

Integrative Health for Anxiety, Part II

Self-Care and Anxiety

Several self-care and professional care approaches can be beneficial for people with anxiety disorders. Some influence anxiety symptoms in general and are useful in addressing all the different subtypes of anxiety disorders. Conversely, others have been studied only for one subtype. For specific information related to PTSD, go to the [“PTSD”](#) overview. The emphasis in this overview is on self-care options, prevention, and complementary approaches. Conventional care approaches will be briefly mentioned, and more detailed reviews on medications for anxiety can be found elsewhere.^{1,2}

Physical Activity

Exercise (and physical activity in general)

It is intuitive that exercise would help decrease anxiety; however, research has historically been somewhat limited. Most research focuses on effects on overall well-being or symptoms of anxiety, rather than exploring the effects of physical activity on specific populations who have a *DSM*-based diagnosis. A 2018 review of 15 studies (675 people) concluded that exercise programs are a viable anxiety treatment, noting that higher intensity regimens were more effective than lower intensity ones.^{3 4} In one study that found benefit for general well-being, exercise is most effective if it exceeds 12 minutes at a time for at least 12 weeks; maximal effects occur when a person exercises 40 minutes per session.⁵ A 2017 meta-analysis and a 2012 meta-review did recommend exercise as being well supported in general.^{6,7} A 2014 meta-analysis of eight studies of exercise for serious mental illness did not find a beneficial effect on anxiety.⁸ A 2014 systematic review concluded that exercise is effective as an adjunctive treatment, but not as effective as antidepressant medications.^{9,10}

Of course, one of the advantages of physical activity in general is that it has numerous other health benefits as well. For general information on the benefits of physical activity and ways to incorporate it into a personal health plan, go to the [“Physical Activity”](#) overview.

Tai Chi

Tai chi has shown promise in recent studies, but studies to date have had methodological limitations, according to a 2014 review.¹¹ That review found two randomized controlled trials (RCTs) and six nonrandomized trials indicating that tai chi was associated with a significant reduction in anxiety. Typically, study participants practiced two to four times a week (30 to 60 minutes per session) for 5 to 24 weeks. A 2015 review of 17 articles concluded that, for all the studies' flaws, tai chi does have benefit and is quite safe.¹²

Qi Gong

Qi gong developed in China and has been used there for thousands of years. It focuses on concentration, relaxation, meditation, breathing regulation, body posture, and movement. A 2014 review found that there are at least two RCTs suggesting an immediate reduction in anxiety after participants did qi gong.¹³ A 2019 review noted a potential benefit, but indicated that more studies are needed.¹⁴

Yoga

The evidence for yoga as a solo therapy or as an adjunctive therapy for anxiety is sparse. A 2018 review looking at Hatha yoga (the type most commonly practiced in the United States) noted that the quality of current research did not allow firm conclusions to be drawn.¹⁵ This is in contrast to a 2014 review that concluded yoga can reduce anxiety symptoms.^{16 17}

Surroundings

When supporting people with anxiety disorders, it is important to explore the role of external stressors. When exploring the influence of surroundings on anxiety, be sure to ask about work stress, vulnerability to crime, as well as safety at home. Not surprisingly, intimate partner violence is a risk factor for anxiety disorders.¹⁸ Be careful not to let external factors be the only focus, however; working with anxiety requires that people look within as well.

Media Fasts

A number of studies indicate that exposure to violence through the media can increase anxiety.^{19,20} Therefore, it might be helpful to suggest that a person with anxiety avoid the news for a set period of time to see if this is helpful. See the [Media Fast](#) handout.

Green Spaces

A 2018 cross-sectional study found that living in proximity to green spaces (natural outdoor environments) is protective against anxiety and depression.²¹ Other studies have come to similar conclusions.²² Even in the short-term, nature time can be helpful; a 2015 study found that a 15-minute walk in the park can lead to favorable changes in vital signs indicative of parasympathetic activation and decreased sympathetic nervous system activity.²³

Personal Development

Personal Development includes anything a person can do to grow as an individual. Augmenting financial resources (including escaping from poverty) and furthering education can reduce to stress and anxiety. Exploring creative pursuits and doing volunteer work can reduce anxiety as well.²⁴ Listening to music can also be helpful for a person with anxiety, though more research is needed to see how significant a benefit they have.^{25,26}

Nutrition

Nutritional psychiatry is a rapidly growing field.²⁷ Diet and anxiety symptoms are linked in many ways.²⁸ There is research showing that people increase or decrease their food intake when anxious, and their choice of food may move away from usual meal-type foods toward high-fat, highly palatable snacks.²⁸ Encourage people to pay attention to what they crave.

Animal studies indicate that diet-induced obesity can lead to anxiety-related behaviors in rats,²⁹ but a link in humans has been less clear.³⁰ Eating too many calories when younger may make

a person more vulnerable to developing anxiety later in life.³¹ Eating a high fat diet for four months induces anxiety through a number of inflammatory and other biochemical means.³² Vegans report lower levels of stress and anxiety than people who eat animal products, as do vegetarians.^{33,34}

A study done in Norway suggested that people whose dietary pattern consists mostly of fruits, whole grains, vegetables, and lean red meats are less likely to have either anxiety in general or an anxiety disorder.³⁵ Conversely, a diet rich in processed meats, pizza, salty snacks, chocolates, sugars and sweets, soft drinks, margarine, French fries, beer, coffee, cake, and ice cream is associated with a significantly increased probability of anxiety. Foods with numerous pro-oxidant compounds seem to worsen anxiety symptoms.³⁶

Nutrient levels may also play a role. People with anxiety tend to have lower levels of vitamin D in their blood.³⁷ People with OCD may have various forms of B12 deficiency.³⁸ In rats, vitamin E deficiency is associated with more anxiety-like behaviors.³⁹ Certain amino acids need to be consumed in the diet to protect against anxiety, namely L-Tryptophan and L-Tyrosine, which are precursors to serotonin, dopamine and norepinephrine, as well as glutamate, which is used to create gamma-aminobutyric acid (GABA).⁴⁰ Folate and B vitamins also are also needed in these biochemical pathways.

Caffeine, Alcohol, and Nicotine

Caffeine intake is associated with symptoms of anxiety and depression, and one option for people with anxiety is to discuss stopping caffeine for a few weeks to see if this is beneficial,⁴¹ noting that people vary genetically in terms of how caffeine affects them.⁴² Some research indicates that caffeine can have health benefits, including for mood.⁴³ That said, overall the evidence seems to support avoiding alcohol and nicotine.^{6,44}

Anti-Inflammatory Diet

Evidence indicates that there is a correlation in some study populations between the presence of neuropsychiatric illness and inflammation.⁴⁵ It is thought that oxidative stress may contribute to the development of anxiety in some people, and imaging studies indicate that inflammation affects a number of anxiety-related brain regions.⁴⁶ Eating an anti-inflammatory diet may prove helpful, and it will have many other health benefits as well. The [Anti-Inflammatory Lifestyle](#) handout has more information.

Glycemic Index and Load

Refined sugars and carbohydrates can cause sudden changes in insulin and glucose levels. Acute insulin and sugar variations have been linked to anxiety in some people.⁴⁷ People who eat lower glycemic load foods have lower odds of having anxiety, so it is worth it for an anxious individual to try a low glycemic index/glycemic load diet for a few weeks to see if he or she notices a benefit.⁴⁸ The [Managing Dietary Carbohydrates for Better Health](#) handout has additional information.

Probiotics

Probiotics for mental health—psychobiotics—have gotten increased research attention in recent years.⁴⁹ A number of studies have found that supplementation with probiotics can help with psychological symptoms, such as anxiety.⁵⁰ A trial of a probiotic supplement for a few weeks to

see if it is beneficial is reasonable. The [Promoting a Healthy Microbiome with Food and Probiotics](#) tool has additional information.

Recharge

Sleep is essential for brain healing and function. People with anxiety have difficulties with sleep onset, maintenance, or efficiency. Recent research suggests a bidirectional link between sleep disorders and mood disorders, including anxiety.⁵¹ Sleep disturbance is known to exacerbate symptoms in most anxiety disorders.⁵² Furthermore, it is a hypothesized risk factor for the development and maintenance of mood and anxiety disorders;⁵² having a diagnosis of insomnia is associated with 3.2 times the odds of developing anxiety.⁵³ Even relatively short periods of sleep deprivation significantly increase a person's anxiety levels.⁵³ Research and clinical practice have demonstrated that treatment of anxiety disorders significantly improves sleep.⁵⁴ When a person has anxiety, always consider what can be done to make sleep better. It can also be helpful to focus on how to make vacations and other pauses (e.g. work breaks) as stress-reducing as possible. The "[Recharge](#)" overview has additional information.

Family, Friends, & Co-Workers

Relationships clearly influence anxiety levels for people. A 2017 review concluded that the link between anxiety disorders and relationships is bidirectional; having anxiety affects the quality of one's relationships, and how one's partner treats him or her can, of course, have a significant effect on anxiety level.⁵⁵ Having anxiety and other mental health disorders increases risk of divorce.⁵⁶ People with anxiety disorders tend to avoid social encounters, and encouraging shared medical visits and classes may be helpful.

Loneliness and social isolation are linked to multiple health problems, including anxiety. People who rate themselves as lonely tend to respond to stress more intensely, with higher levels of blood pressure and inflammation.⁵⁷ A 2014 study found that people who were more isolated actually benefited more from short-term psychotherapy than others, while people with good support benefited more from long-term therapy.⁵⁸

The effects of animal-assisted therapy (and having pets) on anxiety remains to be elucidated. Interactions with animals seems to have some positive effects, but it can also have its associated stresses (including the likelihood of ultimately having the animal die).^{59,60}

Spirit & Soul

Depending on how a person experiences them (and it is important to be very respectful of variations in beliefs), religion and spirituality can have profound positive or negative effects on mental health. There is increasing research favorably linking healthy spirituality and religiosity with less anxiety. A large-scale review done in 2015 found that 147 different studies indicated a positive relationship between spirituality and anxiety, whereas only 33 found a negative effect.⁶¹ A 2015 meta-analysis of 23 studies found a significant effect of religious and spiritual interventions on general symptoms of anxiety.⁶² A review of 43 studies found that, specifically for Veterans, well-being is favorably linked to spirituality, and well-being was defined, in part, in terms of anxiety levels.⁶³ One study found that framing treatment around religion and spirituality is often (though not always) the preferred approach for addressing anxiety in older adults.⁶⁴ Meaning in life in general also has a significant inverse relationship with anxiety levels.^{61,65,66}

Attunement to the existential aspect of patients' stories may do much to help them work more successfully with anxiety symptoms.⁶⁷ It is always worth asking if spiritual or religious issues (e.g., beliefs about death) are associated with anxiety symptoms. The "[Spirit & Soul](#)" overview has additional information.

Mind and Emotions

There is little doubt that invoking the mind's power is essential for most people when it comes to working with anxiety disorders. Psychotherapy, relaxation practices, and other mind-body therapy all can be beneficial. The key is to successfully match the therapeutic approach to each specific individual.

Psychotherapy for Anxiety

A number of psychotherapies can be beneficial for people with anxiety disorders. Cognitive Behavioral Therapy (CBT) is a cornerstone of mental health care. In CBT, the clinician guides the patient in identifying and replacing negative patterns of thinking with more positive and realistic approaches. It includes behavior activation and education about the relationships between thoughts, behaviors, and emotions. CBT involves a limited number of sessions, typically 12. There are specific types of CBT for panic disorder, OCD, and PTSD.

A 2015 review of 19 fMRI studies found that CBT increases the prefrontal part of the brain's control over the different subcortical structures that function differently in different anxiety disorders.⁶⁸ CBT is helpful for people with health anxiety related to having a variety of chronic illnesses.⁶⁹ It has been found just as effective as medication treatment for generalized anxiety disorder, and even more effective six months after the start of treatment.⁷⁰ A large 2018 meta-analysis confirmed it has a large effect size for treating obsessive-compulsive disorder (OCD), generalized anxiety disorder (GAD), and acute stress; it has a small to moderate effect size for social anxiety disorder (SAD) and panic disorder.⁷¹ CBT is also effective for somatoform disorders and for medically unexplained physical symptoms.⁷²

A systematic review of 21 studies found CBT is effective when administered via videoconferencing.⁷³ A meta-analysis of 100 articles found a 51% remission rate for anxiety with CBT (with the number varying based on how "remission" was defined in each study).⁷⁴

Other types of psychotherapy have also shown benefit. Examples of other approaches include emotion-focused therapy (mostly for GAD), exposure therapy (especially for OCD and PTSD), and group sessions of various types for SAD.⁷⁵⁻⁷⁷ A recent meta-analysis of 14 RCTs totaling 1,073 patients showed Psychodynamic Psychotherapy (PP) is as efficacious as other active treatments that have been studied for anxiety disorders.⁷⁸ Limitations of PP include a longer length of treatment; however, longer lasting effects were also found.⁷⁸ A 2017 review of 36 trials using Acceptance and Commitment Therapy (ACT) found that it outperformed being on a waitlist, as well as treatment as usual; effects were comparable to those of CBT.⁷⁹ Of note, the dropout rate for psychotherapy for people with GAD is 17%, so it is important to support ongoing use of these helpful approaches.⁸⁰

Positive Psychology

Positive psychology focuses on helping people build pleasant, engaged, and meaningful lives, in contrast to focusing on reducing negative states, such as anxiety, depression, and anger.⁸¹ This treatment approach helps people develop emotional resilience, rather than directly focusing on decreasing anxiety; it can be a useful adjunct when working with people with anxiety disorders.

Mind-Body Practices

Specific tools that go into more detail about several mind-body practices are featured in the [Passport to Whole Health](#), Chapter 12.

Various states of relaxation elicit cardiorespiratory coherence, which in turn activates the parasympathetic nervous system and opposes the sympathetic nervous system, which tends to be more active in people with anxiety.⁸² Several approaches can decrease anxiety by eliciting the relaxation response. For additional details about each of the approaches listed below, check out the [“Mind and Emotions”](#) and [“Mindful Awareness”](#) overviews and tools.⁸³⁻⁸⁵

Biofeedback

Biofeedback uses various measurement tools to bring greater conscious awareness to what are normally unconscious bodily functions. There are several studies showing that use of biofeedback equipment can reduce anxiety. Heart rate variability biofeedback leads to a large reduction of stress and anxiety, according to a 2017 meta-analysis.⁸⁶ Other studies have also found benefit,^{87,88} Refer to the [“Biofeedback”](#) tool.

Guided Imagery

Mental imagery has been demonstrated to elicit stronger emotions than other mind-body approaches. It has a role in eliciting a sense of calm in patients with anxiety.⁸⁹ Guided Imagery shows promise for improving anxiety in critically ill patients, but more studies are needed.⁹⁰ It also decreases anxiety in patients having hemodialysis and people who are about to have surgery.^{91,92}

Hypnosis

A 2010 review concluded that hypnosis helps with both state anxiety (anxiety due to a specific situation, like taking a test) as well as anxiety disorders (longer-lived anxiety that recurs).⁹³ It also seems to reduce anxiety for people who have cancer, are receiving wound care for burns, or about to have dental procedures.⁹⁴⁻⁹⁶

Meditation

The benefits of mindful awareness are beginning to be understood at a neurobiological level.⁸³ A 2014 review concluded that meditation programs result in small to moderate reductions in “multiple negative dimensions of psychological stress.”⁹⁷ There is still a lack of research on this topic, but a 2017 study of 57 people with GAD found that mindfulness meditation seems to improve occupational function and lead to more appropriate use of health care resources.⁹⁸ In a 2010 meta-analysis, mindfulness was linked with improved anxiety symptoms.⁸⁴ A 2012 review concluded, “The evidence suggests that both mindfulness-based stress reduction and mindfulness-based cognitive therapy have efficacy as adjunctive therapies for anxiety symptoms.”⁸⁵

Progressive Muscle Relaxation

Progressive muscle relaxation decreases anxiety and improves quality of life in a number of different patient groups. Examples include people with acute schizophrenia,⁹⁹ chronic lung disease patients,¹⁰⁰ and people with hypertension.¹⁰¹

Breathing Exercises

Paced deep breathing is an effective way to elicit increased parasympathetic activity.¹⁰² It changes activity levels in different parts of the brain and alters EEG readings.¹⁰³ Breathing retraining has been found to be an effective treatment alone and in conjunction with other treatments for decreasing anxiety and improving anxiety disorders.¹⁰⁴

Author(s)

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