



Obesity in China: current progress and future prospects

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The prevalence of overweight and obesity in China has continued to increase over the last decade, with mounting health and economic consequences. In this Personal View, we critically examine recent advances and identify current and emerging challenges in obesity across public health and policy, clinical research, and practice. National policy frameworks, technical health and nutrition guidelines, and multisectoral collaboration have elevated obesity on the public agenda. Evidence supporting lifestyle interventions and medications for obesity continues to accumulate. Since 2021, five additional GLP-1 receptor agonists (including liraglutide, beinaglutide, semaglutide, tirzepatide, and mazdutide) have been approved in China for weight management, broadening therapeutic choices and initiating a transformation in obesity care. Nevertheless, several key challenges remain which can undermine the sustained impact of the progress. These include limitations in existing diagnostic criteria for obesity which captures phenotypic and cardiometabolic heterogeneity; limited availability of quantifiable, actionable, and accountable national targets which weakens governance and evaluation; and a scarcity of evidence-based algorithms for obesity pharmacotherapy, which risks over-reliance on medication and diverts attention from socioeconomic, environmental, and behavioural determinants. We call for people-centred, integrated systems that embed whole-person obesity care within a planetary health framework and deliver a coherent continuum of prevention, treatment, and long-term support.

Introduction

Obesity is a major public health issue in China. 4 years ago, we reviewed the epidemiology, clinical management, and health policies for obesity in China and highlighted the substantial burden, the minimal availability of evidence-based interventions, and the insufficient political and social momentum to effectively tackle the pressing challenge.^{1–3} Since then, considerable advances have been made in obesity research and practice in China which have been underpinned by growing political commitment and multisectoral collaboration. It is therefore both timely and necessary to revisit these developments and reflect on their implications for future efforts to combat obesity.

The prevalence of overweight and obesity in China has continued to rise. National surveys indicate that about half of adults in China and 20% of children and adolescents aged 6–17 years are living with overweight or obesity,¹ making China the country with the greatest number of people affected. In addition, China's demographic transition is amplifying the obesity challenge. The population is ageing rapidly, and the number of children and adolescents has declined sharply over the last decade.⁴ Despite the demographic contraction in the young population, the prevalence, severity, and absolute burden of overweight and obesity are projected to rise in this population.⁵ If current upward trends in adult obesity and life expectancy persist,^{6,7} the number of older adults living with obesity will increase, and sarcopenic obesity, characterised by excess adiposity with age-related loss of muscle mass and strength, might become a prominent concern. These shifts will place substantial pressure on a health care system that is not currently configured to deliver age-appropriate obesity care. Although further increases are projected among both adults and children, these trends are expected to disproportionately affect socioeconomically disadvantaged populations.^{5,7–10} Socioeconomic disparities

in the obesity burden could be worsened by insufficient access to obesity treatment and related services among the most affected populations.

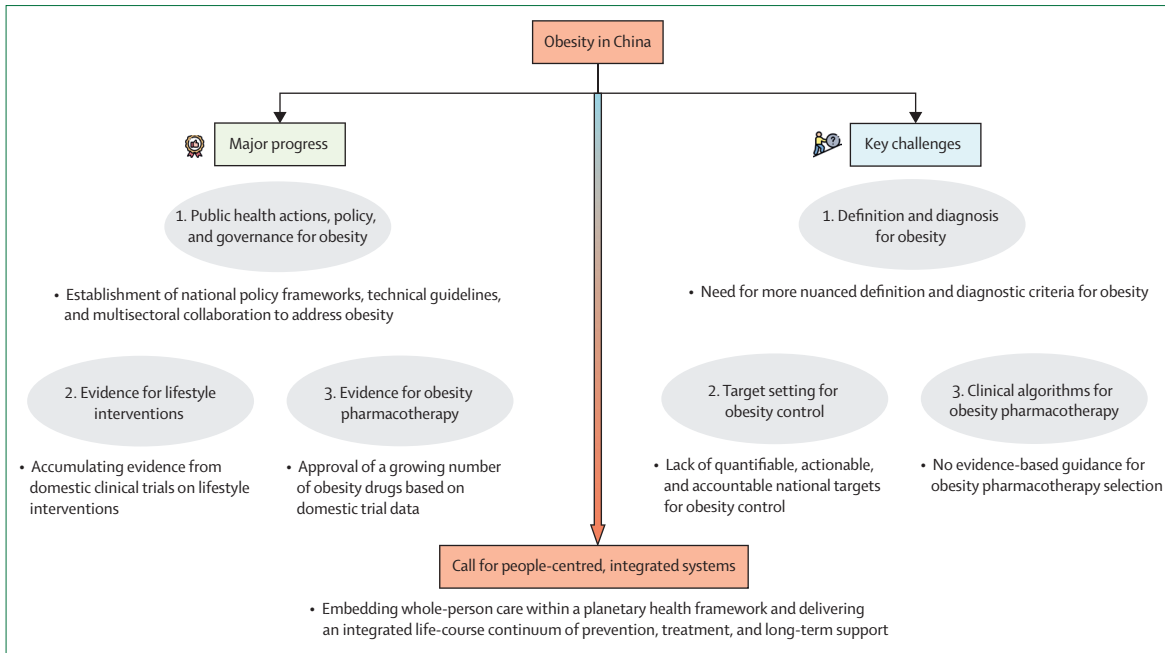
The post-COVID-19 pandemic economic slowdown in China and globally could be exacerbating the social and commercial determinants of obesity. It might constrain household budgets and shift consumption toward cheaper, unhealthier foods. In addition, labour market disruptions such as increasing job instability and longer working hours, particularly among lower-income groups, can reduce opportunities for leisure-time physical activity and increase sedentary behaviours, thereby contributing to weight gain. Balancing economic growth in the food industry with public health priorities remains a substantial challenge. The rapid expansion of fast food, takeout, and pre-packaged and pre-prepared food sectors, together with the proliferation of supermarkets, convenience stores, and online food delivery platforms, has substantially increased both the availability and accessibility of processed, energy-dense foods.¹¹ These developments undermine efforts to reduce obesogenic environments and contribute to consumer behaviours such as increased consumption of unhealthy foods and more sedentary lifestyles.

In this Personal View, we summarise major progress in obesity prevention and control in the 4 years since our 2021 Series on Obesity in China^{1–3} and identify current and emerging challenges (figure 1). We also assess the implications of the progress and challenges for future policy and practice and call for people-centred, integrated systems to curb obesity.

Major progress in obesity control

Public health actions, policy, and governance

Substantial progress has been made in the efforts to control obesity in China (figure 1). Given the substantial burden, both childhood and adult obesity have attracted increasing attention from policy makers. In alignment



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Figure 1: Selected progress and challenges in obesity prevention and control in China
The figure summarises key progress and identifies challenges in obesity control and calls for people-centred, integrated systems.

with the Healthy China Initiative (2019–2030), the Weight Management Years campaign was jointly launched by several governmental agencies in 2024 as a mass mobilisation for obesity prevention and control,¹² and was further reinforced in 2025 to promote multisectoral actions. As the world's largest nationally coordinated, population-wide weight control initiative, the campaign aims to address key determinants of overweight and obesity at both the population and individual levels. At the population level, it focuses on creating supportive environments, fostering a societal framework that positions weight management as a collective responsibility with universal benefits, enhancing public awareness and skills, and promoting the adoption of healthy lifestyles. At the individual level, strategies include establishing weight management clinics, integrating weight management into contracted family doctor services, and improving weight-related health outcomes. To support the implementation, the National Health Commission subsequently released the Guidelines for the Diagnosis and Treatment of Obesity (2024)¹³ and the Guidelines for Weight Management (2024).¹⁴ Other key guidelines issued by governmental agencies and expert organisations include the Technical Guidelines for Comprehensive Prevention and Control of Overweight and Obesity in Primary and Secondary School Students (2024),¹⁵ and the Chinese Dietary Guidelines (2022).¹⁶ The proposed 2025 update to the General Rules for Nutrition Labelling of Prepackaged Foods will introduce mandatory disclosure of sugar and saturated fat, in addition to previously required energy and core nutrients (ie protein, fat, carbohydrates, and sodium). It will also mandate

including a warning advising children and adolescents to limit intake of salt, oil, and sugar.¹⁷ In addition, the draft China National Food Safety Standard for Pre-prepared Dishes, which is the first national standard to specify the scope of pre-prepared dishes, has proceeded to formal public consultation following expert review. The draft prohibits the use of preservatives in pre-prepared dishes and requires explicit labelling of their pre-prepared nature. In addition, to promote physical activity, the National Climate Change Adaptation Strategy 2035 has outlined actions mandating substantial ecological and environmental improvements.¹⁸ Central to these initiatives is the substantial expansion of green infrastructure, including urban parks and forests, public outdoor recreational facilities, and community-based fitness amenities. Important national expert organisations dedicated to obesity control, such as the China Obesity Federation, have been established since 2021 to address the urgent challenge through multidisciplinary collaboration among health and non-health sectors. Moreover, national conferences and workshops on obesity are being convened with increasing frequency each year to disseminate the latest developments in obesity research and practice, as well as potential strategies for obesity control.

Evidence for lifestyle interventions

Other major advances include the accumulation of evidence from domestic clinical trials on obesity interventions conducted in China over the past 4 years. An increasing number of high-quality trials have been conducted to assess the efficacy and safety of lifestyle

interventions. Low carbohydrate intake was reported to be more potent to achieve weight loss over a 12-week period than a calorie-restricted diet among Chinese adults with overweight or obesity, and its combination with calorie restriction could augment the beneficial effects of reducing BMI, body weight, and metabolic risk factors.¹⁹ Consistently, both an isocaloric healthy low-carbohydrate diet and a 10-h time-restricted eating regimen produced greater reductions in BMI compared with calorie restriction alone over a similar intervention period.²⁰ Specifically, the healthy low-carbohydrate diet resulted in greater fat mass loss, whereas time-restricted eating led to a more substantial reduction in lean mass beyond that observed with calorie restriction. This suggests caution when adopting time-restricted eating, as the loss of lean mass is associated with declines in physical strength and an increased risk of weight regain.²⁰ In addition, 8-h time-restricted eating and its combination with a low-carbohydrate diet for 3 months yielded more reductions in visceral fat area and cardiometabolic events than a low carbohydrate diet in participants with metabolic syndrome.²¹ However, in a 12-month trial among adults with obesity, 8-h time-restricted eating with calorie restriction did not show greater reduction in body weight, body fat, or metabolic risk factors than daily calorie restriction alone.²² Low-carbohydrate diets are frequently defined as less than 26% of energy from carbohydrates (or <130 g/day of carbohydrates),^{23,24} whereas calorie-restriction diets are defined as a sustained energy deficit of about 500–750 kcal/day below requirements.^{25,26} The trials varied slightly in their working definitions of low-carbohydrate diets, calorie restriction, and time-restricted eating. The converging lines of evidence indicate that low-carbohydrate diets, time-restricted eating, and calorie restriction could have complementary roles in clinical weight loss interventions among Chinese populations. However, long-term adherence to these dietary interventions and their long-term effects on cardiometabolic health and other health risks are currently insufficiently characterised in Chinese adults.

Despite the overall low quality, emerging evidence from clinical trials on obesity control among Chinese children and adolescents is increasingly being reported.²⁷ In a cluster randomised clinical trial across three socio-economically distinct regions in China, a multifaceted lifestyle intervention targeting both children (promoting healthy diet and physical activity) and their environment (engaging schools and families to support children's behavioural changes) was associated with reductions in mean BMI (mean between-group difference -0.46 kg/m²; intervention vs control) and a greater relative reduction in obesity prevalence from baseline (27.0% vs 5.6%).²⁸ In another novel trial, an 8-week virtual reality sports therapy provided comprehensive improvements in physical, psychological, and cognitive health, beyond weight loss among adolescents with obesity.²⁹ Despite a paucity of robust evidence, innovative

technologies, including virtual reality and artificial intelligence,^{30,31} could facilitate population-level scale-up of conventional lifestyle interventions for obesity in China by enhancing effectiveness, adherence, and cost-effectiveness. Findings from these trials conducted in Chinese populations, together with evidence from other regions, have considerably strengthened the scientific evidence base for incorporating lifestyle interventions into nutrition guidelines and weight management practices in China.

Evidence for obesity pharmacotherapy

Beyond lifestyle interventions, a range of obesity medications has been evaluated in clinical trials among Chinese adults (figure 2).^{32–36} In a trial among 427 Chinese adults with overweight or obesity without diabetes, beinaglutide (a recombinant human GLP-1 receptor agonist) at 0.2 mg three times daily for 16 weeks led to clinically meaningful weight loss with good tolerability.³² In addition, the robust efficacy and acceptable safety profile previously shown in other populations of once-weekly semaglutide at 2.4 mg, a long-acting GLP-1 receptor agonist for weight management, have been confirmed in a clinical trial conducted among Chinese participants.³³ In a multicentre trial among 210 Chinese adults with overweight or obesity, once-weekly treatment with tirzepatide, a glucose dependent insulinotropic polypeptide receptor and GLP-1 receptor dual agonist, at doses of 10 mg or 15 mg for 52 weeks also produced clinically relevant weight loss with a favourable safety profile.³⁴ In addition, once-weekly mazdutide, a GLP-1 receptor and glucagon receptor dual agonist administered at a dose of 4 mg or 6 mg resulted in clinically meaningful reductions in body weight in a trial among 610 Chinese adults.³⁵ In a 2025 trial among 882 participants, ecnoglutide, a cyclic adenosine monophosphate-biased GLP-1 receptor agonist, showed substantial reductions in body weight after a 48-week intervention, accompanied by notable improvements in cardiometabolic risk factors and liver fat content.³⁶ Given that over half of Chinese adults living with overweight or obesity have metabolic dysfunction-associated fatty liver disease,^{38,39} the observed reduction in liver fat content represents a major therapeutic outcome. Among the medications assessed, tirzepatide 15 mg and ecnoglutide 2.4 mg appear to confer the largest weight-loss effect in Chinese adults (figure 2).

Evidence from Chinese trials is supporting regulatory approval of weight-loss medications in China. Generally, new drugs must undergo independent clinical trials in China to obtain marketing authorisation, except for some drugs intended for the treatment of life-threatening diseases, which can be approved without additional stand-alone trials. Based on the clinical evidence, five additional GLP-1 receptor agonists agents (including liraglutide, beinaglutide, semaglutide, tirzepatide, and mazdutide) have been approved in China, following the

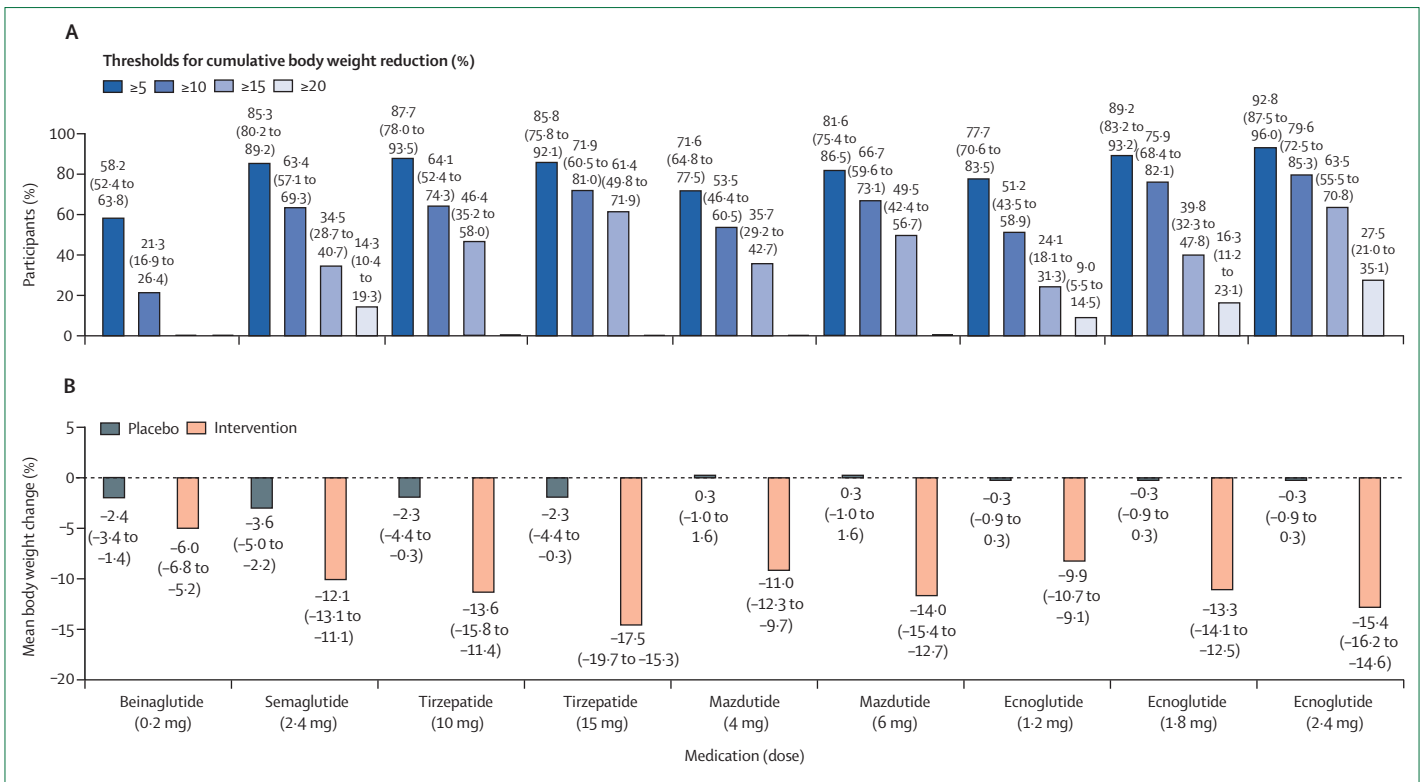


Figure 2: Efficacy of five obesity medications in Chinese adults from clinical trials

Results from clinical trials in Chinese adults for the following obesity medications are presented: beinaglutide 0.2 mg three times daily (follow-up duration 16 weeks);³⁷ semaglutide 2.4 mg once weekly (44 weeks);³³ tirzepatide 10 mg or 15 mg once weekly (52 weeks);³⁴ mazdutide 4 mg or 6 mg once weekly (48 weeks);³⁵ ecnoglutide 1.2 mg, 1.8 mg, or 2.4 mg once weekly (48 weeks).³⁶ (A) Proportions (95% CIs) of participants with overweight or obesity in the intervention groups achieving cumulative body weight reductions of 5% or more, 10% or more, 15% or more, and 20% or more from baseline. Data for the following thresholds were unavailable for some obesity medications in trials among Chinese participants and are therefore omitted: 15% or more and 20% or more for beinaglutide 0.2 mg three times daily, 20% or more for tirzepatide 10 mg and 15 mg once weekly, and 20% or more for mazdutide 4 mg and 6 mg once weekly. The 95% CIs for the proportions achieving cumulative body weight reduction thresholds were calculated using the Wilson score interval method.³⁷ (B) Mean percent change (95% CIs) in body weight from baseline in the intervention and control groups. The 95% CIs for the mean percent change in body weight for tirzepatide and mazdutide were extracted directly from the literature, whereas those for the other obesity medications were estimated as mean plus or minus 1.96 × standard error.

initial approval of orlistat in 2001 (table). Furthermore, a new drug application for ecnoglutide is currently being submitted to the National Medical Products Administration in China. Meanwhile, semaglutide, liraglutide, and tirzepatide along with dulaglutide are included in the 2025 WHO Model List of Essential Medicines for managing type 2 diabetes with established cardiovascular disease or chronic kidney disease, or with comorbid obesity,⁴⁰ a move that could promote broader access to these medications at more affordable costs. Given their potent weight-loss effects, some GLP-1 receptor agonists can serve as alternatives to bariatric surgery for individuals with severe obesity, or as adjunctive therapy for those who have not had adequate weight loss following bariatric procedures. The introduction of these obesity medications, alongside other weight-loss agents currently under clinical investigation,^{41,42} will materially expand the therapeutic arsenal and can aid in transforming the landscape of weight management for individuals with obesity in China.

Key potential challenges in obesity control

Definition and diagnosis for obesity

Although progress has been made in advancing obesity control in China in the last 4 years, major challenges persist in effectively curbing the obesity epidemic (figure 1). A fundamental issue lies in the need to standardise the definition for obesity, particularly within the context of its recognition as a chronic disease worldwide. Although BMI is widely used to screen for overweight and obesity in Chinese adults, with a threshold of 24.0–27.9 kg/m² for overweight and 28.0 kg/m² or more for obesity,¹ these lower cut-off points have not been globally recognised. A substantial share of reports and analyses on overweight and obesity in China, published in international journals or documents, primarily applies the WHO criteria established for white populations, which define the BMI threshold for overweight at 25.0–29.9 kg/m² and the BMI threshold for obesity at 30.0 kg/m² or more.^{8,43–45} However, Chinese adults tend to have higher percentages of body fat and greater risks of cardiometabolic diseases and premature mortality than

	Year of approval	Indication	Dose and administration	Mechanism of action
Orlistat	2001	BMI ≥ 24 kg/m ²	120 mg orally, three times daily with or immediately after meals	Gastrointestinal lipase inhibitor
Liraglutide	2023	BMI ≥ 30 kg/m ² or BMI ≥ 27 kg/m ² with at least one body weight-related comorbidity	Initial 0.6 mg/day for one week, increasing by 0.6 mg/day weekly to a maintenance dose of 3.0 mg/day; subcutaneous injection	GLP-1 receptor agonist
Beinaglutide	2023	BMI ≥ 28 kg/m ² or BMI ≥ 24 kg/m ² with at least one body weight-related comorbidity	0.06 mg per dose before meals, three times daily; increased to 0.20 mg per dose, three times daily after 1 month; subcutaneous injection	GLP-1 receptor agonist
Semaglutide	2024	BMI ≥ 30 kg/m ² or BMI ≥ 27 kg/m ² with at least one body weight-related comorbidity	0.25 mg weekly, titrated to a maintenance dose of 2.40 mg or 1.70 mg weekly after 4 months; subcutaneous injection	GLP-1 receptor agonist
Tirzepatide	2024	BMI ≥ 28 kg/m ² or BMI ≥ 24 kg/m ² with at least one body weight-related comorbidity	2.5 mg weekly, escalated to 5 mg weekly after 4 weeks, with increments of 2.5 mg every 4 weeks up to 15 mg; subcutaneous injection	Glucose dependent insulinotropic polypeptide receptor and GLP-1 receptor dual agonist
Mazdutide	2025	BMI ≥ 28 kg/m ² or BMI ≥ 24 kg/m ² with at least one body weight-related comorbidity	2 mg weekly, increased to 4 mg weekly after 4 weeks, and up to 6 mg weekly after another 4 weeks; subcutaneous injection	GLP-1 receptor and glucagon receptor dual agonist

Table: Obesity medications approved in China

white individuals at equivalent BMI levels.¹ Notably, approximately 10% of Chinese adults fall within the 24–25 kg/m² BMI range, and half of those classified as having obesity according to Chinese criteria have a BMI between 28 kg/m² and 30 kg/m².^{1,8} As a result, the prevalence of overweight and obesity in the Chinese population has been substantially underestimated when using the WHO criteria. Both the absolute burden of diseases attributable to high BMI and its ranking among all major risk factors are substantially understated in the assessments of disease burden for China in many reports.^{43,45–49} This underestimation fails to reflect the true severity of the obesity problem and could misguide policy-making efforts.

In addition, the diagnostic criteria for obesity in China require further refinement to ensure appropriate clinical management, as the current BMI-based definition is relatively imprecise to capture phenotypic and cardio-metabolic heterogeneity.^{50,51} A 2025 framework proposed by *The Lancet Diabetes and Endocrinology* Commission recommends diagnosing the physical obesity phenotype using BMI in combination with an additional anthropometric criterion (eg, waist circumference, waist-to-hip ratio, or waist-to-height ratio) or direct measurement of body fat.⁵² The framework further defines preclinical obesity as the presence of an obesity phenotype without major obesity-related signs, symptoms, or limitations in daily activities, and clinical obesity as the presence of such manifestations. This approach is also supported by the consensus from the European Association for the Study of Obesity (EASO),⁵³ which incorporates both anthropometric and clinical components in the diagnosis of obesity. Although the EASO criteria do not distinguish between preclinical and clinical obesity, they still emphasise the importance of aligning the diagnosis with medical, functional, and psychological impairments. Relative to

BMI-based criteria alone, *The Lancet* Commission framework⁵² is expected to more accurately capture obesity phenotypes (preclinical and clinical) and help prioritise care for those most in need, particularly in low-resource settings. Thus, the approach potentially advances targeted risk-reduction strategies for preclinical obesity and guides therapeutic decision-making for clinical obesity. Individuals are triaged such that high-intensity care is directed to those with clinical obesity, whereas those with preclinical obesity receive preventive interventions to avert progression to clinical obesity and the development of obesity-related complications. Implementation in China will require alignment on treatment indications and outcome endpoints across regulatory authorities, pharmaceutical companies, and health-care providers, so that BMI is used in conjunction with other anthropometric indicators and obesity-related clinical manifestations to enable a more comprehensive and accurate assessment.⁵⁴ However, further evidence is required to establish the effectiveness and applicability of the new diagnostic framework for preclinical and clinical obesity in the Chinese population.

Target setting for obesity control

More quantifiable, actionable, and accountable targets for obesity control should be clearly defined and systematically integrated into national strategies in China. Although the World Health Assembly has set global targets to halt the rise in childhood and adult obesity by 2025, maintaining prevalence at 2010 levels,⁵⁵ national guidelines in China have adopted more pragmatic objectives: the first, reaching a 70% reduction in the annual growth rate of childhood obesity by 2030, relative to the period of 2002–2017;⁵⁷ the second, continuously slowing the annual growth rate of adult obesity by 2030, relative to the period of 2002–2012.⁵⁷ Although very few countries are on track to meet these

global targets,^{43,55,58} China has shown a notable deceleration in the rate of increase of overweight and obesity among both children and adults, particularly in regions with high socioeconomic status.^{8–10} However, to effectively address the complexity of obesity, it is essential that national targets are aligned with both population-wide and high-risk strategies. First, targets should include reducing overall obesity prevalence and improving population-level adiposity indicators through a comprehensive suite of anthropometric measures (beyond BMI) in conjunction with direct assessments of body fat. As the population mean BMI is strongly associated with the prevalence of overweight and obesity,^{59,60} effective control of obesity requires shifting the entire distribution of adiposity indicators towards lower levels. Second, in line with international benchmarks for management of other chronic conditions, such as HIV/AIDS,⁶¹ obesity targets should encompass the full continuum of diagnosis, treatment, and prognosis. Specifically, given that approximately one third of Chinese adults with obesity are unaware of their condition,⁶² it is crucial to increase the number of individuals who are screened, receive further diagnostic evaluation, and are aware of their obesity status. Among those who are aware, clear targets should be set for the number of individuals receiving appropriate treatment. For individuals receiving treatment, further targets should focus on achieving guideline-recommended, stage-specific weight loss.¹⁴

Clinical algorithms for obesity pharmacotherapy

With the approval of multiple obesity medications in China, there is a growing risk that obesity management will rely excessively on pharmacological interventions. The rapidly expanding variety of obesity pharmacotherapies available in the Chinese market can complicate the selection of optimal treatment options for both patients and clinicians. This increasing selection of obesity medications can lead to both overtreatment and undertreatment of obesity. On the one hand, it appears that the indiscriminate or inappropriate use of these medications is increasing among adults with overweight or obesity in China, although more robust evidence is needed to substantiate this trend. On the other hand, inadequate long-term management following the discontinuation of arbitrarily prescribed obesity medications can lead to weight regain and reduced motivation for sustained weight control. Whether these medications, especially GLP-1 receptor agonists with potent weight-loss effects, can be used without lifestyle interventions remains to be assessed in clinical trials.⁶³ Nevertheless, it is anticipated that many individuals could opt for obesity pharmacotherapy in practice if the chronic disease concept of obesity is widely accepted in China. Given the high incidence of weight regain after discontinuation of obesity medications, major challenges exist in determining the optimal duration of therapy at prescribed doses, developing evidence-based strategies for

tapering or withdrawal, and identifying alternative approaches for weight maintenance thereafter.⁶⁴ Of note, beyond their effects on lowering body weight and blood glucose, clinical trials have reported that GLP-1 receptor agonists might reduce the risks of obesity-related conditions, including cardiovascular disease, metabolic dysfunction-associated fatty liver disease, osteoarthritis, and obstructive sleep apnea.^{65–67} However, these potential benefits require confirmation through long-term studies, particularly in Chinese populations. In addition, long-term evaluation is warranted for safety concerns, including gallbladder and biliary disorders, psychiatric safety, and loss of lean mass.^{65,66} As obesity medications differ in weight-loss efficacy and in their effects on obesity-related complications, personalised therapy based on patient characteristics and medication attributes is warranted. Pharmacological treatment algorithms from the EASO provide a feasible framework for tailored care;⁶⁷ similar guidance should be developed in China as evidence on obesity pharmacotherapies available in the Chinese market accumulates for different obesity-related complications.

Pharmacotherapy is not sufficient for prevention and control of obesity in China. Most obesity medications are prohibitively expensive for the average Chinese patient and, therefore, are not a sustainable option. If these agents could be eventually included in the national health insurance scheme, innovative pricing mechanisms, such as volume-based procurement,⁶⁸ could potentially lower prices and reduce out-of-pocket expenses. However, relying solely on medical interventions for obesity control is unlikely to reverse the rising trend of obesity in China. Of note, for childhood obesity in China, evidence supporting the use of weight-loss medications or surgical procedures is scarce; consequently, lifestyle modification is the primary management option in most cases. Like other non-communicable diseases, obesity should be conceptualised within a systems approach. Beyond individual-level prevention and clinical management through lifestyle modification and medical therapy, effective interventions must expand to address obesogenic environments and food systems, as well as upstream regulatory, sociocultural, and economic determinants that shape individual lifestyles and behaviours.

Call for people-centred, integrated systems

Effective obesity control requires the establishment of people-centred, integrated systems that address the comprehensive and long-term needs of individuals and communities across the life course.⁶⁹ Such systems align preventive, primary, and specialty care with social services and community resources to deliver coordinated, continuous support for individuals living with obesity. Obesity not only serves as an independent risk factor for multiple non-communicable diseases, but also shares common risk factors and determinants with many of them. To maximise its effect, obesity prevention and control should be systematically integrated into the

Search strategy and selection criteria

We searched PubMed for original articles and reviews from Jan 1, 2021, to Oct 15, 2025, using the following terms in various combinations: "obesity", "overweight", "body mass index", "epidemiology", "risk factors", "social", "economic", "environmental", "dietary", "exercise", "genetics", "comorbidity", "outcome", "weight loss", "management", "care", "treatment", "lifestyle", "physical activity", "exercise", "nutrition", "behavior change", "medication", "pharmacotherapy", "anti-obesity drugs", "weight-loss drugs", "bariatric surgery", "metabolic surgery", "guidelines", "recommendations", "public health", "policy", "prevention", and "control". We used similar search terms to retrieve Chinese-language articles from the China National Knowledge Infrastructure and Chongqing VIP databases, two leading Chinese-language journal databases in China. We also searched the reference lists of articles identified by this search strategy and selected those we judged relevant. We prioritised studies conducted in China or among Chinese populations and additionally reviewed key guidelines and clinical trials from other countries. We also reviewed obesity-related information from the official websites of Chinese national governmental agencies and professional societies, including the State Council, the National Health Commission, the Ministry of Education, the General Administration of Sport, the National Medical Products Administration, and the Chinese Nutrition Society. We included other literature and data sources that represented important and timely contributions to the topic. As an update to the Obesity in China Series published in *The Lancet Diabetes & Endocrinology* in 2021, our literature review mainly covers the period from 2021 onward.

national strategies for non-communicable diseases, leveraging public health infrastructure and tiered health-care systems in China.⁷⁰ Specifically, obesity control should be incorporated into China's National Essential Public Health Services,⁷¹ so that implementation and monitoring of obesity control could be supported by standardised targets, interoperable data systems, and routine performance feedback.

People-centred systems for obesity control in China should adopt a life-course approach. Despite the strong inter-relationship between childhood and adult obesity, existing policies and strategies in China are often fragmented, targeting these life stages in isolation. Implementing a life-course approach to both lifespan and disease trajectories is crucial to breaking down these silos. Given the nationwide obesity epidemic and complex economic conditions, it is crucial to identify the more feasible and attainable objectives for obesity control. Students from primary school through college spend much of their time in stable school environments, where formal education and peer networks shape their lifestyles and behaviours. The school-based intervention model has been extensively studied and is recognised for potential application for childhood obesity prevention.⁷²⁻⁷⁴

Furthermore, obesity tends to cluster within families, as parents and children often share risk factors such as unhealthy diet and physical inactivity. Thus, implementing childhood obesity interventions through school-based models could be an easy option for effective obesity control in China, with potential positive spillover effects on family environments and adult obesity reduction.

People-centred, integrated systems can help to address unconventional or emerging determinants of obesity. Beyond established risk factors, the rapid rise in obesity in China might reflect adaptation to climate change and environmental degradation,⁷⁵ and increasing exposure to endocrine-disrupting chemicals pervasive in daily life.⁷⁶ These determinants are closely linked to planetary health, which integrates the health of human societies and the integrity of the natural systems that sustain them. As food systems are a leading driver of planetary boundary transgression that threatens planetary health,⁷⁷ they might also amplify these determinants of obesity. In line with this, lower adherence to planetary health diets (which prioritise plant-based patterns, allow moderate amounts of animal-sourced foods, and restrict added sugars, saturated fats, and salt⁷⁸) has been reported to be associated with higher risks of obesity and obesity-related complications.⁷⁹⁻⁸¹ These complex and evolving challenges highlight the imperative to embed whole-person care within a planetary health framework, and to deliver an integrated life-course continuum of prevention, treatment, and long-term support.

In conclusion, China has made notable progress in obesity control over the past 4 years, despite substantial challenges. Given the complex nature of obesity as a typical non-communicable disease, sustained top-down planning combined with broad societal efforts is required to reduce existing cases and prevent new ones. Current national initiatives offer promising opportunities to build people-centred, integrated systems that promote healthy weight and, ultimately, advance a healthy China. As the ancient Chinese poet Qu Yuan wrote, "The road ahead is long and far; I shall seek and explore high and low,"⁸² we must prepare proactively and act steadily to tackle this persistent challenge of modern society.

Contributors

X-FP conceived the manuscript and wrote the first draft. Z-ZF, LZ, and AP edited, wrote, and reviewed the subsequent drafts. All authors gave their approval for the final version submitted and accepted responsibility for every aspect of the work.

Declaration of interests

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