

MINDFULNESS-BASED BLOOD PRESSURE REDUCTION

Lunch and Learn Series

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MISSOURI DEPARTMENT OF
**HEALTH &
SENIOR SERVICES**



Missouri Department of
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.”

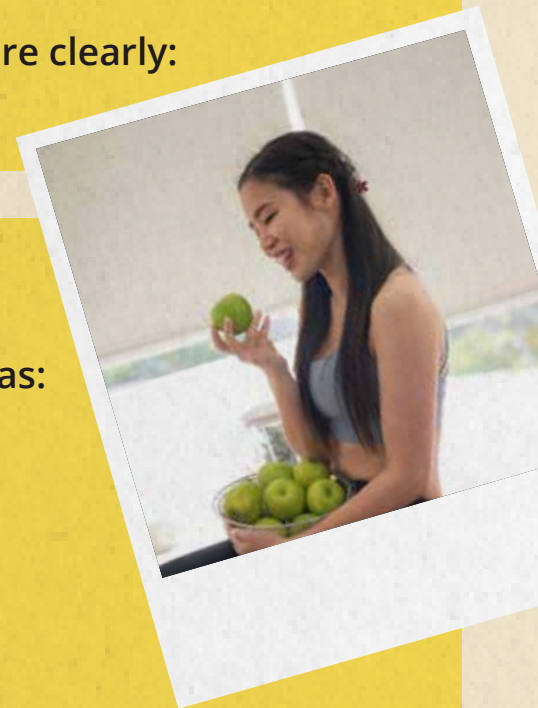
2. Attention Control

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 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 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.