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Exercise & Depression

What the fact sheet covers:

- Regular exercise may alleviate symptoms of depression
- Evidence for the benefits of exercise in managing depression
- Other health benefits of exercise
- Recommendations for mental health benefits.

Regular exercise is a recommended part of treatment for mood disorders including depression (Malhi et al., 2020). Regular exercise may help to improve quality of life and can have an antidepressant effect in depressive disorders (Malhi et al., 2020).

Exercise may increase the level of serotonin in the brain, a neurotransmitter linked to mood regulation, sleep, libido, appetite and other functions (ESSA, 2018). Exercise can also increase the circulating levels of endorphins, which have mood-lifting properties to make us feel good, as well as relaxed post-exercise (ESSA, 2018).

How can exercise help?

- Increasing energy levels
- Improving sleep
- Distraction from worries and rumination
- Provide social support if done with other people
- Increase a sense of control and self-esteem
- Reduce the risk of diseases commonly associated with depression and mood disorders (ESSA, 2018).

The role of exercise in treating depression

- Regular exercise by itself can be effective for people suffering from acute and chronic mental illness, particularly for people who were previously inactive (Exercise Right, 2021).
- Exercise doesn't need to be vigorous to be helpful – evidence suggests

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significant effects for moderate to vigorous intensity activity - a brisk walk can be beneficial (Schuch et al., 2016). There is growing evidence supporting lower intensity activities such as yoga for mood improvements (ESSA, 2018).

- For more severe melancholic depressions, exercise may be a helpful alongside other treatments such as medication or psychological therapies (Malhi et al., 2020).
- Regular exercise of any intensity has also been shown to have a protective effect against incidence of future depression and can be recommended to prevent onset of or recurrence of depression (Harvey et al., 2018).

See our fact sheet **Types of Depression** for more information.

Evidence for the benefits of exercise in managing depression

Regular exercise can be an effective way to manage and relieve some symptoms of depression, and is an easy, relatively low-risk intervention to implement. Engaging in regular exercise has been shown to have a large effect in symptom reduction for people with depression, including major depressive disorder (Schuch et al., 2016).

Schuch et al. (2016) conducted a meta-analysis adjusting for publication bias into the effect of exercise on depression, finding it to have a large and significant antidepressant effect across twenty-five randomised controlled trials between 2013 and 2015. Larger effects are seen for moderate to vigorous intensity, however lower intensity exercise such as yoga has also been shown to be beneficial depending on the person exercising (Brinsley et al., 2020).

16 weeks of regular exercise has been found to be equally as effective as antidepressant medication in treatment of mild to moderate depression (Blumenthal et al., 2007). Increasing exercise over a shorter period has also been shown effective, with as little as 9 weeks of regular activity shown to reduce the risk of depression (Stanton & Reaburn, 2014).

Aerobic exercise such as a brisk walk, cycle, jog or swim, resistance or strength training (e.g. weight-lifting) and lower intensity exercise such as yoga have all been found helpful in managing symptoms of depression (ESSA, 2018). The best exercise for you is the one you enjoy, and are likely to do consistently – going for a brisk walk with a friend, gardening, walking the dog or an active yoga class can all be helpful!

Other health benefits of exercise

In addition to being helpful for managing depression, regular exercise has numerous physical health benefits. These benefits include prevention of numerous (including life threatening) medical conditions such as heart disease, type 2 diabetes, osteoporosis, strokes and certain types of cancers. (Department of Health, 2021).

For extra health and fitness, it is recommended that adults (who are able) should also participate in vigorous activity that makes them 'huff and puff' (e.g. jogging, squash, rowing). For best results, vigorous exercise should be done for 30 minutes or more on three to four days per week (on top of moderate exercise).

Ultimately, for people who are very inactive, health benefits can be gained by becoming slightly more active. A little activity is better than none at all and more is better than a little.

Exercise Recommendations

The National Physical Activity Guidelines for Adults and Older Australians recommends:

- A minimum of 30 minutes of moderate intensity exercise on most, preferably all, days of the week; An example of 'moderate intensity' exercise is brisk walking where a slight increase in breathing and heart rate is noticeable
- Exercising for at least 10 minutes at a time – the 30 minutes total does not need to be continuous; Short sessions of different activities can be combined to make up a total of 30 minutes exercise or more each day
- Being active in as many ways as possible each day (e.g. using the stairs instead of a lift).

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