

# Using yoga to treat disease: An evidence-based review

As researchers continue to increase our understanding of what yoga can do for patients with chronic conditions, we very well may be writing prescriptions for yoga poses.

Lee Lipton, MA, PA-C

**Y**oga is a centuries-old tradition with origins in ancient India. Blending physical, mental, and spiritual practice, it seeks to bring about a state of harmony between mind and body through concentration, physical practice, and mental discipline. For many practitioners, yoga is seen as a path to spiritual enlightenment. “What is yoga?” (see page 36) provides more information on the background and history of yoga.

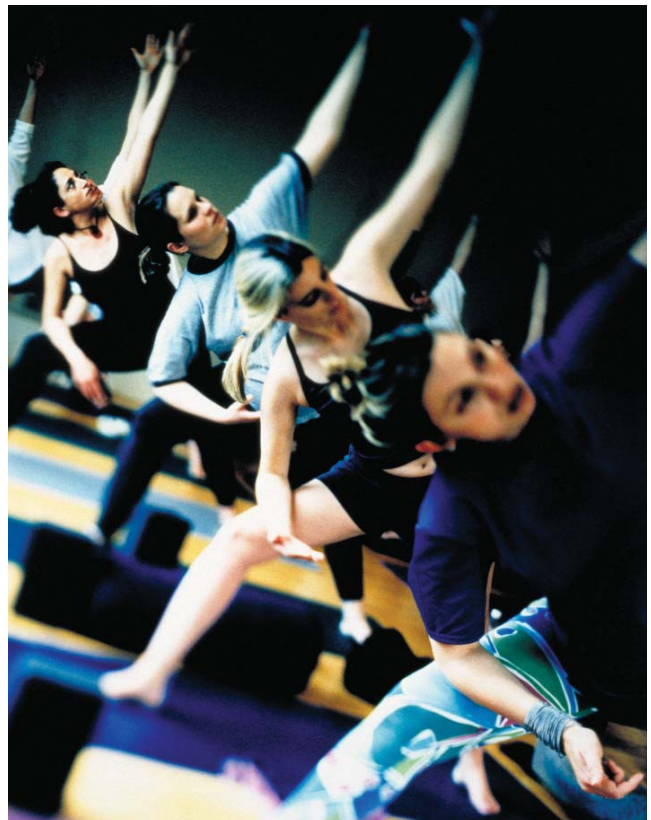
In America, the reported frequency of yoga practice accounted for the second largest relative increase in the use of complementary and alternative medicine between 1997 and 2002.<sup>1</sup> The number of people practicing yoga in the United States today has approximately tripled within the past decade and is currently estimated to be between 15 million and 18 million.<sup>2</sup> As yoga practice has become mainstream, curiosity regarding its potential as adjunct therapy for various diseases has also increased. Over the past decade, the number of research studies exploring the clinical utility of yoga has grown exponentially. Unfortunately, so has the number of unfounded claims for the ability of yoga to “cure” potentially life-threatening diseases.

As medical professionals, PAs strive to find valid scientific research behind the recommendations we make to our patients, whether this is for a prescription medication, a procedure, or a lifestyle change. What is the current state of research on the ancient practice of yoga, and what are the potential benefits for our patients? We are aware that regular physical exercise can help prevent many chronic conditions and is an important therapeutic intervention for many as well. Does yoga practice offer similar benefits?

As we will see, the very nature of yoga can make it awkward to examine in an objective, evidence-based manner. Some yoga practitioners argue that yoga’s holistic and integrated approach to mental, physical, and spiritual health makes it impossible to evaluate within the confines of research science and the randomized, controlled trial (RCT).<sup>3</sup> Indeed, many practitioners point to the very lack of reproducible scientific research as evidence that yoga has a holistic effect on the body and mind that may not be easily quantified as a statistical variable in a study.<sup>3,5</sup> Scientifically trained PAs may find this holistic approach to health a challenge to

accept. In addition, the integrated mind/body nature of yoga may itself impede the effort to tease out the specific aspects of the practice that might have a measurable, statistically significant, and reproducible effect on a patient’s health status. A lack of standardized teaching practices as well as the wide variety of styles and approaches to yoga confound and influence the applicability of even the most well-designed research studies comparing those undergoing yoga “treatment” to untreated control groups.

In the published research, study samples tend to be small, biased, and nonrandomized. In addition, training periods tend to be short, and confounding variables are generally not well-controlled.<sup>5,6</sup> Nevertheless, this article reviews some of



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the latest research involving yoga practice. To find out what the literature suggests yoga might and might not be able to do for your patients, settle into half-lotus pose and read on.

### YOGA RESEARCH FROM A TO Z

**ADHD** Eighteen boys with diagnosed attention-deficit/hyperactivity disorder (ADHD) were randomly assigned to either a yoga treatment or a cooperative activities group. After 20 sessions of yoga, the boys showed improvement on a variety of indices, including oppositional behavior, emotional lability, and restlessness or impulsivity. The subjects exhibited a dose/response curve, with those subjects who participated in additional home practice showing a greater response. The control group showed superior scores on measures of hyperactivity, anxiety, and shyness, as well as social function measures.<sup>7</sup>

**Anxiety** A meta-analysis of the research involving yoga interventions for anxiety and related disorders reviewed eight studies conducted during 2004. Overall, this research reported positive results, especially in cases of obsessive-compulsive disorder. However, the authors were quick to point out a generally poor quality of research techniques, inadequacies in methodology, and difficulty comparing studies.<sup>8</sup> A Cochrane review of two RCTs that investigated the effectiveness of meditation and yoga on patients with diagnosed anxiety disorders stated that based on the available research, no distinct conclusions can be drawn on the ability of meditation and yoga to be effective for anxiety disorders.<sup>9</sup>

**Asthma** To determine the efficacy of Iyengar yoga practice on symptoms and perceived quality of life of people living with asthma, 62 patients with mild to moderate asthma were randomized and divided into two groups. The treatment group performed Iyengar yoga for 4 weeks, and the control group enrolled in a “stretching” program. Both groups underwent spirometry testing and recorded their bronchodilator use, symptoms, and quality of life assessments. At no point in the study did the yoga intervention group show a measured benefit in clinical indices.<sup>10</sup>

Another small RCT divided 17 subjects into a yoga treatment and a control group. The yoga group engaged in relaxation *pranayama* (mindful breathing) techniques, yoga postures, and meditation 3 times per week for 16 weeks. Spirometry testing showed little difference between the two

groups; however, the yoga group showed improved exercise tolerance and reported relaxation as well as a more positive attitude as measured by questionnaire. This study also showed a trend toward less use of short-acting bronchodilator medication in the yoga group.<sup>11</sup>

**Back pain** A 12-week RCT compared viniyoga practice with conventional therapeutic back exercises or a self-help book for 101 patients with chronic low back pain. The yoga group met with one instructor for a weekly 75-minute viniyoga practice. Patients were also encouraged to practice at home daily and were given handouts and an audio CD guide. This group showed greater improvement in functional status, decreased activity restriction, and increased general health compared to the conventional exercise group or the

“The general consensus is that yoga does not provide the significant stimulus necessary to enhance cardiovascular function.”

self-help book group at 12 weeks. At 26 weeks posttreatment, the conventional exercise and yoga therapy group did not show a significant difference in outcome, though at all points in time, viniyoga therapy appeared to be more effective than the self-care book. The viniyoga benefit also lasted for months after the intervention.<sup>12</sup>

**Cardiovascular disease** A systematic literature review of 70 studies published over the past two decades showed a trend toward beneficial changes in metabolic syndrome risk factors such as insulin resistance, lipid profiles, BP, and anthropomorphic indices. The author noted that by controlling risk factors for metabolic syndrome, a regular yoga practice might possibly reduce the risk of cardiovascular disease (CVD). It is important to note that approximately one-third of the reviewed studies were RCTs and that the majority of the others were uncontrolled or nonrandomized controlled clinical trials.<sup>4</sup> A 2002 comprehensive review of the literature

Text continued on page 38

### KEY POINTS

- In America, the reported frequency of yoga practice accounted for the second largest relative increase in the use of complementary and alternative medicine between 1997 and 2002. The number of people practicing yoga in the United States today has approximately tripled within the past decade and is estimated to be between 15 million and 18 million.
- Properly executed, regular, appropriate yoga practice has been shown to help patients improve overall muscular flexibility and strength and improve balance.
- Yoga demonstrates some efficacy as adjunct therapy for back pain, knee osteoarthritis, and carpal tunnel syndrome. It may have some positive effects on obsessive-compulsive disorder, anxiety, and depression, as well as on conditions that are worsened by stress, such as irritable bowel syndrome, ADHD, and menopausal vasomotor symptoms. Yoga practice may add additional benefit to traditional therapies in managing cardiovascular disease indices.

### COMPETENCIES

● Medical knowledge

●● Interpersonal & communication skills

●●●● Patient care

●●●● Professionalism

● Practice-based learning and improvement

●● Systems-based practice

### What is yoga?

The word *yoga* is translated from the Sanskrit word *yug* or *yuj*, which means “to yoke.” Many yoga practitioners and teachers believe this describes the union between mind and body, a concept that is central to this multifaceted practice.

The Indian scholar Patanjali is frequently credited with compiling one of the first comprehensive texts on the practice and philosophy of yoga, called *The Yoga Sutras*. In this 2,000-year-old text, Patanjali outlines eight *limbs*, or foundations of yoga practice, that act as spiritual guidelines. The limbs of yoga include guidelines on ethics, breath control, self-observation, concentration, and meditation.

According to Patanjali, the physical poses of yoga, called *asanas*, represent only one of the eight limbs of yoga practice. Through Patanjali’s perspective, yoga can be viewed as a lifestyle and not just a set of poses. Though asana is not purported to be more or less important than any other aspect of the practice, the word *yoga* in the Western world has come to be synonymous with the physical discipline of asana. In fact, it is quite possible that many American yoga practitioners have studied only the physical postures and have not explored the many dimensions of the practice.

**Types of hatha yoga** *Hatha yoga* is one of the most well-known branches of yoga in America. Hatha yoga combines asanas together with breathing techniques, called *pranayama*, and relaxation or meditation, called *dhanya*. Hatha yoga itself has many different styles, methods, and schools. Though the approaches to the practice may seem to vary dramatically at first glance, each style has roots in hatha yoga. Table 1 provides a partial list and brief explanation of the more well-known forms of hatha yoga in the West.

**Injuries from yoga** Yoga is purported to be a safe and effective practice for anyone who might want to try it. With proper guidance, appropriate pose modifications, and the help of a qualified teacher, this may be true. However, hatha yoga is a physical practice and as such can exacerbate some problems or in some cases even cause injury to practitioners.

Ironically, the risks of injury are compounded by the popularity yoga has enjoyed in the past decade. Yoga has attracted thousands of new practitioners, many of whom are seeking relief from chronic diseases or musculoskeletal conditions. Although their participation in yoga may ultimately be positive, many practitioners approach yoga practice with a “more is better” attitude and thus cause overuse or acute injury. Inexperienced and/or untrained yoga teachers who may be unable to guide participants into correct and safe biomechanical form can compound this problem.

Though rarely reported in the medical literature and possibly caused by extreme poses and advanced practice, several case studies point to the need to educate patients on the possible injury risks associated with yoga. Case studies have reported vertebral artery dissection,<sup>1</sup> basilar artery

occlusion,<sup>2</sup> spontaneous pneumothorax,<sup>3</sup> conjunctival thromboses,<sup>4</sup> peripheral neuropathy,<sup>5</sup> and sciatic nerve compression.<sup>6</sup> More common conditions such as sciatic pain, hypertension, glaucoma, and pregnancy demand that certain poses be modified and in some cases entirely avoided.<sup>7</sup> The number of yoga-related injuries that occur each year is unknown, as they are probably underreported.

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**TABLE 1. Popular styles of yoga in the United States**

**Ananda yoga** uses specific asanas to expand mental awareness. Each pose has an affirmation attached to it, and the focus is on meditation.

**Anusara yoga** is characterized by a philosophy that looks for the good in all people and all things. Students of all levels of ability and yoga experience are honored for their unique differences, limitations, and talents.

**Ashtanga yoga** is often referred to as *power yoga*. This is a physically demanding practice in which postures flow seamlessly into one another with a focus on strength and physical stamina.

**Bikram yoga** is also called *hot yoga*. Bikram is practiced in a room that ranges from 80 to upwards of 100 degrees. Classes consist of 26 poses repeated twice and held for 10 to 90 seconds each. This class requires a certain amount of fitness and stamina, and attention to pose precision is emphasized.

**Iyengar yoga** follows a precise format that utilizes benches, ropes, bolsters, chairs, and other props to help practitioners develop greater symmetry and alignment in their postures.

**Kripalu yoga** format progresses in stages that combine breathing techniques, meditation, mental state awareness, and spontaneous, free-flowing movement.

**Kundalini yoga** Includes chanting, meditation, visualization, breathing techniques, and postures designed to stimulate energy from the spine.

**Viniyoga yoga** is a gentle form of yoga that modifies each pose to the individual student. There is more focus and attention to the breath and a slower pace of poses, as well as an emphasis on biomechanics.

on the psychophysiological effects of hatha yoga concluded that regular hatha yoga practice and a “yoga lifestyle” have the potential to benefit CVD risk indices.<sup>5</sup>

**Cardiovascular fitness** A 50-minute hatha yoga routine burns 2.2 to 3.6 kcal/min, the equivalent a very slow walk. Except in persons who are very deconditioned, this type of yoga practice alone is unlikely to have a significant training effect on cardiovascular fitness, pulmonary function, body composition, or fat metabolism.<sup>13</sup> More vigorous forms of *power* or *vinyasa* yoga require a higher energy output, depending on the method of teaching and selection of asanas (postures). One recent study demonstrated a 7% increase in  $VO_2$  max after previously sedentary subjects practiced 8 weeks of yoga training.<sup>13</sup> However, the general consensus is that yoga does not provide the significant cardiovascular stimulus necessary to enhance cardiovascular function.<sup>14</sup>

**Carpal tunnel syndrome** A randomized, single-blind controlled trial of 42 patients with carpal tunnel syndrome assigned subjects to either a yoga treatment group or a wrist splint group, each 8 weeks in duration. Twice a week, the yoga group practiced postures specifically designed to strengthen and stretch each joint in the upper body. Yoga participants showed improvement in grip strength, pain levels, and Phalen’s sign when compared to the wrist splint group. Nerve conduction studies were not performed.<sup>15</sup> A Cochrane review of 21 trials that evaluated the clinical outcome of nonsurgical treatment of carpal tunnel syndrome reported that 8 weeks of yoga practice significantly reduced

“More research must be done before broader recommendations regarding use of yoga as therapy can be made.”

pain as compared to wrist splinting. The yoga was described as having a “significant short-term benefit,” though the duration of this benefit is unknown.<sup>16</sup>

**Depression** A 2004 review of five RCTs that evaluated yoga-based interventions for depression and depressive disorders showed some positive outcomes and no adverse effects on patients’ mild to severe depressive disorders. However, poor study design and incomplete methodologic reporting makes this interpretation preliminary.<sup>17</sup> An RCT studying 7 weeks of yoga training in a group of breast cancer survivors showed positive changes in emotional function, depression, and mood disturbance.<sup>18</sup> “Yoga and stress management” (in the online version of this article) provides more information on this study and others involving the effects of yoga on stress.

**Irritable bowel syndrome** In an RCT, treatment with loperamide (Imodium) was compared to treatment with a series of 12 yoga postures practiced twice a day for 2 months in a small sample of patients with clinically diagnosed irritable

bowel syndrome. Patients underwent measurement of surface electrogastrography, and trait and state anxiety tests were administered before, during, and up to 2 months after treatment. Both intervention groups demonstrated a decrease in bowel symptoms and state anxiety.<sup>19</sup>

**Menopausal symptoms** In a recent pilot study, 14 postmenopausal women reported via interview and questionnaire a decrease in the severity and frequency of hot flushes after 8 weeks of 90-minute “restorative yoga” classes. Although this initial finding sounds encouraging, this trial had no control group or objective parameter measurements.<sup>20</sup> An RCT studying postmenopausal sleep quality divided 164 women into groups who participated in either 4 months of low-intensity yoga, a moderate-intensity walking program, or a wait-list control group. This study reported no statistically significant interventional effects of any treatment on total sleep quality or on any individual sleep quality domain.<sup>21</sup>

**Multiple sclerosis** An RCT of 57 subjects with clinically defined multiple sclerosis were assigned to weekly Iyengar yoga class plus home practice, a cycling program, or a wait-list control group for 6 months. Results showed that both active interventions produced significant improvement in perceived levels of energy and reduced fatigue; however, the specific effects of the yoga practice were not isolated.<sup>22</sup>

**Osteoarthritis** In a pilot study, 11 deconditioned, yoga-naïve subjects with a clinical diagnosis of knee osteoarthritis showed improvements in pain and knee stiffness after 8 weeks of yoga training. The group performed modified Iyengar yoga sessions once a week.<sup>23</sup>

**Seizure disorders** In 2000, a systematic review of the published literature revealed that only one study was able to meet the selection criteria for reliable research design. The reviewers concluded that no available evidence pointed to yoga therapy as an efficacious treatment for epilepsy.<sup>24</sup>

**Strength and flexibility** In a recent study on the fitness-related effects of hatha yoga, 10 yoga-naïve and previously untrained subjects aged 18 to 27 years participated in 85 minutes of pranayama and hatha yoga practice twice a week for 8 weeks. These subjects showed significant improvement in upper and lower body muscular strength, endurance, and flexibility. No statistically significant change in body composition or pulmonary function was observed.<sup>13</sup>

In a partial RCT with a longer time frame, 54 subjects aged 20 to 25 years participated in either 5 months of yoga instruction or no activity. After that time period, both groups practiced yoga for an additional 5 months. The group practicing 10 months of yoga showed significant improvements in shoulder, trunk, hip, and neck flexibility, as well as a reported improved performance during submaximal exercise testing.<sup>25</sup>

A well-executed study compared subjects who underwent 24 hours of hatha yoga classes over 8 weeks with a control group. The yoga training group showed a 13% to 35% improvement in flexibility, balance, and muscular endurance. The authors concluded that hatha yoga practice has significant effects on balance and flexibility.<sup>26</sup>

Continued on page 41

## ADVICE TO PATIENTS

Properly executed, regular, appropriate yoga practice has been shown to help patients improve overall muscular flexibility and strength and improve balance. Yoga demonstrates some efficacy as adjunct therapy for back pain, knee osteoarthritis, and carpal tunnel syndrome. Although yoga should not take the place of traditional, proven therapies, it may have some positive effects on obsessive-compulsive disorder, anxiety, and depression, as well as on conditions that are worsened by stress, such as irritable bowel syndrome, ADHD, and menopausal vasomotor symptoms. Yoga practice may add additional benefit to traditional therapies in managing cardiovascular disease indices, though this benefit may be the result of lifestyle changes that include yoga practice and cannot be attributed to yoga alone.

Although encouraging, many of these conclusions are vague and not yet well defined. Clearly, more research is needed to more specifically quantify the type, duration, and frequency of practice before more broad recommendations regarding yoga as therapy can be made. For a handout you can give your patients in the meantime, see “Ready to try yoga? Seven steps to help you get started” (in the online version of this article). “Prescribing yoga: The importance of instruction” (also in the online version of this article) describes how to help your patients find a qualified teacher.

## CONCLUSION

The current literature demonstrates that important influencing factors are often neither controlled for nor addressed in the design of yoga studies. Though a few of the more recent studies have made significant efforts to improve the quality of research design, larger samples, longer trial periods, and some attempt to categorize or standardize the teaching methods used in the research are still very much needed.

Authors have overwhelmingly concluded that rigorous investigation of yoga should be a high priority. Although definitive answers about the efficacy of yoga as therapy for disease are unlikely to be found across the board, the scientific evaluation of specific aspects of yoga practice is clearly possible. Well-designed studies will provide some important guidelines regarding what yoga might and cannot do as treatment or preventive care for specific diseases.

As a potential stand-alone or adjunct therapy, yoga is cost-effective and has an overall low incidence of adverse effects. Added to these is the tantalizing suggestion—offered through anecdotal reports, the available research, and experiential

reported observation—that there may be more benefits to this practice than meets the eye. Indeed, the National Institutes of Health’s National Center for Complementary and Alternative Medicine is currently funding clinical trials to study the effects of yoga on everything from insomnia to diabetes, HIV disease, immune function, and chronic obstructive pulmonary disease. By becoming aware of the various types of yoga practice, what yoga can and cannot do for specific disease conditions, and the factors that make yoga safe, PAs can help patients make informed decisions about incorporating yoga practice into a healthy lifestyle. **JAAPA**

**Lee Lipton** works in family practice in northern California. She is a certified yoga instructor and has been teaching classes and training yoga instructors for more than 15 years. She has indicated no relationships to disclose relating to the content of this article.

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## ON THE WEB

- Sidebar: Yoga and stress management
- Patient handout: Ready to try yoga? Seven steps to help you get started
- Sidebar: Prescribing yoga: The importance of instruction

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### Yoga and stress management

Stress plays a role in disease, although it may not be solely responsible for causing disease or making it worse. The effects of stress have been widely studied and are generally well known. The so-called *relaxation response* that is initiated by yoga practice may very well have a healing effect upon the body. How we ultimately quantify this process is unclear, but yoga has promise as an antidote to stress with positive side effects.

A detailed review and analysis of nine research studies involving yoga and cancer showed moderate improvements in indices measuring sleep, mood, disease-related distress, symptoms related to cancer, and overall quality of life. Though this review outlined the need for randomized controlled trials (RCTs) and more evidence corroborating and understanding yoga's mechanisms of action, the authors felt that yoga is a suitable adjunct intervention for cancer patients and survivors.<sup>1</sup>

An RCT that studied 7 weeks of yoga training for breast cancer survivors showed positive changes in emotional function, depression, and reported mood disturbances. Participants in the yoga intervention group showed significant improvement on fitness variables and reported a higher perceived quality of life. The authors of this study also called for more research on the effects of yoga as an adjunct to breast cancer therapy.<sup>2</sup>

An RCT evaluated the effect of yoga practice, including asana, pranayama, and meditation, on stress and perceived quality of life for HIV-positive subjects. Standardized mental

health measures and interviews revealed an immediate stress-relief effect from the yoga interventions, although that effect diminished over time. However, qualitative interviews showed that yoga participants made changes in their daily activities that helped to positively impact stress levels associated with this diagnosis.<sup>3</sup>

A small study compared traditional cognitive behavior therapy (CBT) with sessions of kundalini yoga. A cohort of 26 people was randomly divided into two groups, half of whom received 10 CBT sessions over 4 months and half of whom took part in a kundalini yoga class twice a month for 4 months. By self-report, both the CBT and yoga groups showed improvement in anger, stress levels, and overall quality of life. No significant difference in outcomes between the groups was reported, and because this study was performed at a company, there is no way to know if the improvements were a result of the treatment or perhaps of just being singled out for "special" treatment during the workday. However, there is some evidence that both of these modalities are viable stress management options and should be further explored.<sup>4</sup>

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## Ready to try yoga? Seven steps to help you get started

There are many styles of yoga that make use of various methods and philosophies, but all forms of physical yoga seek union or balance of the body and mind. A particular style may be unique in its teaching methods, the use of props, or the temperature of the room where classes are held. Many classes offer an integration of styles. Most yoga classes offered in studios and gyms consist of physical poses (also called *asanas*) that may help improve physical strength, flexibility, balance, and mental focus. There is no particular style of yoga that is better than another. Choose a yoga class based on your preferences, fitness level, and goals. Below are some general guidelines that can help you find the class that fits your needs.

### 1. Check with your PA

Yoga poses can be beneficial to both body and mind, but like any form of exercise, yoga may also pose an injury risk. Deconditioned individuals may find some of the more rigorous yoga styles too difficult. Certain asanas could potentially worsen back or neck problems. Some yoga postures and formats are not appropriate in pregnancy. In addition, conditions such as carpal tunnel syndrome, arthritis, and low back pain will require some modification of some of the poses. Your PA will advise you as to whether a yoga program is appropriate for you and which precautions you should take before you start your practice.

### 2. Define your goals

Yoga carries many potential benefits that will differ based on the style of yoga and the experience of the practitioner. Many people wish to practice yoga in order to enhance physical fitness, whereas others are interested in stress management, increased flexibility, or relaxation. Some people might wish to focus more specifically on meditation and the spiritual side of the practice. What are your particular goals? Share them with your instructor, and make sure the class is designed to help you reach them.

### 3. Set realistic expectations

The benefits of regular yoga practice are not instantaneous. At least 8 weeks of training two to three times a week are needed to see measurable changes in strength and flexibility, though you may enjoy the way you feel from a regular practice right away. More rigorous forms of power yoga may enhance your strength but typically do not provide a cardiovascular workout. A traditional hatha yoga class burns about as many calories as a leisurely walk, and even a vigorous power yoga practice is still considered equivalent to a light cardiovascular workout. Although yoga can help improve flexibility, balance, and even core muscle strength, it should be viewed as a part of a fitness program

that also includes appropriate cardiovascular and strength training. Finally, while yoga may indeed help you manage stress and improve flexibility, there is no evidence that it cures any disease.

### 4. Find a class that suits you

Yoga instructors vary in both approach to teaching and personality. There is currently no mandatory national certification for yoga instructors, but ideally your instructor will have several years of experience and will have had some recognized training in his or her area of specialty. He or she

## Types of yoga

The most popular branch of yoga in western countries is known as hatha yoga. Hatha yoga includes physical poses (*asanas*), breathing techniques (*pranayama*), and, possibly, meditation (*dhanya*). Below is a partial list of some of the more common forms of hatha yoga:

**Ananda yoga** uses specific asanas to expand mental awareness. Each pose has an affirmation attached to it, and the focus is on meditation.

**Anusara yoga** is characterized by a philosophy that looks for the good in all people and all things. Students of all levels of ability and yoga experience are honored for their unique differences, limitations, and talents.

**Ashtanga yoga** is often referred to as *power yoga*. This is a physically demanding practice in which postures flow seamlessly into one another with a focus on strength and physical stamina.

**Bikram yoga** is also called *hot yoga*. Bikram is practiced in a room that ranges from 80 to upwards of 100 degrees. Classes consist of 26 poses repeated twice and held for 10 to 90 seconds each. This class requires a certain amount of fitness and stamina, and attention to pose precision is emphasized.

**Iyengar yoga** follows a precise format that utilizes benches, ropes, bolsters, chairs, and other props to help practitioners develop greater symmetry and alignment in their postures.

**Kripalu yoga** format progresses in stages that combine breathing techniques, meditation, mental state awareness, and spontaneous, free-flowing movement.

**Kundalini yoga** Includes chanting, meditation, visualization, breathing techniques, and postures designed to stimulate energy from the spine.

**Viniyoga yoga** is a gentle form of yoga that modifies each pose to the individual student. There is more focus and attention to the breath and a slower pace of poses, as well as an emphasis on biomechanics.

should willingly provide references and answer questions if asked. If you find the instructor doesn't meet your needs, don't hesitate to try another class. The instructor should make you feel comfortable and be willing to help you with your practice, regardless of your level of experience.

### 5. Give yourself time

Once you've found a class and style that feel like a good match for you, know that your first few classes might feel awkward or even frustrating. This is normal as you learn a new physical skill set. Your instructor should be able to guide you through this beginner's stage and help you modify the poses as needed to fit your body. Bear in mind that the benefits of yoga will become evident only if you practice regularly. In time, as you become more familiar with the poses and the breathing, the practice will become more and more enjoyable.

### 6. Listen to your body

Approach your yoga practice with an open mind, but remember that you should not do any pose that makes you physically uncomfortable. There is no perfection in yoga, and ultimately you should never force yourself into a pose that causes pain or discomfort. Yoga class is not a perform-

### Resources

- **Yoga Alliance**  
Provides 200-hour and 500-hour registry marks for qualified instructors. (877) 964-2255 or [info@yogaalliance.org](mailto:info@yogaalliance.org)
- **YogaFit**  
Provides instructor training and referrals, world-wide. Yoga Alliance Approved Courses (888) 786-3111 or [www.yogafit.com](http://www.yogafit.com)
- **Yoga Research and Education Center**  
[www.yrec.org](http://www.yrec.org)

ance but rather an individual journey of mind and body. Take breaks as needed, and ask your instructor to show you modifications for particular poses so you feel more comfortable. Props such as blocks, straps, and bolsters can also be used to help you learn the asanas.

### 7. Practice

Make an effort to find 15 to 20 minutes to regularly practice the yoga asanas that you have learned. Some people prefer attending a class, but others may wish to practice privately. There are DVDs, videos, and books available to help you along with your home practice.

### Prescribing yoga: The importance of instruction

Yoga is a noncompetitive practice and is often described as a balance between effort and relaxation. A well-trained teacher can help patients safely realize this level of awareness and balance.

Depending on the style of yoga taught and the philosophy of the teacher, yoga may be a vigorous or gentle physical endeavor. An adept and experienced yoga instructor can adapt poses (called *asanas*) for a patient of any age, health status, or fitness level. Effective yoga practices can be designed for those who are confined to a chair, young and energetic children, healthy mobile adults, pregnant women, and any other individuals with physical challenges. Smaller yoga studios or one-on-one training with a qualified yoga teacher may be more appropriate for some patients than large classes at a fitness or recreation center where individual attention is not as readily available.

Patients should know that although many of the yoga instructor training programs require that prospective teachers pass a rigorous training course, there currently is no national standard of training for yoga instructors. This means that anybody can teach classes, even if they have little or no training. Although there is some movement in the yoga and fitness communities to hold instructors to a basic standard of training, there are also those who argue that teaching yoga is an art as well as a science and that it would be impossible to unify a teaching approach to the myriad styles and interpretations of yoga.

All patients who wish to start a yoga program should be cautioned that as with any physical activity, there is potential for minor to serious injury from improperly executed

yoga poses. PAs can also help patients choose an appropriate yoga practice. Here are some basic considerations:

**Safety** A good instructor will make it a point to teach proper technique and be able and willing to modify poses for beginning students or students with special needs. For example, a deconditioned, overweight patient with chronic low back pain will need to be shown modifications for forward bends and trunk extensions.

**Education/experience** When evaluating potential instructors, patients should ask if their teacher holds a certification from a nationally recognized yoga training program. Teachers may be associated with The Yoga Alliance or the International Association of Yoga Therapists. Certification from a nationally recognized fitness organization such as the American Council on Exercise, the American College of Sports Medicine, or the Aerobic and Fitness Association of America indicates that a teacher holds basic knowledge of physiology and biomechanics.

Patients should also note that many excellent yoga teachers are available who have no specific certification but instead have years of experience teaching. Patients should ask prospective teachers for references and speak to some of that instructor's students for insight and feedback.

**Overall** Instructors should be friendly, supportive, and welcoming. The class should be well-organized, explanations and demonstrations should be clear, and pose modifications should be provided for students as needed. Yoga teachers should not promote specific diets, prescribe nutritional supplements, or attempt to "treat" any type of condition or injury. In addition, yoga instructors should not push, pull, or otherwise force any student's body into any position.