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CONSENSUS ARTICLE

Recommendations from the European interdisciplinary council on ageing on physical activity and diet for mental health conditions in older adults

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Abstract

The global rise in life expectancy is accompanied by an increase in the prevalence of mental health conditions among older adults, including mild cognitive impairment (MCI), dementia, delirium, depression, anxiety, and other severe mental illness. These conditions significantly impact independence, increase healthcare costs, and increase mortality risk. Mounting evidence underscores the central role of modifiable lifestyle factors—particularly physical activity and diet—in the prevention and management of these conditions. This consensus, developed under the auspices of the European Interdisciplinary Council on Ageing (EICA), synthesizes current evidence and expert perspectives. Regular exercise, ranging from aerobic and resistance training to mind–body practices, improves cognition, mood, and physical resilience, while also mitigating cardiometabolic and functional risks. Similarly, adherence to dietary patterns such as the Mediterranean or MIND diets has been consistently associated with reduced incidence of cognitive decline, Alzheimer's disease, and comorbid chronic illnesses, although much of the evidence is observational. Landmark multidomain trials, including the Finnish FINGER and U.S. POINTER studies, have shown that combined interventions targeting diet, physical activity, cognitive stimulation, and social activity can slow cognitive decline in at-risk populations. Lifestyle strategies that promote brain health may enhance functional outcomes in dementia and, in turn, mitigate the risk of delirium. However, widespread implementation of such strategies faces numerous barriers, including physical frailty, socioeconomic constraints, health system fragmentation, and stigma. To overcome these barriers, caregivers, healthcare and public health professionals, policymakers, and community organizations must collaborate in designing accessible, culturally sensitive, and sustainable interventions at a policy level. Emerging digital tools, group-based programs, and co-designed approaches offer novel opportunities to enhance adherence and impact. Integrating lifestyle interventions into standard healthcare pathways represents an urgent, cost-effective strategy to promote mental health and resilience in ageing populations worldwide. This document provides actionable recommendations to guide policy, research, and clinical implementation across diverse health systems.

Keywords Physical exercise · Physical activity · Diet · Dementia · Mild cognitive impairment · Schizophrenia · Bipolar disorder · Delirium

Extended author information available on the last page of the article

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Introduction

The global demographic shift toward an older population is accelerating, with projections indicating that by 2050, there will be 1.5 billion people aged 65 years and over. This demographic shift is accompanied by increased prevalence of mental health conditions [1]. Approximately 14% of people over 60 years live with a mental health condition, accounting for 10.6% of total disability in this age group [1]. Depression is the most common, followed by anxiety and cognitive disorders, and then other conditions such as schizophrenia and bipolar disorder [2]. The consequences can be severe—over a quarter (27.2%) of all suicide deaths occur among people aged 60 years and older, with the highest suicide rates seen in those aged 75 + years [3]. Late-life suicides are overwhelmingly linked to depression, present in 71–95% of cases [2].

Multiple risk factors increase vulnerability to mental health conditions in older age, including social isolation, loneliness, chronic illness, pain, functional decline, bereavement, and economic hardship. Protective factors such as physical and purposeful activity, social engagement, autonomy, and integrated health services can help buffer against these risks, but access to such resources remains uneven between and within countries [4]. Gender disparities further complicate the picture: women report higher rates of depression and anxiety, often linked to caregiving burdens, widowhood, and poverty; while men face higher suicide risk, more frequent substance misuse, and underdiagnosis due to stigma and reluctance to seek help. Structural and systemic biases in healthcare exacerbate these disparities, such as underdiagnosis and limited access to treatment [5].

The public health implications are considerable. Mental health conditions impair physical function, psychological wellbeing, social participation [6], and independence, while driving up healthcare costs and caregiver burden. In the European Union, the demand for long-term care is projected to double by 2050, a trend worsened by delayed detection and intervention [7]. Detection gaps stem from symptoms being misattributed to normal ageing or physical illness, diagnostic tools designed for younger populations, and a treatment gap in which up to 80% of late-life depression and around 75% of dementia cases are untreated [8, 9]. These detection gaps, stemming from symptoms being misattributed to normal ageing or physical illness, limit timely care and increase disease burden. Stigma, accessibility issues, and service underuse further limit effective care.

Data gaps add to the challenge. Inconsistent measurement tools across countries hinder accurate comparisons, older adults remain underrepresented in mental health research, and important subgroups—such as the oldest-old, migrants, and LGBTIQ + populations—are often overlooked [10]. A life-course perspective is essential, recognizing that adverse childhood experiences and midlife stress can heighten vulnerability in later life [11]. This underscores the need for longitudinal research to track mental health trajectories and inform prevention strategies.

It's important to note that mental health in later life can be maintained through interventions that address external factors affecting the mind. Meeting this growing challenge will require urgent action: reducing stigma, embedding mental health screening in routine elder care, developing integrated and evidence-based interventions, training providers in geriatric mental health, and increasing funding for age-inclusive community programs. Without decisive, targeted strategies, the rising tide of mental health conditions in older adults will continue to strain individuals, families, and health systems worldwide.

At the same time, as the global population ages, the convergence of sedentary behaviour and obesity poses a critical and compounding threat to older adults' health [12]. Sedentary behaviour —defined as any waking behaviour characterized by an energy expenditure ≤ 1.5 metabolic equivalents (METs) while in a sitting, reclining or lying posture—now occupies approximately 8.5 to 9.6 h of the waking day among individuals aged 65 years and older, making them the most sedentary demographic group [13]. Systematic reviews have linked increased sedentary time in older adults to higher all-cause mortality [14], metabolic syndrome [15], and markers of adiposity such as waist circumference and overweight/obesity [16]. Moreover, a meta-analysis including more than 110,000 older adults reported significant associations between obesity and both sedentary behaviour (OR, odds ratio ≈ 1.45) and physical inactivity (OR ≈ 1.52) [17]. Importantly, findings suggest that among overweight or obese older adults, reducing sedentary time while increasing moderate-to-vigorous physical activity (MVPA) is associated with meaningful improvements in adiposity—even among those older than 75 years [18]. Moreover, obesity in older adults, driven by inactivity, metabolic shifts, and poor diet, heightens risks mortality, though the so-called 'obesity paradox' sometimes complicates interpretation [19]. Furthermore, undernutrition is observed in one out of every three older obese patients, being associated with decreased functional capacity, impairment in balance and gait functions, falls, and depressed mood [20]. Therefore, targeting sedentary behaviour and obesity through feasible lifestyle interventions is imperative to preserve health, independence, and quality of life among older adults.

Given this background, this paper summarizes an online meeting promoted by the European Interdisciplinary Council on Ageing (EICA), a European Platform fostering interdisciplinary analyses and high-level discussion. EICA also facilitates the translation and dissemination of results from

ageing research to various professional groups, policy makers, and the public. This work aims to assess the existing evidence on how healthy lifestyles can reduce the risk of mental health conditions and the impact of healthy lifestyles on people with these conditions.

Methods

This consensus document was developed under the auspices of the EICA and combines expert consensus with a narrative review of the current evidence. The process involved two complementary components: (1) evidence synthesis and (2) structured consensus development.

A narrative review approach was used to identify and summarize the most relevant and up-to-date literature on physical activity, diet, and mental health in older adults. Although not a systematic review, the evidence selection was guided by principles of transparency and rigor. Priority was given to high-quality sources, including umbrella reviews, meta-analyses, large cohort studies, and major randomized controlled trials. Additional searches were conducted to cover areas where high-level evidence was limited (e.g., severe mental illness, delirium). Databases including PubMed, Scopus, and Web of Science were consulted, focusing primarily on publications from the last decade, with earlier foundational works included when appropriate. Evidence was appraised for relevance, consistency, and methodological quality, and only studies judged to be robust and directly applicable to ageing populations were incorporated into the recommendations.

The consensus process involved a multidisciplinary panel comprising experts in geriatrics, psychiatry, neurology, public health, nutrition, physiotherapy, epidemiology, and ageing research from multiple European and international institutions. All authors participated in a structured online meeting organized by EICA, during which the evidence was presented, discussed, and critically evaluated. Discussions followed a structured agenda organized around key thematic domains (cognitive disorders, MCI, dementia, delirium, depression/anxiety, and severe mental illness). Draft recommendations were generated during the meeting and subsequently refined through iterative email exchanges. When disagreements arose, they were resolved through moderated discussion until consensus was reached; no formal voting was required. All authors reviewed and approved the final recommendations and manuscript content.

The aim of this methodology was not to produce a formal clinical guideline but rather to synthesize current knowledge and expert perspectives into practical, evidence-informed recommendations to support clinicians, policymakers, and researchers working with older adults. The approach ensures transparency, reflects the best available evidence, and captures insights from diverse professional disciplines engaged in ageing and mental health.

The role of diet, physical activity, and exercise in the primary prevention of cognitive disorders

Figure 1 summarizes the main mechanisms and evidence underpinning lifestyle-based prevention of cognitive disorders discussed in the meeting.

The risk of cognitive disorders – MCI (mild cognitive impairment) and dementia of different subtypes – could potentially be reduced by attention to modifiable lifestyle factor, particularly diet, physical activity, and regular exercise, which together can slow cognitive decline and reduce the risk of dementia, although these cannot eliminate the risk entirely as some risk factors are non-modifiable (e.g., genetics) [21, 22].

For clarity, in this manuscript we use the term dietary patterns to refer to comprehensive eating models such as the Mediterranean and MIND diets. The Mediterranean diet emphasizes high intake of fruits, vegetables, whole grains, legumes, nuts, fish, and olive oil, with limited consumption of red and processed meats and sweets [23, 24]. Evidence from observational and cohort studies show that high adherence to the Mediterranean diet is associated with a lower risk of AD and other types of dementia [25, 26], with additional benefits for overall mortality, diabetes, cancer, and cardiovascular disease, highlighting its role as a multi-component preventive intervention. The MIND diet integrates Mediterranean and DASH (Dietary Approaches to Stop Hypertension) principles but places additional emphasis on leafy greens and berries while limiting foods high in saturated fats [27]. Recently, the 3-year MIND Trial (n = 604) compared a MIND diet (i.e., a Mediterranean + DASH, with extra emphasis on leafy greens and berries, limitation in red/processed meat, butter/cheese, pastries/sweets, and fried/fast food + mild calorie restriction) to a control healthy diet with the same calorie restriction and counselling and found that both groups improved modestly, but no significant between-group differences were observed in global cognition or brain MRI measures [28].

Beyond diet, physical activity (i.e., any bodily movement produced by skeletal muscles that results in energy expenditure, such as everyday activities like walking for transportation, gardening, housework, climbing stairs, or recreational movement) contributes not only to cardiovascular and metabolic health but also to improved brain function by raising levels of serotonin, dopamine, endorphins, and brain-derived neurotrophic factor (BDNF), which promote neuronal survival, neuroplasticity, and mood regulation [29]. In older adults, regular and sustained participation in physical

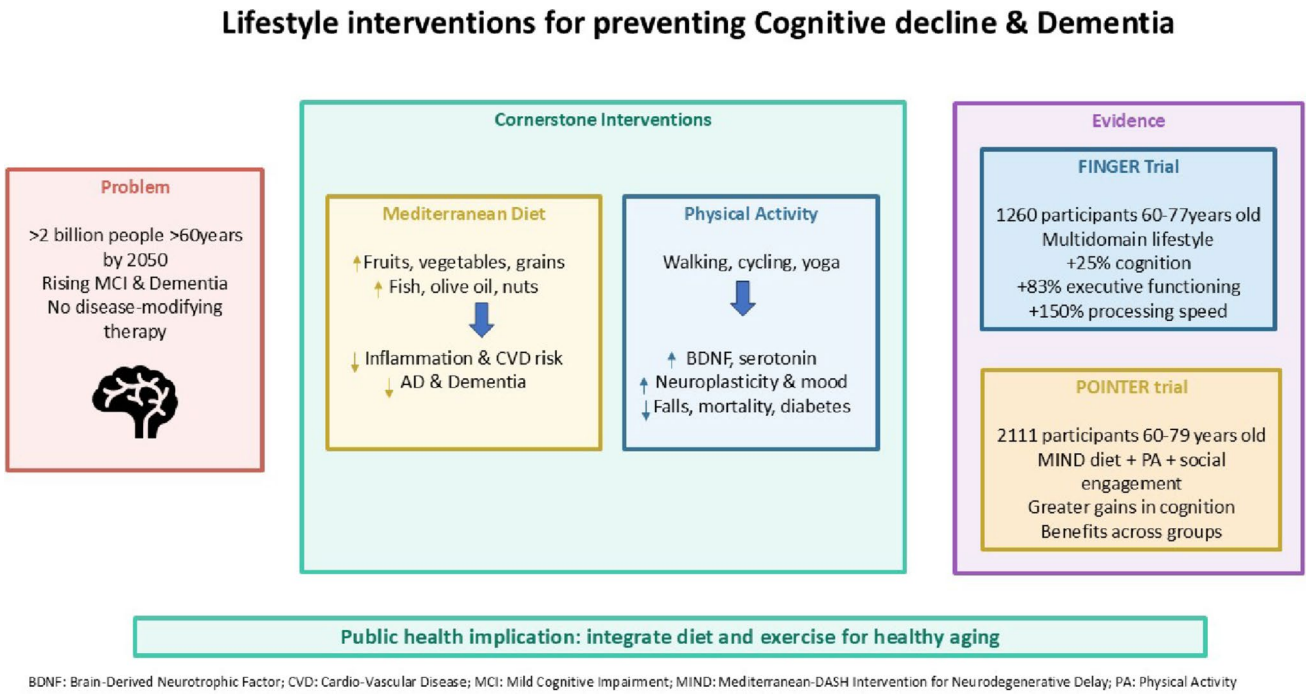

Fig. 1 Lifestyle interventions for preventing cognitive decline and dementia

activity reduces all-cause and cardiovascular mortality, lowers the risk of type 2 diabetes and cancer, prevents falls, preserves bone and muscle health, and enhances mental well-being and sleep, all of which are associated with cognitive resilience [30]. Thus, fostering both dietary adherence to the Mediterranean pattern and sustained engagement in physical activity may be considered important components of public health strategies aimed at reducing the incidence of cognitive impairment and dementia, improving quality of life, and ensuring healthier ageing across populations. Unfortunately, practically no data are available about physical exercise (i.e., a specific subcategory of physical activity that is planned, structured, repetitive, and performed with the intention of improving or maintaining physical fitness) for the primary prevention of cognitive disorders [31].

In addition to individual lifestyle factors, multicomponent interventions have shown promising results, with two approaches particularly relevant to the primary prevention of cognitive disorders: a multidomain lifestyle intervention and a structured lifestyle modification program. The Finnish Geriatric Intervention Study to Prevent Cognitive Impairment and Disability (FINGER trial) was a two-year, multicentre randomized controlled trial involving 1,260 participants aged 60–77 years at elevated risk for dementia, but without substantial cognitive impairment at baseline [32]. Participants were randomized to either a multidomain lifestyle intervention group or a control group receiving general health advice. The intervention targeted diet, physical activity, cognitive training, social engagement, and vascular/metabolic risk factor management. Findings demonstrated that the intervention group exhibited 25% higher overall cognitive performance compared to controls, with particularly notable benefits in executive functioning (83% higher) and processing speed (150% higher). Memory improvements were more modest but still favourable [33]. Long-term follow-up indicated sustained cognitive benefits and reduced risk of progression to dementia. The FINGER trial thus provides robust evidence that multidomain interventions can attenuate cognitive decline in at-risk older adults and has become a model for international collaborative efforts through the World-Wide FINGERS (WW-FINGERS) network [34].

The U.S. POINTER (Study to Protect Brain Health Through Lifestyle Intervention to Reduce Risk) was a two-year, multicentre, single-blind randomized controlled trial involving 2,111 participants aged 60–79 years at elevated risk for cognitive decline. Participants were randomized to either a structured lifestyle intervention (STR)—comprising 38 facilitated peer-team meetings, prescribed aerobic, resistance, and stretching exercise, adherence to the MIND diet, cognitive training (e.g., BrainHQ) combined with social engagement, and regular health monitoring with goal-setting—or a self-guided (SG) version, with six peer meetings and general encouragement without structured coaching [35]. After two years, both groups showed improvements in global cognition, but the structured group exhibited statistically significantly greater gains (difference in global cognitive composite of 0.029 [standard deviation] SD per year,

95% CI 0.008–0.050; $P = 0.008$), as well as enhanced executive function (0.037 SD per year; 95% CI 0.010–0.064), while processing speed trended similarly and no differences emerged in memory performance [35]. Notably, the cognitive benefits were consistent across subgroups regardless of gender, ethnicity, APOE-ε4 status, or cardiovascular health. By contrast, the original FINGER trial was conducted in a relatively homogeneous Finnish population and compared a multidomain intervention—including diet, exercise, cognitive training, social activity, and vascular/metabolic monitoring—with general health advice, showing a roughly 25% improvement in overall cognition in the intervention group after two years. Unlike FINGER, the POINTER trial notably evaluated two levels of intervention intensity (structured vs. self-guided), involved a diverse U.S. cohort, and directly assessed the added benefit of support and accountability mechanisms. Taken together, while FINGER established the multidomain model, POINTER extended it by testing structured versus self-guided implementation in a diverse U.S. population.

These two large intervention trials further strengthen the importance and the feasibility of multicomponent interventions for preventing further cognitive decline -as well as encouraging wider health benefits - in people at high risk of cognitive disorders. However, further studies are now required including more diverse populations and a wider range of outcomes.

Mild cognitive impairment

Epidemiological data suggest that MCI affects approximately 6.7% of adults aged 60–64 years and rises to over 25% in those aged 80–84 years, with a substantial proportion progressing to dementia over time [36]. Research consistently shows that modifiable lifestyle factors, particularly physical activity and diet/ nutrition, can influence both the onset and progression of MCI.

While several individual nutrients—such as B vitamins, omega-3 fatty acids, and polyphenol-rich foods—show promise for improving specific aspects of cognition in MCI, the evidence is more consistent and robust for whole dietary patterns [37]. These patterns exert broader effects by simultaneously targeting oxidative stress, neuroinflammation, vascular health, and synaptic function [38]. By contrast, findings from nutrient supplementation trials remain heterogeneous and often limited by small sample sizes, underscoring that dietary patterns currently represent the most evidence-supported nutritional approach for maintaining cognitive health in MCI [39]. For example, higher adherence to the Mediterranean diet—rich in fruits, vegetables, whole grains, legumes, fish, and healthy fats—has been linked to slower rates of cognitive decline and a lower likelihood of transitioning from MCI to AD [26, 40]. Specific nutrients, including B vitamins, omega-3 fatty acids, and probiotics, have shown positive effects on cognition in clinical trials, albeit often in small study populations [40]. These nutrients may exert their benefits by reducing oxidative stress, dampening neuroinflammation, supporting synaptic function, and preserving structural brain integrity. Other promising dietary interventions include medium-chain triglycerides, vitamin D, and foods rich in polyphenols such as blueberries, grape juice, and cocoa flavanols, all of which have shown potential benefits in specific cognitive domains [40].

Evidence from large-scale umbrella reviews and meta-analyses demonstrates that structured exercise programs can have significant positive effects on global cognition in people with MCI and dementia [31]. Mind–body interventions such as tai chi and yoga, as well as mixed physical activity regimens incorporating aerobic and strength components, have been shown to produce small but meaningful cognitive benefits [36]. Resistance training has demonstrated the largest effect sizes in improving global cognitive outcomes, even though certainty levels vary [36]. Mechanistically, exercise is believed to enhance neuronal health and plasticity through increases in BDNF, improve cerebral blood flow, and reduce vascular risk factors such as hypertension and insulin resistance—key contributors to cognitive decline [41].

While these lifestyle interventions are not without limitations—such as variability in study design, participant characteristics, and adherence rates—they are broadly advantageous because they address multiple health domains simultaneously. In our opinion, future public health and clinical strategies should focus on integrated, person-centred approaches that combine physical activity and dietary modification, tailored to individual abilities, cultural preferences, and medical needs. Sustaining such interventions over the long term will require political and public health support, accessible infrastructure, and strategies to overcome barriers like physical pain, mobility limitations, socioeconomic constraints, or other aspects of inequalities. Thus, integrating these lifestyle strategies within primary care and geriatric services could substantially delay progression to dementia. The combined promotion of physical activity and healthy eating habits offers one of the most promising avenues for delaying MCI progression and preserving cognitive health into older age.

Dementia

The effects of diet and physical activity/exercise in dementia in older people are recognized as important areas for both prevention and management, especially since no definitive disease-modifying treatments currently exist.

A healthy diet plays a crucial role in addressing the nutritional challenges often faced by people with dementia, such as reduced taste and smell, dysphagia, and behavioural eating problems, which increase the risk of malnutrition, dehydration, and sarcopenia. While there is no conclusive evidence that a specific diet halts dementia progression, general adherence to nutritious patterns—such as the Mediterranean or MIND diets—has been linked to reduced Alzheimer's pathology [25] and better quality of life [25]. Dietary interventions focusing on adequate protein, hydration, fresh fruits, and vegetables, sometimes supported with supplements, can improve outcomes such as nutritional status, fall risk, and even certain cognitive measures. However, many of these findings may be confounded by disease severity, caregiver involvement, or concurrent therapies. Nevertheless, patients with dementia frequently show low adherence to both healthy diets and regular participation in physical activity, particularly in severe stages, underscoring the need for tailored, sustained interventions and further research to confirm these benefits and refine clinical recommendations. In advanced stages, caregiver involvement and environmental adaptations become more critical to support adherence.

Evidence from multiple systematic reviews and meta-analyses suggests that home-based exercise programs—typically performed two to three times a week for 40 min per session—can stabilize disability in daily activities, improve global cognition in moderate AD and other dementias, enhance gait and balance, reduce depressive symptoms, and lower the risk of falls [31]. However, these interventions appear less effective for specific cognitive domains like memory or attention, and they do not seem to significantly affect hospitalization rates, mortality, or overall quality of life [40].

Unfortunately, multicomponent interventions combining physical exercise and healthy diet in people already affected by dementia, are still not available.

Delirium

Delirium is an acute, fluctuating disturbance of attention, awareness, and cognition that develops over a short period of time, usually hours to days [42]. It is a common neuropsychiatric syndrome in hospitalized and older adults, often triggered by underlying medical illness, surgery, infection, medications, or metabolic disturbances. Delirium is not only common but also associated with prolonged hospital stays, increased mortality, accelerated functional decline, and a higher risk of subsequent dementia [43]. Its pathophysiology is multifactorial, involving neuroinflammation, oxidative stress, neurotransmitter imbalances—especially acetylcholine deficiency—and impaired brain energy metabolism [44].

Figure 2 summarizes the main evidence about this topic to visualize the multifactorial nature of delirium and the impact of lifestyle interventions.

Among the modifiable predisposing factors, poor nutritional status is a significant contributor. Malnutrition, whether from inadequate calorie and protein intake or specific micronutrient deficiencies such as thiamine (B1) and

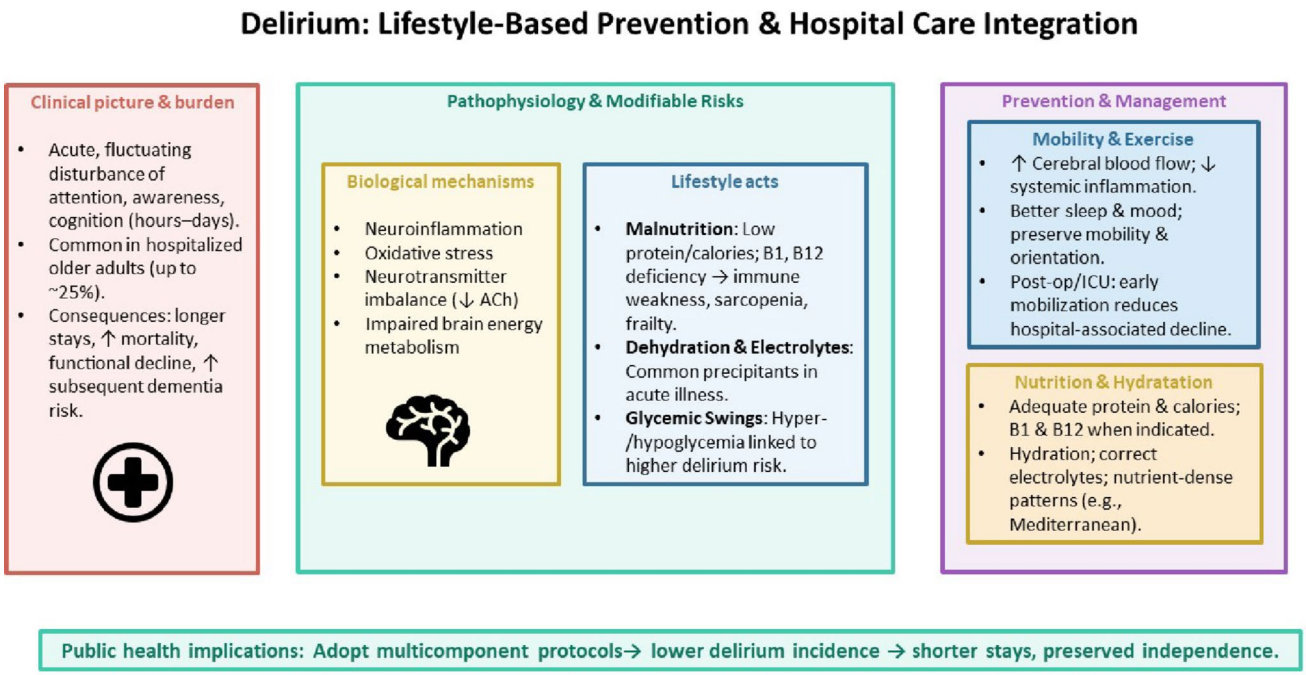

Fig. 2 Lifestyle interventions for preventing delirium

vitamin B12, weakens immune function, reduces muscle strength, increases frailty, and heightens the brain's vulnerability to metabolic and inflammatory stress [45]. Consistently, in a prospective cohort of 417 hip fracture patients, both malnutrition risk (OR = 2.42, 95% CI = 1.29–4.53) and overt malnutrition (OR = 2.98, 95% CI = 1.43–6.19) were independently linked to higher odds of postoperative delirium [46]. Dehydration and electrolyte disturbances, both of which can result from poor dietary intake or illness-related losses, are also common precipitants of delirium. Maintaining a healthy diet rich in high-quality protein, adequate hydration, and micronutrients supports metabolic homeostasis and brain function. Dietary patterns that emphasize nutrient-dense foods, such as the Mediterranean diet, can help stabilize blood glucose levels, preventing the harmful effects of both hyperglycaemia and hypoglycaemia, which have been linked to higher delirium incidence in surgical and critically ill patients [47].

Engaging in regular physical activity can provide a protective effect by improving cardiovascular fitness, enhancing cerebral blood flow, reducing systemic inflammation, and strengthening physical resilience, all of which indirectly reduce susceptibility to delirium [48]. Physical activity also contributes to better sleep regulation, mood stability, and mobility, factors that support orientation and reduce the risk of hospital-associated functional decline. These benefits are particularly relevant in postoperative and ICU settings, where immobility and environmental stressors are major delirium triggers.

Physical activity, structured exercise, and a healthy diet are increasingly recognized as important components in the prevention and management of delirium that affects up to 25% of hospitalized older adults [49–51]. Evidence supports the use of multicomponent non-pharmacological prevention programs that integrate nutritional optimization with mobility promotion, cognitive stimulation, sleep enhancement, and orientation strategies [52]. Such interventions have been shown to reduce delirium incidence by approximately 40% in hospitalized adults, preventing two out of every five potential cases [53]. This benefit is particularly notable given the limited effectiveness and potential risks of pharmacological prevention strategies [47]. The emerging field of metabolomics further highlights the strong interplay between nutrition, metabolic health, and delirium risk, showing that disruptions in lipid metabolism, amino acid biosynthesis, and energy pathways precede and may contribute to delirium onset. These findings suggest that early, individualized nutrition and activity interventions could be tailored to patients at highest risk [54].

Anxiety and depression

Figure 3 summarizes the main evidence about the topic of lifestyle interventions for mental health among older people.

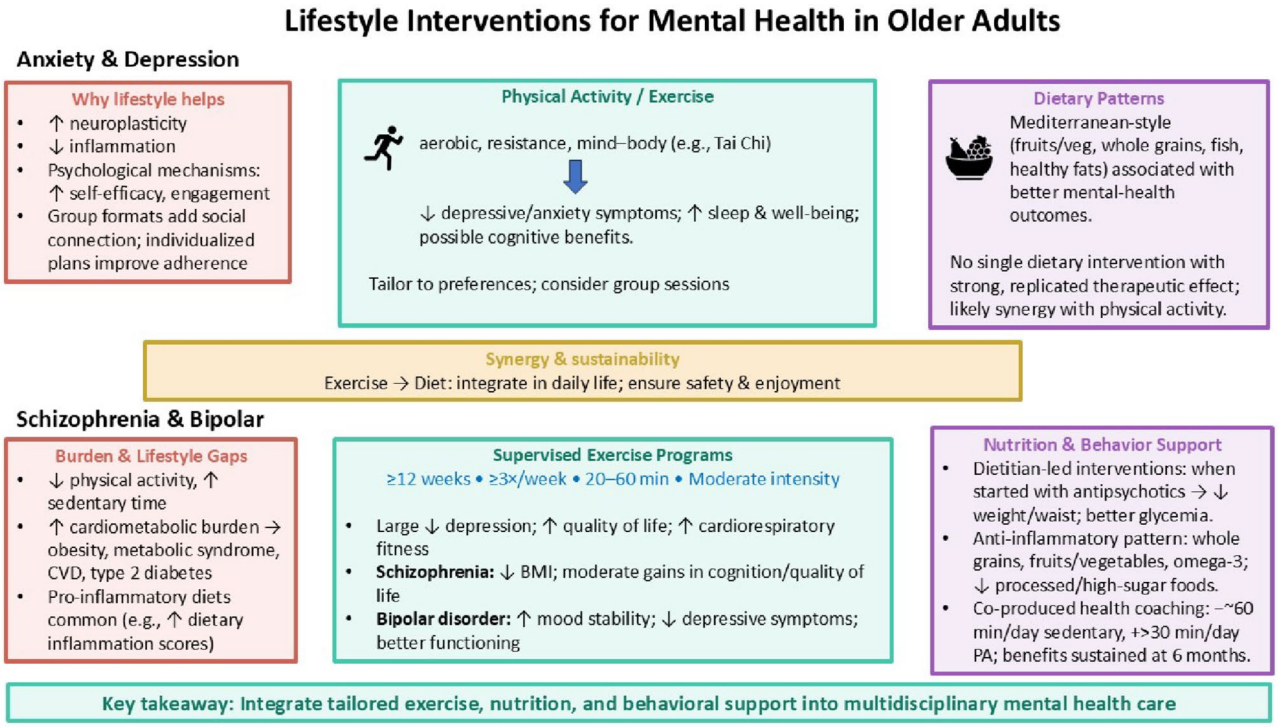

Fig. 3 Lifestyle interventions for mental health in older adults

In nutrition, while no single dietary intervention has shown strong, replicated evidence for directly preventing or treating anxiety and depression, a Mediterranean-style diet, rich in fruits, vegetables, whole grains, fish, and healthy fats, has been consistently linked with better overall mental health outcomes and reduced risk factors associated with mood disorders [55–57].

Physical activity, structured exercise, and healthy dietary patterns can play a meaningful role in both the prevention and management of anxiety and depression, particularly in older adults. Evidence suggests that regular physical activity—ranging from aerobic and resistance training to mind–body practices such as Tai Chi—not only enhances overall physical health but also helps reduce depressive and anxiety symptoms through physiological and psychological mechanisms, including improved neuroplasticity, reduced inflammation, and enhanced self-efficacy [58]. Group-based exercise may add social engagement benefits, while individualized programs can increase adherence by aligning with personal preferences.

The combination of physical activity participation and healthy eating likely has synergistic effects, supporting brain function, hormonal balance, and cardiovascular health, all of which can influence mood regulation. For long-term impact, these interventions should be sustained and tailored to individual needs, with attention to lifestyle integration, safety, and enjoyment, making them sustainable pillars of both mental and physical well-being in later life.

Schizophrenia and bipolar disorder

Physical activity, structured exercise, and a healthy diet can meaningfully improve outcomes in individuals living with schizophrenia and bipolar disorder, both of which are categorized as severe mental illnesses (SMI) and are often accompanied by high rates of physical comorbidity, reduced life expectancy, and poor cardiometabolic health [59]. People with SMI, including schizophrenia and bipolar disorder, are significantly less likely than the general population to meet international recommendations for weekly physical activity, engage in less moderate-to-vigorous activity, and spend more time in sedentary behaviour [60]. This lifestyle profile contributes to elevated risks of obesity, metabolic syndrome, cardiovascular disease, and type 2 diabetes, which in turn worsen psychiatric prognosis and overall quality of life.

In regards to nutrition, people with SMI often present with pro-inflammatory dietary patterns, as shown in large-scale analyses such as the UK Biobank study, which found higher dietary inflammation scores in individuals with schizophrenia and bipolar disorder compared to those without mental illness [61]. Dietitian-led interventions, especially those initiated at the start of antipsychotic treatment, have been shown to produce greater weight loss, reduced waist circumference, and improved glycaemic control, thereby counteracting the metabolic side effects of psychotropic medication. Anti-inflammatory dietary approaches—rich in whole grains, fruits, vegetables, omega-3 fatty acids, and low in processed and high-sugar foods—may additionally help reduce neuroinflammation, a process implicated in the pathophysiology of both schizophrenia and bipolar disorder. Health coaching and co-produced interventions that integrate individualized goal setting, motivational interviewing, and social support, especially in community settings, have been shown to reduce sedentary behaviour by almost an hour per day and increase physical activity by over 30 min daily, with sustained benefits at six months [62].

Evidence from meta-analyses and randomized controlled trials demonstrates that supervised exercise programs—particularly those lasting at least 12 weeks, delivered three or more times per week for 20–60 min at moderate intensity—can yield large improvements in depression symptoms, quality of life, and cardiorespiratory fitness in populations affected by SMI, as well as moderate improvements in schizophrenia-related quality of life and cognition [63]. In schizophrenia specifically, aerobic and resistance exercise can significantly reduce body mass index (BMI) and improve physical health markers, while in bipolar disorder, physical activity is associated with improved mood stability, reduced depressive symptoms, and better functional outcomes [63]. While research in older adults with SMI is limited, future studies should prioritize age-specific adaptations and long-term outcomes. Yet, the available evidence underscores the importance of incorporating physical activity and nutrition interventions into multidisciplinary mental health care–not only to address psychiatric symptoms but also to reduce the disproportionate burden of physical illness and premature mortality in this population.

Discussion and conclusions

The present consensus underscores the increasing recognition that physical activity and healthy dietary practices are fundamental pillars in the prevention and management of mental health conditions in older adults; although it should be noted that the majority of evidence is derived from observational studies and thus subjected to residual confounding and reverse causality (for example, prodromal cognitive decline might lead to reduced activity or poorer diet), and there is considerable heterogeneity in how lifestyle factors are measured. We summarized the main concepts of the consensus in Table 1. While the evidence base is growing, recent advances point toward novel approaches that may

Table 1 Take home messages

Mental health conditions in older adults are highly prevalent, affecting approximately 14% of those over 60 years, with depression and anxiety being the most common; these conditions significantly increase disability, healthcare burden, and risk of suicide
Lifestyle factors such as physical activity and diet are powerful tools in preventing and managing cognitive decline, depression, anxiety, and other mental health disorders in older populations
The Mediterranean and MIND diets consistently show protective effects, reducing risks of Alzheimer's disease and other dementias, and overall mortality while supporting cardiovascular and metabolic health
Regular physical activity, especially aerobic and resistance training, improves global cognition, executive function, mood, sleep, and overall resilience in older adults with or without cognitive impairment
Multicomponent lifestyle interventions, such as those in the FINGER and POINTER trials, demonstrate that combining diet, exercise, cognitive training, and social engagement can meaningfully slow cognitive decline in at-risk older adults
Mild cognitive impairment is highly responsive to lifestyle change—structured exercise programs and healthy dietary patterns can delay progression to dementia and improve cognitive outcomes
Need awareness of the challenges at personal and socioeconomic levels of maintaining lifestyle change in MCI
Exercise and diet are vital components of dementia care, not as cures but as strategies to stabilize function, reduce falls, improve mood, and counter malnutrition, sarcopenia, and frailty
Delirium prevention benefits from lifestyle measures: adequate nutrition, hydration, and regular mobility are low-cost effective strategies that can reduce incidence by up to 40% in hospitalized older adults
Physical activity and diet also support mental health in severe mental illnesses (schizophrenia, bipolar disorder), helping to mitigate cardiometabolic risks, improve quality of life, and reduce psychiatric symptoms
Integrating lifestyle-based interventions into standard care for older adults is an urgent public health priority, as they are low-risk, cost-effective, and capable of improving both mental and physical health outcomes globally

Table 2 Summary of key evidence and recommendations on physical activity and diet for mental health in older adults

Domain	Key Evidence	Recommendations
Cognitive disorders (MCI, dementia)	Mediterranean/MIND diets associated with reduced AD/dementia risk; exercise improves global cognition; multidomain trials (FINGER, POINTER) show additive benefits	Promote combined diet + physical activity programs; encourage aerobic and resistance training; support long-term adherence to healthy dietary patterns
Delirium	Malnutrition, dehydration, and immobility increase delirium risk; multicomponent interventions reduce incidence by ~40%	Optimize nutrition/hydration; implement mobility-enhancing protocols; embed delirium-prevention bundles in routine care
Depression & anxiety	Physical activity reduces depressive and anxiety symptoms; Mediterranean-style diet associated with better mood outcomes	Encourage regular aerobic/resistance training; integrate dietary counselling with mental health care
Severe mental illness (SMI)	Exercise improves mood, cognition, metabolic health; dietary interventions reduce antipsychotic-associated weight gain	Provide supervised exercise programs; initiate dietitian-led interventions early in treatment; reduce sedentary behaviour

further improve uptake, sustainability, and effectiveness of interventions. Digital health technologies, such as wearable devices, smartphone-based activity trackers, and telehealth-delivered exercise or nutrition counselling, offer promising tools to monitor adherence, provide real-time feedback, and personalize goals. However, multiple challenges still exist among older adults to take up such interventions [64]. Similarly, group-based and socially engaging interventions—including community walking clubs, gardening programs, and cooking classes—leverage social connectedness, which is itself protective against depression and cognitive decline. Given that many lifestyle programs are multidomain, it is important to consider the potential synergistic interactions between diet and physical activity, as outlined in Table 2. Evidence from the FINGER and U.S. POINTER trials demonstrates that when healthy dietary patterns are combined with structured exercise, cognitive training, and social activity, the resulting benefits exceed those observed with general health advice or less structured approaches. These synergies likely arise because diet and physical activity influence overlapping biological pathways—such as inflammation, vascular function, neuroplasticity, and metabolic regulation—thereby enhancing overall cognitive resilience in older adults. Recognizing these interactions strengthens the rationale for integrated, rather than isolated, lifestyle interventions.

However, implementing these strategies in real-world practice faces significant barriers. Physical limitations, multimorbidity, and frailty can hinder participation, while socioeconomic constraints reduce access to healthy foods, exercise facilities, and digital tools. Cognitive impairment itself may limit adherence, and stigma surrounding mental illness can further discourage engagement. Healthcare systems are often fragmented, with insufficient integration of mental health, primary care, and community services, which leads to underutilization of preventive programs. Additionally, variability in cultural attitudes toward ageing, physical activity, and diet must be considered when tailoring interventions to diverse populations.

Addressing equity, feasibility, and real-world implementation is essential for translating lifestyle recommendations into effective public health strategies. Late-life mental health and lifestyle behaviours are profoundly shaped by socioeconomic status, education, geographic location, and cultural norms, which influence access to nutritious foods, safe environments for physical activity, digital tools, and healthcare services. Structural barriers—such as underdiagnosis in disadvantaged populations, food insecurity, neighbourhood deprivation, transportation limitations, and digital exclusion—can significantly limit adherence and widen existing health disparities. To enhance feasibility and policy relevance, interventions must therefore be adaptable to local resources and culturally meaningful contexts. Examples include community-based walking groups, low-cost or home-based exercise programs, intergenerational activity initiatives, and dietary modifications that prioritize affordable, locally available foods while respecting cultural traditions. Embedding such approaches within primary care, community organisations, and social services can improve uptake and sustainability, ensuring that lifestyle-based strategies are accessible to older adults across diverse socioeconomic and cultural settings.

Stakeholders and caregivers play a pivotal role in bridging these gaps. Caregivers are essential in supporting daily routines, encouraging adherence, and helping older adults overcome motivational or logistical barriers. Healthcare professionals—including geriatricians, psychiatrists, dietitians, physiotherapists, occupational therapists, speech and language therapists and primary care providers—must be trained in geriatric mental health and lifestyle counselling, while policymakers have the responsibility of ensuring equitable access to community-based exercise programs, affordable nutritious food, and age-friendly environments and integrating these into national ageing and mental health strategies. Culturally sensitive approaches and engagement with local communities are essential to ensure relevance and uptake across diverse populations. Public–private partnerships may also facilitate the scaling of interventions, particularly in resource-limited settings.

Future strategies should prioritize co-design approaches that involve older adults and their caregivers in intervention planning, ensuring acceptability and long-term adherence. Implementation science frameworks are needed to assess how lifestyle interventions can be effectively embedded into routine care pathways, including hospitals, nursing homes, and community health services. Finally, sustained investment in longitudinal research is required to understand the long-term effects of diet and exercise interventions on mental and physical health trajectories, assessing the effect size and change with time, and to adapt programs to subgroups that are often underrepresented in clinical studies, such as the oldest-old, migrants, and people with severe mental illness.

Taken together, novel interventions that utilise multicomponent approaches, supported by supported by technology and social engagement, offer a unique opportunity to enhance mental as well as physical health of older adults through physical activity and diet. Overcoming barriers will require coordinated efforts across stakeholders, with caregivers, clinicians, and policymakers all playing a significant role. Embedding these lifestyle-based approaches into standard care represents not only a clinical imperative but also a cost-effective public health strategy to promote healthy and resilient ageing.

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Declarations

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