When I prescribe strength training for my depressed patients, they are often surprised. They have never heard of the relationship between physical strength and psychological well-being. Most patients who come to see me, a psychiatrist, think that I will just give them a pill to provide a solution to their depression. Yes, medications have a role in moderate and severe depression, but often after a stint of medications and psychotherapy, patients still don’t have a complete resolution of symptoms. Strength training can complete the spectrum of total care by improving a variety of mood, pain, and cognitive issues.

Strength training has been shown in a number of studies to increase cognitive performance. One 2010 study done in elderly women showed that once weekly and twice weekly resistance training, both improved cognitive function as shown by a cognitive test of selective attention, and resolution of the mental conflict between naming colors and reading words. This means that the frontal lobe, the front part of their brain that is important for executive function and concentration, improved in function. Interestingly, they compared this group to a group doing just stretching and balance work, which did not see any improved function.[1] I have prescribed strength training and had patients come back with “I started with stretching and foam rolling with a personal trainer,” to which I prescribed:

A 2017 study done in men and women, ages 30–45, showed improvement in psychological health, as measured by a questionnaire after 12 weeks of resistance training. The questionnaire was a measure of each participant’s opinion on their own concentration, stress, happiness, and self-confidence. The authors of the study looked at resistance training two times a week, three times a week, and four times
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a week. All groups showed general psychological improvement after 12 weeks, with the group that trained four times a week reporting the most improvement.[2]

Next, there are many studies that show that strength training is beneficial to those diagnosed with depressive disorders. In one study on adults greater than 60 years old, 10 weeks of a supervised progressive resistance training program three times a week was shown to improve depression, as well as improve bodily pain, vitality, and social functioning. It was also shown to decrease limitations on routine activities from emotional problems.[3]

In a study looking at high and low intensities of progressive resistance training in adults >60 years old, a decrease in depression symptoms was more significant in the high intensity exercise group. The high intensity group was lifting 3x8 reps at 80% their one rep max, whereas the low intensity group was doing 20% of their one rep max. The depression scale assessed sleep, feelings of guilt, mood, anxiety and slowness of thought, speech, and action. Strength gain was directly associated with a reduction in depressive symptoms. Those in the high intensity group felt like they had more vitality than those in the other groups. Sleep quality improved significantly in all participants, with the greatest relative change in the high intensity group.[4]

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In conclusion, training for physical strength is important for enhanced “brain strength,” and has been shown to treat depression and improve cognitive function. Those who had the highest strength gains experienced the highest improvements in their mood issues. Strength gains also improved cognitive performance. Therefore, strength training should be another tool used in the treatment and prevention of psychiatric issues. In particular, I practice and recommend the “Starting Strength” model for strength training due to the technical nuance and effectiveness that occurs in strength acquisition.
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Disclaimer: For informational purposes I (Dr. David Puder) worked with a resident (Dr. Amul Shah) reviewing the scientific foundation for why resistance training helps with depression. This should not replace the recommendations of your own physician. Further, all things here are my own opinions and don’t represent any other institution.

References


