

# **Yoga Fundamentals**

Olin Levitt, Ph.D., E-RYT

## **Centered City Yoga**

Salt Lake City 926 E 900 S  
Salt Lake City, UT 84105 (801) 521-9642

When developing a yoga practice it is important to obtain guidance through skilled and knowledgeable yoga teachers. Regularly attending a yoga class or classes, going to yoga workshops, or seeking out a yoga teacher training experience is a commitment to oneself as well as an opportunity to connect with and support like-minded people. Your involvement at CCY is also a means of strengthening the greater Salt Lake City community as a whole.

**For a schedule of classes at Centered City Yoga, visit:**

<http://www.centeredcityyoga.com>

# Yoga

**Historic Origins:** A group of physical, mental, and spiritual practices or disciplines, originating in ancient India. Yoga most likely emerged around the sixth and fifth centuries BCE. The Hindu Upanishads are considered the earliest texts in which yoga practices are described.

The Yoga Sutras, a text on Yoga theory and practice, was compiled by the sage Patanjali between 200 CE and 400 CE. It is one of the most important texts in Hindu tradition and the foundation of classic yoga. In it, yoga is tersely defined as “The inhibition of the modifications of the mind.”

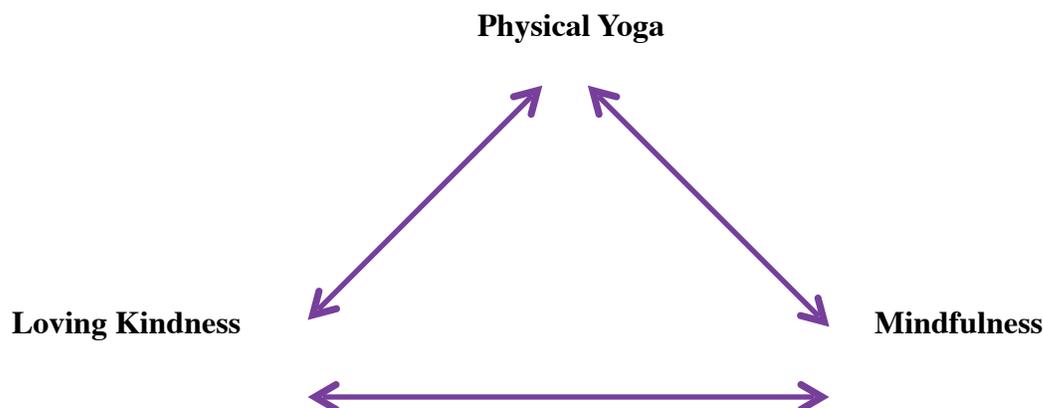
Patanjali’s yoga consisted of eight ethical, physical, and interior practices (i.e., “Limbs”) culminating in attaining a state of mind free from all modes of active or discursive thought, eventually leading to the recognition of one’s identity as pure awareness (“Samadhi”).

## Patanjali’s Eight Limbs of Yoga

1. YAMA:
  - a) Ahimsa: Non-Violence
  - b) Satya: Truthfulness
  - c) Asteya: Non-Stealing
  - d) Brahmacharya: Chastity
  - e) Aparigraha: Non-Hoarding
2. NIYAMA:
  - a) Saucha: Purity and Cleanliness
  - b) Santosa: Contentment
  - c) Tapas: Dedication to Practice
  - d) Svadhyaya: Self-Study
  - e) Ishvara Pranidhana: Surrendering to the Divine
3. ASANA: Body Postures
4. PRANAYAMA: Breath Practices
5. PRATYAHARA: Withdrawal from External Stimulation
6. DHARANA: Concentration/Cultivation of Inner Perceptual Awareness
7. DHYANA: Contemplation/Reflection/Deep Meditation
8. SAMADHI: Transcendence/Union

## A comprehensive yet contemporary model that honors ancient yoga traditions and wisdom:

- A. Loving Kindness to Self and Others (Yama/Niyama)
- B. Physical Yoga (Asana/Pranayama)
- C. Mindfulness (Pratyahara/Dharana/Dhyana/Samadhi)



## **Asana**

### **Beginning Level Poses**

#### ***Standing***

Downward Facing Dog (Adho Mukha Svanasana)  
Downward Facing Dog Split  
Extended Side Angle Pose (Utthita Parsvakonasana)  
Garland Pose (Malasana)  
Half Forward Bend (Ardha Uttanasana)  
Mountain Pose (Tadasana)  
Lunge Pose (High and Low)  
Pyramid Pose (Parsvotthanasana)  
Raised Hands Pose (Urdhva Hastasana)  
Standing Forward Bend (Uttanasana)  
Standing Straddle Forward Bend (Prasarita Padottanasana)  
Triangle Pose (Trikonasana)  
Warrior I (Virabhadrasana I)  
Warrior II (Virabhadrasana II)

#### ***Balancing***

Plank Pose  
Hands and Knees Balance  
Side Plank Variations (Vasisthasana Variations)  
Tree Pose (Vrksasana)

#### ***Backbends***

Bridge Pose (Setu Bandha Sarvangasana)  
Cat–Cow Stretch  
Cobra Pose (Bhujangasana)  
Knees, Chest and Chin Pose (Ashtanga Namaskara)

#### ***Seated***

Cobler's Pose (Baddha Konasana)  
Easy Pose (Sukhasana)  
Half Lord of the Fishes Pose (Ardha Masyendrasana)  
Head to Knee Pose (Janu Sirsasana)  
Seated Forward Bend (Paschimottanasana)  
Seated Wide Legged Straddle (Upavistha Konasana)  
Staff Pose (Dandasana)

#### ***Resting/Supine***

Child's Pose (Balasana)  
Corpse Pose (Savasana)

Goddess Pose (Supta Baddha Konasana)  
Happy Baby Pose (Ananda Balasana)  
Legs Up the Wall (Viparita Karani)  
Pelvic Tilts  
Reclined Big Toe Pose (Supta Padangusthasana)  
Supine Spinal Twist (Supta Masyendrasana)

For a description of the above poses visit:

<https://www.verywell.com/library-of-beginners-yoga-poses-4111744>

## **Intermediate Level Poses**

### ***Standing***

Awkward Chair Pose (Utkatasana)  
Eagle Pose (Garudasana)  
Extended Side Angle Variations (Parsvakonasana)  
Half Moon Pose (Ardha Chandrasana)  
King Dancer Pose (Natarajasana)  
Lizard Pose (Utthan Pristhasana)  
Pyramid Pose Variations (Parsvotthanasana Variations)  
Reverse Warrior Pose  
Revolved Side Angle Pose  
Revolved Triangle Pose  
Sugarcane Pose (Ardha Chandra Chapasana)  
Warrior III (Virabhadrasana III)

### ***Seated***

Cow Face Pose (Gomukhasana)  
Boat Pose (Navasana)  
Hero Pose (Virasana)  
Knee to Ankle Pose  
Lotus Pose (Padmasana)  
Pigeon Pose (Eka Pada Rajakapotasana)

### ***Backbends***

Bow Pose (Dhanurasana)  
Camel Pose (Ustrasana)  
Fish Pose (Matsyasana)  
Locust Pose (Shalabhasana)  
Upward Facing Dog (Urdhva Mukha Svanasana)

### ***Arm Balances***

Four Limbed Staff Pose (Chaturanga Dandasana)  
Crow Pose (Bakasana)  
Scale Pose (Tolasana)  
Side Plank Pose (Vasisthasana)  
Sleeping Vishnu Pose (Anantasana)

### ***Inversions***

Headstand Pose (Salamba Sirsasana)  
Plow Pose (Halasana)  
Shoulderstand (Salamba Sarvangasana)

For a description of the above poses visit:

<https://www.verywell.com/intermediate-yoga-pose-library-3567087>

### **A Sampling of Advanced Level Poses**

#### ***Standing***

Bird of Paradise  
Revolved Half Moon Pose (Parivrtta Ardha Chandrasana)  
Little Thunderbolt Pose (Laghu Vajrasana)  
One Legged King Pigeon Pose (Eka Pada Rajakapotasana)  
Wheel Pose (Urdhva Dhanurasana)

#### ***Arm Balances***

Dragonfly Pose  
Firefly Pose (Eka Pada Galavasana)  
Side Crow Pose (Parsva Bakasana)

#### ***Seated***

Compass Pose (Parivrtta Surya Yantrasana)  
Monkey Pose (Hanumanasana)

#### ***Inversions***

Forearm Stand (Pincha Mayurasana)  
Handstand (Adho Mukha Vrksasana)  
Scorpion Pose (Vschikasana)

For a description of the above poses, visit:

<https://www.verywell.com/advanced-yoga-pose-library-3567056>

## Surya Namaskara A



Sun Salutation A: <https://www.youtube.com/watch?v=9P5PSqmnu88>

## Surya Namaskara B



Sun Salutation B: [https://www.youtube.com/watch?v=S94\\_5zv3MY](https://www.youtube.com/watch?v=S94_5zv3MY)

## Pranayama

Breathing is something we do on a daily basis. The body, in a living state, breathes involuntarily whether we are awake, sleeping, or actively exercising. Breathing is living. It is a vital function of life.

In yoga, we refer to this as pranayama. Prana is a Sanskrit word that means life force and ayama means extending or stretching. Thus, the word “pranayama” translates to the control of life force. It is also known as the extension of breath. Every cell in our bodies needs oxygen to function properly. So it’s no surprise that research shows that a regular practice of controlled breathing can decrease the effects of stress on the body and increase overall physical and mental health.

Ever notice how soothing a simple sigh can be at the end of a long day? There are a variety of breathing techniques that are known to reduce stress, aid in digestion, improve sleep, and cool you down. Here are instructions on four pranayama exercises worth practicing and the most beneficial times to do them.

### 1. Nadhi Sodhana aka Anuloma Viloma

Nadhi sodhana, also known as alternative nostril breathing, is a very relaxed, balancing breath that is used to help calm the nervous system and aid in a restful night’s sleep. By increasing the amount of oxygen taken into the body, it’s believed that this breath can also purify the blood, calm the mind, reduce stress, and promote concentration.

**How to do it:** Nadhi sodhana can be done seated or lying down. To start, empty all the air from your lungs. Using the thumb of your dominant hand, block your right nostril and inhale through your left nostril only. Be sure to inhale into your belly, not your chest. Once you are full of breath, seal your left nostril with the ring finger of the same hand, keeping your right nostril closed, and hold the breath for a moment. Then release your thumb and exhale through your right nostril only. Be sure to exhale all the breath out of the right side and pause before inhaling again through the same side. Seal both nostrils once you’ve inhaled on the right side and exhaled through the left side. A complete cycle of breath includes an inhalation and exhalation through both nostrils. If you’re just starting out, you can do a four-count inhale, holding your breath for four to eight counts, then exhale for four counts. Perform up to ten cycles and notice how your body responds. You may feel more relaxed and calm in both your mind and body.

**When to do it:** Nadhi sodhana is a calm, soothing breath that can be done any time of day. Try practicing this technique when you are anxious, nervous, or having trouble falling asleep.

### 2. Kapalabhati Pranayama

Kapalabhati means skull shining breath. It’s a pranayama exercise as well as an internal kriya, or cleansing technique. Practitioners of kapalabhati believe that this breath will help clear mucus in the air passages, relieve congestion, reduce bloating, and improve lung capacity. Kapalabhati is an invigorating breath that can build heat in the body.

**How to do it:** Start by sitting in a comfortable seat with a tall, straight spine, and exhale completely. Inhale briefly through both nostrils, then sharply exhale (again out of your nose) while pulling your navel in toward your spine. The exhalation is short and quick, but very active, while

the inhalation is short and passive. Again, pull your navel in as you exhale and soften it on the inhalation. Do one round of 30 (counting your exhalations) and rest for a minute with some deep breaths in between. Repeat. If this seems strenuous, start with 15 and gradually work your way up.

**When to do it:** Kapalabhati is great to do in the morning if you're feeling chilly or sluggish. You may also try it when you're feeling congested or bloated, but don't try it on a full stomach. Avoid this technique if you are pregnant, or suffer from blood pressure issues or heart conditions.

### **3. Ujjayi Pranayama**

Ujjayi means victorious breath; it's also referred to as ocean breath due to the sound it creates. This breath is often used in asana (posture) practice, especially in ashtanga and vinyasa classes. Ujjayi encourages full expansion of the lungs, and, by focusing your attention on your breath, it can assist in calming the mind.

**How to do it:** Find a place where you can sit comfortably with a straight spine. Take a steady breath in through both nostrils. Inhale until you reach your lung capacity; maintain a tall spine. Hold your breath for a second, then constrict some of the breath at the back of your throat, as if you were about to whisper a secret, and exhale slowly through both nostrils. This exhalation will sound like an ocean wave or gentle rush of air. You should feel the air on the roof of your mouth as you exhale. Repeat up to 20 times.

**When to do it:** This breath can be practiced for up to 10 minutes at any time of day. Try it with an asana practice as well.

### **4. Sitali Pranayama**

Sitali also means cooling, which explains the effect it can have on your mind and body. This breath encourages clearing heat with coolness. It's especially helpful during summer and in hot climates.

**How to do it:** Roll your tongue until the outer edges touch, forming a tube. If you can't curl your tongue, make an oval shape with your mouth, keeping your tongue flat. Inhale through your mouth, taking in all the air that you can. It may make a hissing sound. After inhaling, bring the tip of your tongue to the roof of your mouth and seal your lips. Feel the coolness of the inhalation in your mouth then exhale through your nose. Repeat five to ten times or as needed.

**When to do it:** If you're feeling overheated, irritable, or find yourself waiting impatiently in hot weather, sitali is a great tool to try to cool off and relax! Breathing is one of the most natural things we do as humans. It is a gift and a very powerful tool that can enable us to create more ease and balance in our lives. Taking time to focus on the breath allows us to pause from daily stresses, physical symptoms, and emotions that have taken over the mind. It is in that moment where we focus on the breath that we can return to a neutral state of being, gain clarity, feel rejuvenated, and enhance an overall sense of well-being. These are just a few wonderful reasons to invite a pranayama practice into your daily routine.

### **Helpful Tips for Getting Started**

- **You be the judge.** If you feel any discomfort or lightheadedness, stop immediately and return to normal breathing. Consult an instructor for guidance and supervision.

- **Never force or restrict your breath.** Don't compromise the quality of the breath. Do the best that you can. The more you practice, the longer you'll be able to perform the exercises, and eventually, you'll be able to use more of your lung capacity.
- **Patience and practice.** Pranayama should be done with great care and awareness. Try to stay focused on the journey, not the destination! Over time, you will start to notice the benefits of the practice.
- **Precautions.** If you are pregnant, or suffer from diabetes, high or low blood pressure, heart conditions, epilepsy, or vertigo, please consult your health care provider before performing any of these breathing exercises.

The above material is from One:Life, published by One Medical Group <http://www.onemedical.com/blog/live-well/breathing-pranayama-techniques/>. For an additional Pranayama resource, visit: <http://www.integralyogastudio.com/basicpranayama.php>

## **Mindfulness**

Mindfulness is the intentional cultivation of moment-by-moment, non-judgmental, focused attention/awareness. It's a fundamental component of human consciousness and a mental capacity that can be strengthened through a variety of training methods. Over the past decade, training in mindfulness has spread from its initial western applications in health care to other fields, including corporate business and education.

**Formal Mindfulness Practice:** Meditation is the structured practice of sitting quietly while intentionally attending to thoughts, feelings, body sensations, and sensory experiences as they arise, moment-to-moment, with acceptance and without getting caught up in thoughts about the experience. To accomplish this, one initially directs attention to a specific area, such as the breath. During meditation, it becomes readily apparent that the mind repeatedly drifts off the chosen "anchor" into spontaneously arising thoughts, memories, feelings, or images. Upon noticing this drift, the practitioner brings his/her attention repeatedly back to the anchor. The intent is not to get rid of thoughts, feelings, or sensations. Rather, it is to cultivate a clearer awareness of direct moment-to-moment experience with acceptance and a kindly curiosity, not obscured by self-absorbed judgments about the experience. Noticing whatever arises with a growing degree of acceptance and non-judgment leads to increased clarity and stability of attention. It can also lessen reactivity in the body's physiological stress responses.

**Informal Mindfulness Practice:** In addition to regular, sitting meditation, a complete practice includes the weaving of mindful awareness into activities of everyday life, such as showering, walking, eating, and interpersonal interactions. Bringing mindfulness into daily life in this way has the potential to create a radical shift in the relationship one has with him/herself, others, and the world.

## **Mindfulness Research Findings**

For centuries, mindful awareness and meditation practices have been widely acknowledged as transformative. Modern day practitioners as well as subjects from mindfulness- and meditation-related studies generally report that these practices improve attention and concentration, reduce levels of anxiety and depression, and improve psychological well-being.

In 2011, a group of Harvard researchers endeavored to look beyond subjective self-reports and conducted a seminal biological study using MRI instrumentation. Data revealed that eight weeks of daily meditation significantly changed neural structures in the brains of participating subjects. The results were illuminating and had a profound effect on research communities as well as the general public.

New brain research on the effects of meditation is currently being published in major journals every week, and often illustrate new findings on the benefits of meditation. It is interesting that the purported positive effects of meditation purported in ancient times are now being confirmed scientifically. Meditation practice has a vast array of mental, psychological, and neurological benefits - from increased mass in brain structures, to reduced activity in the “me” centers of the brain, to enhanced connectivity between brain regions. Below are summaries of just a few of the research findings.

### **Meditation Leads to Volume Changes in Key Areas of the Brain**

In 2011, Sara Lazar and her team at Harvard found that mindfulness meditation can actually change the structure of the brain. The hippocampus, which governs learning and memory, and certain areas of the brain that play roles in emotion regulation and self-referential processing, grew thicker after just eight weeks of practice. There were also decreases in brain cell volume in the amygdala, which is responsible for fear, anxiety, and stress. And, these changes matched the participants’ self-reports of stress levels, indicating that meditation not only changes subjective perception and feelings, it also changes the brain. A follow-up study by Lazar’s team found that subjects who reported improvement in overall psychological wellbeing showed accompanying changes in changes in brain areas linked to mood and arousal.

### **Concentration, Attention and Memory Improve**

With or without an ADHD diagnosis, concentration problems affect millions. One of the central benefits of meditation is that it improves attention and concentration. A recent study found that just two weeks of meditation training improved verbal reasoning scores on GRE tests. This and other studies suggest that the focused attention (on an object, idea, or activity), targeted in many forms of meditation and one of its core practices, can strengthen cognitive skills.

### **Meditation Reduces Stress and Symptoms of Anxiety**

Mindfulness-Based Stress Reduction (MBSR), developed by Jon Kabat-Zinn at the University of Massachusetts’ Center for Mindfulness, aims to reduce a person’s stress level, physically and mentally. Studies have shown that the majority of MBSR practitioners report reduced anxiety. Longitudinal studies show these improvements are sustained seven years after the initial eight-week course. Researchers have hypothesized that these changes are likely mediated through the brain regions associated with self-referential (“me-centered”) thoughts. A Stanford University

team recently found that MBSR brought about improvement in symptoms of Social Anxiety Disorder in those targeted for treatment.

### **Its Effects Rival Antidepressants for Depression and Anxiety**

A review study at Johns Hopkins looked at the utility of using mindfulness meditation to reduce depression, anxiety, and pain symptomatology. Researcher Madhav Goyal, M.D., and his team found that the effect size of meditation fell at 0.3. Interestingly, the effect size for antidepressants is also 0.3. In a discussion of his research, Dr. Goyal stated, “A lot of people have this idea that meditation means sitting down and doing nothing, but that’s not true. Meditation is an active training of the mind, with different meditation programs often approaching it in different ways.”

### **Meditation Can Help with Addiction**

Given its effects on the self-control regions of the brain, meditation can be very effective in helping people recover from various types of addiction. This has been demonstrated by recent addiction research. One study, for example, pitted mindfulness training against the American Lung Association's Freedom From Smoking (FFS) program. This study found that people who learned mindfulness were many times more likely to have quit smoking by the end of the training than those in the conventional treatment. Also, the benefit from meditation was sustained at a seventeen-week follow-up. It has been proposed that meditation helps people “decouple” the state of craving from the act of smoking, so the one doesn’t always have to lead to the other. Rather, the addicted person learns to fully experience and ride out the “wave” of craving, until it passes. Additional research studies are coming out that show mindfulness training, mindfulness-based cognitive therapy (MBCT), and mindfulness-based relapse prevention (MBRP) to be very effective in treating other forms of addiction.

### **Meditation Reduces Excessive Activity in the Brain**

One of the most interesting studies in the last few years, carried out at Yale University, found that a daily meditation practice decreases activity in the Default Mode Network (DMN) of the brain. This network is responsible for mind-wandering and self-referential thoughts (i.e., “Monkey Mind”). The DMN is “on” or active when we’re not thinking about anything in particular - when our minds are just wandering from thought to thought. Since mind-wandering is associated with being less happy, ruminating, and worrying about past and future, it’s a goal for many people to dial it down. Several studies have shown that meditation, through its quieting effect on the DMN, appears to do just this. And even when the mind does start to wander, because of the new connections that form, meditators are better at snapping back out of it.

### **Slows Down Age-Related Changes in the Brain**

A recent study from UCLA found that long-term meditators show less signs of age-related neurological deterioration than non-meditators. Participants who had been meditating for an average of twenty years had more grey matter volume throughout the brain. Older meditators showed some volume loss compared to younger meditators, but not as pronounced as in the non-meditators. “Going into the study, we expected rather small and distinct effects located in some of the regions that had previously been associated with meditating,” said study author Florian Kurth. “Instead, what we actually observed was a widespread effect of meditation that encompassed areas throughout the entire brain.”

## **Short Meditation Breaks Can Help Kids in School**

For the developing brain of a child or teen, meditation has as much as, or perhaps even more, promise than it has for adults. There is increasing interest from researchers in various fields in bringing meditation and yoga to school-age children and teens, who deal with many stressors inside school, and oftentimes, additional stress and trauma outside school. Some schools have started implementing meditation into their daily schedules, with good effect. School-based studies are filtering in from high-risk schools using yoga and/or meditation with positive results, such as increased attendance, decreased suspensions, and higher Grade Point Averages. Various studies are reporting additional cognitive and emotional benefits in schoolchildren.

The above content was derived from an article by Alice G. Walton, Ph.D. (Biopsychology and Behavioral Neuroscience) who regularly reports on new research findings in health, medicine, psychology and neuroscience. In it, she includes references to many of the cited studies. <https://www.forbes.com/sites/alicegwalton/2015/02/09/7-ways-meditation-can-actually-change-the-brain/#3e3bf8c91465>

## **Resources for Developing a Daily Mindfulness Practice**

### **Books**

Kabat-Zinn, J. (1994). *Wherever You Go There You Are: Mindfulness Meditation in Everyday Life*. New York, NY: Hyperion.

Kabat-Zinn, J. (1990). *Full Catastrophe Living: Using the Wisdom of Your Body and Mind to Face Stress, Pain and Illness*. New York, NY: Delta

Williams, M. & Penman, D. (2011). *Mindfulness: An Eight Week Plan for Finding Peace in a Frantic World*. New York, NY: Rodale

Burch, V., & Penman, D. (2013). *Mindfulness for Health: A Practical Guide to Relieving Pain, Reducing Stress, and Restoring Wellbeing*. London, England: Piatkus.

Smally, S. & Winston, D. (2010). *Fully Present: The Science, Art, and Practice of Mindfulness*. Philadelphia, PA: Perseus Books Group/Da Capo Press.

### **Websites**

University of Massachusetts Center for Mindfulness in Medicine, Health Care, and Society. Website: <http://www.umassmed.edu/cfm>

UCLA Mindful Awareness Research Center. Website: <http://www.marc.ucla.edu>

### **Local**

Mindfulness Utah (Vicki Overfelt). Website: <http://www.mindfulnessutah.com>

Metta Mindfulness Center (Becca Peters). Website: <http://www.beccapeters.com>

“Just Breathe: Teens” & “Just Breathe: Adults” Jordan Family Education Center. 801.565.7442. <http://jordandistrict.org/departments/jfec/>