



How Yoga Supports Health & Physiology

Assessment



1. Describe four perspectives from which yoga can be described as supporting health.
2. In what ways can yoga serve a preventative role?
3. Research shows the effect of yoga on various symptoms. Discuss.
4. Yoga is safe to be used along with other treatments. Explain.
5. How does yoga help to address imbalances?
6. Another way to look at how yoga supports health is how it impacts our body and its physiology. 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?

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

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

2. In what ways can yoga serve a preventative role?

Yoga may serve a preventative role in two ways:

- **Overall healthcare** – Because 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.

In addition, yoga affects mental state and attitude, which may lead to pain prevention, pain relief and/or the placebo effect.

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

Yoga is very effective at relieving symptoms. Dr. Bell observes 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, for example.

Based on an extensive and ever-growing library of research, we know that:

- 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, chronic inflammation generally, etc.

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

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

- 1) Prevention of medical conditions
- 2) Relief or improvement in symptoms, whether acute or chronic
- 3) Support in rehabilitation
- 4) Management and resolution of stress; balancing the nervous system

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. Another way to look at how yoga supports health is how it impacts our body and its physiology. Name 10 systems of the body and note where you can go to learn more about research on yoga’s impact on each.

In this view, we consider the impact of yoga on various systems of the body:

- 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**. Here are examples of how these general benefits affect specific health conditions:

- 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) Chronic stress is known to both cause and exacerbate disease, and can lead to other problems such as anxiety or depression. A balanced nervous system is the key to positively managing stress. In the lesson, Why Yoga Works – Yoga's Impact on the Nervous System & Stress, you'll find related facts and research.
 - 2) Yoga's effect on the nervous system is a key factor related to many other impacts on health and wellness.
 - 3) Yoga reduces chronic stress, helping to prevent and manage stress-related diseases (e.g. heart disease, digestive disorders, etc.).
 - 4) Yoga is also an aid for other conditions that are caused or exacerbated by stress (e.g. anxiety and depression).
 - 5) Stress management helps reduce inflammation which may address inflammation-related problems (e.g. most forms of arthritis and gastrointestinal conditions).
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](#)
- [Anxiety](#)
- [Depression](#)

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.
- 4) According to the Bihar School of Yoga, the solution to digestive problems lies in elevating the eating process from a mechanical habit to a conscious and pleasurable act, in which moderate quantities of simple pure food are eaten with full awareness... Even a small improvement in your diet combined with a yoga practice and some stress relief will likely improve your digestive problems." [\(Yoga RX\)](#)

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?

- 1) Yoga asanas, breath awareness, and pranayama can help improve lung function to foster general health.
- 2) Additionally, research shows that yoga improved quality of life and symptoms of people with asthma and people with COPD.

14. How can yoga impact the immune system?

Research shows yoga's positive impact on gene expression, cellular and metabolic health, immunity, and microbiome health.

From a big picture perspective, yoga helps immune system function in these ways.

- 1) Supports immune system functioning in general, particularly through nervous system impacts.
- 2) Boosts lymphatic efficiency.
- 3) Addresses particular factors that contribute to and exacerbate immune system disorders, including inflammation and stress.

15. How can yoga impact cardiovascular health?

Research shows that yogic techniques have a beneficial effect on cardiovascular health in general and on high blood pressure.

For clinical research on the impact of yoga on heart health, see: Research – Cardiovascular Disease & Heart Health. The research demonstrates yoga's extremely impressive successes with high blood pressure, cardiovascular disease, post-heart attack recovery, and heart health generally.

There are presumably numerous reasons for why yoga has such success with heart health. The following points to some of them. (See the lesson for evidence backing each topic.)

- 1) Stress Relief & Nervous System Regulation
- 2) Regulating the Inflammatory Response
- 3) Lowering & Regulating Blood Pressure
- 4) Improving Sleep Quality
- 5) Relieving Blood Sugar Issues, Insulin Resistance & Diabetes