



Topic
Better Living

Subtopic
Health & Wellness

Yoga for a Healthy Mind and Body

Course Guidebook

Heidi E. Sormaz
Certified Yoga Instructor



PUBLISHED BY:

THE GREAT COURSES
Corporate Headquarters
4840 Westfields Boulevard, Suite 500
Chantilly, Virginia 20151-2299
Phone: 1-800-832-2412
Fax: 703-378-3819
www.thegreatcourses.com

Copyright © The Teaching Company, 2014

Printed in the United States of America

This book is in copyright. All rights reserved.

Without limiting the rights under copyright reserved above,
no part of this publication may be reproduced, stored in
or introduced into a retrieval system, or transmitted,
in any form, or by any means
(electronic, mechanical, photocopying, recording, or otherwise),
without the prior written permission of
The Teaching Company.



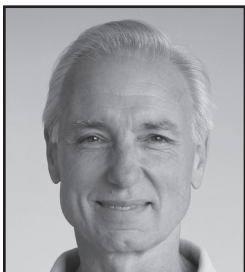
Heidi E. Sormaz, Ph.D.

Certified Yoga Instructor

Heidi E. Sormaz is the founder, owner, and director of Fresh Yoga LLC in New Haven, Connecticut. She received her M.S. and Ph.D. from Yale University and has been a Postdoctoral Fellow at Yale and the University of California, Berkeley. She has taught psychology at Yale, San Francisco State University, and Albertus Magnus College. A Forrest Yoga mentor teacher, Ms. Sormaz has obtained the highest teaching credentials from both Forrest Yoga and Yoga Alliance (E-RYT 500). She has taught yoga and meditation at Esalen in Big Sur, California, and has presented workshops and teacher trainings at conferences and studios across the United States.

Ms. Sormaz's academic focus is studying the interruption of cognitive habits (habitual thinking) with specific attention, focus, and meditation. She is an expert on the influence of arousal and attention on performance, the effects of anxiety on thinking, stress management, and performance in pressure situations. HRD Press published her book *Performance under Pressure: Managing Stress in the Workplace, and Alternative Therapies in Health and Medicine* published her article "Meditation Can Reduce Habitual Responding." Ms. Sormaz was awarded the Flora Stone Mather Alumnae Award from Case Western Reserve University and the Wilhelm Wundt Award at the Northeast Ohio Undergraduate Psychology Research Conference.

In 2008, *Yoga Journal* featured Ms. Sormaz on its list of "gifted, well-studied" teachers from across America. Her classes are live-streamed for StudioLiveTV, and she has been a presenter at Wind Horse: The Forrest Yoga Conference and at Yoga, Meditation, and Recovery Conferences since 2012. ■



John Schumacher

Founder and Director
of Unity Woods Yoga Center

John Schumacher is the founder and director of Unity Woods Yoga Center, Washington DC's premier yoga studio. He has practiced yoga for more than 40 years and has taught in the Washington area since 1973. He studied in India with B. K. S. Iyengar for 33 years and is a certified advanced Iyengar yoga teacher, one of only 13 teachers in the United States to hold that level of certification. He also spent many years studying with internationally acclaimed teacher Dona Holleman. ■

Disclaimer

This series of lectures is intended to convey general health, fitness, and nutritional information and is for educational purposes only. It is not a substitute for, nor does it replace, professional medical advice, diagnosis, or treatment of health conditions. Please consult your physician or other health-care professional before beginning or changing any fitness or nutrition program to make sure that it is appropriate for your needs.

If you have any concerns or questions about your health, you should always consult with a physician or other health-care professional. Do not disregard, avoid, or delay obtaining medical or health-related advice from your health-care professional because of something you may have seen or heard in these lectures. Current health and fitness research may exist that could impact the educational information provided in these lectures, and advice found herein may not be based on the most recent findings or developments. Therefore, the use of any information provided in these lectures is solely at your own risk. By continuing with the programs, exercises, advice, information, or diets discussed in these lectures, you recognize that there are risks of injury or illness which can occur because of your use of the aforementioned information and you expressly assume such risks and waive, relinquish, and release any claim which you may have against The Teaching Company as a result of any future physical injury or illness incurred in connection with, or as a result of, use or misuse of the programs, exercises, advice, diets, and/or information discussed in these lectures. The opinions and positions provided in these lectures reflect the opinions and positions of the relevant lecturer and do not necessarily reflect the opinions or positions of The Teaching Company or its affiliates.

The Teaching Company expressly **DISCLAIMS LIABILITY** for any **DIRECT, INDIRECT, INCIDENTAL, SPECIAL, OR CONSEQUENTIAL DAMAGES OR LOST PROFITS** that result directly or indirectly from the use of these lectures. In states which do not allow some or all of the above limitations of liability, liability shall be limited to the greatest extent allowed by law.

Table of Contents

INTRODUCTION

| | |
|---------------------------|---|
| Professor Biography | i |
| Course Scope | 1 |

LECTURE GUIDES

LECTURE 1

| | |
|--------------------|---|
| Western Yoga | 2 |
|--------------------|---|

LECTURE 2

| | |
|-----------------------------------|---|
| Yoga Begins with the Breath | 9 |
|-----------------------------------|---|

LECTURE 3

| | |
|----------------------------|----|
| Yoga and Pain Relief | 16 |
|----------------------------|----|

LECTURE 4

| | |
|--------------------------------|----|
| Yoga for a Healthy Heart | 26 |
|--------------------------------|----|

LECTURE 5

| | |
|-----------------------------------|----|
| Yoga and Addictive Behavior | 35 |
|-----------------------------------|----|

LECTURE 6

| | |
|---------------------------------------|----|
| Yoga for Depression and Anxiety | 44 |
|---------------------------------------|----|

LECTURE 7

| | |
|--------------------|----|
| Iyengar Yoga | 53 |
|--------------------|----|

LECTURE 8

| | |
|------------------|----|
| Power Yoga | 55 |
|------------------|----|

LECTURE 9

| | |
|----------------|----|
| Yin Yoga | 58 |
|----------------|----|

LECTURE 10

| | |
|--------------------|----|
| Anusara Yoga | 60 |
|--------------------|----|

Table of Contents

LECTURE 11

Forrest Yoga63

LECTURE 12

Everyday Yoga.....66

SUPPLEMENTAL MATERIAL

Bibliography.....69

Yoga for a Healthy Mind and Body

Scope:

Yoga can have a transformative effect on your body and mind, helping you move from disease to ease in the ways that you breathe, move, and think. Current scientific research shows that yoga practice can affect balance, sleep, stress, anxiety, mood, cholesterol, and overall quality of life more than exercise alone. This course introduces you to the ancient tradition of yoga and explains how it has evolved to become the North American phenomenon that it is.

The first half of the course provides a brief history of what we know as yoga in the West and the science behind how modern yoga can create a healthy body and mind. This part of the course includes specific examples of how yoga practice can affect pain reduction, help prevent heart disease, aid in recovery from addiction, and decrease anxiety and depression.

The second half of the course is primarily experiential—yoga practice only has a healing effect if you engage in it. Lectures 7 through 11 introduce you to popular modern styles of yoga in the United States: Iyengar yoga, power yoga, yin yoga, anusara yoga, and Forrest yoga. You will learn where and how they fit into the evolution of 21st-century yoga. In addition, you will learn how to practice these styles in extended routines. In the final lecture, with the help of all you have learned in this course, you will learn a yoga practice that is designed to fit the needs of your body and mind, including how to update the sequence when necessary.

This course is the introduction you need to create an adaptable yoga practice that can help you maintain a healthy body and mind. ■

Western Yoga

Lecture 1

Throughout this course, you will be introduced to the health benefits of yoga—essentially, how yoga can help you feel better. In the first six lectures, you will explore some of the science behind how yoga can affect your mind and body. In these lectures, particular yoga poses will be incorporated that can lead to better health. The final six lectures will focus primarily on practice. If you're looking for enlightenment, you can get that with yoga. If you're just looking for a little peace of mind, you can *definitely* get that with yoga.

What Is Yoga?

- Many would say that yoga is a spiritual tradition from India that's thousands of years old. That's true of the word "yoga." What we are focusing on in this course is the yoga that's most common in the United States today—the yoga that scientists study and write about today. This yoga is actually less than 100 years old. It has its historical roots in Indian tradition, but it has evolved into a North American cultural phenomenon.
- Classical yoga is rooted in religion, but modern yoga, which is the focus of this course, is typically not. There's a spiritual component, but it's more often taught as a way of healthy living—not a religion. You can be Christian or Jewish or atheist and still practice yoga.
- What was once an effort to obtain enlightenment and eliminate all human suffering is now presented as more of an effort to lessen day-to-day suffering and to improve our overall health and well-being.
- Practicing yoga creates a healthy body and healthy mind. You don't need to subscribe to any particular religion to experience the positive effects, and these benefits occur even when yoga is being taught in this modern, Western, sometimes exercise-like sort of way.



© Fuse/Thinkstock

Practicing yoga can soothe your mind, body, and soul.

- This course focuses on hatha yoga, which has a primary focus on the body. Most of the yoga styles taught in the United States are considered forms of hatha yoga.
- Hatha yoga has three main ingredients: breath exercises (pranayama), physical postures (asana), and meditation (dhyana). When yoga is taught traditionally, much of it is named and described in Sanskrit, using words such as pranayama, asana, and dhyana.
- Pranayama involves bringing your awareness to your breath and manipulating the way that you breathe. Often, yoga classes begin or end with pranayama.
- In the United States, the majority of the yoga class is asana, which can be translated as “body position,” or the mastery of sitting still. When the word “asana” is used in modern, Western yoga, it is referring to the movements and postures performed throughout the class. These moves can be as simple as sitting with one leg crossed in front of the other or as complicated as standing with one of your legs behind your head.

- The third component is dhyana, which is practice that trains your awareness and attention. The earliest writing on yoga was essentially meditation instruction; you could argue that pranayama and asana are simply techniques that help us sit in meditation more easily.

Where Did Yoga Come From?

- In the 5th century, many scholars believe that Hindu author Patanjali wrote the *Yoga-sutras*. Yoga existed before Patanjali, but he wrote the text that became the authority on the subject. Interestingly, the *Yoga-sutras* contain no reference to any particular physical postures, such as the tree pose, downward-facing dog, or a sun salutation. Essentially, the sutras are 196 concise statements on how to live in order to have a better relationship with your own mind—to be aware of it, but not controlled by it.
- The *Yoga-sutras* describe the eight “limbs” of yoga, or eight steps to a quiet mind. They’re not one-after-another steps; they’re different practices that work together. Of the eight, only one refers to asana, or body practices.
- The shift to a greater emphasis on yoga postures began with the *Hatha Yoga Pradipika*, which was written in around the 15th century. It was the first text outlining yoga asana, and it had 15 static postures.
- But the more physical approach became popular in the 1930s, when Tirumalai Krishnamacharya was hired by the maharajah of Mysore in southern India to teach yoga at the palace. Krishnamacharya was widely considered the father of vinyasa, a style of yoga that combines breath with movement. Much of what we practice today in the United States comes from Krishnamacharya’s students, including T. K. V. Desikachar, Indra Devi, B. K. S. Iyengar, and K. Pattabhi Jois.
- One principle taught from the lineage of Krishnamacharya that is central to modernized yoga is to teach what’s appropriate for the individual in front of you. This is one reason why modern yoga is so great: It can be adapted for everyone.

How Does Yoga Work?

- Practicing yoga helps you become aware of your habits and changes your habits. In yoga, the word “samskara” represents habit—the physical, mental, or emotional patterns that we bring with us everywhere we go. Repeating samskaras reinforces them and makes us more likely to do them again.
- One of the most important physical habits to consider is the way that we breathe. We don’t have to think about it; we’ll still be alive without thinking about or feeling our breath. At the same time, however, breathing is a pattern we’re creating and strengthening.
- We have a lot of stress in our lives, and when we feel stressed, our breathing pattern reflects the so-called fight-or-flight response. Our body thinks that in order to survive, we need to tighten our muscles and get ready to run. We start taking shallow, rapid clavicular breaths. We use our neck, shoulders, and upper ribs rather than our diaphragm to move air in and out of the lungs. When we do this, we’re hardly breathing.
- Shallow clavicular breathing leads to anxiety. It increases your heart rate and blood pressure and makes the physical symptoms of stress worse. Hardly breathing becomes a habit: When you feel stressed, you take shallow breaths, and you can’t breathe. When you can’t breathe, the symptoms of stress get worse, and you feel even more stressed. At some point, this will lead you to a health practitioner, or you’ll just continue to feel stressed.
- Yoga can help us address the habits in our body—from the stress-inducing way that we breathe to the ways in which we hold ourselves that create pain in our back, neck, and shoulders. Yoga can also address the habits we have in our mind. Yoga can help us practice becoming more aware of how our mind works and make choices about where we put our attention.

- Yoga has the potential to help you unwind all of your habits so that you can choose where to put your focus and energy, but it takes a while. You'll slowly become more comfortable with uncomfortable.

Physiological and Psychological Changes

- On this yoga journey, the first thing you will likely feel is the physiological change that comes along with yoga practice. Science tells us that yoga makes you feel better: Yoga practice releases substances in your brain that act as antidepressants. Specifically, gamma-aminobutyric acid (GABA) is a neurotransmitter produced by your central nervous system that slows the firing of neurons in your brain. It makes you less excitable and produces a calming feeling, especially mental calming. It also gives you a sense of physical calming.
- In one study, researchers from the Boston University School of Medicine showed that yoga practice could increase GABA levels in experienced yoga practitioners' brains by 27 percent. If participants had only been doing yoga for about three months, the increase was 13 percent. This suggests the possibility that the more yoga you do, the more your brain responds in a feel-good direction—by increasing GABA levels.
- Even if the yoga practice is very vigorous, engaging in it increases relaxation and reduces anxiety. This reduces stress. Stress reduction is a major reason that yoga has become so popular in the United States.
- Yoga practice reduces the physiological effects of stress. Research shows that yoga reduces stress indicators like cortisol, heart rate, blood pressure, inflammation, and pain.
- Stress is also a habit—in both our body and our mind. Stress is created and reinforced in our minds, and yoga can help us repattern the stress-producing ways that we think.
- Stress can be defined as our reaction to a perceived threat. This means that our thinking—whether or not we perceive a threat—

influences whether or not we're stressed. Like anything else, perceiving the world as threatening can just be a habit.

- Stress plays a role in almost every other health problem that we face, so in reducing our stress response, yoga helps alleviate or lessen most other health problems. It turns out that yoga's effect on health and stress reduction is larger than what's found with just exercise alone. One way to understand that effect is by remembering the three elements described in hatha yoga. There's asana, which can look like exercise, but yoga also includes conscious breathing and mindfulness practice.
- Interestingly, even when specific physiological changes aren't found from engaging in yoga, practitioners still report feeling better. Yoga has a positive effect on the psychological factors that improve your quality of life and make you feel better. If you can perceive a situation in a less stressful way, regardless of whether it registers as a physiological change, you'll feel better.

Suggested Reading

Büssing, Michalsen, Khalsa, Telles, and Sherman, "Effects of Yoga on Mental and Physical Health."

Kabat-Zinn and Hanh, *Full Catastrophe Living*.

Roach and McNally, *The Essential Yoga Sutra*.

Singleton, *Yoga Body*.

Practice

Note how yoga impacts your body and mind.

First, note how your body feels. Write down three specific areas that draw your attention.

Next, note how your mind feels. What are you thinking about? Does your mind feel busy or clear?

- Practice the breath of equal lengths for six rounds.
 - Come to sit on the edge of a chair.
 - Inhale for a count of four, hold the breath for four, and exhale for four.
 - Repeat six times.
- Practice meditation by counting your exhales backward from five to one.
 - Continue sitting on the edge of a chair.
 - Set a timer for five minutes.
 - During those five minutes, count each exhale from five to one, and then begin again at five.
- Practice shoulder shrugs.
 - Standing or sitting, lengthen up through your spine and relax your arms by your sides.
 - Inhale. Hold the breath, hike the shoulders up by your ears, squeeze shoulders straight back.
 - Exhale. Keep arms relaxed, squeeze the upper shoulder blades together, and drag down one to two inches.
 - Inhale into the upper back, then exhale. Squeeze the mid-shoulder blades together and drag down one to two inches.
 - Inhale into the bottom tips of your shoulder blades, then exhale. Bend your elbows, and squeeze the lower tips of your shoulder blades together and down.
 - Repeat shoulder shrugs twice.

Note any change in your body and mind.

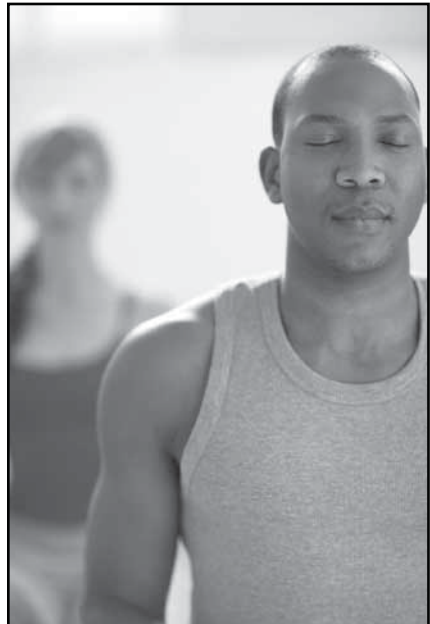
Yoga Begins with the Breath

Lecture 2

How often do you pay attention to your breath? If you're like most people, it's probably only when you're having a really hard time breathing, like when you have a cold and can't breathe through your nose. We're habitual creatures, and breathing is automatic and habitual. However, as you will learn in this lecture, the way we habitually breathe is typically not that good for us—we really should pay more attention. This idea of unwinding our conditioning, of bringing our habits back to conscious awareness, is the hallmark of yoga. Bringing awareness to how we breathe can change everything.

The Importance of Breath

- Of the three things we take in every day to survive—food, water, and breath—breath is the most important. You can survive without food for about a month, and you can survive without water for a few days. But without breath, you've got about five minutes.
- Inhaling is the first thing you do when you come into this world, and exhaling is the last thing you do before you leave it. In between, we spend very little time or energy



© Getty Images/Photodisc/Thinkstock

Breathing in a mindful way is an important component of yoga practice.

paying attention to how we breathe—unless it’s a problem, like with asthma or sleep apnea.

- Most of us just don’t think about breathing on a regular basis. But for hundreds of years, yogis have fully grasped that in order to live well, we need to learn how to breathe well. They understand that breathing well is the key to health, well-being, and stress reduction.
- The health benefits of yoga practice have generally not been shown to be particular to any specific tradition. There are many different yoga traditions. For example, some yoga is done in 110 degrees—hotter than a sauna. Other forms of yoga ask you to lie on the floor and stretch while relaxing as much as possible. And yet still other types of yoga ask you to flow through movements in what appears to be a kind of gymnastics, taking you to the very limits of your physical strength.
- There are many different styles of yoga, but what they all have in common is a systematic attention to the act of breathing. These yogic practices include a variety of exercises that have a goal of helping you become more efficient at breathing—no matter what your body is doing or how hot it is in the room.
- Each yoga pose, or asana, presents a specific challenge to the mechanics of how you breathe. First, there are specific breathing exercises, or pranayama. In addition, when you’re engaging in the yoga postures, you’re learning how to be in a specific pose while maintaining as much effective breathing as possible. When you practice yoga, you train both your body and mind how to breathe well in extreme or stressful situations.
- In a good yoga class, the teacher doesn’t just tell you to “breathe”—let’s face it, if you’re alive, you’re breathing. Instead, a good yoga class teaches you *how* to breathe. It brings your awareness to your breath, and it asks you to stretch the limits of your habitual breath.

Breathing Exercise: Expanding the Ribs

- There's no better way to discover the role and limits of your own breath than to practice some yoga, where you will pay attention to your breath and try some breathing techniques that aren't just your usual habits.
- You might find that just bringing your awareness to your breath makes it difficult to breathe. Breathing is typically such an automatic process that bringing awareness to it interrupts our ability to remain automatic.
- There's no one right way to breathe in yoga, just as there's no one right style of yoga. Each practice has its way of freeing up our habits and, specifically, the habitual way that we breathe.
- A breathing exercise called expanding the ribs involves placing your hands on the sides of your rib cage and giving a little pressure, inhaling specifically into the bottom of your rib cage, and pushing the rib cage wide against your hands. With each breath, you feel the movement of your ribs expanding, widening outward.
- Deep breath involves inhaling and exhaling completely, expanding the rib cage from the bottom to the top. At the end of the exhale, you draw the low belly back slightly—to help get all the air out. This deep breath asks you to use muscles around your rib cage that maybe you haven't felt in a while.

Telescoping the Ribs

- Telescoping the ribs combines expanding the ribs (a deep breath through the whole rib cage) with lengthening the rib cage away from the pelvis. These motions together—expanding and telescoping the ribs—help you decompress your back, get a full breath, and begin unwinding the habitual tension you have in your core.
- It takes effort to telescope the ribs because these muscles around the ribs habitually tighten with stress. In other words, stress leads to tightening of the muscles in your core and rib cage. This constricts

your diaphragm, and it is difficult to breathe. When you can't breathe, then you feel stressed. Not practicing breathing—which is the typical state of things, because we don't practice—creates a downward spiral. When you feel stressed, you can't breathe, and when you can't breathe, you feel even more stressed.

- Yoga is the intervention. In yoga, we're doing everything that we can to allow the diaphragm to move freely and change shape as much as possible. When inhaling, the diaphragm moves down and changes shape, and when exhaling, it moves up and changes shape. The diaphragm's freedom to move is what gives us our best breath. As you continue practicing yoga, you'll know what that freedom feels like.
- In addition to freeing up the habitual tension in our external muscles, another reason that freeing up the breath and the diaphragm is so important is because the diaphragm is connected to your vital organs: your heart, your lungs, and all of your abdominal organs. Stress is like a vice on your diaphragm and vital organs. The more the diaphragm can move freely, the better all of those organs can function.

Freeing Up the Diaphragm: Uddiyana

- Uddiyana is a yoga asana that is specifically designed to help free up the diaphragm. "Uddiyana" is translated as "belly flies up," or you could just call it a fake inhale. You basically exhale all of your breath out and then use the muscles you would normally use to inhale—but you don't inhale. This concept of feeling for stretching the breath—making it longer, slower, and more full—is the key to most of the stress-reducing and health-improving changes that we see in yoga.
- When you breathe too quickly—which most people do out of habit—you take short, shallow breaths, and your body loses carbon dioxide without significantly increasing levels of oxygen. Breathing too quickly can lead to a constriction of the blood vessels in your

brain. This can create headaches, dizziness, muscle spasms, or a lack of feeling in the body—you're robbing the brain of oxygen.

- When you slow down the breath, the level of carbon dioxide in your bloodstream rises. Although many people think of carbon dioxide as a waste product, it is in fact crucial to maintaining proper blood pH. When you increase the amount of carbon dioxide by stretching your breathing, this actually causes the blood vessels in your brain to dilate so that the brain can get more oxygen, leading to better blood flow. This tends to increase a feeling of calm alertness and well-being.

Warrior II Pose

- In warrior poses, maintaining the relationship of the pelvis to the legs requires strong abdominal work. Our usual habit when we need to do strong abdominal work is to hold the breath and then try to use the chest and neck to hold ourselves up. Instead, as we do this pose, we focus on how to maintain a full breath.
- In the warrior II pose, it is the strength needed in the abdominals and pelvis that presents a challenge to your diaphragm—to your breath. You might also find it challenging overall, which creates a need for more attention to your breath.

The Bound Angle Pose

- In the bound angle pose, the specific challenge is staying out of compression, or not squishing the diaphragm. Our physical habit in a forward bend is to just compress the front of the body. Compression is a posture that many of us know well from sitting at a computer or in a car—it's basically slumping, and a slumping posture needs to be addressed and changed.

Downward-Facing Dog

- Even if you've never done yoga, it's likely that you've heard the words "downward-facing dog." From the perspective of the breath, downward-facing dog is an inversion. Your head is below your hips. This moves the diaphragm toward your head so that exhaling

is really easy. More conscious effort has to be put on inhaling in order to maintain an efficient breath.

- At the same time, you're using your core muscles for support. So, the core muscles have to work, but they also have to find freedom to allow the diaphragm to move. The goal with yoga is not to have solid six-pack abs; instead, we want the core muscles to be able to completely contract and completely let go.

Suggested Reading

Kaminoff and Matthews, *Yoga Anatomy*.

Practice

Note how stressed or relaxed you feel on a scale of 1 to 10, where 1 is fully relaxed and 10 is extremely stressed.

- Practice expanding the ribs.
 - Put your hands on the sides of your rib cage and give a little pressure.
 - Inhale into the bottom of your rib cage.
 - Push the rib cage wide against your hands.
 - With each breath, feel the movement of your ribs expanding—widening outward.
 - Repeat for five breaths.
- Practice deep breath.
 - Deep breath is expanding the rib cage from the bottom to the top.
 - Inhale into the bottom of the ribs, widening, and fill into the middle and into the upper ribs.

- Exhale everything out, and pull the low belly slightly back.
- Repeat for five breaths.
- Practice telescoping the ribs.
 - Telescoping combines expanding ribs and a deep breath through the whole rib cage with lengthening the rib cage away from the pelvis.
 - Inhale. Take a deep breath through the ribs, while dragging the rib cage up away from the hips.
 - Exhale everything out, pulling the low belly slightly back.
 - Repeat for five breaths.
- Practice uddiyana.
 - Come to standing, and bend your knees. Lean forward slightly, and brace your hands on your thighs.
 - Exhale all of your breath out, hold it out, draw your belly back, and expand the ribs.
 - Relax the belly. Inhale.
 - Repeat for five breaths.

Note how stressed or relaxed you feel on a scale of 1 to 10, where 1 is fully relaxed and 10 is extremely stressed. Has it changed since the beginning of the exercise?

Yoga and Pain Relief

Lecture 3

Pain is our body's way of ensuring our survival—of letting us know that it's time to stop, pay attention, and do something different. We're all interested in better ways to manage our own pain, which is one of the reasons we should all be interested in yoga. In this lecture, you will learn how yoga can help you alleviate pain. You will be introduced to exercises that alleviate pain created by chronic slumping and the compression problems associated with carpal tunnel syndrome. More generally, these exercises give you the power to alleviate your own chronic pain in the shoulders, neck, and upper back.

Pain and Stress

- Acute pain is an immediate response to a threat. Chronic or recurring pain, on the other hand, is what many of us are dealing with—it's a mind-body experience. Chronic pain is in your mind and in your body; your experience of that pain is very real.
- Chronic pain might have originated as damage or an injury in your body, but once the physical damage has healed, many other things can lead to a pain response as big as the original event, including emotions like anger, stress, or just moving in the same way but to a much lesser degree.
- Once you've had pain, your body and mind will make it easier to detect a similar threat in the future. It ensures that you are aware of the thing that felt so bad so that you pay attention to it. It gives you a pain response even when the threat no longer really exists.
- We learn, and we get better at having pain. We get better at detecting threats we've encountered before, and our body's response to even something very small is pain.

- Being in pain automatically increases your level of stress. When your body is in pain, your systems go on full alert. Your nervous system increases arousal, heart rate, blood pressure, and muscle tension and heightens your senses so that you can take action in an emergency.
- Because both the stress and pain systems in your body are about survival, it's difficult to separate them in your mind. Your nervous system is not so good at it either. Pain equals stress. We learn that these two things go together, and then they're hard to tell apart.
- Stress is a large contributor to chronic or recurring pain. So, learning how to reduce stress is key in managing pain. We know that practicing any type of yoga reduces our stress level, so already yoga is a good candidate in the treatment of pain.
- Scientific studies have been conducted with people experiencing pain from a wide variety of conditions, including lower back pain, migraines, carpal tunnel syndrome, arthritis, and many others. These studies have looked at several different types of yoga that had similar components, like breathing, stretching, strength building, and relaxation exercises. But the studies also had many differences, including the type of yoga practice, the intensity of the practice, the amount of time spent in the practice, and the frequency of the yoga sessions. Overall, we know that yoga reduces pain, but at this point, we don't have conclusive evidence as to how or why.

Pain-Reduction Tools

- Let's consider three key tools used in yoga that may underlie pain reduction. The first pain-reduction tool you can learn in yoga is to change your breath and attention pattern. These changes reduce stress and give the signal to our body that we're safe and well instead of in a state of emergency.
- The typical breath response to pain is to hold the breath or to breathe rapidly. Most hatha yoga poses ask you to do exactly the opposite:

deliberately lengthen and slow down your breath. We know that there is a connection between changing breathing patterns and reducing stress levels.

- Yoga also asks us to pay attention in a particular way—to make a choice to bring our awareness to what’s happening in the present. Crucial to the yogic approach to pain management is the ability to differentiate the actual sensation of the pain from your thoughts about it or your emotional reactions to it.
- Often, when we have pain, we make it worse with negative thinking. These recurring thoughts are scary; they create stress. And increased stress equals increased pain. In hatha yoga, continual cueing to come back to the actual sensation happening in the body helps us make a conscious choice not to follow the negative habits of our thoughts—not to practice thinking negatively.
- When you consciously bring your attention back to the present, you’re creating a new habit of being in what is happening, not in the downward spiral of thoughts about what might be or what might have been. This attention to what is happening will help you reduce your experience of pain.
- The second pain-reduction tool that you can learn in yoga is how to release chronic contraction. Most of the tension we hold in our body is unconscious and unintentional. We often don’t notice the tension until it’s causing pain or a headache.
- We can decrease chronic contraction by either deliberately tensing a muscle followed by releasing it or by engaging in systematic relaxation techniques. It might seem like intentional tension is the wrong direction, but it can help.
- Most of the tension you hold in your body is unconscious. Tensing to relax makes sense because it’s easier to undo something you are consciously doing than to undo something that you don’t even know you’re doing.

- Yoga uses both direct coaching to relax and also intentional tensing to relax and release areas of the body with chronic contraction. These areas are often the ones that lead to or are already causing pain.
- The third pain-reduction tool you can learn in yoga is how to create the potential for healthier movement patterns in the body. Much of how we move is a habit—we don't need to pay attention to it.
- Often, pain is a result of bad movement patterns that have become a habit in our body. Moving in a way that's out of alignment or that puts undue stress on a particular muscle or joint will eventually lead to pain.
- Learning in yoga to engage muscles that aren't working properly and to relax ones that don't let go when they should, you can help bring your bones into better alignment, relieve the compression of joints and soft tissue, and alleviate pain. Yoga can help you figure out which parts of the body should be working in a certain pattern of movement and which ones need to take a rest.

The Slump

- The slump—or in yoga, we call it slumpasana—is becoming a chronic condition in our culture. Surely you have experienced this in your body. Slumpers (all of us) typically thrust the head forward, chronically internally rotate the upper arms (sometimes to the point of fixation where we can no longer move the area), and don't engage the muscles between the shoulder blades.
- One of the primary causes of this body position and the pain that results is screen time—sitting in front of a computer, television, or another electronic device or even standing with your phone, texting and staring at the screen.
- Throughout all of the yoga poses, use the first pain-reduction tool to change your breath and your attention patterns to focus on sensation and on what's happening in the present.

- In the slump position, we're chronically contracting the pectoralis muscles in the front of the shoulder, chronically releasing the back of the shoulder. We can use the second pain-reduction tool—working to lessen chronic contraction—to address this shoulder habit.

Shoulder Shrugs

- Shoulder shrugs are a great exercise that you can stop and do almost anywhere or anytime to address the problem of chronic slumping and chronic contraction in the front of the shoulder.

Chest Opener

- This pose involves using a wall to help you open up your chest and shoulders. Your chest and shoulders should feel different from the chronic slump, and you might even feel a little more awake after doing this pose.

Chaturanga

- Let's add the third pain-reduction tool and work toward creating a healthier movement pattern in the upper back and shoulders. This



© LittleBee80/iStock/Thinkstock

Chaturanga is a movement that helps strengthen the upper back.

can help you figure out which parts of the body should be working and which ones need to take the back seat.

- To address the slump, we need to strengthen the muscles in the upper back and release the muscles in the front of the shoulder, especially when we are weight-bearing on the shoulder.
- In yoga, a common movement is chaturanga, or lowering down from a push-up position to the floor. This is a movement that can train us to turn on and strengthen the upper back while opening the front of the shoulder.
- In the chaturanga pose, you spread across your shoulder blades and draw them down your back in order to stay strong in the upper back. At the same time, you move the front of your shoulder away from the front of your body, which will be away from the floor as you lower down. It's really important to move consciously here because our habit is to roll the shoulder forward. When you are weight-bearing, that is dangerous for your rotator cuff. So as we lower, the head of the shoulder moves away from the floor.

Plank

- The plank pose involves getting onto your hands and knees, pushing your hands strongly into the floor, and stepping back into a push-up position. After doing this pose, your chest and shoulders should feel different than they do after you have been sitting at a desk all day.

Carpal Tunnel Syndrome

- When we don't address it, a slumpy posture can actually contribute to carpal tunnel syndrome, which happens when the median nerve gets compressed. This nerve begins in the front of the neck and shoulder and moves all the way down the inner arm through the wrist. Symptoms are usually burning, tingling, or numbness in the hands and fingers. The problem compression is commonly at the neck, in the front of the shoulder, or at the wrist.

- The first scientific studies of yoga and pain reduction examined the effect of Iyengar yoga on the symptoms of carpal tunnel. Researchers found that yoga intervention led to a reduction in the symptoms and signs of carpal tunnel; pain intensity often decreased, while grip strength often increased.

Dandasana

- Dandasana, or the staff pose, involves sitting on the floor with your legs together and extended in front of you, placing your hands at the sides of your hips, fingers facing forward, and pushing down while you flex your feet. You can use this pose to address the compression associated with carpal tunnel syndrome.
- This pose incorporates the three pain-reduction tools: attention to breath and sensation, releasing chronic contraction, and helping you create the possibility of new movement patterns in the upper body.

Suggested Reading

Cramer, Lauche, Haller, and Dobos, “A Systematic Review and Meta-Analysis of Yoga for Low Back Pain.”

Garfinkle, Singhal, Katz, Allan, Reshetar, and Schumacher Jr., “Yoga-Based Intervention for Carpal Tunnel Syndrome.”

McGonigal, *Yoga for Pain Relief*.

Practice

Notice the degree of rounding forward that you have in your shoulders and upper back. Feel for how much you are slumping.

- Practice shoulder shrugs.
 - Standing or sitting, lengthen up through your spine and relax your arms by your sides.
 - Inhale. Hold the breath, hike the shoulders up by your ears, squeeze shoulders straight back.

- Exhale. Keep arms relaxed, squeeze the upper shoulder blades together, and drag down one to two inches.
- Inhale into the upper back, then exhale. Squeeze the mid-shoulder blades together and drag down one to two inches.
- Inhale into the bottom tips of your shoulder blades, then exhale. Bend your elbows, and squeeze the lower tips of your shoulder blades together and down.
- Repeat shoulder shrugs twice.
- Practice chest opener at the wall.
 - Stand with your right shoulder about one foot away from a wall.
 - Inhale. Reach the right hand back onto the wall, and keep the arm straight or slightly bent at shoulder height.
 - Exhale. Turn the palm of the right hand toward the ceiling, with the little-finger side of the hand touching the wall.
 - Put your left hand on the right side of your upper chest and keep looking straight ahead, with your chin level with the floor.
 - Inhale into the right side of the chest, lifting the chest. Use the sensation of the left hand to guide the breath.
 - Exhale. Lightly press the right edge of the hand into the wall and reach slightly back behind you.
 - Hold for eight breaths.
 - Repeat on the left side.
- Practice chaturanga.
 - Come onto hands and knees.

- Push your hands strongly into the floor and step back into a push-up position.
- Inhale. Lift between the shoulder blades, and spread across the upper back.
- Pull the belly back to stay strong in the core, exhale, and put your knees down.
- To lower to the floor, push your hands into the floor and lower down, moving the front of the shoulder away from the floor.
- Hug the upper arms along your sides as you lower.
- Lower the chest and the hips to the floor at the same time.
- Push back to hands and knees, and repeat twice.
- Practice half-forward bend at the wall.
 - Stand with your feet about hip-width apart, facing a wall, approximately three feet from the wall.
 - Inhale externally, rotate your upper arms, and raise your arms overhead.
 - Exhale. Draw the shoulder blades down the back, and bend at the hips.
 - Without changing the arms, turn the hands so that fingers face the ceiling, and bring the hands to rest on the wall.
 - Inhale. Push the hands into the wall.
 - Exhale. Reach the tailbone away from the wall.
 - To come out of the pose, step forward toward the wall and release the arms.

Notice the degree of rounding forward that you have in your shoulders and upper back. Feel for how much you are slumping now as compared to when you began this exercise.

Yoga for a Healthy Heart

Lecture 4

In this lecture, you will learn about the four heart-healthy elements that you should look for in a yoga class that will help you work in a way that doesn't put undue stress on your heart, but instead gradually asks more and more of your breath and your muscular system in order to move you into more vigorous exercise. These four elements are breathing exercises, breath coaching, increasing exercise capacity, and movements that improve posture. You will also learn about a few examples of yoga poses and breath exercises that you can use to create a routine of your own.

Heart Disease

- Cardiovascular disease is the leading cause of death in the United States. The Centers for Disease Control and Prevention estimates that someone in the United States has a heart attack every 34 seconds. And this isn't just a problem in the United States. According to the nonprofit group The Heart Foundation, by the year 2020, heart disease will be the number-one killer globally.
- And there's no gender bias. Many people think that heart disease is a male problem, but each year in the United States, roughly the same number of women and men die from cardiovascular problems. In fact, one in four female deaths are related to heart disease.
- The good news is that we can do something about it. And what we can do is straightforward and doable. Most cardiovascular diseases can be prevented simply by changing your lifestyle. Medicare has even begun funding lifestyle programs for heart-disease patients. These programs include yoga, which has been shown to be an excellent prevention and intervention measure.
- Yoga can help lessen the risk factors involved in developing heart disease. Some of these are high stress, high blood pressure, insulin

resistance, and physical inactivity. Across a number of studies, the first three risk factors have been shown to be affected by yoga practice; practicing leads to reduced stress, lower blood pressure, and better insulin resistance.

- As for the fourth risk factor, physical inactivity, it's as if yoga was created as the cure—because yoga can be adapted to gradually prepare you for more and more vigorous exercise. It can help you make a slow transition from a more sedentary lifestyle to a more active one. This might be the difference between life and death.
- You can start with gentle yoga that doesn't require very much physical exertion (this will help improve your stress level and your blood pressure), and then you can gradually build to stronger, more vigorous movement.
- Yoga has actually been shown to be most effective in reducing the risk factors for heart disease in people who have a sedentary lifestyle. It's more effective than asking you to exert a large physical effort. Extreme exercise, such as running 10 miles, actually increases inflammation and stress if that's not your norm.
- Another great thing about turning to yoga as the transition from a sedentary to a more active lifestyle is that it can be adapted to whatever you can do. Sometimes, if you have a low level of physical activity, there are other health concerns going on at the same time, such as arthritis, obesity, or osteoporosis. These conditions limit the range of poses you're able to perform and often limit your range of motion. A good yoga instructor can create a safe environment and help you modify poses to meet your abilities.
- Over and above the risk factors for heart disease, yoga can also help address the symptoms of having the disease. Most importantly, yoga can teach you to how to breath more fully. People with heart disease often have an altered breathing pattern and experience shortness of breath, especially when they try to exercise. You can use yogic

breathing techniques and postures to help retrain the respiratory muscles, improving shortness of breath.

- In addition, yogic deep breathing can help slow your breathing rate. Taking fewer but deeper breaths each minute temporarily lowers your blood pressure and calms the sympathetic nervous system, which is responsible for generating stress hormones. Breathing better helps you increase your exercise capacity.

Four Heart-Healthy Elements

- Although there isn't one particular style of yoga that's been shown to be the best intervention for heart health, we do know that there are certain elements of the practice that lead to positive outcomes.
- If your goal is a healthier heart, then the first heart-healthy element to look for is a yoga practice that emphasizes breathing exercises—an increased amount of pranayama.

Breathing Exercises: Ujjayi

- Changing your lifestyle starts with changing how you breathe. One of the most common breathing techniques in yoga is ujjayi breath. It sounds like a whisper, or more famously, like Darth Vader. Engaging in ujjayi breathing heats up your body and stimulates the parasympathetic nervous system (the one that calms you down). You use the same muscles to do ujjayi breathing as when you whisper.

Breathing Exercises: Sitali

- Focusing on breathing in a way that lengthens and slows down your breath can directly help lower your blood pressure. Sitali breathing creates an extremely slow breath. It involves making a very small opening with your mouth on inhale and exhaling with ujjayi.
- The small opening is traditionally made by rolling your tongue and sticking the rolled tongue out just enough so that you can

inhale through the opening made by the tongue. Whether or not you can roll your tongue is genetic; another option is just pursing your lips into a small opening.

Breathing Exercises: Uddiyana

- Increasing the duration and capacity of your breath will increase your heart health, so a great breathing exercise to include in your yoga practice is uddiyana, which strengthens your diaphragm and stretches your intercostal muscles, the muscles around the rib cage, to their maximum. When those muscles are tense or underused, your breathing will suffer.
- Uddiyana is actually the only exercise in yoga for your diaphragm. Uddiyana involves exhaling all of your breath out and holding the breath out, but engaging all of the muscles as you would to inhale—stretching the rib cage open.

Breath Coaching: Seated Twist and Side Bend

- The second heart-healthy element is breath coaching throughout the poses. This is important because not all styles of yoga emphasize breath coaching.
- Breath coaching is different than just saying, “breathe.” Instead, breath coaching is when the teacher continuously asks you to breathe in a particular way and coaches you as to how to breathe—what to do with your belly and rib cage—as you are moving into, staying in, and coming out of the postures.
- When you learn to stretch your breath within the poses and not just in the breath exercises per se, you’re learning to change your breathing habits in all aspects of your life. Two poses that can help you with this are a seated twist on a chair, which helps you feel for stretching the breath, and a side bend on a chair, which is also really good for engaging and stretching all of the muscles around your rib cage.

Increasing Exercise Capacity: Warrior I

- The third element of heart-healthy yoga practice is to look for a practice that can help you build up your exercise capacity, where you can start with very gentle poses and slowly build.
- Standing poses are great for building strength. To gradually build strength in standing poses, you can increase the time you spend in each pose from 10 seconds to 30, or you can hold the pose for only 10 seconds, come out, and then repeat.
- Warrior poses are great for building strength. There are many warrior asanas, including warrior I. (Also recall the warrior II pose from Lecture 2.) Warrior I, like other standing poses, allows you to feel just how easily the vigorousness of the practice could change by lengthening the time in the pose, repeating the pose, or adding another standing pose.

Movements That Improve Posture: Wind-Relieving Pose

- The fourth key ingredient in a heart-healthy yoga practice is incorporating movements that improve posture. Luckily, this is true of mostly all yoga classes. Bad posture—or slumpasana, as it is referred to in Lecture 3—is linked to an increased risk for heart disease.
- There are a number of poses to alleviate slumpasana, including shoulder shrugs, but some of these poses deal directly with the shoulders and upper body. There’s a lower-body component as well.
- Another area that needs to be addressed is the front of the hip—specifically, the tight hip flexors and psoas muscles that accumulate from sitting in a more sedentary lifestyle. Chronic sitting leads to chronic contraction in the hip, more of an arch in the lower back and a tugging of the rib cage down—a slump.

- A great counter-pose for hip contraction is a wind-relieving pose at the wall, or knee to chest. This pose provides a deep stretch in the hip flexor and psoas. The degree of stretch can be deepened with the gradual addition of a block. To get the most benefit from this pose, stay in it for about a minute and a half.

Movements That Improve Posture: Bridge Pose

- A second pose that can help open the hip flexors and the chest is the bridge pose on a block. If you don't have a block available, you can do this pose without a block, but recognize that you may need to exit the pose early.



© Juppierimages/Pixland/Thinkstock

The bridge pose is a movement that helps improve posture.

Suggested Reading

Abel, Lloyd, and Williams, “The Effects of Regular Yoga Practice on Pulmonary Function in Healthy Individuals.”

Yang, “A Review of Yoga Programs for Four Leading Risk Factors of Chronic Diseases.”

Practice

Notice your ability to breathe. On a scale of 1 to 10, with 1 being very easy and 10 being very difficult, rate how easy it is for you to breathe fully.

- Practice ujjayi breathing.
 - With your mouth open, constrict the muscles in the back of your throat as if you were whispering. Inhale. Draw the breath in, making the whisper sound. Exhale. Move the breath out with the whisper sound.
 - Repeat for two breaths.
 - Inhale with the mouth open, and exhale through the nose with the mouth closed.
 - Repeat for two rounds.
 - Ujjayi breathe with the mouth closed on both the inhale and exhale.
 - Repeat for five rounds.
- Practice sitali.
 - Sitali is inhaling through that small opening made by pursing the lips (maybe around the rolled tongue) and exhaling through the nose with ujjayi.
 - Inhale through the small opening. Exhale with the mouth closed through the nose with ujjayi.

- Repeat for eight rounds.
- Practice uddiyana.
 - Come to standing, and bend your knees. Lean forward slightly, and brace your hands on your thighs.
 - Exhale all of your breath out, hold it out, draw your belly back, and expand the ribs.
 - Relax the belly. Inhale.
 - Repeat for five breaths.
- Practice seated twist on a chair.
 - Come to sit on the edge of a chair.
 - Inhale. Telescope your ribs.
 - Exhale. Keep the lift and twist to your left, taking your left arm to the back of the chair and your right hand to the outside of your left leg.
 - Inhale. Lengthen. Exhale. Maybe twist a little farther—but not so far that you're straining.
 - Hold for five breaths.
 - Repeat on the other side.
- Practice knee to chest at the wall.
 - Set yourself up with the short end of your yoga mat next to a wall.
 - Lie down on your back so that your flexed feet are right up against the wall, with toes pointing up toward the ceiling.
 - Keep your right leg extended, with the foot planted firmly on the wall.

- Inhale. Hug your left knee in toward your chest.
- If you can't reach your arms around the leg, use a strap across the shin.
- Exhale. Reach strongly through the right leg, allowing the right thigh and hip to stretch.
- Stay in the pose for 90 seconds.
- Replace your left foot on the wall.
- Repeat on the other side.

Notice your ability to breathe. On a scale of 1 to 10, with 1 being very easy and 10 being very difficult, rate how easy it is for you to breathe fully.

Yoga and Addictive Behavior

Lecture 5

The hallmark of addictive behavior is compulsively seeking out a substance or activity even in the face of negative health and social consequences. Whether addictive behavior is seriously interfering in your life or is just an occasional unpleasant event, this lecture will help you see how yoga can help interrupt the cycle of addiction. Yoga and working with your attention in a specific way can help you break the vicious cycle of stress, negative emotion, and craving substances and behaviors that have negative consequences. The prescription is to decrease symptoms associated with relapse into addictive behavior.

The Addictive Pattern

- Addiction begins with pleasure or comfort. As human animals, this is what we all want. We move toward things that are pleasant, and we move away from things that are unpleasant. We're all wired that way for survival.
- The first time you have a potentially addictive substance like alcohol or engage in a potentially addictive activity like shopping, it brings you pleasure. Later, your brain creates a craving for that pleasant experience you once had. Craving is an uncomfortable, unpleasant physical and emotional state. We want to get away from it.
- At some point, shopping or drinking might not bring us pleasure anymore, but we reach for it because our brain believes that it will get rid of the discomfort of craving. If we do have that drink or go shopping and it makes us feel better—the discomfort of the craving subsides—the behavior's been reinforced. We're more likely to do it again.
- More and more researchers are suggesting that the same pathway underlies addiction to drugs and alcohol and also compulsive

eating, caffeine addiction, Internet surfing, shopping, and sex. Although there are many complexities, the body and its feelings are at the center of all of this.

- When people compulsively reach for something that will have negative consequences in their life, they do so because they need to feel a different psychological state—the need to get away from what’s uncomfortable. If you don’t know how to modulate your own anxiety, depression, or fatigue through healthy means, you’ll turn to unhealthy means, like sugar, pain pills, caffeine, or alcohol.
- The addictive pattern begins with pleasure. The brain registers all pleasures the same way. Whether it starts with a drug, a sexual encounter, or a good meal, neurons release dopamine into our brain. Dopamine also affects memory and learning by interacting with another neurotransmitter, glutamate. This is important because glutamate links activities needed for survival, like eating and sex, with pleasure and reward.
- When this link between glutamate and dopamine happens—potentially when a person drinks alcohol—it activates the same brain circuits as the behaviors linked to survival: You get pleasure and reward. In other words, that alcohol can take on the same significance as something truly needed for survival, like food.
- So, repeated exposure to an addictive substance links liking something to feeling like you need it for survival, even if it no longer brings any pleasure. At this point, the habit of reaching for a drink is no longer about pleasure; it’s about survival and relieving the distress and discomfort of craving.
- In the addictive cycle, when we crave something that we lack—a drug or behavior, for example—our brain leaves us with an irresistible desire, which is very uncomfortable. Our nervous system wants homeostasis; it wants to self-regulate. When we have a craving, we will reach for something to make us feel better.

Breaking the Addictive Cycle

- Yoga can help interrupt this cycle of choosing the addictive behavior. Thus far, research has shown that yoga can reduce craving in cigarette smokers as much as walking. In addition, yoga has worked as a cognitive therapy in recovery from heroin addiction.
- Yoga might also help prevent food addiction. We know that practicing yoga leads to weight loss. We also know that chronic stress leads to changes in food-seeking behavior—including increased consumption of foods high in sugar and fat, which can lead to obesity—and yoga reduces stress.
- Awareness—observing what is happening before making food choices—can interrupt unhealthy eating habits. This idea makes sense from the very basis of what yoga is meant to do: help us change habits.
- Yoga can interrupt the highly conditioned habitual chain of cognitive, emotional, and physiological processes that contribute to addiction. A major link in this chain is the discomfort of craving. To break the chain, we need to learn to be more comfortably uncomfortable.
- There is a relationship between habit, or *samskara*, and comfort. We tend to return to our habits because they're comfortable. Yoga can help you get more comfortable with uncomfortable, and therefore, it can help break unhealthy habits.
- Yoga can also teach self-soothing. In order to alleviate compulsion, we need to reconnect with self-soothing and recognize in the moment of discomfort that we have the ability to do something about it.
- People with addictive tendencies don't look to themselves to feel better, to self-soothe; they look outside of themselves, to a substance or activity. Research has shown that a person with addictive tendencies may not even realize that they can help themselves feel better without reaching for something external. We all have

the ability to self-soothe, but with addiction, the individual needs to be reminded that there's an option to work with and change the discomfort from the inside.

- The ability to self-soothe and address discomfort in a healthy way is a major component of treating addictive behavior to prevent relapse. Unfortunately, there is an 80- to 95-percent relapse rate in nicotine and alcohol addiction. So, preventing relapse is a prerequisite for successful long-term change in addictive behavior.
- Yoga can help prevent relapse and aid in recovery by helping people learn how to be comfortably uncomfortable—so that they don't reach for the unhealthy or destructive alternative. Yoga does not cure addiction, but by helping us work through the issues that contribute to relapse, yoga can increase our ability to be comfortably uncomfortable, and it can help us change our beliefs about our ability to self-soothe.

Becoming More Comfortably Uncomfortable

- Yoga can teach you four ways of paying attention that can help you be more comfortably uncomfortable: to accept what *is* happening, to recognize that nothing is permanent, to make choices about what you are attending to and enhance pleasant experience, and to observe the results of your practice and become aware of your ability to self-soothe.
- First, yoga can help you accept what *is* happening. On a fundamental level, if we want things to be different than they are, we suffer, we feel bad, and we're uncomfortable. The first step in dealing with discomfort is bringing your attention to and accepting what is actually happening. Bringing your attention to and accepting what craving feels like can be the beginning of counterconditioning and can serve as an alternative to the addictive behavior.
- When you bring your awareness to something, it often changes on its own. For example, when you bring your awareness to the



© Design Pics/Thinkstock

Bringing awareness to what is happening when practicing yoga can help you bring awareness to your life outside of yoga.

tension in your shoulders, it often begins to release just because the spotlight of awareness is on it.

- Accepting what *is* happening is more than just bringing your awareness to something, and it's different from avoiding or suppressing. We all know that trying not to think about something doesn't work. Acceptance doesn't mean we like it or are OK with it never changing; accepting is just being in the reality of how it is right now.
- A way to practice this is to internally add the word "yes" to our experience—saying yes to whatever *is* happening. It's an inner practice of acceptance where we willingly allow our thoughts and feelings to come about and pass away. Saying yes isn't a way of manipulating our experience (pretending that we like it or that it's better than it is) but, instead, an aid to recognize life, as it is, rather than being on automatic.

- Accepting all that's happening—sensations, opinions, thoughts—is a break in the chain of addictive behavior. It interrupts the automatic reaction between being uncomfortable and reaching for the addictive substance or behavior.
- Yoga can help you practice accepting what *is*. This is a necessary first step, but it can sometimes still be overwhelming and negative. At this point, it can help to know that everything changes—nothing is permanent.
- Attending to sensation in yoga is an easy reminder of this fact. You can bring your awareness to an uncomfortable sensation and feel it change. This is a technique crucial to feeling craving—being able to feel the actual sensation and feel that it's not constant.
- Because discomfort can be very intense or unpleasant, it is important to know how to create and engage in a yoga practice that increases pleasant sensation and positive affect. There are many different ways to do this. For example, ritual and repetition create comfort.
- Ritual can be anything from having a devoted space in your house, to always attending the same class at the same time, to laying out your mat and props a certain way. Repetition can be on the level of choosing a practice that's the same or a similar series of poses each time (like Bikram or ashtanga yoga) or simply repeating aspects of the poses again and again (like kundalini yoga).
- You could also purposely choose a style of yoga that feels pleasurable to you in your body. For some, this might be a restful style, like restorative, yin, or gentle yoga. But others might find the constant movement and intense workout of a vinyasa or power yoga class more pleasant.
- More importantly, as you're doing any practice, you can learn to create a more pleasant internal environment. There are many ways to do this. You could pick an aspect or sensation in the pose that

feels most pleasant to you and focus your attention there, or choose a body sensation that often feels good or comfortable as a focus of attention, or actively attempt to call up a pleasant sensation or pleasant self-talk.

- Finally, it's a good idea to observe the results of practice. This helps you realize and gives you a personal sense of control over self-soothing and positive affect. After calling up a pleasant feeling, it is important to take in the sensation and notice the absence of discomfort. We need to be able to recognize that we can change our level of comfort from the inside out.

Cat/Cow

- During the cat/cow pose, as you go through the repetitive motion—there are many different sensations happening—zero in on one that is particularly pleasant. If you drift to something not so pleasant, just notice that and move your attention back toward what you found to be pleasant. This is feeling for a pleasant sensation—not blocking the current experience, just choosing where to put your attention.

Downward-Facing Dog

- Sometimes pleasant sensation isn't pose-related; it's a more general feeling that might always be available or can be called up. In downward-facing dog, as you breath deeply, bring your awareness to your heartbeat. Notice that sensation and how pleasant it can be, and if your mind wanders off, just gently bring your awareness back to the pleasant sensation of your heartbeat.

Savasana

- The final pose in all yoga classes is savasana. Come to lying out straight, relaxing your arms and legs. This is the perfect opportunity to take in how different your breath, mind, and body feel from engaging in a yoga practice.

Suggested Reading

Khanna and Greeson, “A Narrative Review of Yoga and Mindfulness as Complementary Therapies for Addiction.”

Kissen and Kissen-Cohen, “Reducing Addictions via the Self-Soothing Effects of Yoga.”

Lin, Zhou, Du, Qin, Zhao, Xu, and Lei, “Abnormal White Matter Integrity in Adolescents with Internet Addiction Disorder.”

Powledge, “Addiction and the Brain.”

Young, de Armas DeLorenzi, and Cunningham, “Review of Using Meditation as an Intervention in Addictions Counseling.”

Practice

Close your eyes, and notice your level of comfort or discomfort in your body.

- Side bend: Practice noticing sensation.
 - Sit on the floor with your legs crossed.
 - Inhale. Reach the arms up overhead, palms facing each other.
 - Exhale. Bring the right hand to the floor, and reach the left over the left ear.
 - Bring your awareness to the sensation of your breath in the rib cage on the left, and notice the sensations as you breathe.
 - Stay for three breaths.
 - Inhale. Reach the arms up, palms facing each other.
 - Exhale. Side bend to the left, and bring the left hand to the floor.
 - Focus in on the area of most interesting sensation in your body.
 - Breathe there, and stay for three breaths.

- Repeat the motion twice more on each side.
- Notice whether the main sensation changes or remains the same.
- Practice cat/cow, feeling for a pleasant sensation in the body.
 - Come to hands and knees.
 - Inhale. Release your rib cage down, and pick your head up.
 - Exhale. Pull the low belly back, and release the head down.
 - Keep going with this at the pace of your breath for 10 rounds.
 - Bring your attention to a sensation in the body that is particularly pleasant.
 - If you drift to something not so pleasant, just notice that and move your attention back toward what you found to be pleasant.
- Practice ragdoll, calling up a pleasant sensation in the body.
 - Stand with your feet hip-width apart, and forward bend. If you are tight in the back or hamstrings, bend the knees deeply.
 - Call up a pleasant sensation in your body.
 - As you hang in the forward bend, generate that pleasant sensation.
 - Hold for eight breaths.
 - Inhale. Roll up to standing.

Close your eyes, and notice if the level of comfort or discomfort in your body has changed.

Yoga for Depression and Anxiety

Lecture 6

It's likely that at one time or another you've had symptoms of anxiety or depression. Whether you've been clinically diagnosed or just occasionally have some of the symptoms, yoga can help. Yoga can be particularly good at helping you realize that your thoughts are not you. They're not even necessarily reality—they're just your thoughts. And when they're not so pleasant, this is an awesome thing to find out. In this lecture, you will learn about how yoga can help with anxiety and depression. As an intervention for these issues, yoga can help you think differently, and it can change your neurochemistry.

Depression and Anxiety

- Even though there are effective treatments for anxiety and depression, there are a number of reasons to introduce something like yoga as an intervention. First, not enough people receive treatment. Fewer than half of the people affected by depression in the world (in some countries, less than 10 percent) actually receive any kind of treatment.
- There are practical barriers to treatment, like not having enough money to pay for it or not having transportation or childcare. Of those who do seek out help, 40 percent don't respond well to medication strategies or psychological therapy.
- Next, drug therapy can create addiction. There are really valid concerns about the addictive and other potential side effects of drug treatments. Finally, there can be a social stigma attached to seeking out treatment.
- Yoga can address a lot of these practical issues. It can be cheaper than therapy; often, you can find yoga instruction for free. Yoga doesn't have the negative side effects of drugs. If anything, the chemical shift in your brain is a positive one. And you can do yoga

in your own home. If you do go out and attend a class, no one knows why you're there, unless you choose to tell them.

- Even better, there's no reason to believe that yoga would interfere with any other treatment. So, even if you're currently receiving treatment, whether or not it's having the desired result, there's no reason you can't add yoga into the mix.

How Yoga Can Change Your Mind

- Researchers have firmly established that exercise is an excellent intervention for both depression and anxiety. So, even just on that basis, yoga done as exercise is going to help. We also know that compared to other exercise routines, yoga is more effective at reducing the symptoms of stress. Yoga reduces blood pressure, fights inflammation, improves your sleep, reduces pain, and lowers cholesterol, so if stress is adding to your anxiety or depression—and most likely it is—then yoga will be a better intervention than just exercise.
- So, how does yoga work to help alleviate anxiety and depression? There are a number of benefits that happen when people practice yoga. We can break those benefits into two broad categories: how yoga changes your mind and how yoga changes your neurochemistry.
- First, let's focus on the mind. Yoga trains mindfulness, which can help you realize that your thoughts are just your thoughts, not necessarily reality. You can think of mindfulness as having two key ingredients.
- The first one is self-regulation of attention. In mindfulness, we practice purposefully directing our attention to what's happening in the present. So, during yoga practice, teachers direct you to pay attention to body sensations and breathing.
- The second key ingredient of mindfulness is adopting an attitude of acceptance toward what's actually happening in the present. This can take the form of just noticing your thoughts or emotions in a nonjudgmental way. So, as you breathe in a particular pose, when

you notice that you're thinking, just label it as thinking and gently bring your awareness back to the sensation of the breath.

- Mindfulness—in particular, mindful breathing—helps people with something called decentering, which is being able to view your thoughts as just events happening in your mind rather than treating them as an accurate reflection of reality. When we're stuck in depression or anxiety, we tend to be stuck in a state where we believe our own negative thoughts—we're unable to decenter.
- In decentering, instead of believing that the thought “she doesn't like me” is a reality, you learn that you just had a thought and that thought happened to be “she doesn't like me”—and now that thought has passed. It was there; now it's gone. Emotionally, these two events feel really different. Imagine actually believing that someone doesn't like you and being aware that you just had a thought about whether or not someone likes you. Can you feel the difference?
- If we don't decenter, or don't know how to decenter—if we can't recognize that our thought is just a thought—then negative thoughts can escalate into rumination, which is when you repeatedly focus on negative feelings, including their causes and their consequences. Rumination can be extremely damaging psychologically; it can create depression, and it can worsen it.
- Mindfulness practice can reduce repetitive negative thoughts and feelings. When what you're dealing with are a lot of negative thoughts and feelings, mindfulness in yoga practice can be a great place to begin because it's often presented with a focus of attention on the sensations in the body as you move. These sensations can be dramatic or highly variable—easy to pay attention to. And as you are paying attention to what you're feeling in your body, your neurochemistry is changing in a particular way that counteracts the negativity.

How Yoga Can Change Your Neurochemistry

- Yoga can change your brain chemistry by lowering your stress levels. If you have chronic stress, you're depleting the dopamine

and serotonin levels in your brain. This can manifest as anhedonia, a loss of interest or enjoyment in your life. The things that used to feel pleasurable don't anymore.

- We know that yoga lowers the physiological symptoms of stress, including blood pressure, heart rate, and cortisol levels. Yoga can help interrupt this neurotransmitter depletion by lowering stress.
- One of the most important neurochemical findings to be aware of is that the practice of yoga postures is associated with increased levels of GABA in your brain. This neurotransmitter acts like an antidepressant.
- Specifically, GABA slows down the firing of neurons in your brain. It makes you less excitable and produces a feeling of calm, especially mental calm. You're less likely to react to events in your environment or events in your mind in a way that increases your stress level.
- GABA is your body's naturally made drug therapy. By increasing the amount of GABA circulating in your brain, yoga practice can actually alleviate feelings of anxiety and depression.

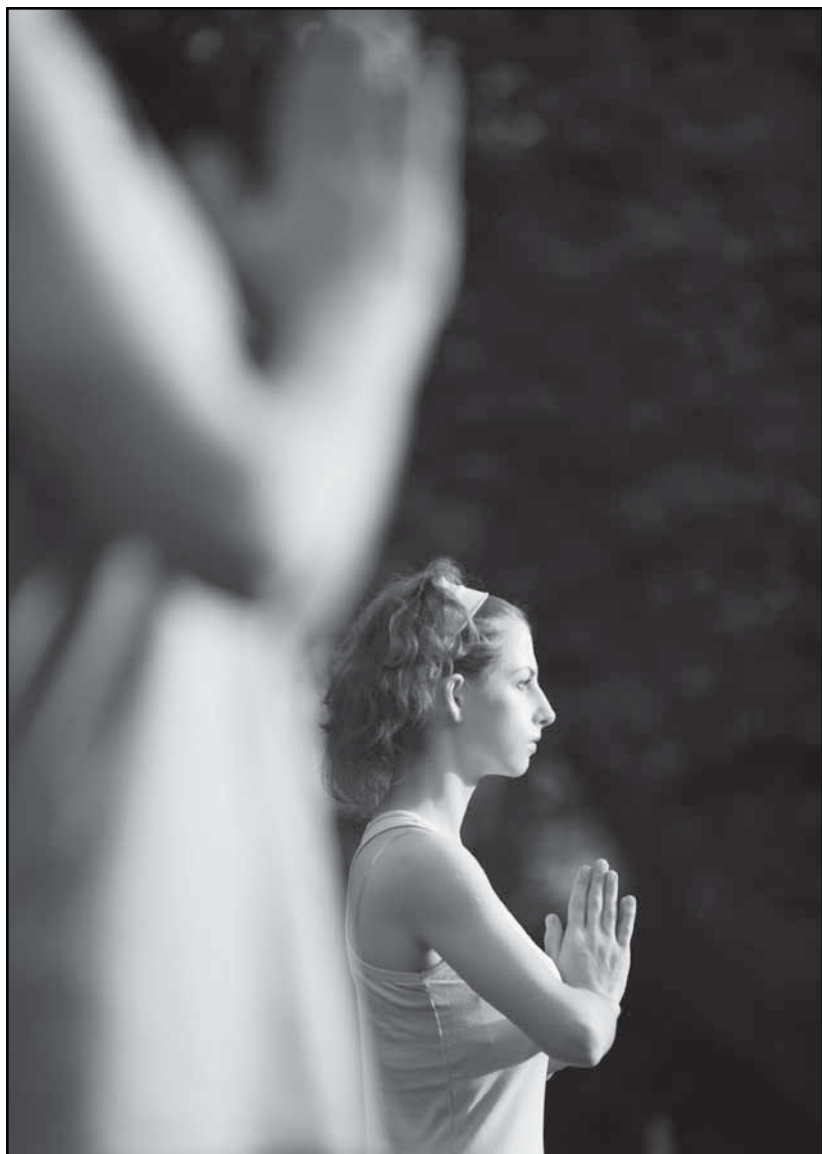
Best Approaches for Depression and Anxiety

- There are all kinds of different ways to do yoga, from lying-on-the-floor stretching to really vigorous exercise. So, what's the best approach for depression and anxiety?
- Depression can appear in different ways. Overwhelming lethargy is one. This is when you have a hard time getting out of bed; you feel tired, unmotivated, and hopeless. You can often recognize depressed people because they have slumped shoulders and collapsed chests and look as if they are barely breathing—because they are.
- Depression can also manifest as activity and restlessness. This often includes a lot of anger and feeling really stiff in the body. People who exhibit these symptoms often have trouble exhaling fully, a physical issue that can create even more anxiety.

- Yoga for depression and anxiety needs to address the breath. Depression and anxiety lead to shallow breathing; the breath needs to be lengthened and more full. This will reduce stress.
- It should also include mindful awareness, to help promote decentering. You should be directed to pay attention to what's happening in the moment, focusing primarily on something other than negative or anxiety-producing thoughts to help you recognize that they are just thoughts.
- Finally, many instructors would agree that a vigorous or challenging practice is the way to go. A vigorous practice helps you stay occupied. There's not too much time to ruminate; it's hard to brood when you have to move on to the next pose. Engaging in a vigorous practice also quickly changes your energy levels. It wakes you up from wanting to sleep all the time, and it calms you down from nervous jitters.

Sun Salutations

- A great approach to turn to is a yoga practice based on sun salutations. Traditionally, these were a series of movements performed in the morning to greet or honor the sun, but we can do them anytime.
- The idea behind a sun salutation is that you match up one breath per pose, stringing the movements together. There isn't a lot of downtime—at the very most, you're asked to stay in a pose for up to five breaths.
- This focus on matching up one breath per pose gives you an aspect of the present moment you can continuously pay attention to—that's a physical sensation, something to come back to when you get lost in thought. Keep bringing your attention to the sensation of inhaling or exhaling as you move.
- There are a number of different sun salutation sequences. Surya namaskar A and B, or sun salutation A and B, are more challenging than classic sun salutations. They are the beginning of any ashtanga



© Hemant Mehta/Thinkstock.

Sun salutations are a series of movements that involve matching up your breath with each pose.

yoga practice. They're also the basis of almost all vinyasa classes found in the United States.

- Challenging but doable is what you want as an intervention for anxiety or depression. One thing that will make surya namaskar A and B easier is if you know how to do upward-facing dog. Sun salutations can be the beginning of your yoga practice or a full practice themselves.
- If you're looking for an intervention for symptoms of anxiety or depression and you want to add yoga into your healing plan, look for a class that includes sun salutation–type movements. Whether or not the teacher gives you specific directions to do so, practice using sensation as the object of your awareness. Use mindfulness: When you notice that you're thinking, just label that “thinking” and deliberately redirect your attention back to the sensations in your body.
- Practicing yoga in this way will help you change your mind and your neurochemistry. Both of these changes will help you build a new, healthier relationship with your own mind and body.

Suggested Reading

Edenfield and Saeed, “Update on Mindfulness Meditation as a Self-Help Treatment for Anxiety and Depression.”

Kinser, Goehler, and Taylor, “How Might Yoga Help Depression?”

Streeter, Gerbarg, Saper, Ciraulo, and Brown, “Effects of Yoga on the Autonomic Nervous System, Gamma-Aminobutyric Acid, and Allostasis in Epilepsy, Depression, and Post-Traumatic Stress Disorder.”

Streeter, Whitfield, Owen, Rein, Karri, Yakhkind, Perlmutter, Prescott, Renshaw, Ciraulo, and Jensen, “Effects of Yoga versus Walking on Mood, Anxiety, and Brain GABA Levels.”

Uebelacker, Epstein-Lubow, Gaudiano, Tremont, Battle, and Miller, “Hatha Yoga for Depression.”

Practice

Stand at the top of your yoga mat and assess.

- Are you feeling anxious?
- Are you feeling sad or depressed?
- How awake do you feel?
- How busy is your mind?

Practice classic sun salutations, moving at one breath per pose or transition.

Complete six to eight rounds.

- Come up to the top of your mat, and stand with your feet together.
- Inhale. Lift your chest.
- Exhale. Bring the hands together at your chest.
- Inhale. Reach up.
- Standing forward bend. Exhale. Fold forward. If you have an injured back, bend your knees.
- Lunge, inhale, step the right foot back, lower the back knee down to the mat, and reach the arms up.
- Exhale. Bring the hands down to the mat.
- Plank. Inhale. Step the left foot back to a push-up position. Bring your hands under your shoulders with your arms straight.
- Chaturanga, exhale, lower down, bring the knees to the floor, bend your elbows along your sides, and keep the head and the shoulders moving away from the floor.

- Low cobra, move your hands a few inches forward, inhale, pull your chest forward and up, and hug your upper arms along your sides.
- Exhale. Move forward to come down.
- Downward-facing dog. Shift to hands and knees. Push into the hands, and straighten through the legs.
- Lunge with the knee down. Inhale, step the right foot forward, and reach the arms overhead.
- Forward bend. Exhale, bring your hands down, and step the back foot to meet the front.
- Inhale, reach out, and come up. If you have an injured back, you can bend the knees and round up.
- Exhale. Bring the hands together at the chest.
- That is one sun salutation. On the next round, step your left leg back into lunge. Each round, alternate the leg that steps back.

Stand at the top of your yoga mat and assess.

- Are you feeling anxious?
- Are you feeling sad or depressed?
- How awake do you feel?
- How busy is your mind?

Has anything changed?

Iyengar Yoga

Lecture 7

The idea that yoga is suitable for all bodies and all levels is central to the teaching of B. K. S. Iyengar, the creator of Iyengar yoga. This philosophy led to an aspect of the style that it has become known for—the use of props. In Iyengar yoga, it's believed that in order to get the full health benefits of the postures, you need to do them in a precise, particular way. The point of using props like blankets, bolsters, walls, chairs, and straps is to allow you to achieve the correct position and, therefore, the full benefits of the postures. Iyengar teaches that in yoga practice, asana comes first; learning and practicing the physical postures comes before pranayama or meditation.



© Jami Garrison/Stock/Thinkstock

Warrior II poses.

In this lecture, you will experience a beginner sequence of Iyengar yoga. The lecture includes a lot of physical direction, but at the same time, the postures are part of a larger system that addresses your body, mind, health, and spirit.

Poses

- Elevated Cross-Leg Posture
- Mountain Pose
- Forward Bend
- Downward-Facing Dog
- Warrior II
- Extended Side Angle Stretch
- Staff Pose
- Head-on-Knee Pose
- Corpse Pose (Savasana)

Suggested Reading

Iyengar, *Light on Yoga*.

———, *Yoga*.

Practice

For this lecture, perform the practice portion of the lecture.

If you are new to yoga and find any of the practices in the lecture too difficult, go to the practice in Lecture 12. In that lecture, you are directed how to create a practice that is more or less challenging.

Power Yoga

Lecture 8

If you're going to exercise, yoga is not a tough cardiovascular workout, but it will change your physiology in ways that affect all other health issues. It might not be the best exercise for fitness as defined by most sports medicine experts, but it might be the best exercise for your overall health. This was the approach taken by Beryl Bender Birch in her 1995



© Brand X Pictures/Stockbyte/Thinkstock

Headstands.

book *Power Yoga*, which coined that phrase as a new style of yoga. She challenged the notion of what it really meant to be fit—isn't overall health and balance more important than cardiovascular fitness? Schools of power yoga are active and athletic; it was adapted from the traditional system of ashtanga yoga in the late 1980s. With its emphasis on strength and flexibility, power yoga brought yoga to the gyms of America. People began to see it as a way to work out, and it has spread to most health clubs and gyms across the United States.

This lecture includes a power yoga practice. Unlike ashtanga yoga, power yoga doesn't follow a set series of poses, so classes can vary widely, but the sequencing is similar to ashtanga yoga: You begin with sun salutations, intersperse standing poses, and follow with floor work, backbending, and inversions.

Poses

- Child's Pose
- Downward-Facing Dog
- Upward-Facing Dog
- Rag Doll
- Mountain Pose (Samasthiti)
- Sun Salutation A
- Sun Salutation B
- Low Push-Up
- High Push-Up
- Forward Bend
- Reverse Swan Dive
- Warrior I
- Halfway Lift
- Thunderbolt
- Warrior II
- Crescent Lunge
- Revolved Crescent Lunge
- Extended Side Angle Pose
- Side Plank
- Rock the Baby
- Headstand
- Savasana

Suggested Reading

Baptiste, *40 Days to Personal Revolution*.

Birch, *Power Yoga*.

Broad, *The Science of Yoga*.

Hagins, Moore, and Rundle, “Does Practicing Hatha Yoga Satisfy Recommendations for Intensity of Physical Activity Which Improves and Maintains Health and Cardiovascular Fitness?”

Ross and Thomas, “The Health Benefits of Yoga and Exercise.”

Practice

For this lecture, perform the practice portion of the lecture.

If you are new to yoga and find any of the practices in the lecture too difficult, go to the practice in Lecture 12. In that lecture, you are directed how to create a practice that is more or less challenging.

Yin Yoga

Lecture 9

Yin yoga requires three things: that you take a shape, relax with gravity, and rest in stillness. In traditional Chinese medicine, the words “yin” and “yang” simply refer to opposites: If yin is cold, hard, passive, and slow, then yang is hot, soft, active, and fast. Yin yoga gets its name as a description for the elements of the body that it affects most—your connective tissue (which can be described as everything other



Lecture 9: Yin Yoga

Downward-facing dog.

© Purestock/Thinkstock

than muscle, so it includes tendons, ligaments, skin, bone, fascia, etc.). Connective tissue is considered the yin tissue in the body because it's hard, or not very flexible, and dense. If you want it to change, it's only appropriate to work with it very slowly. An appropriate stress on the tissue in yin yoga is gentle and prolonged. In the United States, yin yoga has become very popular among meditators.

In this lecture, you will be taken through a yin yoga routine. You might need two blankets as props for this lecture. In a beginning class in yin yoga, you should generally hold each pose for anywhere between three and five minutes.

Poses

- Wide-Knee Child's Pose
- Dragon Pose
- Sleeping Swan Pose
- Eye-of-the-Needle Pose
- Downward-Facing Dog
- Sphinx Pose
- Forward Bend
- Child's Pose
- Butterfly
- Savasana

Suggested Reading

Clark, *The Complete Guide to Yin Yoga*.

Lasater, *Relax and Renew*.

Practice

For this lecture, perform the practice portion of the lecture.

If you are new to yoga and find any of the practices in the lecture too difficult, go to the practice in Lecture 12. In that lecture, you are directed how to create a practice that is more or less challenging.

Anusara Yoga

Lecture 10

Founded in 1997 by John Friend, anusara yoga is based on the Iyengar system of alignment. It presents a structure that includes the universal principles of alignment—the belief being that practicing these principles would bring us back to the correct alignment that can help condition the body for sitting in meditation. Anusara also added an explicit spirituality based primarily on tantric philosophy. It's suggested that the skyrocketing popularity of anusara reflected in part that the mainstream was now hungry for a more spiritual approach, a more precise alignment, and an explicit philosophy for life.

In anusara practice, there are five major alignment principles.

- **Opening to grace:** This is where the practitioner deliberately intends to place themselves in alignment with the flow of supreme consciousness. This can simply mean that you make a choice to open yourself up to the influence of something bigger than you. You place yourself squarely and mindfully in the flow of everything.
- **Muscular energy:** This is drawing energy from the periphery of the body into a central location called a focal point. It's not just grabbing and tensing your muscles; it's more like a current of energy. It creates firmness, moving inward from the periphery to the core.
- **Inner spiral:** This is an expanding energy spiral. In the legs, it runs from the feet up through the pelvis into the waistline. It rotates the legs inward and moves the thighs backward. It widens, making more space in the thighs and pelvis. In the arms, inner spiral spins the forearms inward.
- **Outer spiral:** This is a contracting energy spiral. In the legs, it runs from the waistline down through the tailbone and out through the

legs and feet. It moves the tailbone forward and the thighs forward. It rotates the legs outward. In the arms, outer spiral spins the upper arms out and away from each other, creating a heart-opening action.

- Organic energy: Muscular energy (drawing in) is balanced with organic energy—extending out—from the focal point to the periphery. This energy expands and radiates outward; it brings about a feeling of lightness and freedom.



© byheaven/Stock/Thinkstock

Extended side angle.

Poses

- Mountain Pose
- Forward Bend
- Lunge
- Plank
- Cobra
- Downward-Facing Dog
- Extended Side Angle
- Warrior II
- Tree Pose
- Ardha Matsyendrasana
- Savasana

Suggested Reading

Friend, *Anusara Yoga Training Manual*.

Practice

For this lecture, perform the practice portion of the lecture.

If you are new to yoga and find any of the practices in the lecture too difficult, go to the practice in Lecture 12. In that lecture, you are directed how to create a practice that is more or less challenging.

Forrest Yoga

Lecture 11

As we move through our daily lives, our body defends against pain and unpleasant emotion. We tense up in reaction to it; we use our body to avoid fully experiencing emotion. The emotional impact of our experiences are then imprinted on our body—through tension. In yoga, when you consciously move the muscles out of a habitual position, you'll likely feel the emotional imprint that moved them there in the first place. Once felt, you can begin to repattern that habit of physically defending against pain. Forrest yoga, developed by Ana Forrest, addresses the realm of emotion. It highlights mindfully creating an internal environment that we can stay in, even if a difficult emotion arises. The pacing, cueing, breath, and attention work in Forrest yoga is very deliberate to help you keep coming back into your experience, instead of exiting the pose or leaving with your mind.

The basic moves of Forrest yoga promote mindful awareness—they help ground you in the reality of the present so that you can feel the current situation as you reprocess the past. You have been introduced to some of the basic moves before, including deep breathing, expanding the ribs, and telescoping the ribs. Other basic moves are as follows.

- **Active feet:** This move keeps energy running down to the ground, helping you feel your connection to the earth.
- **Active hands:** This move helps release compression in the wrist and hand bones.
- **Relaxing the neck:** This move is exactly what it sounds like. Because tensing the neck is so habitual, it requires a great deal of mindfulness to fully let go of the neck in an asana practice.



Child's pose.

Poses

- Uddiyana
- Bound Angle Pose
- Seated Side Bend
- Bridge Pose
- Turbo Dog
- Child's Pose
- Classic Sun Salutations with Variations
- Easy Twisting Warrior
- Lunge
- Cobra
- Warrior II with Eagle
- Extended Warrior Variation
- Forward Bend
- Savasana

Suggested Reading

Forrest, *Fierce Medicine*.

Pert, *The Molecules of Emotion*.

Practice

For this lecture, perform the practice portion of the lecture.

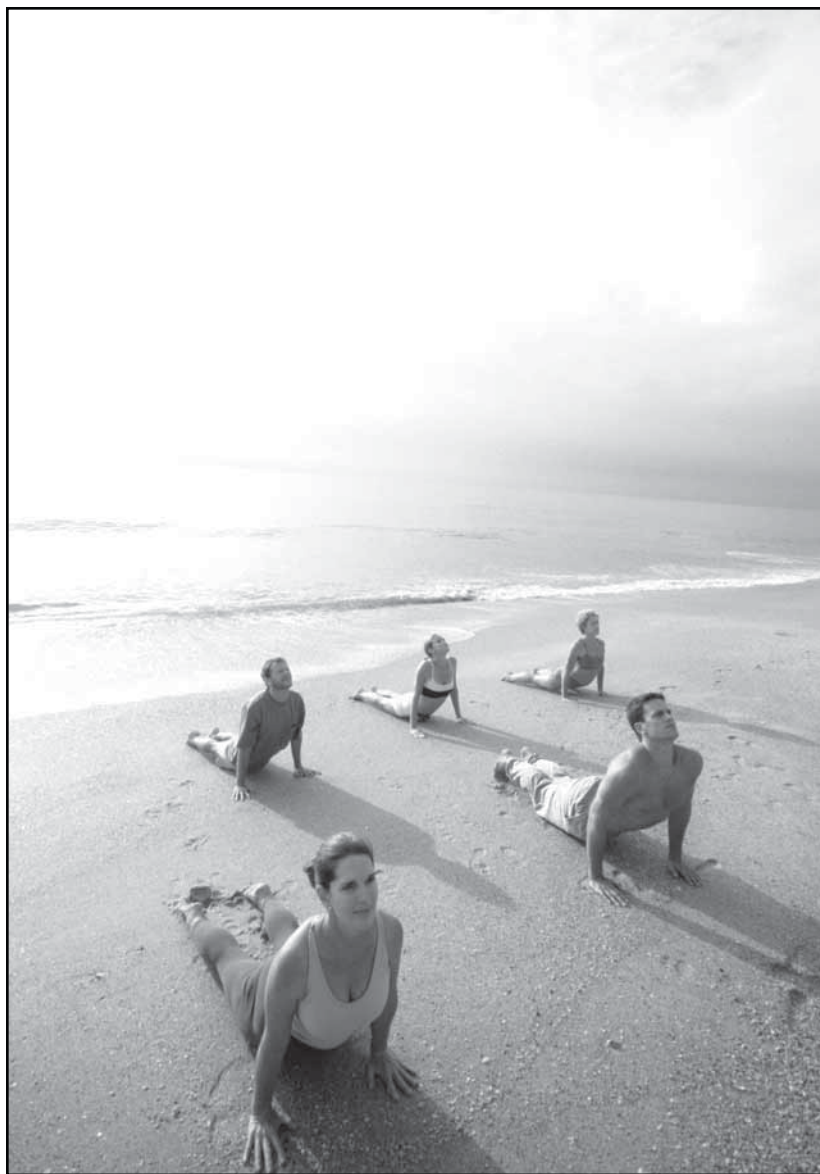
If you are new to yoga and find any of the practices in the lecture too difficult, go to the practice in Lecture 12. In that lecture, you are directed how to create a practice that is more or less challenging.

Everyday Yoga

Lecture 12

Yoga is about changing habits in the way you breathe, move, and think. So, as you build an everyday yoga practice, it's important to include a variety of elements that improve your ability to breathe, move, and think.

- The first thing your everyday practice should address is breathing deliberately and in a way that repatterns how you use the diaphragm and the muscles around the rib cage. To release the chronic contraction of stress on the rib cage, your everyday practice should include moves that stretch the muscles in between the ribs and exercise the diaphragm.
- The second thing your practice should address is the way you move. Improvements in this area begin with posture. The order of poses after the breathing exercises should be based on moving you away from slumping. To warm up, do poses that turn on the muscles that could be supporting the shoulders, hips, and back, which are weak. After warming up, you can move into the part where you build strength. This middle part can be just static poses one after the other, or it could be a moving vinyasa, power yoga, anusara yoga, or Forrest yoga. Finally, toward the end of the sequence, you can include poses to stretch and unwind before final relaxation. End with at least a five-minute savasana.
- The third habit that your everyday yoga practice needs to address is the way you think. You need to practice mindful awareness in order to interrupt and repattern the habits in your mind. A good place to start is to keep bringing your attention back to the sensation of your breath. You can also make a point of bringing your mindful awareness to the effects of the practice by pausing for a breath in between some of the poses.



© Purestock/Thinkstock

Cobras.

Poses

- Uddiyana
- Bound Angle Pose
- Shoulder Shrugs
- Side Bend
- Elbow to Knee
- Bridge
- Turbo Dog
- Child's Pose
- Variations of Classic Sun Salutations with Standing Poses
- High Lunge
- Easy Twisting High Lunge
- Cobra
- Warrior II
- Extended Side Angle
- Wind-Relieving Pose
- Classic Seated Twist
- Savasana

Suggested Reading

Horton, *Yoga Ph.D.*

Horton and Harvey, eds., *21st Century Yoga*.

Practice

For this lecture, perform the practice portion of the lecture.

If you are new to yoga and find any of the practices in the lecture too difficult, you are directed how to create a practice that is more or less challenging.

Bibliography

Abel, A. N., L. K. Lloyd, and J. S. Williams. “The Effects of Regular Yoga Practice on Pulmonary Function in Healthy Individuals: A Literature Review.” *The Journal of Alternative and Complementary Medicine* 19, no. 3 (2013): 185–190. How yoga practice can improve heart health.

Baptiste, Baron. *40 Days to Personal Revolution: A Breakthrough Program to Radically Change Your Body and Awaken the Sacred within Your Soul*. New York: Simon & Schuster, 2004. Baptiste’s power yoga daily practice guide.

Birch, Beryl Bender. *Power Yoga: The Total Strength and Flexibility Workout*. New York: Simon & Schuster, 1995. Power yoga practice guide.

Broad, William J. *The Science of Yoga: The Risks and Rewards*. Simon & Schuster, 2012. Popular review of major scientific findings examining the effects of yoga practice.

Büssing, A., A. Michalsen, S. B. S. Khalsa, S. Telles, and K. J. Sherman. “Effects of Yoga on Mental and Physical Health: A Short Summary of Reviews.” *Evidence-Based Complementary and Alternative Medicine* 2012 (2012). <http://dx.doi.org/10.1155/2012/165410>. Scientific review of the effects of yoga practice.

Chou, R., A. Qaseem, V. Snow, D. Casey, J. T. Cross Jr., P. Shekelle, and D. K. Owens. “Diagnosis and Treatment of Low Back Pain: A Joint Clinical Practice Guideline from the American College of Physicians and the American Pain Society.” *Annals of Internal Medicine* 147 (2007): 478–491. Inclusion of yoga practice in medical guidelines for pain treatment.

Clark, Bernie. *The Complete Guide to Yin Yoga: The Philosophy and Practice of Yin Yoga*. Ashland, OR: White Cloud Press, 2012. Philosophy and practice guide for yin yoga.

Cramer, H., R. Lauche, H. Haller, and G. Dobos. "A Systematic Review and Meta-Analysis of Yoga for Low Back Pain." *Clinical Journal of Pain* 29 (2013): 450–460. The effects of yoga practice on low back pain.

Cramer, H., R. Lauche, J. Langhorst, and G. Dobos. "Effectiveness of Yoga for Menopausal Symptoms: A Systematic Review and Meta-Analysis of Randomized Controlled Trials." *Evidence-Based Complementary and Alternative Medicine* 2012 (2012). <http://dx.doi.org/10.1155/2012/863905>. How yoga practice increases quality of life in patients with menopausal symptoms.

Edenfield, T. M., and A. Saeed. "Update on Mindfulness Meditation as a Self-Help Treatment for Anxiety and Depression." *Psychology Research and Behavior Management* 5 (2012): 131–141. The use of mindfulness meditation in anxiety and depression treatment.

Forrest, Ana. *Fierce Medicine: Breakthrough Practices to Heal the Body and Ignite the Spirit*. New York: HarperOne, 2011. Philosophy and practice of Forrest yoga.

Friend, John. *Anusara Yoga Training Manual*. 9th ed. The Woodlands, TX: Anusara Press, 2006. Philosophy and practice of anusara yoga.

Garfinkle, M. S., A. Singhal, W. A. Katz, D. A. Allan, R. Reshetar, and R. Schumacher Jr. "Yoga-Based Intervention for Carpal Tunnel Syndrome: A Randomized Clinical Trial." *JAMA* 280, no. 18 (1998): 1601–1603. The effects of Iyengar yoga practice on carpal tunnel syndrome.

Hagins, M., W. Moore, and A. Rundle. "Does Practicing Hatha Yoga Satisfy Recommendations for Intensity of Physical Activity Which Improves and Maintains Health and Cardiovascular Fitness?" *BMC Complementary and Alternative Medicine* 7, no. 40 (2007). <http://www.biomedcentral.com/content/pdf/1472-6882-7-40.pdf>. Benefits of yoga as exercise.

Horton, Carol. *Yoga Ph.D.: Integrating the Life of the Mind and the Wisdom of the Body*. Chicago, IL: Kleio Books, 2012. View of the history and development of modern yoga.

Horton, Carol, and Roseanne Harvey, eds. *21st Century Yoga: Culture, Politics, and Practice*. Chicago, IL: Kleio Books, 2012. Collection of yoga philosophers and practitioners describing 21st-century yoga.

Iyengar, B. K. S. *Light on Yoga: Yoga Dipika*. Rev. ed. New York: Schocken Books, 1995. Philosophy and practice of Iyengar yoga.

———. *Yoga: The Path to Holistic Health*. New York: Dorling Kindersley, 2001. Application of Iyengar yoga to common health conditions.

Kabat-Zinn, Jon, and Thich Nhat Hanh. *Full Catastrophe Living: Using the Wisdom of Your Body and Mind to Face Stress, Pain, and Illness*. New York: Bantam Dell, 1990. More information on the mindfulness-based stress reduction program.

Kaminoff, Leslie, and Amy Matthews. *Yoga Anatomy*. 2nd ed. The Breath Trust, 2012. How yoga postures challenge your breath.

Khanna, S., and J. M. Greeson. “A Narrative Review of Yoga and Mindfulness as Complementary Therapies for Addiction.” *Complementary Therapies in Medicine* 21 (2013): 244–252. The use of mindfulness in addiction treatment.

Kinser, P.A., L. E. Goehler, and A. G. Taylor. “How Might Yoga Help Depression? A Neurobiological Perspective.” *Explore* 8, no. 2 (2012): 118–126. How yoga affects the brain chemistry of depression.

Kissen, M., and D. A. Kissen-Cohen. “Reducing Addictions via the Self-Soothing Effects of Yoga.” *Bulletin of the Messinger Clinic* 73, no. 1 (2009) 34–43. The role of self-soothing in addiction treatment.

Lasater, Judith Hanson. *Relax and Renew: Restful Yoga for Stressful Times*. Berkeley, CA: Rodmell Press, 2011. Philosophy and practice of restorative yoga.

Lin, F., Y. Zhou, Y. Du, L. Qin, Z. Zhao, J. Xu, and H. Lei. “Abnormal White Matter Integrity in Adolescents with Internet Addiction Disorder: A

Tract-Based Spatial Statistics Study.” *PLoS ONE* 7, no. 1 (2012): e30253. doi:10.1371/journal.pone.0030253. Brain similarity of drug addiction and Internet addiction disorder.

McGonigal, Kelly. *Yoga for Pain Relief: Simple Practices to Calm Your Mind and Heal Your Chronic Pain (The New Harbinger Whole-Body Healing Series)*. Oakland, CA: New Harbinger Publications Inc., 2009. Philosophy and practice of yoga for pain relief.

Pert, Candace B. *The Molecules of Emotion: Why You Feel the Way You Feel*. New York: Scribner, 1997. How cellular chemistry forms a dynamic information network, linking the mind and body.

Powledge, Tabitha M. “Addiction and the Brain.” *BioScience* 49, no. 7 (1999): 513–519. The brain chemistry underlying addiction.

Roach, Geshe Michael, and Christie McNally. *The Essential Yoga Sutra: Ancient Wisdom for Your Yoga*. New York: Doubleday, 2009. Modern version and translation of the *Yoga-sutras*.

Ross, A., and S. Thomas. “The Health Benefits of Yoga and Exercise: A Review of Comparison Studies.” *The Journal of Alternative and Complementary Medicine* 16, no. 1 (2010): 3–12. Review comparing the effects of yoga practice and exercise.

Singleton, Mark. *Yoga Body: The Origins of Modern Posture Practice*. New York: Oxford University Press, 2010. History of the origins of modern yoga.

Streeter, C. C., P. L. Gerbarg, R. B. Saper, D. A. Ciraulo, and R. P. Brown. “Effects of Yoga on the Autonomic Nervous System, Gamma-Aminobutyric Acid, and Allostasis in Epilepsy, Depression, and Post-Traumatic Stress Disorder.” *Med Hypotheses* 78, no. 5 (2012): 571–579. Yoga creating a natural antidepressant.

Streeter, C. C., T. H. Whitfield, L. Owen, T. Rein, S. K. Karri, A. Yakhkind, R. Perlmutter, A. Prescott, P. F. Renshaw, D. A. Ciraulo, and J. E. Jensen. “Effects of Yoga versus Walking on Mood, Anxiety, and Brain GABA

Levels: A Randomized Controlled MRS Study.” *The Journal of Alternative and Complementary Medicine* 16, no. 11 (2010): 1145–1152. The effects of yoga on GABA levels in the brain.

Uebelacker, L., G. Epstein-Lubow, B. A. Gaudiano, G. Tremont, C. L. Battle, and I. W. Miller. “Hatha Yoga for Depression: Critical Review of the Evidence for Efficacy, Plausible Mechanisms of Action, and Directions for Future Research.” *Journal of Psychiatric Practice* 16, no. 1 (2010): 22–33. Review of the effects of yoga practice on depression.

Weintraub, Amy. *Yoga for Depression: A Compassionate Guide to Relieve Suffering through Yoga*. New York: Broadway Books, 2004. Philosophy and practice of yoga for depression.

Yang, Kyeongra. “A Review of Yoga Programs for Four Leading Risk Factors of Chronic Diseases.” *Evidence-Based Complementary and Alternative Medicine* 4, no. 4 (2007): 487–491. The effects of yoga practice on the risk factors for heart disease.

Young, M. E., L. de Armas DeLorenzi, and L. Cunningham. “Review of Using Meditation as an Intervention in Addictions Counseling.” *Journal of Addictions & Offender Counseling* 32 (2011): 58–71. The effects of meditation on addiction.