

How Yoga Supports Health & Physiology

Assessment



1. Describe four perspectives from which yoga can be described as supporting health.
2. In what ways has Baxter Bell MD explained that yoga can serve a preventative role?
3. Research shows the effect of yoga on various symptoms. Discuss.
4. How can yoga techniques be used along with other treatments?
5. How does yoga help to address imbalances?
6. Research on yoga's impact may be categorized in terms of bodily systems. Name 10 systems of the body and note where you can go to learn more about research on yoga's impact on each.
7. In what ways does *asana* support muscular and skeletal health?
8. Describe yoga's impact on stress and stress-related diseases.
9. Many significant research studies show yoga's positive impact on mental health. What underlying factors may be responsible for the impact?
10. What common practice in yoga promotes emotional well-being, and why?
11. In what ways do yoga practices support digestive health in general?
12. What more specific effects may yoga have on digestion?
13. Which yoga practices may help to improve lung function?
14. How can yoga impact the immune system?
15. What does research show is the effect of yoga on the circulatory system?
16. What heart conditions indicate a need to practice with a yoga therapist rather than in a regular yoga class?

1. Describe four perspectives from which yoga can be described as supporting health.

- 1) Prevention & symptom relief
- 2) Support along with other treatments
- 3) Balancing stability & ease
- 4) Impacting bodily systems & processes

2. In what ways has Baxter Bell MD explained that yoga can serve a preventative role?

Baxter Bell MD explains that yoga serves a preventative role in two ways:

- **Overall healthcare** - Yoga is a powerful antidote to stress and has a positive impact on strength, flexibility, balance and agility, it naturally serves a preventative role in conditions caused by a sedentary lifestyle and/or stress — conditions such as heart disease, cancer, diabetes, osteoporosis, balance issues, and so on.
- **Particular conditions** - Yoga is adaptable to all sorts of needs. A person at risk for osteoporosis, for example, can emphasize practices to build bone and muscle strength.

3. Research shows the effect of yoga on various symptoms. Discuss.

Based on an extensive library of research, we know that yoga is very effective at relieving symptoms.

- Yoga has a very long list of symptoms it addresses, such as low back pain, depression, headaches, chronic pain and much more.
- Yoga provides relief for a wide range of conditions that underlie chronic pain (e.g. migraines, osteoarthritis, fibromyalgia, cancer, etc.)

Baxter Bell MD notes that:

- Sometimes yoga promotes symptomatic relief without impacting the underlying cause, such as low back pain caused by a ruptured disc, for example.
- Other times, yoga addresses the symptoms and also leads to a cure of the condition, such as stress-related headaches or digestive problems.

4. Yoga is safe to be used along with other healthcare practices. Explain.

Baxter Bell MD describes the ways in which yoga can be used along with other treatments:

- 1) Medical condition prevention
- 2) Symptom improvement
- 3) Rehabilitation support
- 4) Stress management
- 5) Relief of symptoms related to chronic conditions, life-threatening illness and hospice care.

5. How does yoga help to address imbalances?

As Olga Kabel notes, yoga can be adapted to address imbalance on any level — physical, mental or emotional — and can support imbalances on any end of the spectrum, from “too tight” to “too loose.”

6. Research on yoga’s impact may be categorized in terms of bodily systems. Name 10 systems of the body and note where you can go to learn more about research on yoga’s impact on each.

Another way to look at how yoga supports health is how it impacts our body and its physiology. In this view, we think of the body in terms of such systems as these:

- 1) Nervous System
- 2) Skeletal System
- 3) Muscular System
- 4) Mental Health
- 5) Emotional Well-Being
- 6) Respiratory System
- 7) Digestive System
- 8) Cardiovascular System
- 9) Immune & Lymphatic Systems
- 10) Endocrine System

7. In what ways does *asana* support muscular and skeletal health?

Asana practice addresses **strength, flexibility, balance, agility** and **posture**.

- 1) Improving muscle strength can help with any condition that causes weakness (e.g. sarcopenia, chronic fatigue syndrome, recovery from broken bones or other lack of use such as having been bedridden as a result of illness or surgery).
- 2) Improving bone strength can help with osteoporosis and osteopenia.
- 3) Improving flexibility can help with any condition that causes stiffness (e.g. osteoarthritis or Parkinson’s disease).
- 4) Improving balance can help with any condition that impacts balance (e.g. frailty from aging and inactivity, multiple sclerosis, Parkinson’s disease, peripheral neuropathy from diabetes, and poor eyesight.)
- 5) Improving agility can help with any condition that affects nimbleness and response time, including any condition that affects balance and slowing of brain-body nerve conduction.)
- 6) Improving posture helps with problems caused by poor physical alignment (e.g. carpal tunnel syndrome and back pain).

8. Describe yoga's impact on stress and stress-related diseases.
 - 1) Yoga reduces chronic stress, helping to prevent and/or manage stress-related diseases (e.g. heart disease, digestive disorders, etc.).
 - 2) Yoga is also an aid for other conditions that are caused or exacerbated by stress (e.g. anxiety and depression).
 - 3) Stress management helps reduce inflammation which may address inflammation-related problems (e.g. most forms of arthritis and gastrointestinal conditions).
 - 4) See Yoga for Times of Change Using Stress Management Techniques for Medical Conditions for various approaches to physical vs emotional disorders.
 - 5) See also: Yoga & Mental Health, Yoga & Anxiety and Yoga & Depression.
 - 6) See Yoga for Times of Change Reducing Cellular Stress with Yoga for information on cortisol, adrenals, stress and yoga.
 - 7) Learn more: Nervous System & Stress.
9. Many significant research studies show yoga's positive impact on mental health. What underlying factors may be responsible for the impact?

The very purpose of yoga practice according to the Yoga Sutras (to bring about "the cessation of fluctuations of the mind") is clearly intended to affect mental health. These are some of the specific ways it does that:

- 1) **Yoga balances the nervous system** – Yoga is beneficial in part because of its proven ability to impact the nervous system and bring stress relief.
- 2) **Yoga affects brain chemistry** – Dharma Singh Khalsa MD explains that "yoga and meditation can alter the very biochemistry of the brain more directly and efficiently than regular exercise." Not only does yoga stimulate the Relaxation Response, it also invokes a balance of stimulation and relaxation via glandular secretions of endorphins and adrenaline. (Amy Weintraub)
- 3) **Yoga brings attention to the present moment** – Present moment awareness is a key element of relieving symptoms related to many mental health concerns, including anxiety.
- 4) **Yoga cultivates self-awareness without judgment** – Meditation and mindfulness teachings help the practitioner to invoke the observational distance necessary to release identification with emotional patterns. This brings the student vital knowledge, increased acceptance and peace, and a pathway for change. "If you are willing to take a step back and observe your mood, you are practicing self-awareness. From here, you can better manage and even overcome your depression by developing a practice that suits your feelings." (Amy Weintraub)
- 5) **Yoga leads to an embodied experience** – The experience of embodiment is one of the reasons yoga tends to have a positive impact on the practitioner's sense of well-being. Clinical psychologist Bo Forbes has found with her patients that the insights a

student gains from becoming present and embodied tend to have a lasting effect on emotional balance and mental health.

See also:

- [Mental Health & Yoga](#)
- [Anxiety & Yoga](#)
- [Depression & Yoga](#)

10. What common practice in yoga promotes emotional well-being, and why?

To achieve emotional well-being requires the recognition that emotions are healthy and normal, and the willingness to allow emotional energy to move through without excessive resistance. To feel feelings, we must focus on the body. This is in contrast to being caught up in thought, whether judgment, fix-it mode, or layering on additional feelings of frustration or shame in response to simply having emotions.

Yoga teachers often use phrases such as “come back to your body,” “feel where your body is in contact with the floor,” and “feel your torso expanding with the inhalation.” These are invitations to:

- Bring the mind back (from an external focus or from scattered or obsessive thinking), and
- Turn attention to the inner state of being.

This essential practice is to be grounded, embodied or “in the body” which means to be aware of bodily sensations and the inner experience.

Another name for inner sensing is interoception. Breathing, mindfulness and grounding practices encourage students to practice inner sensing and to experience the state of being “in the body.” In this way, yoga supports emotional well-being. For much more specificity, see [Emotional Well-Being & Yoga](#).

11. In what ways do yoga practices support digestive health in general?

- 1) Digestive health is supported by overall well-being, of course. Mindful yoga practices support nervous system balance, stress reduction, pain management and more. Learn more: [Why Yoga Works](#).
- 2) The digestive system works best when the nervous system is in a balanced state, which for most people means spending more time in rest and digest mode (as opposed to flight or fight mode). Yoga has a positive effect on the nervous system, thereby promoting proper digestive system functioning. By reducing stress and calming the nervous system, yoga helps to calm an irritated digestive system.
- 3) Yoga can also teach students to listen to their body, helping them to gain the skills to more easily identify which foods or other factors aggravate their digestion.

12. What more specific effects may yoga have on digestion?

- 1) **Healthy Gut Bacteria** – Stress management may also play a role in maintaining healthy gut bacteria, which influences the metabolism of certain nutrients in food, regulation of the immune system, and experiences of hunger, satiety and sleep.
- 2) **Organ Health** – *Asanas* can benefit the digestive system by supporting good circulation to the digestive organs, strengthening the muscular support around the organs and stimulating good elimination.
- 3) **Effective Esophagus Functioning** – “Restorative poses where your head and chest are higher than your belly and standing yoga postures can improve the functioning of your esophagus, and stress management practices will help both you and your esophagus relax.” (Yoga for Times of Change)
- 4) **Symptom Relief & Prevention** – For conditions such as irritable bowel syndrome, a yoga practice can help to bring the digestive system back into balance during an acute flare up and can extend symptom-free periods. (Yoga for Times of Change)
- 5) **Shortened Recovery Time** – Restorative practices, relaxation techniques and *pranayama* can help to shorten recovery times from flare ups and from surgery. (Yoga for Times of Change)

13. Which yoga practices may help to improve lung function?

- Yoga asanas, breath awareness, and pranayama can help improve lung function to foster general health and can help with respiratory diseases (e.g. mild asthma and COPD).

14. How can yoga impact the immune system?

- Yoga can boost immune system functioning, supporting those with immune system disorders (e.g. HIV/AIDS and adrenal insufficiency).
- Yoga can help foster healing from a wide range of illnesses (e.g. flu, auto-immune conditions such as rheumatoid arthritis, and cancer).
- Learn more: Yoga & The Immune System.

15. What does research show is the effect of yoga on the circulatory system?

- Research shows that yogic techniques have a beneficial effect on cardiovascular health in general, as well as high blood pressure specifically.
- One key way that yoga supports cardiovascular health is through stress relief and balancing of the nervous system.
- See Heart Health & Yoga for details on the research that has shown these effects of yoga:
 - 1) *Review of 37 randomized control trials: Effective for cardiovascular health, reduced BMI, reduced cholesterol (2014)*
 - 2) *Improved balance, regulated blood pressure & improved cardiovascular health (2014)*
 - 3) *Reduced need for healthcare services by 43% (2015)*
 - 4) *Reduced risk in those with mild to moderate hypertension (2002)*

16. What heart conditions indicate a need to practice with a yoga therapist rather than in a regular yoga class?

- For students with heart disease, **yoga therapy** is likely called for as opposed to **generalized yoga**. Yoga teachers are advised to refer students with heart disease to a yoga therapist for an individualized plan.