

# Yoga and Meditation for Health and Well-Being

*Adalbert Schneider*

Department of Psychological,  
Herdecke University, 58313 Herdecke, Germany

## **Introduction:**

One of the most important reasons for yoga and meditation is bring balance in life both inside and outside world. Meditation involves trying to train your thoughts to stay in the present moment, because in the present moment there is true peace. Current evidence suggests that yoga and meditation enhances cardiovascular endurance(Raub, 2002) and reduces depression, stress, strain and anxiety (Saeed, Antonacci, & Bloch, 2010).

Because of yoga and meditation's low risk for side effects, when selecting appropriate postures for the population, and potential for actual positive side effects, it is effective for cardiac rehabilitation, depending on the patients' abilities and willingness to adopt yoga practices with regularity.

***Change your posture and you change the way you breathe. Change your breathing and you change your nervous system. This is one of the great lessons of yoga*** (Kub, Chrys Tim McCall, 1970).

Self-regulation overlaps with brain systems governing the autonomic, "fight-or-flight" stress response. Clinical researches have shown that one of the most reliable indicators of stress is heart rate variability (HRV). HRV is the variation in the time interval between one heartbeat and the next. Clinical research has shown that when HRV levels are high, a person experiences low levels of stress and greater resiliency. When HRV levels are low, this is an indication of greater stress and lower resiliency.

HRV serve as a proxy for 'vertical integration' of the brain mechanisms that guide flexible control over behavior with peripheral physiology, and provides an important window into understanding stress and health (Thayer, Åhs, Fredrikson, Sollers III, & Wager, 2011). Meditation and yoga increases self-regulation and heart-rate variability.

In this article eight most powerful meditation types and twelve yoga types are identified.

## **Reasons for Meditation and Yoga:**

- to reduce stress,
- to become peaceful,
- to improve your power of concentration,
- to reduce stress and anxiety,
- to build inner strength,
- to enhance strength and immunity.

## **Benefits of Yoga and Meditation:**

- lower blood pressure
- Improved concentration
- Increased mental clarity
- More positive view of self/others
- Increased body awareness and acceptance
- Increased energy and vitality
- improved blood circulation
- lower heart rate
- less perspiration
- slower respiratory rate
- less anxiety
- lower blood cortisol levels
- more feelings of well-being
- less stress
- deeper relaxation
- improved sleep patterns
- improved data retention and focus
- Improved reaction time
- Improved learning ability and memory
- Increased ability to be present in the moment
- Greater creativity
- Improve Grey Matter in brain
- Improve cortical thickness in brain

## **What is yoga?**

Yoga is a group of physical, mental, and spiritual practices or disciplines which originated in ancient India. Amit Ray said “Yoga is not a religion. It is a science, science of well-being, science of youthfulness, science of integrating body, mind and soul”(Ray, 2010b).

Yoga includes physical postures and exercises (asanas), breathing techniques (pranayama), deep relaxation, and meditation practices that cultivate awareness and ultimately more profound states of consciousness. The application of yoga as a

therapeutic intervention, which began early in the twentieth century, takes advantage of the various psychophysiological benefits of the component practices.

Evidence suggests that that yoga promotes a reduction in sympathetic activation, enhancement of cardiovagal function, and a shift in autonomic nervous system balance from primarily sympathetic to parasympathetic (Innes, Bourguignon, & Taylor, 2005).

According to Darwin's Origin of Species, "it is not the most intellectual of the species that survives; it is not the strongest that survives; but the species that survives is the one that is best able to adapt and adjust to the changing environment in which it finds itself" (Nesvold et al., 2012). Yoga is the best technique to adapt and adjust to the changing environment (Ray, 2010b).

## **Types of yoga**

Modern forms of yoga have evolved into exercise focusing on strength, flexibility, and breathing to boost physical and mental well-being. There are many styles of yoga, and no style is more authentic or superior to another; the key is to choose a class appropriate for your fitness level.

**Hatha yoga:** a generic term for any type of yoga that teaches physical postures. When a class is labeled as "hatha," it is usually a gentle introduction to the basic yoga postures.

**Ashtanga yoga:** based on ancient yoga teachings but popularized in the 1970s, each of the six established sequences of postures rapidly link every movement to breath.

**Iyengar yoga:** focused on finding the proper alignment in each pose and using props such as blocks, blankets, straps, chairs and bolsters to do so.

**Kripalu yoga:** teaches practitioners to get to know, accept and learn from the body. In a Kripalu class, each student learns to find their own level of practice on a given day by looking inward. The classes usually begin with breathing exercises and gentle stretches, followed by a series of individual poses and final relaxation.

**Kundalini yoga:** the Sanskrit word kundalini means coiled, like a snake. Kundalini yoga is a system of meditation directed toward the release of kundalini energy. A class typically begins with chanting and ends with singing, and in between features asana, pranayama, and meditation designed to create a specific outcome.

**Bikram yoga:** held in artificially heated rooms at temperatures of nearly 105 degrees and 40% humidity, Bikram is a series of 26 poses and sequence of two breathing exercises.

**Jivamukti yoga:** meaning, "liberation while living," jivamukti yoga emerged in 1984, incorporating spiritual teachings and vinyasa style practice. Each class has a theme, which is explored through yoga scripture, chanting, meditation, asana, pranayama, and music, and can be physically intense.

**Power yoga:** an active and athletic style of yoga adapted from the traditional ashtanga system in the late 1980s.

**Sivananda Yoga:** a system based on a five-point philosophy that holds that proper breathing, relaxation, diet, exercise, and positive thinking work together to form a healthy yogic lifestyle. Typically uses the same 12 basic asanas, bookended by sun salutations and savasana poses.

**Vipassana Yoga:** a system based on vipassana meditation and yoga exercises (Ray, 2010b).

**Yin Yoga:** a quiet, meditative yoga practice, also called taoist yoga. Yin yoga enables the release of tension in key joints: ankles, knees, hips, the whole back, neck, and shoulders. Yin poses are passive, meaning the muscles should be relaxed while gravity does the work.

**Prenatal yoga:** yoga postures carefully adapted for people who are pregnant. Prenatal yoga is tailored to help people in all stages of pregnancy and can support people in getting back into shape after pregnancy.

## **Types of Meditations:**

Just as there are different forms of exercises to train and relax the body, there are different ways to train and relax the mind. There are many ways to meditate depending on what you are personally trying to achieve. Our ability to resist an impulse determines our success. It's probably the single most important skill for our growth and development. Meditation teaches us to resist the urge of that counterproductive follow through (McCown, Reibel, & Micozzi, 2010). The eight most powerful meditation techniques are:

- 1. Om Meditation:** Om meditation is the combination of the two great meditation techniques – breath and sound. They are combined form of yoga posture, breathing exercises and sound exercises. “Om is the mantra of harmony and celebration. Om is the mantra to access the Supreme Divinity residing within us. Om is the mysterious cosmic energy that is the substratum of all the things and all the beings of the entire universe. It is an eternal song of the Divine. It is continuously resounding in silence on the background of everything that exists. Om meditation is accessing that divine peace and silence” (Ray, 2010a).
- 2. Mindfulness Meditation:** Mindfulness Meditation is an adaptation from traditional Buddhist meditation practices, especially Vipassana, but also having strong influence from other lineages. This form of meditation simply

requires that you be fully present with each of your activities. Rather than allowing your mind to bounce from thought to thought during the day, take the time to be mindful of what you do or think during daily activities. This type of meditation can be done while you are walking to your car, washing the dishes, typing on your computer, or any other type of daily activity. Often with everyday activities we start and finish almost automatically, not even remembering the in-between of what we just did. Being mindful and present is about being there for the in-between. As you drive home from work, take in your surroundings, be mindful of how you drive, shift gears, how the car sounds, or the noises around you. Being present and mindful on your drive home will not only make you a more alert driver, but you will find yourself arriving at home with a clearer memory of the in-between. The core of mindfulness meditation is: “If you want to conquer the anxiety of life, live in the moment, live in the breath. (Ray, 2015)”

- 3. Zen Meditation:** Zen is simple observing the mind and breath. We tend to see body, breath, and mind separately, but in zazen they come together as one reality. The first thing to pay attention to is the position of the body in zazen. The body has a way of communicating outwardly to the world and inwardly to oneself. How you position your body has a lot to do with what happens with your mind and your breath.

The most effective positioning of the body for the practice of zazen is the stable, symmetrical position of the seated Buddha. Sitting on the floor is recommended because it is grounded.

Once you sit comfortably, count each inhalation and each exhalation, until you get to ten. If your mind wanders, which it will, cast off the thought and then continue back counting from one again. When you are able to get to ten repeatedly without any intruding thoughts, it's time to start counting an inhalation and an exhalation as one rather than counting them separately. Eventually you will be able to just concentrate on the breath and abandon the counting. For this to happen you need to practice zazen on a daily basis. You can practice Zen in as little as 15 minutes each day.

- 4. Walking Meditation:** In walking meditation, called *kinhin* in the Zen tradition, practitioners move slowly and continuously while staying aware of the body and mind. For this form of meditation, use good posture (just like seated meditation), take deep breaths, and experience the motions of the body. The walking movement should be continuous, so pick a safe place with space to roam around, like a large park or field.
- 5. Loving-Kindness Meditation:** This form of meditation allows you to develop positive emotions and release negative ones. An individual repeats silent mental phrases directing feelings of love toward a loved one, toward themselves, toward a person they might not know, toward someone who has harmed them, and lastly, towards everyone.

Reciting a phrase like: I will be kind enough to take the time to listen to

1. Myself
2. A loved one (e.g. my wife/ husband, child or friend)
3. A person I do not know well (e.g. someone at work you might not have talked to before)
4. Someone who has done me harm (e.g. someone you might have had a disagreement with)
5. Anyone that I meet (e.g. a store clerk) Using positive phrases and

**6. Dance Meditation:** Get ready to boogie—meditation just got a soundtrack! Most people, at one time or another, have put on some tunes and cut the rug to chill out after a tough day. Dance or kundalini meditation takes that release one step farther by asking participants to let go of the ego and surrender to the rhythms and ecstasies of movement. Some classes encourage yelling, jumping, and even hooting like an owl! Dance meditation may not be for the faint of heart—or arm or leg—but it can be a great way to release tension and get in touch with our instincts.

**7. Daily Life Practice Meditation:** In this style of meditation, practitioners slow down daily activities to half-speed and use the extra time to be mindful and focus on thoughts. There's no need to sign up for a class when it's possible to meditate while washing dishes, taking a shower, walking down the subway steps...

**8. Breathing Meditation:** This technique takes those pre-yoga class "Oms" to the next level. Also called yogic breathing or Pranayama, this meditation style is all about controlling the inhales and exhales. Longer exhales tend to be calming, while longer inhales are energizing. For meditative purposes either the ratio of exhale to inhale is even or the exhale is longer than the inhale for a calming effect.

### **Meditation and Heart Rate Variability:**

Heart rate variability (HRV) is the change in the time interval between heartbeats, from beat to beat. It is controlled by the autonomic nervous system, which also controls many other vital functions within the body. This system is divided into two parts, the sympathetic and the parasympathetic. The sympathetic branch, in a simplified sense, increases heart rate and the parasympathetic branch decreases heart rate. Thus, the observed heart rate variability is an indicator of the dynamic interaction and balance between these two branches of the system.

Researchers observed that there is an increased parasympathetic and reduced sympathetic nerve activity and increased overall HRV for meditation group (Nesvold et al., 2012).

### **Conclusion:**

The degree to which yoga interventions are curative treatments remains to be determined; currently it is safe to suggest that yoga can be a beneficial supportive

add-on or adjunct treatment. Jayasinghe stated that one may “conclude that yoga can be beneficial in the primary and secondary prevention of cardiovascular disease and that it can play a primary or a complementary role in this regard” (Jayasinghe, 2004). Because of yoga’s low risk for side effects, when selecting appropriate postures for the population, and potential for actual positive side effects, it might be a promising candidate particularly for cardiac rehabilitation, depending on the patients’ abilities and willingness to adopt yoga practices with regularity. However, the meditative and self-reflective (cognitive) aspects of yoga could be problematic especially for patients with psychotic or personality disorders. Nevertheless, there is currently insufficient data on contraindications or side effects related to yoga practices in patients with psychological disorders.

Virtue cultivation that proceeds via meditation can help us to identify and regulate our emotions and moods. Further, meditation enables us to develop the attentional focus, emotional intelligence, and sense of social connection that ground of many of the virtues (Upton, 2017).

However, recent clinical studies confirmed that an 8-week of yoga and/or meditation program can substantially improve the conditions of arthritis, asthma, Bipolar disorder and other diseases. Moreover, om meditation and mindfulness meditation – is also growing among managers, CEOs and senior executives in the corporate world. The research on mindfulness suggests that meditation sharpens skills like attention, memory, and emotional intelligence (Seppala, 2016).

Although more precise quantitative conclusion cannot be drawn, the results strongly indicate that further inquiry into the physiological effects of yoga and meditation would be fruitful in increasing our understanding of the mind-body connection.

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