FOCUS ON

Weight management and the wellness economy: Structural implications for public health, prevention policies and health system sustainability

FEDERICO SERRA[1], WALTER RICCIARDI[2], CARLO SIGNORELLI[3], ROBERTA SILIQUINI[4], STEFANO CAPOLONGO[5], CLAUDIO CRICELLI[6], GIUSEPPE NOVELLI[7], ATTILIO PARISI[8], ANNAMARIA COLAO[9], ANDREA LENZI[10]

[1]Health City Institute, Rome, Italy; [2]Università Cattolica del Sacro Cuore, Rome, Italy; [3]Università Vita-Salute San Raffaele, Milan, Italy; [4]Università di Torino, Turin, Italy; [5]Politecnico di Milano, Milan, Italy; [6]Società italiana di medicina generale e delle cure primarie, Florence, Italy; [7]Università Roma Tor Vergata, Rome, Italy; [8]Università di Roma Foro Italico, Rome, Italy; [9]Università of Napoli Federico II, Naples, Italy; [10]Sapienza Università di Roma, Rome, Italy; Consiglio Nazionale delle Ricerche, Rome, Italy

ABSTRACT

The rapid expansion of the global wellness economy represents one of the most profound structural transformations in contemporary health-related systems. Within this evolving landscape, weight management has shifted from an individual behavioral concern to a systems-level determinant of public health, deeply interconnected with non-communicable diseases (NCDs), environmental exposures, urban design, social inequities and health system sustainability. This work aims to analyze weight management as a structural infrastructure of preventive health policy embedded within the broader economic and governance architecture of the wellness economy. We conducted a multidisciplinary analysis drawing on literature published between 2010 and 2024, macroeconomic analyses and international policy frameworks. We examined weight management through a systems lens integrating environmental epigenetics, urban health, pharmacological innovation and planetary health governance. The wellness economy currently exceeds USD 6.8 trillion globally and offers unprecedented preventive potential. However, it also risks fragmentation, inequity and over-medicalization if not aligned with public health principles. Our analysis demonstrates that obesity and metabolic risk must be reframed as structural determinants requiring regulatory alignment, environmental risk mitigation, equity safeguards and integration across public and private actors. Weight management should be recognized as a core component of health

Received: 1 February 2026 | Accepted: 1 March 2026

Correspondence: Federico Serra / Health City Institute, Piazza dei Santi Apostoli 66, 00187, Rome, Italy / E-mail: fedserra@gmail.com

system resilience and long-term sustainability. Repositioning weight management as a structural determinant of planetary health represents a necessary paradigm shift for 21st-century prevention strategies. Effective governance requires coordinated action across multiple sectors to ensure equitable access and sustainable implementation. (www.actabiomedica.it)

Key words: weight management, wellness economy, urban health, health systems sustainability, non-communicable disease prevention

From individual lifestyle to structural health infrastructure

Over the past three decades, global health systems have undergone a fundamental epidemiological transition. Non-communicable diseases (NCDs) now account for the overwhelming majority of morbidity and mortality worldwide, driven by aging populations, urbanization, environmental degradation and profound socioeconomic inequalities (1,2). Traditional healthcare architectures—designed around episodic, hospital-centered care—are increasingly misaligned with the chronic, multifactorial and socially embedded nature of metabolic disease. Within this context, prevention is no longer a supplementary strategy; it is a structural imperative (3-4). Health demand increasingly arises upstream of clinical care, manifesting as lifestyle management, risk stratification and the pursuit of functional longevity. The concept of "wellness" has consequently evolved from a peripheral cultural notion into a powerful economic and governance force. The global rise of the wellness economy reflects this structural shift (5-6). Weight management, in particular, occupies a central and highly strategic position within this ecosystem. It is not merely a matter of caloric balance or personal discipline; it synthesizes biological vulnerability, environmental exposures, urban design, food systems, socioeconomic stratification and long-term fiscal sustainability of healthcare systems (7-8). Reframing weight management as a systems-level determinant of public health—rather than a behavioural outcome—constitutes the core argument of this analysis.

The wellness economy as a macroeconomic health infrastructure

According to the Global Wellness Institute, the global wellness economy exceeded USD 6.8 trillion in 2023, accounting for approximately 6% of global GDP, with projections reaching USD 9–10 trillion by 2029 (5). Consumer-facing segments—including nutrition optimization, fitness, mental health services, sleep technologies and weight management interventions—constitute a rapidly expanding share of this growth (6). This expansion signals a structural reallocation of health-related expenditure toward preventive and self-directed domains, largely financed through private markets (3). The wellness economy increasingly functions as a parallel preventive infrastructure operating alongside traditional healthcare systems. However, its rapid growth generates critical tensions (3, 9-10):

- Prevention shifts from public systems to private markets
- Access becomes stratified by income and digital literacy
- Evidence standards vary across sectors
- Regulatory oversight remains heterogeneous
- Health data governance is fragmented

Weight management lies at the epicentre of these dynamics, serving simultaneously as a driver of market expansion and a major determinant of public health expenditure (9,11).

Weight management in the era of metabolic risk

Obesity and overweight represent some of the most significant modifiable risk factors for type 2 diabetes, cardiovascular disease, hypertension, several malignancies and musculoskeletal disorders (2,8). Yet interpreting weight solely through anthropometric indices obscures its structural determinants (7,12).

Body weight functions as:

- A biomarker of food system industrialization
- A proxy indicator of socioeconomic inequality
- A reflection of urban mobility and built environment
- A downstream consequence of environmental toxicity
- A long-term driver of healthcare costs

In high-income countries, obesity-related complications account for a substantial proportion of healthcare expenditure (11). Without structural intervention, metabolic disease trajectories threaten fiscal sustainability of universal health systems. Thus, weight management is not only a preventive strategy; it is a resilience strategy for health systems.

Beyond behavioural reductionism: Structural determinants of metabolic health

The historical emphasis on individual responsibility—dietary discipline and exercise adherence—has proven insufficient to reverse obesity trends (13). Epidemiological evidence consistently demonstrates a social gradient in obesity prevalence, with disproportionate burden among populations experiencing lower income, reduced education and environmental disadvantage (10). Contemporary food environments are characterized by ubiquitous availability of ultra-processed, energy-dense and low-cost products. Urban planning in many settings discourages active mobility (14-15). Chronic psychosocial stress—associated with precarious employment, housing instability and financial insecurity—modulates neuroendocrine pathways involved in metabolic regulation (16). Under such structural constraints, personal choice is heavily mediated by environmental architecture. Effective policy must therefore shift from moralizing behavior to designing health-enabling systems.

Environmental epigenetics and intergenerational metabolic risk

Emerging research in environmental epigenetics significantly reshapes the conceptual boundaries of obesity prevention. Exposure to endocrine-disrupting chemicals (e.g., bisphenol A, phthalates), particulate matter (PM2.5), persistent organic pollutants and chronic urban stressors can induce stable epigenetic modifications affecting adipogenesis, insulin sensitivity and appetite regulation (17-19). These mechanisms include:

- Altered DNA methylation patterns
- Histone modification changes
- MicroRNA expression shifts
- Inflammatory pathway activation

Crucially, prenatal and early-life exposures may program long-term metabolic vulnerability, generating transgenerational risk accumulation (17-19). This phenomenon may be conceptualized as an intergenerational metabolic debt embedded within polluted and socially stratified environments. In this light, weight management cannot be disentangled from environmental governance, climate mitigation, urban regeneration and chemical regulation policies.

Pharmacological innovation: Promise and policy pressure

Recent advances in incretin-based pharmacotherapies have transformed obesity treatment paradigms. Agents targeting GLP-1 and dual incretin pathways demonstrate substantial weight reduction

and cardiometabolic improvements in randomized trials (20-21). Yet systemic implications remain complex:

- Chronic administration requirements
- High per-patient costs
- Potential large eligible populations
- Risk of medicalizing structural disease drivers
- Equity concerns if access remains privately financed

While pharmacological innovation offers meaningful clinical benefit, it must be embedded within multidisciplinary care pathways and public reimbursement strategies guided by strict appropriateness criteria. Medication should complement—rather than substitute—structural preventive policies.

Urban health: The city as a metabolic ecosystem

Over 55% of the global population now resides in urban areas. Cities operate as metabolic ecosystems, concentrating environmental exposures, food environments, mobility patterns and stress gradients. Urban characteristics influencing metabolic health include (14-16):

- Walkability and active transport infrastructure
- Availability of green spaces
- Food retail distribution
- Air pollution levels
- Heat island effects
- Housing density and quality

Obesogenic urban environments disproportionately impact socioeconomically disadvantaged communities, amplifying health inequities (17). Urban planning thus emerges as a primary prevention instrument. Weight management policy cannot be separated from housing, mobility, zoning and environmental regulation.

Integration between wellness markets and health systems

Digital platforms, wearable devices, telehealth coaching and behavioral apps increasingly intersect with formal healthcare. These tools may enhance early risk detection and patient engagement, but they also create parallel private health circuits. Key governance challenges include (10):

- Clinical validation of digital interventions
- Interoperability with public health records
- Data privacy and ownership
- Algorithmic bias
- Unequal digital access

Public systems must actively regulate and integrate wellness innovations to prevent fragmentation and inequity.

Weight management within planetary health and the SDGs

Metabolic disease intersects directly with planetary health. Industrial food systems, ultra-processed food production, sedentary urban design and pollution-intensive transportation models simultaneously drive obesity prevalence and environmental degradation (7).

Weight management strategies aligned with (22-23):

- SDG 3 (Health)
- SDG 10 (Reduced Inequalities)
- SDG 11 (Sustainable Cities)
- SDG 12 (Responsible Consumption)
- SDG 13 (Climate Action)

can serve as cross-sectoral levers linking human health to ecological sustainability.

Wellness, when reframed as systems governance rather than consumer trend, becomes a bridge between economic development and planetary resilience.

Policy architecture for structural governance

A coherent structural framework requires:

- Integration of weight management into national prevention plans
- Environmental exposure mitigation policies

- Urban health–aligned planning
- Appropriateness-based pharmacological reimbursement
- Public–private regulatory harmonization
- Equity-centred access design
- Health literacy reinforcement
- Long-term cost-effectiveness model

Governance must move beyond sectoral silos toward interministerial coordination integrating health, environment, finance, urban development and social policy.

Reframing weight management as public health infrastructure

Weight management represents one of the most powerful leverage points for confronting the intertwined crises of NCDs, inequality, environmental degradation and fiscal pressure on healthcare systems (1-2,11). The wellness economy offers innovation and preventive potential, but without structural governance it risks amplifying inequities and commercial distortion. Reframing weight management as a structural public health infrastructure—embedded within planetary health governance—is not merely a conceptual shift; it is a policy necessity for sustainable health systems in the 21st century.

Conflict of Interest: Each author declares that he or she has no commercial associations (e.g. consultancies, stock ownership, equity interest, patent/licensing arrangement etc.) that might pose a conflict of interest in connection with the submitted article.

Authors Contribution: All authors contributed equally to the conception and design of the work, drafting and critical revision of the manuscript for important intellectual content. All authors approved the final version to be published and agreed to be accountable for all aspects of the work. F.S. additionally coordinated the working group.

Declaration on the Use of AI: AI-assisted tools were used exclusively for grammar and linguistic revision of the manuscript

References

1. World Health Organization. Global status report on noncommunicable diseases 2023. Geneva: WHO; 2023.
2. GBD 2019 Risk Factors Collaborators. Global burden of 87 risk factors in 204 countries and territories, 1990-2019: a systematic analysis for the Global Burden of Disease Study 2019. Lancet. 2020;396(10258):1223-49. doi:10.1016/S0140-6736(20)30752-2
3. OECD. Health at a Glance 2023: OECD Indicators. Paris: OECD Publishing; 2023. doi:10.1787/7a7afb35-en
4. Frieden TR. A framework for public health action: the health impact pyramid. Am J Public Health. 2010;100(4):590-5. doi:10.2105/AJPH.2009.185652
5. Global Wellness Institute. Global Wellness Economy Monitor 2023. Miami: GWI; 2023.
6. McKinsey & Company. Future of Wellness Survey 2023. New York: McKinsey; 2023.
7. Swinburn BA, Sacks G, Hall KD, et al. The global obesity pandemic: shaped by global drivers and local environments. Lancet. 2011;378(9793):804-14. doi:10.1016/S0140-6736(11)60813-1
8. Afshin A, Forouzanfar MH, Reitsma MB, et al. Health effects of overweight and obesity in 195 countries over 25 years. N Engl J Med. 2017;377(1):13-27. doi:10.1056/NEJMoa1614362
9. Sassi F. Obesity and the economics of prevention. Paris: OECD Publishing; 2010.
10. Marmot M. The health gap: the challenge of an unequal world. Lancet. 2015;386(10011):2442-4. doi:10.1016/S0140-6736(15)00150-6
11. Cawley J, Meyerhoefer C. The medical care costs of obesity: an instrumental variables approach. J Health Econ. 2012;31(1):219-30. doi:10.1016/j.jhealeco.2011.10.003
12. World Obesity Federation. World Obesity Atlas 2024. London: WOF; 2024.
13. Roberto CA, Swinburn B, Hawkes C, et al. Patchy progress on obesity prevention: emerging examples, entrenched barriers, and new thinking. Lancet. 2015;385(9985):2400-9. doi:10.1016/S0140-6736(14)61744-X
14. Diez Roux AV, Mair C. Neighborhoods and health. Ann N Y Acad Sci. 2010;1186:125-45. doi:10.1111/j.1749-6632.2009.05333.x
15. Rydin Y, Bleahu A, Davies M, et al. Shaping cities for health: complexity and the planning of urban environments in the 21st century. Lancet. 2012;379(9831):2079-108. doi:10.1016/S0140-6736(12)60435-8
16. Münzel T, Sørensen M, Gori T, et al. Environmental stressors and cardio-metabolic disease: part II-mechanistic insights. Eur Heart J. 2017;38(8):557-64. doi:10.1093/eurheartj/ehw294
17. Rappaport SM, Smith MT. Environment and disease risks. Science. 2010;330(6003):460-1. doi:10.1126/science.1192603
18. Heindel JJ, Blumberg B. Environmental obesogens: mechanisms and controversies. Annu Rev Pharmacol Toxicol.

2019;59:89-106. doi:10.1146/annurev-pharmtox-010818-021304
19. Vrijheid M, Slama R, Robinson O, et al. The human early-life exposome (HELIX): project rationale and design. Environ Health Perspect. 2014;122(6):535-44. doi:10.1289/ehp.1307204
20. Wilding JPH, Batterham RL, Calanna S, et al. Once-weekly semaglutide in adults with overweight or obesity. N Engl J Med. 2021;384(11):989-1002. doi:10.1056/NEJMoa2032183
21. Jastreboff AM, Aronne LJ, Ahmad NN, et al. Tirzepatide once weekly for the treatment of obesity. N Engl J Med. 2022;387(3):205-16. doi:10.1056/NEJMoa2206038
22. Whitmee S, Haines A, Beyrer C, et al. Safeguarding human health in the Anthropocene epoch: report of The Rockefeller Foundation-Lancet Commission on planetary health. Lancet. 2015;386(10007):1973-2028. doi:10.1016/S0140-6736(15)60901-1
23. United Nations. Transforming our world: the 2030 Agenda for Sustainable Development. New York: UN; 2015.