

Yoga

for Chronic Disease Management

Research shows yoga is beneficial for chronic disease management, but patients should adapt poses described here to align with their physical abilities.

By Matthew D. Hansen, DPT, MPT, BSPTS



IN TODAY'S WESTERN society, the word “yoga” often invokes images of young and fit participants dressed in vibrantly colored stretchy yoga pants and posed in seemingly unattainable postures. While many consider yoga a textbook example of cultural appropriation, that doesn't mean everyone shouldn't be able to benefit from this ancient practice.

Many of the asanas (postures) of Hatha yoga, the most recognizable form of yoga in the United States, can safely be used to improve flexibility. However, yoga's benefits in its many forms extend far beyond improved range of motion. To obtain these benefits, one must first understand a bit about the history and nature of yoga and, ideally, learn from a yogi who is already practiced in the art.

Most scholars agree that yoga was first developed some 2,500 to 5,000 years ago in India — not as a religion in and of itself (although several religions incorporate its practices) but as a system of spiritual, physical and emotional health. The meaning of the Sanskrit word stems from one of two roots meaning “to concentrate” or “to yoke” (also translated to mean “to unite” or “to control”). Depending on who you ask, there are between four and six main types (paths) of yoga. Hatha yoga, with its familiar “downward-facing dog” (Adho Mukha Svanasana), “child's” (Balasana) and “warrior” (Virabhadrasana) poses, to name a few, is just one of these paths. One of the newest forms of yoga, Hasyayoga, isn't one of its main paths, but it is still one of my favorites. If you're feeling down and need a boost of joy in your day, start by Googling the term “laughter yoga” (Hasyayoga's English translation). It doesn't take long to learn the practice, and just watching others do it will put you on the right road.

I recommend learning the basics of all of yoga's different paths, but for physical and emotional benefits, Hatha yoga is a good place to start. It's much more than assuming a posture though. It's meditation and a state of mind that are brought about by one of yoga's most important components: breathing (also referred to as Pranayama).

Yoga Breathing (Pranayama)

Breathing should be rhythmic and controlled, usually through the nostrils, although it is also appropriate to breath through the mouth if the nasal passage is obstructed, temporarily or otherwise. Breathing will naturally become more labored with increased effort; however, if the quality of breath becomes compromised or if participants were able to breathe through their nose at rest but are no longer able to

do so, it is a good indicator they should pause and rest until proper technique can be resumed for yoga breathing.

There are many different yoga breathing techniques, but the following steps for the “victory breath” (Ujjayi Pranayama), although a bit difficult to master at first, describe a technique frequently used during Hatha yoga.

Step 1: First learn the technique by breathing through your mouth. Relax your body, jaw and tongue so your mouth slightly drops open.

Step 2: Inhale and exhale deeply while (here's the tricky part) slightly contracting the back of your throat and softly whispering the sound “ahh” as you exhale. Some yogis have compared the sensation during inhalation to sucking through a wide straw and the sensation during exhalation to fogging up a window. Your breath should make an “ocean” sound like the tide softly rolling in and out.

Step 3: Once the technique has been mastered, close your mouth and begin breathing through the nose while maintaining soft lips and the same constriction in the throat. The breath should still sound the same.

Step 4: Fully expand the lungs during inhalation, and completely release the air during exhalation.

Step 5: Gradually begin to connect breath with yoga postures. Inhale with the victory breath as you extend into a posture, and exhale as you contract or assume folded postures (i.e., postures that entail bending forward).

Another great yoga breathing technique to use prior to a session or other workout, or simply to clarify the mind and energize the body at any time during the day, is the “bellows breath” (Bhastrika Pranayama). It is also one of the easiest techniques to learn (see steps below), but should not be practiced by someone who has seizures, panic attacks or uncontrolled hypertension, or pregnant women. It's also not a good idea to perform bellows breathing soon after eating on a full stomach.

Step 1: Inhale deeply through your nostrils, allowing the diaphragm to expand downward and the abdomen to swell outward first, and the chest to expand afterward, followed by a rising of the collar bones.

Step 2: Exhale rapidly through your nostrils (I teach that exhalation should take approximately half the time of inhalation). Feel the collar bones drop, your chest deflate and the abdomen return to its position. Keep the head, shoulders and neck still when breathing.

Step 3: Repeat the process for a cycle of 10 breaths. If you wish to continue, take a 30-second break and either begin a

new cycle of 10 breaths or increase the number of breaths per cycle to 20, and then to 30 after a 30-second break between each cycle.

Yoga Postures (Asanas)

Which postures to incorporate into a Hatha yoga routine depends on the intent of the activity and the targeted body part(s). There are many benefits of following a particular yoga sequence (series of related, often progressive postures), but most importantly, a yoga routine should be nonharmful. Some postures for certain people can be outright dangerous. Most postures for the majority of people can be harmful if not performed properly. The self-declared ultimate goal of yoga is liberation (moksha), not mandatory bed rest or a trip to urgent care.

There are many options for adapting a particular posture. Your cobra pose (Bhujangasana) may not look more like Figure 1 than Figure 2, and that's perfectly all right! With time, your pose may look more like Figure 1 or it may not. Even if you can't fully lift your head up on your own, that's perfectly all right, too!

A typical routine consists of pre-yoga stretching, breathing exercises to focus and relax the body, warm-up postures, progressive workout postures and a relaxation (cool-down) period. Participation, mindfulness and proper breathing are just as important to the ultimate benefits of yoga if someone is not able to perform the progressive postures, although tools, including blocks/bricks, straps, bolsters and yoga balls, are available to enhance or assist with assuming and maintaining a posture.

While I would never prescribe specific postures to people without first getting to know them and their particular health situation, the asanas in Figures 1 through 8 are often recommended for beginners due to their adaptability and generally decreased strain on the body. Remember that your performance of the postures doesn't have to look just like the figures. For example, imagine how you might adapt it to your ability. If being on your knees is difficult, think how you might be able to adapt the pose in a chair.

Evidence to Support Yoga for Chronic Disease Management

Numerous studies during the past decade have documented the physical and mental benefits of practicing yoga, including benefits enjoyed specifically by autoimmune

Figure 1.
Cobra Pose (Bhujangasana)



Figure 2.
Cobra Pose (Bhujangasana)



disease and immunodeficient patient populations. Benefits may include improved flexibility, body alignment, strength, balance, stamina, proprioception (body awareness) and sleep, as well as reduced stress and pain. Fortunately, there is also specific support for the benefits of yoga on the immune system.

Building on research findings conducted earlier in the decade supporting yoga's positive effects on several immunological indicators, a 2018 meta-analysis published in the *Journal of Behavioral Medicine* found yoga appears to improve the body's immune system and decrease chronic inflammation. Another study published in *BMC Complementary and Alternative Medicine* reported yoga breathing for just 20 minutes was enough to lower stress-related inflammation markers. And, a 2013 meta-analysis of 17 different studies that looked at the effects of yoga for rheumatoid arthritis, fibromyalgia and unspecified back pain found yoga significantly improved pain and psychological outcomes in all cases.

Getting Started

The greatest challenge to starting any new physical routine for someone living with a chronic health condition is usually simply getting started. Any addition or disruption to someone's daily routine can cause anxiety. Here are some tips to help:

1) Prepare. Yoga doesn't require much, but you will want to wear nonrestrictive clothing and have a comfortable surface on which to perform postures (e.g., a yoga mat).

Figure 3.
Bridge Pose
(Setu Bandhasana)

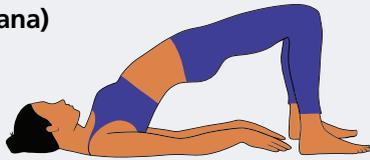


Figure 4.
Cat Pose
(Marjaryasana)

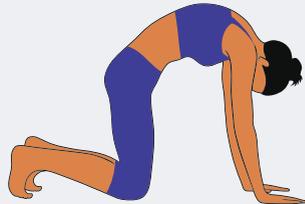


Figure 5.
Cow Pose
(Bitilasana)

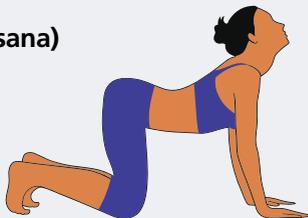


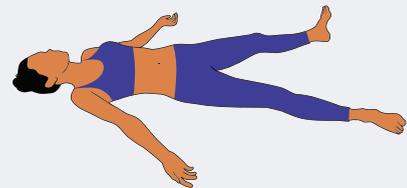
Figure 6.
Child's Pose
(Balasana)



Figure 7.
Easy Pose
(Sukhasana)



Figure 8.
Corpse Pose
(Savasana)



2) Start slow. Don't overdo it! Even starting with one or two postures for a few minutes a day can bring positive results.

3) Be consistent. Creating a habit and subsequent change requires consistency. If you don't feel up to performing your full routine or even any postures on a given day, consider at least performing breathing exercises. Just about anyone can perform the corpse pose while breathing meditatively, no matter how badly their day is going.

4) Adapt and/or seek help. Adapting postures can take a bit of imagination, but it can also be fun. If you need additional help, find a professional in your area who teaches yoga therapy or who can guide you through a session of restorative yoga. Search for a certified yoga therapist or a physical therapist or certified athletic trainer who has special training in yoga. If you aren't comfortable trying physical yoga yet or have difficulty with mindfulness meditation, consider trying yoga sleep (Yoga Nidra), a guided meditation through words and imagery that helps relaxation.

Lastly, whatever you do, enjoy your new path to improved wellness. As you begin to practice yoga, you should be left feeling more relaxed and at peace in your life.

Namaste! ■

MATTHEW DAVID HANSEN, DPT, MPT, BSPTS, is a practicing physical therapist in Utah and president of an allied healthcare staffing and consulting agency named SOMA Health, LLC. He completed his formal education at the University of Utah, Salt Lake City, and has additional training in exercise and sports science, motor development and neurological and pediatric physical therapy.

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