Clinical practice guidelines

LIFESTYLE-BASED MENTAL HEALTH CARE FOR MAJOR DEPRESSIVE DISORDER





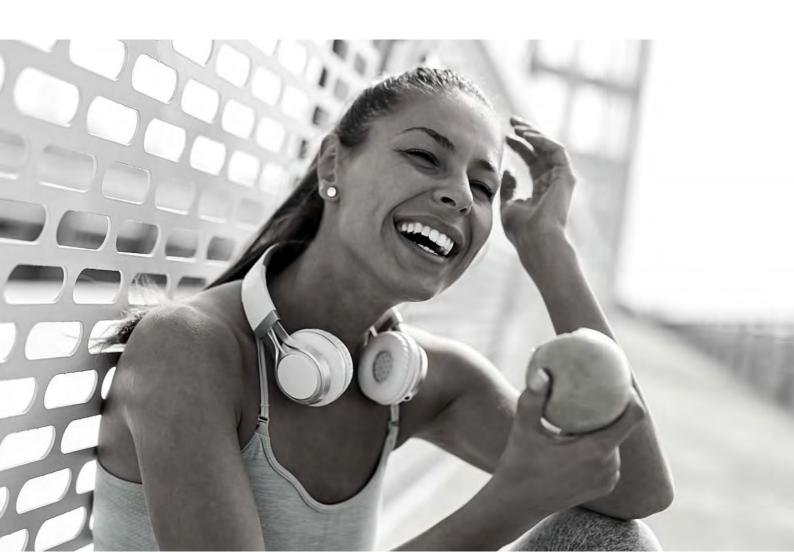


Table of contents

About these guidelines	
Recommendation 1: Exercise and physical activity	5
Recommendation 2: Smoking cessation	9
Recommendation 3: Work and volunteer engagement	12
Recommendation 4: Mindfulness and relaxation practices	15
Recommendation 5: Dietary change	18
Recommendation 6: Sleep hygiene	21
Recommendation 7: Social connection	24
Recommendation 8: Interaction with green or blue space	27

About these guidelines

MAJOR DEPRESSIVE DISORDER

Major Depressive Disorder (MDD) is a leading cause of global disability and is one of the leading causes of disease burden worldwide. Approximately 4.7% of people worldwide experience depression in any 12-month period. The prevalence of MDD is consistent across high-, middle- and low-income countries, demonstrating the global burden of this disease.

GUIDELINE AIMS

These Guidelines aim to provide clinicians with up-to-date, evidence-based information on the management of major depressive disorder (MDD) using lifestyle-based approaches.

SCOPE

The guidelines are designed for any health professional who may diagnose and/or who is part of a team providing care for adults with MDD, including allied or generalist health professionals, as well as community rehabilitation, psychosocial or peer support workers working directly with people with MDD.

DEVELOPMENT

The Guidelines are based on a synthesis of current scientific evidence, rigorously evaluated using a systematic grading system, which determined the strength of recommendations.

PRACTICE AND SAFETY CONSIDERATIONS

- The Guidelines are not a policy directive and are not intended to replace or take precedence over local policies and procedures.
- The Guidelines should be used in conjunction with existing guidelines, disciplinespecific practice standards, and relevant training.
- All recommendations should be considered within the available clinical context, with consideration for current training, expertise, and interest of the clinician as well as the availability of related health professionals and relevant resources.
- The Guidelines provide broad recommendations and guidance for clinicians when working with people who have major depressive disorder. However, the clinical appropriateness of these recommendations must be assessed on an individual, person-by-person basis.
- For all lifestyle behaviours recommended in these guidelines, effectiveness will be maximised when delivered in conjunction with behaviour change techniques that are appropriate for the person and their circumstances.

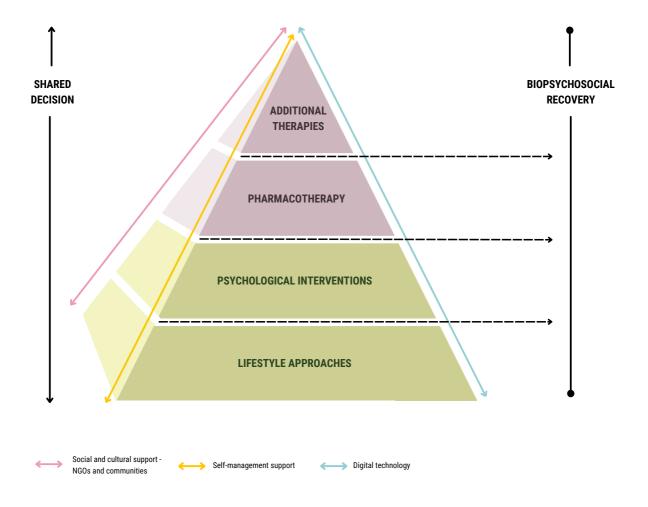
LIFESTYLE-BASED APPROACHES

Lifestyle-based mental health care includes the assessment and intervention of the lifestyle determinants of health in the prevention, recovery and treatment of mental disorders. These include nutrition, physical activity and exercise, sleep, social connection, natural environments, reducing substances and screens, engaging with work and volunteering, and stress management and relaxation practices including mindfulness and meditation practices."

"Given the supportive evidence for the included lifestyle interventions for managing MDD and the highly favorable safety profile, lifestyle-based approaches should be considered as a core component of mental health care with the capacity to additionally benefit comorbid physical disorders. The extent to which the lifestyle therapies of diet, exercise, sleep and substance cessation are foundational refers to care that "needs to be undertaken to facilitate functional recovery" as per its definition in Royal Australian & New Zealand Royal College of Psychiatrists (RANZCP guidelines for mood disorders (Malhi et al. 2021)).

WHY LIFESTYLE-BASED MENTAL HEALTH CARE?

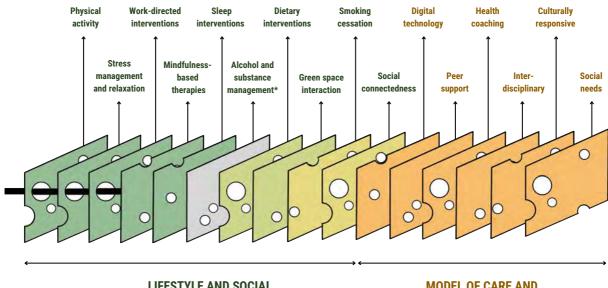
These guidelines take the position that lifestyle-based approaches should form a foundational level of mental health management within healthcare systems.



Lifestyle-based approaches present several key opportunities and benefits for people with MDD:

- They are generally considered to be low risk for causing adverse effects;
- They may provide a dual benefit, addressing clinical symptoms of MDD while potentially mitigating physical comorbidities – which is a recognized challenge for those with mental illness.

Furthermore, the benefits of specific lifestyle-based approaches may be compounded in a system of comprehensive care that leverages the knowledge and skills of an interdisciplinary team of healthcare professionals, across implementation approaches.



LIFESTYLE AND SOCIAL APPROACHES

MODEL OF CARE AND IMPLEMENTATION APPROACHES

*Not graded as part of these guidelines (we recommend use of complementary AOD guidelines)

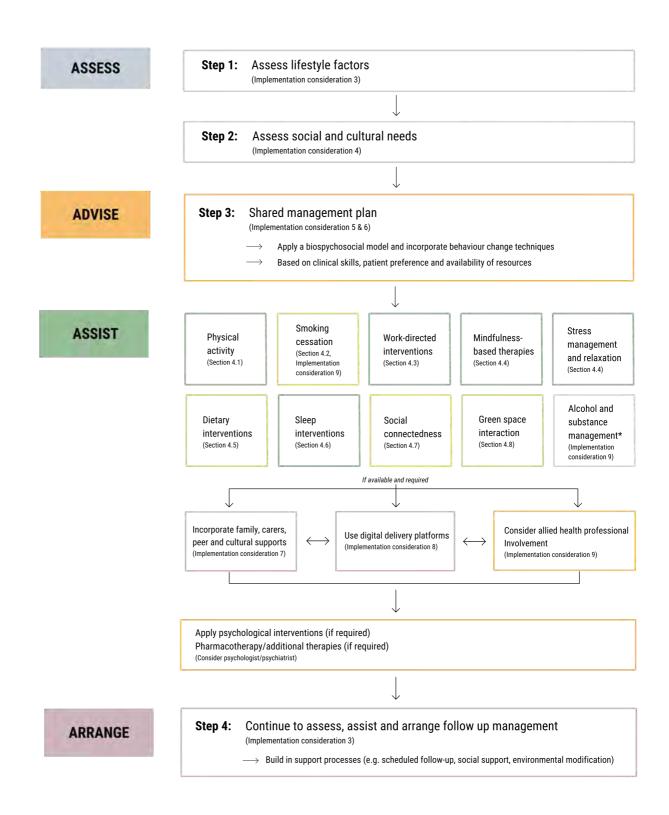
WHICH LIFESTYLE-BASED INTERVENTIONS?

Although lifestyle-based approaches encompass a wide range of interventions, these guidelines considered:

- Physical activity
- Dietary approaches
- Sleep related approaches
- Smoking cessation
- Work and volunteer engagement
- Loneliness and social support
- Mindfulness and stress management practices
- Green and blue space approaches

MODEL OF LIFESTYLE BASED CARE

The flowchart below outlines the process that practitioners can follow to thoroughly assess the needs of people with MDD, and develop and monitor management approaches within a lifestyle-based framework.



^{*}Not graded as part of these guidelines (we recommend use of complementary AOD guidelines)

Exercise and physical activity



Exercise and physical activity

BACKGROUND

- Exercise and physical activity are an effective intervention for reducing depressive symptoms and risk of developing or worsening MDD.
- Exercise can also improve quality of life and sleep.
- Pathways may include a combination of neurobiological mechanisms (e.g., reduced inflammation) and psychosocial factors (e.g., increased self-efficacy).
- However, people with MDD have reduced physical activity levels. They are less likely to achieve the recommended 150 minutes of moderate and vigorous physical activity per week.

CLINICAL CONSIDERATIONS

Caution should be taken when prescribing physical activity, especially intensive forms, to those with certain medical conditions, such as heart disease, diabetes, asthma, vertigo, osteoporosis, or joint disease. Consult the individual's physician prior to initiating an exercise program.

- The best exercise prescription is one that can be maintained.
- Prescription should be based on feasibility of adherence, and individualized to the person's motivation and current levels of physical activity and fitness.
- An aspirational target of 150-300 min/week is recommended in line with World Health Organization guidelines.
- Aerobic and anaerobic exercise may be prescribed. Aim for a minimum perceived exertion of 3-7+ out of 10, that leads to some degree of increase in heart rate and breathing rate.
- Discuss strategies to reduce sedentary behaviours. Mentally passive sedentary behaviour (requiring little mental effort e.g., watching TV) in particular, has been linked to increased risk of MDD.
- Mind-body interventions that incorporate aspects of mindfulness, physical activity, breath work, and spirituality may be prescribed (e.g., yoga, tai chi, and qi gong).

Exercise and physical activity

ASSESS

- 1. Understand what has been attempted, what has worked, what hasn't worked, and why
- 2. Explore capability, opportunity, and motivation for initiating and maintaining...
- 3. Explore cultural and traditional values and how these may impact recommendations.
- 4. Inquire about and encourage individuals to engage in physical activity that they enjoy, and at a frequency and intensity that they can sustain.

ADVISE

- 5. Discuss engagement in supervised exercise activities such as group classes, personal trainers, and team sports, as these may improve adherence
- **6.** Encourage reduced sedentary behaviour with examples (e.g., digital apps and push notifications, reminders, standing/walking meetings, standing desks).

ASSIST

- 7. Encourage feasible exercise routines that are effortful but not too difficult, exhausting, or painful. Emphasise regularity over intensity.
- 8. Try starting with low-moderate intensity exercise (e.g., walking/cycling short distances) rather than high intensity exercise routines (e.g., sprints, long distance running).
- 9. Suggest strategies like pairing exercise with enjoyable activities e.g., listening to music, socializing, watching TV, or exercising in a pleasant environment.
- 10. Promote awareness of positive mental, physical, and social experiences *during* physical activity instead of afterwards, as this can guide attention and increase motivation.

- 11. Engage with an accredited exercise physiologist where warranted to overcome barriers, especially where physical comorbidities exist (e.g. heart conditions).
- 12. Track progress and barriers to engaging in physical activity and exercise and provide reinforcement, support and/or referral where necessary.
- 13. Gradually incorporate higher intensity exercise where feasible and appropriate, to gain maximal antidepressant benefits.

Exercise and physical activity

AEROBIC EXERCISE

Energy exerted at a sustained and steady rate.

- Walking/hiking
- Swimming
- Dancing
- Cycling
- Using an elliptical trainer
- Rowing
- · Jogging
- Skipping
- Aerobics
- · Snow skiing
- Kick boxing

ANAEROBIC EXERCISE

Energy exerted in short, high-intensity bursts

- Weight lifting
- Pushups
- Squats
- · Pilates and yoga
- Sprints (running, biking or swimming!)
- Pull ups
- High intensity interval training
- Planks
- Jumping / burpees
- Circuit training

SIMPLE WAYS TO REDUCE SEDENTARY BEHAVIOURS

- Take regular breaks when sitting for long periods. Get up and make a cup of tea, go for a walk or go and chat to a work colleague.
- Convert passive leisure activities to activities that involve some movement walk with a friend instead of calling them, walk to the shops instead of ordering online, or do some gardening instead of scrolling through social media.
- Stand up at work ask for a stand up desk in your office, or set one up at home.
- When you drive somewhere, park a little further away so you have further to walk to your destination.
- When getting public transport, get off your bus, tram or train one stop early and walk the rest of the way.
- Set time limits on sedentary behaviour set an alarm as a reminder, or use an app on your phone.
- · Cycle to work.
- Walk to get your groceries.
- Place objects you need regularly in your home or office (e.g. printers, stationery, food) out of reach, so you have to get out of your seat to access them.
- Install a treadmill desk! You could share the cost with people you work with and take it in turns throughout the day to use it.
- Use your lunch break to walk around the block, or a nearby park, or clean up if working from home.

Smoking cessation



Smoking cessation

BACKGROUND

- Smoking cessation is associated with improvements in depressive symptoms.
- People with MDD are more likely to be smokers compared to the general population, exacerbating already elevated comorbidity and mortality risk.
- In contrast to common belief, people with mental illness report high levels of motivation to quit smoking.

CLINICAL CONSIDERATIONS

- Previous MDD is associated with decreased smoking abstinence rates and increased smoking relapse rates. Smoking cessation interventions in people with MDD may require further support and additional long-term monitoring.
- Tobacco smoking can affect metabolism of some antidepressant and antipsychotic medications (e.g., clozapine, olanzapine, fluvoxamine, duloxetine, mirtazapine, and trazodone).
- Smoking cessation may also affect metabolism and absorption of currently prescribed medications, and other drugs (e.g., caffeine), which can result in restlessness and sleep disturbances.

- Combined psychological and pharmacotherapy support improves abstinence rates for >6 months in the general population, ranging from 25-30% compared to 3-5% for those who were unassisted.
- Pharmacotherapy options may include:
 - NRT patches, inhalers, gums, lozenges
 - Varenicline
 - Bupropian
 - Region-specific recommended options
- Psychological approaches such as motivational interviewing, cognitive behavioural approaches, behaviour activation, and mindfulness-based approaches can be used.
- Addressing factors that predict smoking relapse may facilitate long-term cessation, including:
 - Sleep disturbance A recognized consequence of nicotine withdrawal, occurring in up to 42% of people who have quit smoking.
 - Weight gain Common after smoking cessation.
 - Social networks Where there are many other smokers.

Smoking cessation

ASSESS

- 1. Understand what has been attempted, what has worked, what hasn't worked, and why.
- 2. Explore capability, opportunity, and motivation for initiating and maintaining smoking cessation.
- **3.** Explore cultural and traditional values and how these may impact recommendations, uptake, and adherence.
- 4. Assess and develop strategies with individuals for managing urges. Generally, strategy intensity should match urge intensity to be effective.

ADVISE

- 5. Discuss management strategies for triggers (e.g., social settings, stress) linked to smoking.
- 6. Educate on withdrawal symptoms and relapse management.

ASSIST

- 7. Educate on the physical, mental, social, and financial benefits of smoking cessation.
- 8. Establish support from family and friends and local smoking cessation support groups, including "social quitting" where multiple people quit at the same time.
- 9. Acronyms like "DEaDS" may help to manage urges: Delay (by 10 minutes), Escape/avoid (change environment), Distract (e.g., call someone, physical activity), Substitute (e.g., nicotine replacement therapy, water).

- 10. Refer individuals to a smoking cessation specialist if required.
- 11. Work with an appropriate medical practitioner to implement formal smoking cessation interventions including:
 - a. Nicotine replacement therapy.
 - b. Specific smoking cessation medications e.g. varenicline.
 - c. Antidepressant medications e.g. bupropion.
 - d. Talking therapies including cognitive behavioral therapy.
- 12. Track progress and barriers to smoking cessation and provide reinforcement, support and/or referral where necessary.
- 13. Monitor addiction transference, as this is common.

Work and volunteer engagement



Work and volunteer engagement

BACKGROUND

Employment and volunteering are sources of routine, structure and social interaction. Employment can be a significant source of confidence, identity, status, vocational purpose.

- Evidence suggests that employment has a protective effect on MDD.
- A diagnosis of MDD increases risk of absenteeism and unemployment. This may exacerbate symptoms due to isolation, financial stress, and lack of routine.
- Extended unemployment increases the risk of, and may worsen, conditions related to unemployment, including increased MDD, alcohol abuse, isolation, decreased selfesteem, suicide, financial debt, and diminished social status.
- The probability of returning to work decreases as the length of time since employment increases.

CLINICAL CONSIDERATIONS

Organisational or occupational factors may need to be considered in the context of engagement with work for those with MDD.

- Initially, determine the role of an individual's employment in contributing to or causing depressive symptoms. This determination will inform work-related management strategies.
- Assess for and manage comorbid conditions. Common comorbidities with work-related MDD include musculoskeletal pain, trauma, and substance abuse.
- Evaluate and address perceived work quality. Jobs with high adverse factors (e.g. job insecurity) have a higher risk of MDD relating to unemployment.
- Consider temporarily reduced work hours, with graded return to full work capacity.
- With the person with MDD's consent, work with the employer to implement supportive work-based strategies and manage factors that could exacerbate symptoms.
- Work with the workplace rehabilitation provider, where available and appropriate.
 They can provide further clinical support, coordinate and negotiate return to work, and support individualized work-directed strategies and education.

Work and volunteer engagement

ASSESS

- 1. Understand what has been attempted, what has worked, what hasn't worked, and why.
- 2. Explore capability, opportunity, and motivation for initiating and maintaining work-related changes.
- **3.** Explore cultural and traditional values and how these may impact recommendations, uptake and adherence.
- 4. Consider whether the individual can engage in work, either at full or reduced capacity.
- **5.** Explore individual factors (e.g., symptom severity, personal motivation, comorbidities) and work-related factors (e.g., work environment, manager support, ongoing stressors).
- 6. Understand functional capacity, rather than considering only improvement in depressive symptoms.

ADVISE

7. Discuss barriers such as personal factors (e.g., personal relationships, finances, housing arrangements), health behaviors and attitudes, employment factors, and medical factors.

ASSIST

- 8. Educate on the physical, mental, social, and financial benefits of work.
- 9. Encourage volunteer activities where employment is not feasible or appropriate.

- 10. Engage with a trained workplace rehabilitation provider where available and appropriate.
- 11. Track progress and barriers to engaging in, or returning to, work and provide reinforcement, support and/or referral where necessary.

Mindfulness and relaxation practices



Mindfulness and relaxation practices

BACKGROUND

- Stress is implicated in onset and relapse, severity, and recurrence of MDD. The use of stress management approaches, and specifically mindfulness, may support MDD management.
- Several mechanisms have been implicated in the pathology of sustained stress in MDD including the hypothalamic pituitary adrenal (HPA) axis, the sympathetic nervous system, genetic susceptibility, and changes in brain structure and function.
- Mechanisms of action may include improvement in mindfulness, decreased rumination, and worry, increased self-compassion and psychological flexibility.

CLINICAL CONSIDERATIONS

- Mindfulness-based or stress management approaches can take various forms including mindfulness-based stress reduction (MBSR), Mindfulness Based Cognitive Therapy (MBCT), and relaxation therapies such as progressive relaxation training or autogenic training.
- Even when delivered competently, temporary, non-severe side effects are common e.g., discomfort, irritability, and a greater awareness of symptoms of stress or rumination.
- Major adverse reactions are very uncommon and mainly arise in the context of poor supervision and prolonged formal practice for which the individual was not prepared.
- Caution should be taken when prescribing mindfulness for those experiencing acute major depressive episodes or psychosis, as difficulties with engagement and practice can arise. It is also possible to accentuate unpleasant symptoms. It can be safely applied when the individual is in a more stable condition.

- The person with MDD should be well informed about the process and what it entails. Not everyone will be ready to engage in mindfulness as a level of insight and motivation is required.
- For those experiencing mild depressive symptoms, introductory and self-guided mindfulness training may be warranted. This may be facilitated with self-guided digital health training programs and phone applications.
- Relaxation techniques, e.g., progressive relaxation training or autogenic training, may form a beneficial component of treatment and ongoing management.

Mindfulness and relaxation practices

ASSESS

- 1. Understand what has been attempted, what has worked, what hasn't worked, and why.
- 2. Explore capability, opportunity, and motivation considerations for initiating and maintaining mindfulness and stress management strategies.
- **3.** Explore cultural and traditional values and how these may impact recommendations, uptake and adherence.
- 4. Identify and address the underlying causes of stress, including administering a social needs screening tool.

ADVISE

- 5. Discuss individualized approaches to enhance resilience to stressors through problem solving, behaviour change, social support, lifestyle measures, and environmental factors (e.g., housing, employment).
- **6.** Emphasise that regular practice of mind-body techniques (e.g., MBSR, relaxation techniques) increases resilience and coping.
- 7. Discuss ways to prioritize more time for activities that can reduce stress, such as time with family, friends, and hobbies.

ASSIST

8. Encourage practice of simple techniques that can be done anywhere, e.g. box breathing (breath for 4 seconds in, hold for 4 seconds, exhale over 4 seconds, hold for 4 seconds).

- 9. Refer to well-trained mindfulness professionals to enhance effects and mitigate mindfulness-related adverse events.
- 10. Recommend digital and online tools to support mindfulness meditations, relaxation practices, and simple breath techniques.
- 11. Refer to a stress management specialist where warranted. An interdisciplinary approach, including the use of a trained psychologist, may facilitate stress management.
- 12. Track progress and barriers to managing stress and engaging in mindfulness activities. Provide reinforcement, support and/or referral where necessary.

Dietary change



Dietary change

BACKGROUND

- Evidence suggests an association between nutrient-dense dietary patterns and reduced risk of MDD.
- Diets high in ultra-processed foods are associated with increased risk of depressive symptoms.
- Mechanisms of action may include inflammation, oxidative stress, mitochondrial dysfunction, the gut microbiota, tryptophan–kynurenine metabolism, the HPA axis, neurogenesis and BDNF, and epigenetics.

CLINICAL CONSIDERATIONS

- While most studies have used a Mediterranean style dietary pattern, Mediterranean diets are not necessarily essential or superior to other healthy dietary patterns.
- Any dietary pattern that emphasizes the consumption of nutrient dense, unprocessed foods may be equally effective for reducing depressive symptoms.
- No randomized controlled trials currently support the support more restrictive dietary regimens (e.g. ketogenic diet) for reducing MDD symptoms..

- Dietary advice and prescription should be considered alongside an individual's ethical/spiritual/religious preferences, comorbidities, food intolerances and allergies, taste preferences, and socioeconomic status.
- A dietitian that is trained in dietary counselling to deliver dietary interventions is highly recommended to ensure individualized and sustainable dietary improvements.
- Dietary advice focusing on healthy eating strategies, rather than weight loss and calorie restriction, are recommended to be provided for the management of depressive symptoms.
- General recommendations could comprise adhering to nutrient-dense dietary patterns including increased consumption of fruits, vegetables, legumes, wholegrain cereals, nuts, lean meat, and omega-3 rich foods such as fatty fish, while reducing consumption of processed foods.
- Techniques such as motivational interviewing, nutritional education, and individualized and structured eating advice, may be used to overcome challenges associated with symptoms of MDD.

Dietary change

ASSESS

- 1. Understand what has been attempted, what has worked, what hasn't worked, and why.
- 2. Explore capability, opportunity, and motivation for initiating and maintaining diet-related changes.
- **3.** Explore cultural and traditional values and how these may impact recommendations, uptake and adherence.
- 4. Use tools like food diaries or checklists to assess, understand and monitor eating patterns.

ADVISE

- 5. Discuss the benefits of evidence-based changes:
 - Increase consumption of fruits, vegetables, legumes, whole grains, nuts, seeds, herbs and spices as tolerated.
 - Limit intake of ultra-processed foods and discretionary foods, and replace ultra-processed foods with minimally-processed nutritious foods.
 - Include high consumption of foods rich in omega-3 polyunsaturated fatty acids and fiber.
 - Consume red meat in moderation and opt for lean sources rather than processed and/or fatty cuts, considering the individual's cultural-religious background.
 - Include extra virgin olive oil as the main source of cooking and added oil.
 - Consume the daily recommended water intake.
 - Avoid excessive alcohol consumption.

ASSIST

- 6. Encourage adherence to nutrient-dense, minimally processed dietary patterns that are non-restrictive and easy to follow, such as the Mediterranean diet.
- 7.
 Encourage individuals to incorporate joy, social connection, and mindfulness into the "food experience" where possible.
- 8.

 Promote the benefits of cooking in bulk and freezing, planning meals in advance, and buying frozen vegetables, canned and dried legumes, and tinned fish for affordable, convenient, and nutrient dense meals.

- 9. Where required and available, refer to a trained dietician.
- 10. Track progress and barriers to changing and maintaining supportive dietary habits and provide reinforcement, support and/or referral where necessary.

Sleep hygiene



Sleep hygiene

BACKGROUND

- Sleep-focused interventions improve MDD via improved sleep quality. Insomnia symptoms are therefore an important target for improving MDD outcomes.
- MDD and sleep are intricately connected. Most people with acute MDD report difficulties initiating and/or maintaining sleep.
- Sleep disturbances in a major depressive episode correlate with MDD severity, are a significant driver of distress and impaired quality of life and are independently associated with suicidal ideation and suicide attempts.
- Residual sleep disturbances are common after acute phase treatment for MDD and increase the risk of future depressive relapse.

CLINICAL CONSIDERATIONS

The majority of people presenting with MDD in primary care are likely to present with both MDD and insomnia. Sleep disturbance is a common reason for seeking primary care treatment, and sleep interventions are less stigmatized than mental health treatments

- It is recommended that all individuals presenting with MDD be assessed for insomnia, and vice versa. This may include assessing time needed to fall asleep, periods of wakefulness after sleep onset, total sleep time, time in bed, number of awakenings, subjective sleep quality.
- All individuals identified as having sleep problems comorbid with MDD should receive treatment specific to sleep disturbance.
- CBT-I has been found to be a safe and beneficial treatment for insomnia. CBT-I treatment can be accessed by referral to a CBT-I trained psychologist in some healthcare systems.
- Good sleep hygiene habits are associated with improvements in sleep and may be encouraged. A clear explanation of the underlying mechanism of each sleep hygiene recommendation may enhance treatment adherence.

Sleep hygiene

ASSESS

- 1. Understand what has been attempted, what has worked, what hasn't worked, and why.
- 2. Explore capability, opportunity, and motivation for initiating and maintaining sleep-related changes.
- **3.** Explore cultural and traditional values and how these may impact recommendations, uptake and adherence.
- 4. Identify and understand current sleep behaviours and factors contributing to these behaviours, to understand barriers and opportunities for change.

ADVISE

- 5. Discuss development of positive sleep habits such as:
 - Avoid going to bed unless tired.
 - Establish a consistent sleep schedule on weeknights and weekends.
 - Aim for at least seven hours of sleep.
 - Reduce screen time and other sources of bright/artificial lighting before bedtime.
 - Reduce fluid intake before bedtime particularly, caffeinated and/or alcoholic beverages.
 - Introduce relaxing activities prior to going to bed (e.g., mindfulness-based meditation).
 - Ensure the place of sleep is relaxing, dark, and is at a comfortable temperature

ASSIST

- 6. Promote the physical, mental, social, and financial benefits of sufficient sleep.
- 7. Emphasise the efficacy of habitual sleep routines in improving sleep.

- 8. Refer to a sleep specialist where required and available.
- 9. Track progress and barriers to changing and maintaining sleep habits and provide reinforcement, support and/or referral where necessary.

Social connection



Social connection

BACKGROUND

Loneliness: a "negative psychological response to a discrepancy between the social relationships one desires (expectations) and the relationships one actually has (objective, real ones)".

- Greater loneliness may predict poorer MDD outcomes, with evidence indicating that people with MDD who perceive their social support as poorer have worse outcomes in terms of symptoms, recovery, and social functioning.
- For people with MDD, the odds of being lonely are up to 10 times greater than for the general population.
- Membership of social groups can protect against developing MDD, alleviate existing MDD, and prevent MDD relapse.

CLINICAL CONSIDERATIONS

Perceived and provided social support do not necessarily occur together. Individuals may objectively have many avenues for provided social support, while still feeling unsupported, resulting in a low rating of perceived social support.

- Barriers to social connection should be addressed from initial assessment to enable
 the sustainable uptake of social interventions, including physical access to social
 resources, digital literacy, geographic location, financial constraints, and psychosocial
 factors.
- Existing interventions address four broad categories: (1) social skills; (2) existing social support; (3) opportunities for new social contact; and (4) maladaptive social cognitions.
- Practitioners should be aware of available local resources and programs to support recommendations for those experiencing loneliness, e.g., community groups, hobbies, sports groups, volunteer opportunities.
- Social Prescribing may prompt short-term improvements in MDD. Social Prescribing involves connecting individuals from within the primary care setting with community organizations and resources with the help of dedicated linkage workers.
- Volunteering may reduce levels of MDD, with sustained volunteering rather than intermittent volunteering appearing to accrue greater benefits.

Social connection

ASSESS

- 1. Understand what has been attempted, what has worked, what hasn't worked, and why.
- 2. Explore capability, opportunity, and motivation for initiating and maintaining social connections and reducing loneliness.
- **3.** Explore cultural and traditional values and how these may impact recommendations, uptake and adherence.
- 4. Identify individuals at higher risk of loneliness, like people from specific populations (e.g., older adults, CALD communities) and people experiencing major life events (e.g., retirement, job loss).
- 5. Assess for and address negative cognitions and behaviours (e.g. social media use) related to social engagement. Assessment tools related to problematic internet use may help.

ADVISE

- **6.** Discuss opportunities to reconnect with past and present beneficial social connections that have gone dormant.
- 7. Discuss establishing new social connections through shared values and interests.
- 8. Discuss options and safety for using digital platforms to generate positive social connections, role models, peer support, and generating in-person social connections.

ASSIST

- 9. Use social prescribing models, where available and appropriate.
- **10.** Personalise interventions to individual circumstances and preferences (e.g., religiosity, spirituality).
- Incorporate other lifestyle domains (e.g., team sport) that individuals may enjoy, as appropriate.

- 12. Refer to local organisations and groups that provide social opportunities, such as volunteering, as appropriate.
- 13. Track progress and barriers to social connection and maintaining supportive relationships and provide reinforcement, support and/or referral where necessary.

Interaction with green or blue space



Interaction with green or blue space

BACKGROUND

Green and blue space, or nature-based interventions, increase an individual's exposure to vegetation-rich environments or bodies of water (also sometimes referred to as blue space). These environments can be urban (e.g., parks, backyards) or natural environments (e.g. beaches, forests).

- Increased exposure to green space is associated with reduced odds of depressive symptoms.
- Some intervention studies have reported improvements in stress, quality of life, and mood.
- Multiple mechanisms of action have been proposed that relate to evolutionary factors, bioactive compounds within the natural environment, divergence from habitual patterns of normal experience, and promotion of physical activity.

- Recommendations should consider individual preferences, feasibility, accessibility, neighborhood or cultural safety, capacity, mobility, socioeconomic status, and location.
- Structured programs may include horticultural or garden therapy, walking groups, wilderness therapy, andoutdoor sports and activities (e.g., hiking, camping, swimming, tai chi).
- Some studies suggest that between 10-20 minutes per exposure is the minimum required time to provide psychological and/or physiological benefits to mental health outcomes; and others find that wellbeing increased significantly with weekly contact with nature ≥ 120 minutes.
- A related factor is "nature intensity" (also referred to as "vegetation complexity"), describing the level of biodiversity of a specific green space environment and how this may affect possible benefits to mental health.

Interaction with green or blue space

ASSESS

- 1. Explore individual capability and motivation for initiating and maintaining green space exposure.
- 2. Understand what has been attempted, what has worked, what hasn't worked, and why.
- **3.** Explore cultural and traditional values and how these may impact recommendations, uptake and adherence.
- **4.** Explore local area opportunities for green-space exposure, such as community gardens, or local parks or beaches.

ADVISE

- 5. Discuss barriers to green space exposure, e.g. geographical location, time.
- 6. Encourage incorporation of natural elements into current living environments where outdoor exposure is not possible or practical.

ASSIST

- 7. Educate individuals that even small levels of green space exposure may provide benefits.
- **8.** Encourage small bouts of green space exposure initially to help establish new routines.
- 9. Encourage forms of green space exposure that the individual finds enjoyable and relaxing.
- 10. Incorporate social components to green space exposure such as engaging with friends and/or family members.

- 11. Refer to formal programs such as walking groups, garden tours, and outdoor mindfulness and exercise programs, as appropriate and available.
- 12. Track progress and barriers to green space exposure and provide reinforcement, support and/or referral where necessary.



Want more information?

READ THE FULL CLINICAL GUIDELINES
FOR THE USE OF LIFESTYLE-BASED
MENTAL HEALTH CARE IN MAJOR
DEPRESSIVE DISORDER



