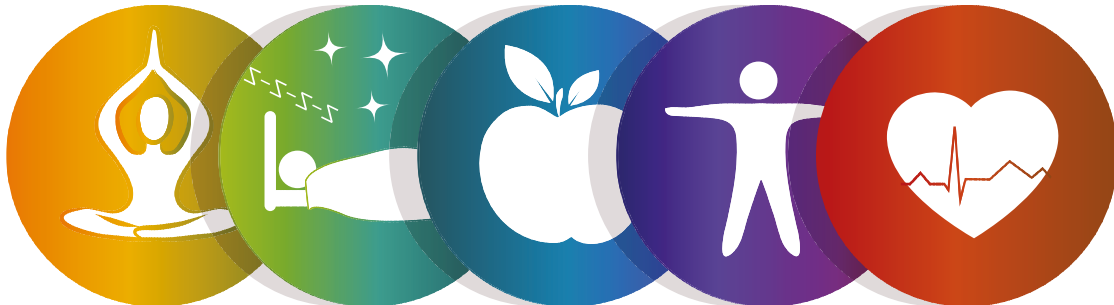
Co-Director of the Danish Centre for Motivation and Behaviour Science (DRIVEN)

**Austen El-Osta**

Director, Self-Care Academic Research Unit (SCARU) [a.el-osta@imperial.ac.uk](mailto:a.el-osta@imperial.ac.uk)



# Foreword



**Mr. David Skinner**  
President, International  
Self-Care Foundation

As we look to the future of health systems, it is increasingly evident that empowering individuals to take greater responsibility for their own health is essential to improve outcomes and help relieve growing pressures on services globally. The International

Self-Care Foundation (ISF) champions the seven pillars of self-care as a structured, evidence-based framework for building healthier societies. Among these, physical activity stands out as a health behaviour and as a catalyst for broader wellbeing across the life course. This report, part of the [Self-Care 2030 series](#), provides critical insight into how physical activity underpins all other aspects of self-care. It makes a compelling case for placing movement at the heart of global prevention efforts, drawing attention to innovative, inclusive and scalable interventions that can support populations to live longer, healthier lives. We are pleased to support this work & commend its timely contribution to the self-care agenda.

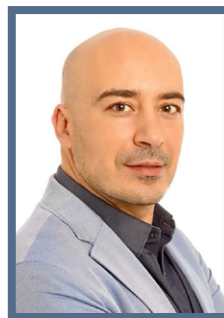


**Prof. Nikos Ntoumanis**  
Co-Director of the Danish  
Centre for Motivation and  
Behaviour Science (DRIVEN)

This volume arrives at a pivotal moment. Technological advancements including smart watches make monitoring of physical activity easier, yet global activity levels seem to decline. The pages

that follow shine a spotlight on community-led initiatives, habit-forming technologies, and policy levers that can promote physical activity. The behavioural science insights

within these pages offer a roadmap for moving beyond traditional awareness campaigns toward interventions that address capability, opportunity, and motivation in integrated ways. By reframing physical activity as a natural component of daily living rather than another obligation, we open pathways for more inclusive and sustainable participation. The potential for technology-enabled, personalised approaches holds tremendous promise. However, this report cautions that innovation must be balanced with equity considerations. This contribution to the [Self-Care 2030 series](#) provides an evidence-based framework for empowering individuals while acknowledging the systems-level changes required to create truly active communities. Let this report serve as both a guide and a call to action!



**Dr. Austen El-Osta**  
Director, [Self-Care Academic  
Research Unit \(SCARU\)](#)

As societies confront rising rates of chronic disease, mental health decline & the health impacts of sedentary lifestyles, the promotion of physical activity must become a core strategy for health systems, communities & individuals alike. In this volume we

explore the transformative role of movement as a foundational pillar of self-care. Drawing on the latest global evidence, behavioural science & innovation trends, this report offers an integrated perspective on how physical activity influences & interacts with nutrition, mental wellbeing, digital health & broader determinants of health. It makes the case for urgent cross-sectoral action through design, policy, education & equity-focused interventions to embed movement across all life stages & settings. As we look to the future, the message is clear: physical activity is not an optional extra. It is a vital act of self-care & a public health imperative for a healthier, more resilient world.

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# Introduction

In an era marked by increasing sedentary lifestyles and escalating healthcare burdens, promoting physical activity as a pillar of self-care is more important than ever. The World Health Organization (WHO) identifies physical inactivity as one of the leading risk factors for global mortality (1). Addressing this challenge requires a holistic approach that integrates behavioural change, environmental considerations, policy frameworks and digital innovations to integrate physical activity into daily life and public health strategies.

The Self-Care 2030 Insights Report series is dedicated to exploring each of the seven pillars of self-care in depth, offering evidence-based insights and forward-thinking strategies. This third volume delves into the role of physical activity, examining its scientific foundations, key determinants and practical interventions that can drive meaningful change.

This report highlights the intricate connections between physical activity and other pillars of self-care (e.g., mental health, healthy eating, health literacy). Other suggestions are made about how technology, innovation, and policy reforms can be harnessed to facilitate more active lifestyles across all ages. This report is intended to serve as a resource and a call to action.



# The Global Burden of Physical Inactivity

A lack of regular physical activity is strongly associated with an increased risk of non-communicable diseases (NCDs), including cardiovascular disease, obesity, type 2 diabetes and certain cancers. Additionally, research suggests individuals who engage in regular movement experience improved mood, reduced stress levels and enhanced cognitive function, reinforcing the intrinsic connection between physical activity and psychological wellbeing. The WHO estimates that approximately 31% of adults and 80% of adolescents worldwide do not meet recommended physical activity levels (1). Females tend to be less active than males; also, older adults, and people with disabilities are less likely to be active than younger and physically able individuals. This widespread inactivity significantly contributes to the growing burden of NCDs, which are responsible for 74% of all global deaths (2). As such, reinforcing the importance of modifiable lifestyle behaviours such as regular physical activity remains a critical public health priority for reducing morbidity and preventing premature mortality (3).

Sedentary behaviour refers to low-energy activities ( $\leq 1.5$  metabolic equivalent of task, or METs) performed while sitting or lying down during waking hours such as watching TV or prolonged sitting (4). In contrast, physical inactivity describes not meeting the recommended levels of moderate-to-vigorous physical activity (150–300 minutes per week), making it a distinct concept from sedentary behaviour (5). From an economic standpoint, the costs of physical inactivity are staggering. Healthcare expenditures associated with treating preventable conditions linked to sedentary lifestyles place immense financial strain on health systems globally with the cost of treating new cases of these NCDs estimated to reach nearly US\$ 300 billion by 2030, around US\$ 27 billion annually (6). Beyond monetary costs, the societal impact includes reduced workforce participation,

lower productivity and rising dependency on healthcare services due to the increase in disability adjusted life years (DALYs), indicating a growing health loss globally (7).

Despite these challenges, interventions promoting physical activity have proven to be highly cost-effective (8). whereas the integration of digital health technologies, wearable fitness trackers and community-based initiatives has shown promise in encouraging sustained engagement in active lifestyles (9). Policies that promote inclusive, accessible opportunities for physical activity across all demographics, particularly among underserved populations, can drive significant improvements in public health outcomes.

Addressing the global burden of physical inactivity requires a concerted effort at the individual, community and policy levels. By recognising the profound implications of inactive lifestyles and implementing targeted interventions, societies can create environments that empower individuals to incorporate movement into their daily lives.



## The Science of Physical Activity and Health



Regular physical activity is strongly linked to increased life expectancy, better quality of life and healthier aging (10). It plays a vital role in self-care, promoting longevity, mental resilience and overall wellbeing. Active individuals experience lower rates of chronic disease, enhanced physical function in older age and greater independence. Cardiovascular benefits include improved heart health, better circulation and reduced risk of hypertension, heart disease and stroke. Musculoskeletal advantages range from increased bone density and joint mobility to enhanced muscle strength, reducing injury risks and supporting long-term mobility (11). Metabolically, exercise boosts insulin

sensitivity, lowers the risk of type 2 diabetes and aids in healthy weight maintenance. Regular movement also improves mental wellbeing by alleviating stress, anxiety and depression through endorphin release, promoting relaxation and emotional stability. Furthermore, cognitive benefits include enhanced memory, focus and problem-solving abilities, with a reduced risk of neurodegenerative diseases like Alzheimer's and dementia (12). By recognising these cumulative benefits, physical activity can be fully integrated as a cornerstone of self-care, ensuring vitality and independence throughout life.

# Determinants of Physical Activity

Physical activity levels are influenced by a range of socioeconomic, cultural and environmental factors, shaping an individual's ability and motivation to engage in regular movement. Understanding these determinants is crucial for developing targeted interventions that encourage active lifestyles across diverse populations.

## Socioeconomic, cultural and environmental influences

The decision to engage in physical activity is often shaped by socioeconomic factors such as income, education and occupation. Higher socioeconomic status is generally associated with greater access to recreational facilities, safe environments and structured exercise programmes, while lower-income populations often face challenges such as unsafe neighbourhoods, limited time due to multiple jobs and fewer community resources.

Cultural norms also play a significant role in shaping attitudes toward

physical activity. In some communities, traditional gender roles may discourage women from engaging in outdoor exercise, while in others, physical activity is embedded into daily life through dance, martial arts, or labour-intensive activities. Social expectations and family support further influence whether individuals prioritise movement as part of their daily routine. Environmental factors, such as the availability of parks and sports facilities directly impact physical activity levels. People living in walkable, green and well-maintained neighbourhoods are more likely to be physically active than those in urban environments with poor infrastructure, high traffic, or pollution. Climate and seasonal variations can also serve as barriers, with extreme heat, cold, or poor air quality discouraging outdoor exercise.

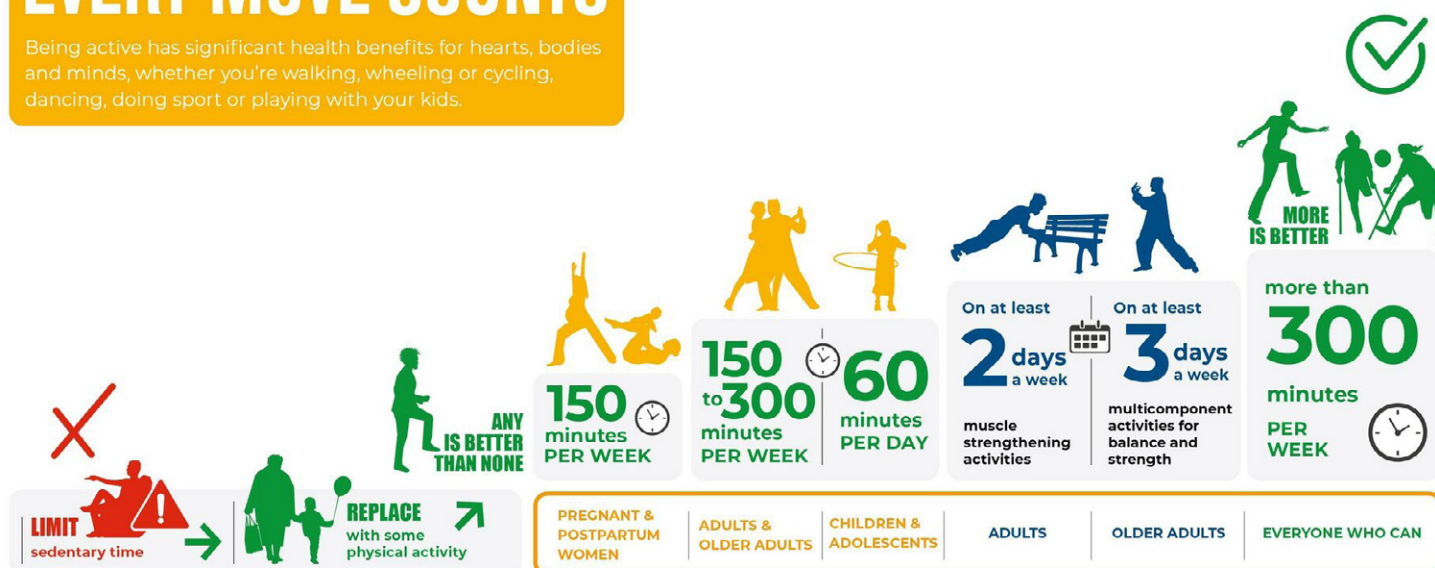
## Barriers to participation

Many individuals face significant barriers that prevent them from engaging in regular physical activity.

These barriers can be broadly categorised into access, safety, lack of time, cultural norms, lack of social support, body image concerns, low energy and motivation where the availability of affordable, convenient places for exercise is a critical determinant. Lack of fitness centres, public spaces and transportation options can discourage participation, particularly in rural and low-income areas. Personal security concerns, including high crime rates, poor lighting in parks and inadequate traffic safety, deter individuals from walking, running, or cycling. Fear of injury, particularly among older adults and those with disabilities, is another key barrier. Additionally, misconceptions about physical activity requirements may lead to the perception that only intense or lengthy exercise is beneficial. Research has shown that even light physical activity, such as slow walking or light housework can reduce the risk of premature death among less active adults.

## EVERY MOVE COUNTS

Being active has significant health benefits for hearts, bodies and minds, whether you're walking, wheeling or cycling, dancing, doing sport or playing with your kids.



# Strategies for Promoting Physical Activity Behavioural Change Models

Promoting physical activity requires a multi-faceted approach that addresses individual behaviour change, community engagement and policy-level interventions. Effective strategies should be evidence-based, scalable, sustainable, and adaptable to and acceptable by diverse populations. The following key approaches offer a roadmap for increasing physical activity levels at scale.

## Behavioural change models

One of the most widely used frameworks in promoting physical activity is the COM-B model, which identifies three core components: (i) Capability, (ii) Opportunity, and (iii) Motivation for Behaviour change (13). Interventions based on the COM-B model focus on enhancing these three factors through targeted interventions and policy changes. These interventions can be facilitated by behaviour change techniques (BCTs) such as goal setting, habit formation and social support networks. Increasingly, such BCTs are



delivered via digital engagement tools (e.g., fitness apps and gamification).

## Community-based interventions

Community-driven initiatives promote supportive environments

for active lifestyles by leveraging social engagement, local resources and culturally tailored activities. Key approaches include active transport (promoting walking and cycling via infrastructure improvements and public awareness), exercise prescriptions (such as embedding physical activity recommendations into routine healthcare) and workplace wellness including encouraging movement through fitness challenges, standing desks and scheduled breaks. School-based programmes that enhance structured PE, active commuting, and outdoor play to instil lifelong habits and social support networks can also help promote engagement with peers, families and mentors to sustain participation. Local champions (teachers, healthcare providers, volunteers) also play a key role in promoting and reinforcing behaviour change.



Policymakers can also help shape active environments by implementing WHO Guidelines (e.g. recommending 150–300 min moderate or 75–150 min vigorous activity weekly), urban planning and fiscal incentives including subsidies for sports facilities, active commuting and community fitness, workplace regulations and school PE mandates that prioritise lifelong movement skills over competition-based models.

# Physical Activity Across the Lifespan

Physical activity is essential at every stage of life, supporting physical, mental and social wellbeing from childhood to old age. However, the type, intensity and purpose of movement evolve over time. Understanding these changes and implementing age-specific strategies can maximise the benefits of an active lifestyle across the lifespan.

## Childhood and adolescence: building habits early

Developing an active lifestyle from an early age sets the foundation for lifelong health. Physical activity in children and adolescents is linked to improved motor skills, cognitive development, academic performance and emotional wellbeing. The WHO recommends at least 60 minutes of moderate-to-vigorous physical activity per day for children and teenagers (1). Key benefits of childhood physical activity include enhancing bone density, muscle strength, coordination and cardiovascular health. It also improves concentration, memory and problem-solving skills. Furthermore, physical activity can contribute to reducing stress, anxiety and risk of depression while boosting self-esteem. However, with the advent of modern lifestyles physical activity levels are declining due to increased screen time and urbanisation. To combat this, structured school-based physical education programmes, active play during break times, active commuting from and to school and extracurricular sports must be prioritised to provide physical and health literacy for long-lasting healthy, active lifestyles (5). Encouraging outdoor activities, reducing sedentary screen time and integrating movement into learning can promote long-term positive habits.

## Adults: balancing work and personal health

For adults, balancing work, family and social responsibilities often leads to sedentary habits, making it challenging for adults to stay active. However, regular physical activity is essential for managing stress, preventing chronic diseases and enhancing overall wellbeing. The WHO recommends at least 150–300 minutes of moderate-intensity or 75–150 minutes of vigorous-

intensity exercise per week. To combat work-related sedentary behaviour, active commuting such as walking or cycling along with workplace movement breaks, including standing desks, walking meetings and stretching, can promote regular activity. Time constraints can be addressed by integrating movement into daily routines, such as taking the stairs, engaging in home workouts, or playing actively with children. To sustain motivation, technology-driven solutions like fitness apps, virtual classes and gamified challenges can enhance engagement and accountability, making exercise more enjoyable and habitual.

## Older Adults: maintaining mobility and independence

Physical activity is essential for older adults to preserve functional independence, prevent frailty and reduce age-related disease risks. The WHO recommends at least 150 minutes of moderate intensity activity per week, complemented by strength and balance exercises. Low-impact activities such as walking, swimming, tai chi and yoga enhance mobility while minimising joint strain. Home-based movements like chair yoga and resistance band exercises help those with mobility restrictions remain active, reducing fall risks. Strength and resistance training, including low-strain exercises like wall pushes or partial bodyweight movements, supports muscle and bone health, lowering the risk of osteoporosis and sarcopenia. Social-based exercise programmes, such as dance classes or senior fitness groups, encourage participation and adherence. These programmes can improve physical health but also enhance mental wellbeing by reducing loneliness, promoting social connections and offering cognitive protection against dementia and Alzheimer's.

## Case Study: Micro-exercise as a sustainable approach

Micro-exercise or 'exercise snacks' refer to short bursts of activity performed throughout the day rather than prolonged workout sessions. This

approach is particularly useful for individuals with time constraints or limited access to exercise facilities.

Examples of micro-exercise include:

- **Vigorous Intermittent Lifestyle Physical Activity (VILPA):** This refers to short (1–2 min) high-intensity activities that are integrated into activities of daily living (14). VILPA has emerged as a promising approach to enhancing health and mitigating prevalent barriers associated with physical activity participation.
- **Mini movement breaks:** Performing bodyweight exercises like squats or stretches during work breaks.

## Examples of promoting micro-exercises include:

- **Habit stacking:** Incorporating movement into existing routines, such as calf raises while brushing teeth or lunges while waiting for coffee.
- **Replacement activity:** Taking the stairs instead of lifts, pacing while on calls, or performing household chores at a higher intensity.

**Research suggests that even short** periods of activity, when accumulated over the day, contribute to substantial health improvements. This strategy is especially beneficial for individuals who struggle with motivation or time constraints, providing an accessible and sustainable way to remain active across the lifespan.



# The Link Between Physical Activity and Other Pillars of Self-Care

Physical activity does not exist in isolation; it is deeply interconnected with other key aspects of self-care, including nutrition, mental health and health literacy. A holistic approach that integrates movement with these other pillars enhances health outcomes, promotes sustainable behaviour change and optimises overall wellbeing.

## Synergies with nutrition

Nutrition and physical activity work together to regulate energy balance, support metabolic health, and enhance physical performance. A well-balanced diet fuels movement, while exercise optimises nutrient absorption, metabolism, and body composition (15). Regular physical activity increases energy expenditure, aiding weight management when paired with appropriate caloric intake, with some cultures also considering energy balance concepts like Chi, which are less emphasised in Western perspectives. Muscle recovery and growth rely on sufficient protein intake, particularly post-exercise, to support repair and strength development. Bone health benefits from weight-bearing activities combined with adequate calcium and vitamin D intake, reducing osteoporosis risk. Additionally, physical activity enhances gut health by improving digestion, fostering microbiome diversity, and strengthening overall immunity. To maximise the benefits of movement, individuals should adopt nutritional strategies tailored to their activity levels, including hydration, macronutrient balance and timing of meals around workouts. Attention should be given to the 'licencing effect', when people give themselves permission to indulge or act in ways that contradict their goals after doing something «good» or healthy (e.g., eat unhealthy after a workout (16).

## Impact on mental health and emotional wellbeing

Physical activity is a powerful tool for enhancing mental health, with profound effects on mood regulation, cognitive function and stress resilience. Movement stimulates the release of endorphins, serotonin and dopamine, neurotransmitters that promote emotional wellbeing. Exercise reduces stress and anxiety. Regular physical activity is linked to improved mood comparable to some antidepressant treatments, enhances cognitive function and supports sleep quality. Movement helps regulate circadian rhythms, promoting deeper, more restorative sleep. Integrating mind-body exercises, such as yoga and tai chi, further enhances mental resilience, combining movement with mindfulness and breath control.

## The role of health literacy in promoting physical activity

Health literacy is the ability to access, understand and apply health

information is essential for promoting sustained engagement in physical activity. Individuals with higher health literacy are more likely to recognise the benefits of movement, adopt consistent exercise habits and make informed lifestyle choices. Key aspects of health literacy in physical activity include understanding exercise

recommendations, awareness of movement-related risks, navigating fitness resources and interpreting personal health data and biometric feedback (e.g., heart rate, VO<sub>2</sub> max) for personalised fitness planning. In this regard, public health campaigns, digital tools and community education initiatives play a critical role in improving health literacy, empowering individuals to take charge of their physical activity journey. However, health literacy is insufficient for promoting physical activity. Many people are aware of the benefits of exercise but are inactive. Research suggests that facilitating positive experiences during exercise and developing public health campaigns that focus on such experiences are key factors for effective physical activity promotion.

## Holistic approaches for sustained health improvements

Integrating physical activity, nutrition, mental health strategies and health literacy creates a sustainable self-care framework that enhances long-term health outcomes. This holistic model recognises that movement is not just about exercise – it is part of a broader lifestyle approach that supports overall wellbeing. A holistic self-care strategy integrates multiple dimensions to support overall wellbeing. It combines movement with proper nutrition, mental health support and informed decision-making, ensuring a balanced approach to health. Community-based interventions play a crucial role by promoting engagement through group fitness, peer support and workplace wellness programs. Environmental design is also essential in creating spaces that encourage physical activity, making movement a natural and accessible part of daily life.



# Looking to the Future: the Role of Physical Activity in Self-Care 2030

As we look ahead to 2030 and beyond, physical activity will play an increasingly critical role in shaping the future of self-care and public health.

The future of physical activity will be shaped by technology, data-driven interventions and a holistic health approach. Artificial Intelligence (AI) and machine learning are already used to tailor workouts based on real-time data from wearables and biometrics. Virtual coaches will provide more adaptive training, while predictive analytics will identify health risks for early intervention. Virtual reality, augmented reality and avatar-guided exercise and physiotherapy will make movement more interactive. Such technologically

supported interventions can ensure sustainable motivation. However, technology-driven interventions for physical activity should be designed in ways that do not widen health inequalities.

We would like to see the emergence and widescale adoption of movement-integrated lifestyles that include shift from structured workouts to embedding movement in daily routines. Walkable cities, active workplaces and movement-based learning in schools have the potential to reduce sedentary time. Society should fully embrace exercise as preventive medicine whereas longevity research must highlight movement's role in healthy ageing. Governments

ought to invest more in free exercise spaces, inclusive fitness programmes and financial incentives for active commuting. Disability-friendly tech and global policies should be integrated into education, employment and social systems.

Technological advancements, policy innovations and shifting societal norms will transform how individuals engage in movement, making physical activity more personalised, accessible and integrated into everyday life. However, achieving a physically active global population requires sustained efforts at individual, community and systemic levels.



# A Call to Action: Embedding Physical Activity into Everyday Life



As we move toward 2030, the role of physical activity in self-care, public health and longevity will only grow in importance. To realise a future where movement is embedded in daily life, we must:

- Leverage technology to make fitness more personalised and scalable.
- Advance policy initiatives that prioritise active environments and equity.
- Apply behaviour science models that target individual and systemic behaviour change models that sustain long-term engagement.

- Strengthen cross-sector collaborations between healthcare, urban planning and digital innovation.
- Promote daily bouts of movement (even of light intensity) beyond structured exercise, ensuring it becomes an integrated part of daily living.

By embracing innovation, promoting inclusivity and reinforcing the vital role of physical activity in self-care, we can collectively create a healthier, more active world where everyone (regardless of age, background, or ability) can thrive through movement. The time to act is now. Self-Care 2030.



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