

# Immune Yoga

## A Guide for Healing and Wellness

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### Welcome to Your Journey

Welcome to this retreat dedicated to strengthening your body, calming your mind, and supporting your immune system through the ancient practice of yoga. This booklet will guide you through the principles and practices of Immune Yoga, an approach specifically designed to enhance immune function and activate your body's natural healing responses.

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### What is Immune Yoga?

Immune Yoga refers to yoga practices specifically designed to support and strengthen the immune system. The term was first coined in 2008 by Serenity Yoga founders John Steinmetz, Drs. Biederman and Caperna, who developed this approach to serve the HIV community while creating an inclusive, stigma-free environment.

This therapeutic approach combines three powerful elements:

**Asanas (Physical Poses)** – Postures that stimulate immune organs like the thymus gland and promote lymphatic circulation

**Pranayama (Breathing Techniques)** – Breathing practices that reduce stress hormones and activate the body's relaxation response

**Meditation and Relaxation** – Techniques that engage the parasympathetic nervous system, allowing the body to rest, repair, and heal

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# **The Science Behind Immune Yoga**

## **Reducing Inflammation**

Regular yoga practice has been shown to downregulate pro-inflammatory markers in the body, particularly decreasing IL-1beta and showing reductions in IL-6 and TNF-alpha. This reduction in chronic inflammation supports overall immune health.

## **Lowering Stress Hormones**

Yoga inhibits the release of stress hormones like norepinephrine. This is crucial because high levels of stress hormones can make immune cells more vulnerable and may even increase viral reproduction in those living with chronic infections.

## **Enhancing Immune Cell Function**

Multiple studies have demonstrated that consistent yoga practice can:

- Increase CD4 T-cell counts
- Improve CD4/CD8 ratios
- Reduce viral loads in people living with HIV
- Enhance overall immune system resilience

One remarkable study found that HIV-positive children and adolescents who practiced yoga for four months experienced a 36.63% increase in CD4 cells and a 42.05% improvement in their CD4/CD8 ratio.

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## **Key Poses for Immune Support**

### **Inversions and Heart Openers**

#### **Half Shoulderstand (Viparita Karani variation)**

This gentle inversion helps you breathe into the thymus gland near your heart and stimulates the thyroid in the throat. Inversions increase circulation to the thymus gland, which plays a vital role in immune cell development.

### **Legs Up the Wall (Viparita Karani)**

This restorative inversion promotes lymphatic drainage and allows the body to rest deeply while supporting immune function.

### **Heart-Opening Backbends**

Poses like Supported Fish Pose and Bridge Pose open the chest and stimulate thymus activity, encouraging deeper breathing and improved circulation to immune organs.

### **Grounding and Calming Poses**

#### **Standing Forward Bend (Uttanasana)**

This pose calms the nervous system while gently stretching the entire back body.

#### **Bound Angle Pose (Baddha Konasana)**

Opens the hips and promotes relaxation while stimulating abdominal organs.

#### **Staff Pose (Dandasana)**

A foundational seated pose that strengthens the back and improves posture while preparing the body for deeper stretches.

#### **Child's Pose (Balasana)**

Profoundly calming and restorative, this pose activates the parasympathetic nervous system.

#### **Seated Forward Folds**

These poses have a deeply calming effect on body and mind. Placing a block under the forehead can lightly stimulate the hypothalamus and pituitary gland, helping to balance the nervous system.

### **Detoxifying and Stimulating Poses**

#### **Plow Pose (Halasana)**

Stimulates the thymus and lymphatic system while inverting the body.

#### **Twists**

Gentle spinal twists help detoxify organs and stimulate immune function through improved circulation.

#### **Corpse Pose (Savasana)**

Complete muscular release allows for deep integration and nervous system reset.

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## **Activating Your Parasympathetic Nervous System**

The parasympathetic nervous system (PNS) is your body's "rest and digest" mode. When activated, it allows your immune system to function optimally, reduces inflammation, and promotes healing.

### **Poses for Deep Relaxation**

#### **Reclining Bound Angle Pose (Supta Baddha Konasana)**

With deep breathing and lengthened exhales, this pose has a profoundly calming effect, especially when sensory stimulation is reduced.

#### **Supported Bridge Pose**

With the head below the heart, this pose calms the nervous system by stimulating parasympathetic nervous system connector cells located in the brainstem and sacral spinal cord.

#### **Restorative Child's Pose with Props**

Using bolsters and blankets to fully support the body allows for complete release and deep rest.

### **Supported Heart Openers Using Bolsters**

These gentle backbends open the chest while providing complete support, allowing the body to relax deeply while receiving the benefits of the pose.

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## **The Power of Breath: Pranayama**

Breathing techniques are perhaps the most direct way to influence your nervous system and immune function.

### **Diaphragmatic Breathing with Extended Exhales**

Breathe in for a count of 4, then exhale for a count of 6 or 8. This extended exhale increases healthy vagal tone and has a calming effect on the parasympathetic nervous system.

### **Kapalabhati (Skull Shining Breath)**

An energizing breathing technique that cleanses the respiratory system and increases vitality.

### **Anuloma Viloma (Alternate Nostril Breathing)**

Also known as Nadi Shodhana, this technique balances the left and right hemispheres of the brain and creates a sense of equilibrium.

### **Bhramari (Humming Bee Breath)**

This technique targets the vagus nerve through its branches that innervate the pharynx, larynx, and diaphragm. Any soothing stimulation of the voice helps activate the vagus nerve, promoting relaxation and immune support.

### **Bhastrika (Bellows Breath)**

A powerful pranayama technique that increases oxygen circulation and energizes the entire system.

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## Research-Backed Benefits

### Studies on HIV and Yoga

Numerous scientific studies have documented the immune-boosting effects of yoga, particularly for people living with HIV:

- A randomized controlled study found that one month of integrated yoga significantly reduced depression and increased CD4 counts in HIV-1 infected adults.
- A meta-analysis of 19 randomized controlled trials with 1,300 participants found that meditation and yoga significantly improved CD4 T-cell counts and maintained them at follow-up, while also significantly reducing stress, depression, and anxiety symptoms and improving quality of life.
- The UCLA study found a dose-response relationship: the more people practiced mindfulness meditation and yoga, the better their T cells performed.
- A meta-analysis of seven studies found that people living with HIV who received yoga interventions reported significant improvements in perceived stress, positive affect, and anxiety.

### Long-Standing Programs

The mind-body program for HIV/AIDS at Beth Israel Deaconess Medical Center at Harvard University used yoga for 14 years, employing it to achieve the "relaxation response" that counteracts stress's effects on the immune system.

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## Creating Your Practice

For optimal immune support and parasympathetic activation, a balanced practice should include:

1. **Gentle inversions** (legs up wall, supported shoulderstand)

2. **Heart-opening backbends** (supported fish pose, bridge)
3. **Restorative forward folds**
4. **Pranayama with extended exhales**
5. **Meditation and deep relaxation** (Savasana, Yoga Nidra)
6. **Regular, consistent practice** – ideally daily or at least 3-4 times weekly

### **The Key is Consistency**

Research consistently shows that regular practice is essential. Benefits increase with both the frequency and duration of practice. Even 15-20 minutes daily can make a significant difference in immune function and overall wellbeing.

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### **Your Retreat Practice**

During this retreat, you'll experience:

- **Morning practices** to energize and prepare the body
- **Afternoon sessions** focusing on restoration and immune support
- **Evening relaxation** to activate deep parasympathetic response
- **Guided pranayama** throughout the day
- **Meditation and yoga nidra** for complete integration

Remember: Yoga is not about perfection. It's about showing up for yourself, breathing consciously, and allowing your body to heal. Honor where you are today, and trust in the process.

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## A Note on Healing

Whether you're managing a chronic condition, supporting your immune system through a challenging time, or simply seeking to enhance your overall wellness, know that every breath, every pose, and every moment of stillness is contributing to your healing.

The practices you'll learn here are gifts you can take home with you, tools you can use daily to support your health and wellbeing for years to come.

Welcome. Breathe. Begin.

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*"Yoga is the journey of the self, through the self, to the self." — The Bhagavad Gita*

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