

# **MINDFULNESS-BASED BLOOD PRESSURE REDUCTION**

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**Lunch and Learn Series**

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**MENTAL HEALTH**

# A PRACTICAL GUIDE FOR PUBLIC HEALTH PROFESSIONALS



Hypertension (high blood pressure) is one of the most important modifiable risk factors for heart attack and stroke. The good news: we already know many ways to reduce blood pressure—through movement, healthy eating, medication, weight loss, and stress reduction.

Mindfulness offers another evidence-based tool that helps people actually follow through on those changes.

This guide summarizes key ideas from Dr. Eric Loucks and the Mindfulness-Based Blood Pressure Reduction (MB-BP) program.

## Why Focus on Blood Pressure?

- Cardiovascular disease is the **leading cause of death** in the U.S. and globally.
- About **half of U.S. adults** have hypertension; about half of them do not have it under control.
- Even a **5–6 mmHg drop** in systolic blood pressure can significantly reduce the risk of heart attack and stroke.

## Evidence-based ways to lower blood pressure include:

- Weight reduction
- Dietary Approaches to Stop Hypertension (DASH)-Style eating patterns
- Regular physical activity
- Reducing alcohol use
- Taking antihypertensive medications as prescribed
- Managing stress reactivity, anxiety, and depression

Mindfulness doesn't replace these strategies—it supports people in using them more consistently.

# WHAT IS MINDFULNESS?

Mindfulness is:

Awareness that arises from paying attention, on purpose, in the present moment, with curiosity and without judgment.

Three key elements:

## 1. Present-moment awareness

A. Noticing thoughts, emotions, and body sensations as they are happening.

## 2. Quality of awareness

A. Curiosity instead of criticism.

B. Observing experiences like a scientist gathering data, rather than labeling them "good" or "bad."

## 3. Remembering to use your wisdom

A. Bringing what you know (from health education, life experience, cultural wisdom) into the present moment when you're making choices.

# HOW MINDFULNESS SUPPORTS BLOOD PRESSURE CHANGE

The MB-BP program looks at how mindfulness can influence the **things that drive blood pressure:**

- Diet
- Physical activity
- Alcohol use
- Medication use
- Stress reactivity and emotional patterns



# It focuses on three core skills:

## 1. Self-Awareness

Noticing:

- How your body feels before, during, and after exercise
- What actually happens in your body and mood after certain foods or drinks
- How your body reacts to stress (racing heart, tight jaw, shallow breathing, etc.)

This awareness helps you see **cause-and-effect** more clearly:

“Every time I do X, I feel Y.”



## 2. Attention Control

Training your mind to stay where you choose, such as:

- Staying with your breath or body sensations
- Staying with a conversation
- Staying with your food while you eat

This makes it easier to:

- Be present while moving your body
- Be present at the grocery store or restaurant when making choices
- Catch yourself before acting on impulse (e.g., grabbing a second drink, snapping in anger)

## 3. Emotional Regulation

Instead of automatically “numbing out” or reacting, mindfulness helps you:

- Notice strong emotions (anger, anxiety, shame, craving)
- Take a step back before reacting
- Choose a response aligned with your values and health goals

This can reduce fight-or-flight spikes in blood pressure and support healthier coping strategies.

# WHAT THE RESEARCH SHOWS

In clinical trials of MB-BP, participants who completed the program (compared to a control group who received health education and blood pressure monitoring):

- Had an average **systolic blood pressure reduction of ~6 mmHg** (a clinically meaningful drop).
- Improved adherence to **heart-healthy eating patterns** (especially among those starting with poorer diets).
- Reduced **sedentary time**.
- Showed better overall **cardiovascular health** (combined score of BP, BMI, diet, physical activity, sleep, smoking).
- Reported **reductions in depressive symptoms**, with especially strong benefits for those with histories of adverse childhood experiences (e.g., neglect).

Programs are designed to be **trauma-sensitive**, offering choices in how practices are done and prioritizing safety and emotional readiness.

# LINKING MINDFULNESS TO DAILY HEALTH CHOICES

You can bring mindfulness into everyday blood-pressure-related behaviors:

## Mindful Movement

Before, during, and after activity, notice:

- Energy level
- Mood
- Body sensations

Ask: What forms of movement feel doable and satisfying for me right now (walking, stretching, gardening, dancing, etc.)?



## Mindful Eating

Pick one snack or meal to notice more closely:

- What do you feel when you **see** the food?
- What happens while you **eat** (taste, fullness, speed)?
- How do you feel **15-60 minutes later** (energy, cravings, mood)?

This isn't about judging food; it's about **learning what truly feels good** over time.

## Mindful Response to Stress

When something triggers you:

1. Notice: "I'm activated—heart racing, jaw tight, thoughts speeding up."
2. Take a few slower breaths.
3. Ask: "What would my wiser self want me to do here?"
  - A. Walk away for a moment?
  - B. Speak calmly instead of yelling?
  - C. Choose a non-alcohol, non-food way to cope?

# SETTING A SMALL, REALISTIC INTENTION

Mindfulness supports change, but the change itself needs to be small and doable.

Pick one blood-pressure-related intention for the next week that is:

- **Specific** – “Walk 10 minutes after lunch on 3 days”
- **Measurable** – You can clearly tell if it happened or not.
- **Attainable** – Dial it back until you’re at least an 8/10 confident you can do it.
- **Relevant** – It genuinely supports your health and values.
- **Time-bound** – Has a clear “when” and “how often.”

Example:

“On Monday, Wednesday, and Friday, I will walk for 15 minutes after work before I look at my phone.”

Write it down. If possible, share it with someone you trust.

# NEXT STEPS & RESOURCES

Mindfulness-based programs like Mindfulness-Based Blood Pressure Reduction (MB-BP) and Mindfulness-Based Stress Reduction (MBSR) can offer:



- Structured weekly sessions
- Guided practices
- Group support
- Practical tools tailored to your health goals

To explore available mindfulness and wellness resources for the Missouri public health workforce, visit:

[dmh.mo.gov](http://dmh.mo.gov) and look for workforce well-being and mindfulness offerings.

## FINAL THOUGHT

Mindfulness isn't about "being calm all the time" or "doing it perfectly."

It's about:

- **Noticing** what's happening inside you,
- **Remembering** what you know supports your health, and
- **Choosing**, moment by moment, to move a little closer to the life you want—including a healthier relationship with your blood pressure.

Contact [mindfulness@brown.edu](mailto:mindfulness@brown.edu) to register for an MBSR Course today.

# A SIMPLE PRACTICE YOU CAN TRY

You can adapt this for yourself or the people you serve.

## 3-Minute "Check-In & Anchor"

### 1. Find your posture

- A. Seated or standing, aiming for both comfort and alertness.
- B. Feet on the ground, spine gently upright if possible.

### 2. Choose an anchor

- A. The breath (movement in the chest or belly),
- B. The feeling of your hands or feet, or Sounds around you.

### 3. Notice where your mind is

- A. Past? Future? Worries? Planning?
- B. Just acknowledge it.

### 4. Gently return to your anchor

- A. One breath. One sound. One sensation.
- B. Each time your mind wanders, notice where it went and gently bring it back.

Even a few minutes a day can strengthen attention control and awareness over time.