



Yoga

What Is Yoga?

Some people can remember a time before yoga studios could be found on almost every street corner in the United States, but yoga has been around for millennia. It is an ancient system of contemplative practice that originated in India over 5,000 years ago. Most people associate yoga with hatha yoga and other body-oriented practices (like Bikram, Vinyasa Flow, and Iyengar yoga). These forms of yoga incorporate various asanas, or physical postures. There are many other types of yoga as well, including jnana (knowledge), karma (action), and bhakti (devotion). One of the main purposes of yoga as originally practiced was to foster greater mindful awareness, to help people achieve states of “higher consciousness.”¹ In fact, it is often referred to as a “science of mind.” The word yoga originates from the Sanskrit *yug* which means union; it was intended to effectively connect mind and body.

As of 2015, 9.5% of U.S. adults (21 million) had practiced yoga, up from 6.1% in 2007.² According to the 2012 National Health Interview Survey,³ 94% of those who practice yoga reported doing it for wellness reasons. 85% reported reduced stress, 55% reported improved sleep, 25% cut back or quit smoking, and 12% cut back or quit drinking alcohol.

How Yoga Works

There are many theories about why yoga is beneficial. Of course, it is a form of physical activity, and many of its benefits probably occur through the same means as they do for other forms of physical activity; some studies find comparable benefits for yoga compared to other forms of physical activity.⁴ In addition, yoga has some novel effects. It increases mindfulness traits⁵ and decreases stress levels (especially, according to current studies, in the workplace).⁶ It shifts brain waves to more relaxed, focused patterns⁷ and favorably shifts neurotransmitter balance.⁸ It also reduces levels of the stress hormone, cortisol,⁹ and it acts on the medial pain perception system of the brain to produce analgesia.¹⁰

How to Use Yoga

For beginners, it is perhaps best to do yoga in a classroom environment, or to have some personalized training with a certified trainer. It can help to start with assistive devices like yoga blocks and straps.

Who Can Use Yoga

Honoring a person’s physical (and mental) health limitations, yoga can be used by most people. There are entire yoga courses designed for people with wheelchairs.



When to Use Yoga

It is not easy to summarize findings from yoga studies, because they focus on different forms of yoga and a variety of different asanas (postures). Some styles will integrate breathing and meditation, and is then difficult to determine the relative effects of these different elements. Teachers may have different styles. Some will individualize yoga routines, while others will teach large classes that follow a specific set of asanas that everyone moves through together.

While more research is needed, yoga has been found to have a wide array of benefits, including the following, as summarized by Shah¹¹ and Field¹² (and others, if noted):

Overall Well-Being

- Reduces levels of inflammatory biomarkers in multiple different chronic diseases¹³
- Improves spinal mobility, flexibility, and muscle endurance
- Benefits functional status and fall prevention, including for those with a history of traumatic brain injury, stroke, Parkinson's, Alzheimer's, or multiple sclerosis¹⁴
- Activates the parasympathetic nervous system and improves heart rate variability¹⁵
- Improves emotional well-being, quality of life, and cognitive function

Physical Diagnoses Where Yoga Research Has Found Benefit

- Cardiovascular disease, including improvement of cholesterol panels¹⁶
- Type 2 diabetes¹⁷ and glucose balance.¹⁸ Reduces body mass index (BMI) and emotional eating.
- Hypertension (high blood pressure)¹⁹
- Nonspecific low back pain. A 2017 Cochrane review noted low to moderate evidence of small to moderate improvements.²⁰
- Neck pain (intensity, function, range of motion, quality of life, mood)²¹
- Headaches
- Arthritis in general, osteoarthritis of the knee, and other rheumatic diseases²²
- Sleep
- Menopausal symptoms²³
- Sexual function
- COPD²⁴ and asthma
- Adjunctive care for breast cancer
- Neurological problems like multiple sclerosis, epilepsy, Parkinson's disease, Alzheimer's disease, and neuropathy²⁵
- Cancer-related toxicities (fatigue, cognitive impairment, distress, sleep problems)²⁶

Mental Health Benefits of Yoga

We know that physical activity in its many forms is beneficial to mental health. Research indicates that yoga has these benefits, and perhaps others that are linked to something beside the exercise benefit.



- Yoga showed promise for improving positive mental health indicators in most of the 14 studies covered by a 2018 systematic review.¹ Indicators included life satisfaction, mindfulness (self-awareness), affect, self-compassion, forgiveness, gratitude, goal setting, optimism, and resilience, among others.
- A 2017 review found potential benefit for yoga for short-term depressive symptoms, but evidence for anxiety and PTSD is inconclusive.²⁷
- A 2013 review also found benefit for mood disorders.²⁸
- A 2013 review concluded only a weak recommendation could be made for yoga as an adjunctive therapy for PTSD.²⁹
- Yoga improves quality of life in people with schizophrenia, possibly through boosting oxytocin levels.³⁰

The effects of yoga interventions are typically found to be equal to or superior to other forms of exercise in studies that make comparisons,^{31,32} and there may be ways that yoga is superior to usual exercise for particular aspects of health.^{31,33} Preliminary data demonstrates that yoga practice is associated with increased mindfulness-related traits³⁴ and decreased stress levels.^{5,35}

In addition to participating in classes where everyone is doing the same asanas (poses), a person may also work with a yoga therapist for a personalized approach. Yoga Therapy, also known as therapeutic yoga, is focused specifically on healing. It first arose within Ayurveda, the traditional medicine of India. Most yoga research does not differentiate between therapeutic yoga and other forms, but it is gaining in popularity.

What to Watch Out for (Harms)

Generally, adverse events due to yoga were found to have a 12-month prevalence of 4.6% and a lifetime prevalence of 21%, but serious events are rare (<2% of injuries).³⁶ Headstands, shoulder stands, and the lotus position (crossing the legs with both feet resting on top of the thighs) seem to be the most problematic when not done properly. Hot yoga classes, which involve vigorous movement in hot, humid rooms, are linked to more adverse events. The same protocols should be followed with yoga as for engaging in any new form of physical activity; if there are other health issues that may pose risks, a clinician should sign off prior to someone's starting yoga.

Tips From Your Whole Health Colleagues

- **Try yoga for yourself** before you make recommendations that others use it.
- **Ask around your community** to learn which yoga teachers are most highly recommended.
- **Seek out teachers certified with the Yoga Alliance.** They will have Registered Yoga Teacher (RYT) as a title after their name.
- It is not advised to learn yoga exclusively through books or audiovisual media. **An in-person teacher is preferable.**
- **Consider Yoga Therapy** for sicker or more debilitated patients. Many of the best therapists have a background in health care.



- While it may be classed as a form of physical activity, **yoga also aligns with other parts of the Circle of Health**. It cultivates mindful awareness, invokes the power of the mind, can become a spiritual practice, and, because it is often taught in a classroom venue, it can foster social connections. If one broadens yoga practice to include other areas beyond the yoga poses, they will be encouraged to eat a healthy diet and explore their overall personal development in new ways as well.
- The VA and other groups are actively exploring ways to teach yoga via **TeleWholeHealth**,³⁷ which will likely make it more accessible in the future to people who are homebound or living in rural areas.

Resources

Websites

- [Never, Ever Give Up. Arthur's Amazing Transformation](#)
 - Watch how one Veteran reversed his obesity and pain through yoga
- [International Association of Yoga Therapists](#)
- [iRest®](#):
 - Based on teachings of Yoga Nidra
- [Laughter Yoga International](#)
- [Mindful Yoga Therapy](#):
- [Veterans Yoga Project](#)
 - Practice library with links to videos and tutorials
- [Yoga for Vets](#):
 - Nonprofit focused on bringing yoga to Veterans
- [Yoga Warriors International](#):
 - Veterans can search for a class or learn to be a teacher

Books

- *2,100 Asanas: The Complete Yoga Poses*, Daniel Lacerda (2015)
- *Yoga for Arthritis: The Complete Guide*, Loren Fishman (2008)
- *Yoga for Back Pain*, Loren Fishman (2012)
- *Yoga for Osteoporosis: The Complete Guide*, Loren Fishman (2011)

Apps and Monitoring Software

- *Daily Yoga: Yoga for Fitness*
- *Lotus Flow – Yoga & Workout*
- *Simply Yoga – Home Instructor*
- *Yoga for Beginners | Mind + Body*



What we know about integrative health care has come to us thanks to the efforts, experiences, and collective wisdom of people from many cultures and backgrounds. We wish to acknowledge all the healers, researchers, patients, and peoples who have informed the content of this tool.

Author(s)

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