Outline

• What is and isn’t Mindfulness?
• How did this become a “Movement?”
• How is it practiced?
• Does it “work?” In health? In Illness?
• If yes, Is there any scientific evidence?
Mindfulness
What is it?

• **Paying attention to the present moment**
  Not resort to the default mode of worrying about the past or planning for the future.

• **How? With curiosity**
  To sights, sounds, surroundings, body, thoughts, emotions, feelings, how do they arise, how do they disappear - everything that the moment holds.

• **And - Without judgment**
  Bringing attention, repeatedly, to the present moment.
“If you want to understand your mind simply sit down and observe it
It is ‘discovery’ during introspection
It is just life”
Mindfulness
What it is Not

• Not a relaxation exercise
• Not a quick fix for an ailment
• Not a silver bullet that cures everything
• Not a technique
• Not a religion
• The course is
  – Not psychotherapy
  – Not a Buddhist class
  – Not an attempt to convert anyone to anything
Mindfulness Has Arrived

February 2014

2010
Mindfulness Has Taken Over
Global Recognition
750 MBSR Programs Worldwide
Program Enrollment from 80 Countries, 6 Continents
Mindfulness Movement
From East to West

• 1960’s
  – Joseph Goldstein, Sharon Salzburg, Jack Kornfield (Insight Meditation Society)

• 1970’s
  – Jon Kabat-Zinn

• 1980’s
  – Mindfulness Based Stress Reduction (MBSR)

• 1990’s and present
  – Scientific exploration of Mindfulness
First Article by Jon Kabat-Zinn

An Outpatient Program in Behavioral Medicine for Chronic Pain Patients Based on the Practice of Mindfulness Meditation: Theoretical Considerations and Preliminary Results

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Ambulatory Services
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Abstract: The practice of mindfulness meditation was used in a 10-week Stress Reduction and Relaxation Program to train chronic pain patients in self-regulation. The meditation facilitates an attentional stance towards proprioception known as detached observation. This appears to cause an “uncoupling” of the sensory dimension of the pain experience from the affective/evaluative alarm reaction and reduce the experience of suffering via cognitive reappraisal. Data are presented on 51 chronic pain patients who had not improved with traditional medical care. The dominant pain categories were low back, neck and shoulder, and headache. Facial pain, angina pectoris, noncoronary chest pain, and GI pain were also represented. At 10 weeks, 65% of the patients showed a reduction of ≥33% in the mean total Pain Rating Index (Melzack) and 50% showed a reduction of ≥50%. Similar decreases were recorded on other pain indices and in the number of medical symptoms reported. Large and significant reductions in mood disturbance and psychiatric symptomatology accompanied these changes and were relatively stable on follow-up. These improvements were independent of the pain category. We conclude that this form of meditation can be used as the basis for an effective behavioral program in self-regulation for chronic pain patients. Key features of the
Articles on Mindfulness
From 1980 - 2013
How to Practice Mindfulness?
MBSR Course
palousemindfulness.com*

• Goals of the course
  – Understanding and practicing mindfulness and heartfulness

• How it is organized
  – Once a week sessions for 8 weeks
  – Daily mindfulness practices (Formal & Informal)
  – Maintain records of the practices
  – Learning materials (written and video clips)

• Graduate with a Certificate
  – Pre- and post-course survey
*Free Online Course
Daily Mindfulness Practices

FORMAL
• Body Scan Meditation
• Sitting Meditation
• Mindful Yoga 1 & 2
• Loving-kindness Med.
• Mountain Meditation
• Lake Meditation
• RAIN Meditation
• Soften, Soothe, Allow Meditation
• Silent Meditation

INFORMAL
• Simple Awareness
• Pleasant Events
• Unpleasant Events
• STOP – One Minute Breathing Space
• Five Step PAIN Process
• Soften - Soothe – Allow
• Communications
Weekly Topics

• Understanding Simple Awareness
• How to deal with Thoughts
• How to deal with Emotions / Pain
• Research
• Stress
• Communication
• Compassion, to self and others
• Resilience
Online Mindfulness-Based Stress Reduction (MBSR)

This online MBSR training course is 100% free, created by a fully certified MBSR instructor, and is modeled on the program founded by Jon Kabat-Zinn at the University of Massachusetts Medical School.

Welcome!
I’m so glad you found this website! Here you will find a complete eight-week MBSR course, designed for people who are not able to take a live MBSR course for financial or logistical reasons. All of the materials used in the live course I teach, including guided meditations, articles and videos, are freely available here. - Dave

Potter

Offering something for nothing does seem a little suspicious these days and I get many emails about this free online MBSR course, many of which ask one or more of the following questions:

Is this online MBSR course really, truly, 100% free?
The short answer is “yes”. There is no catch: no fees, no spam, you don’t even need to identify yourself or give an email address. I receive no income personally from the site, not even indirectly. Contributions make the course even more accessible to people around the world, but this is not expected nor required - see About Contributions.

What are your credentials and why don’t you charge for the course?
I am fully certified as an MBSR instructor by the University of Massachusetts Medical School and I taught live, in-person MBSR classes in my community for 12 years. I’m also a retired professional psychotherapist who has had a daily meditation practice for 25 years, and when I discovered MBSR, I wanted to offer it to my clients and my community. I started teaching my twice-yearly in-person classes in 2004 and, as a service to my students, began to put some parts of the class online. I soon realized that with a little work, the material could be useful to people who would not ever be able to attend a live MBSR class, either because of financial limitations or because no classes are offered nearby.
Essential Attitudes
Prerequisites for Mindfulness Practice

• Acceptance
• Beginner’s mind (not a know it all)
• Letting go or Letting be, ‘This too shall pass’
• Non-judging
• Non-striving
• Patience
• Trust
Essential Components
Prerequisites for Mindfulness Practice

Letters of the alphabet (James R Doty MD)
• C Compassion, Curiosity
• D Dignity
• E Equanimity, Empathy
• F Forgiveness
• G Gratitude, Generosity
• H Humility, Humor
• I Integrity
• J Justice, Joy
• K Kindness
• L Love
In a nutshell, mindfulness is......
Does it Work?
Mindfulness in Wellness

- Easier learning
- Improved memory
- Increased self-awareness
- More compassion
- Improved introspection
- Decrease in anxiety
- Increase in perception
- Better body awareness
- Better pain tolerance

- Improved emotion regulation
- Improved complex thinking
- Better Self-regulation
- Effective decision making capabilities
- Better able to manage stress
- Improved resilience
How Do We Know?
Initial Empirical Studies on the Effects of MBSR

Correlational Research on Mindfulness and Psychological Health
Populations studied:
Undergraduate students
Adults in the community
Clinical subjects
Using surveys / questionnaires before and after

Reviewed by S Keng
Changes in Brain and Immune Function Before and After MBSR

• Randomized control study
• Brain electrical activity before and after 8 wk. MBSR
• 25 subjects with 16 controls (Biotech co. employees)
• Significant activity in left-sided activation = positive affect
• Significant increases in antibody titers to Flu vaccine
• Higher the activation higher the titers
Changes in Brain Structure After 8 Weeks of MBSR

• Mindfulness practice leads to increases in **regional** gray matter density
• Evidence for Neuroplasticity

Holzel, Lazar et al 2011
Richard Davidson PhD
Science of Mindfulness

https://www.youtube.com/watch?v=Gok2dUtdWE&t=107s
Figure 1 | Brain regions involved in the components of mindfulness meditation. Schematic view of some of the brain regions involved in attention control (the anterior cingulate cortex and the striatum), emotion regulation (multiple prefrontal regions, limbic regions and the striatum) and self-awareness (the insula, medial prefrontal cortex and posterior cingulate cortex and precuneus).
Excerpt From Anderson Cooper 60 Minutes with Judson Brewer MD, PhD

https://www.youtube.com/watch?v=Bu04GE8lzCE
Posterior Cingulate Cortex
Part of ‘Self Referential’* Network

- PCC **fires** up with Guilt, Craving, Rumination, Anxiety, Fear
- PCC **dormant** while in meditation

*MEE MEE MEE MEE MEE MEE DEFAULT MODE*
Differences Between Non-Meditators and Meditators

Real-time feedback from the PCC during focused attention
Mental States when PCC is Deactivated
PCC Deactivation

“Toward the middle I had some thoughts which I don’t see on the graph maybe because I let them kind of flow by”

“I noticed …that the more I relaxed and stopped trying to do anything, the bluer it went”
Mental States when PCC is Activated

Activation

Distracted Awareness
- Distraction
  - Muddled
  - Self-related thinking
  - Deliberating
  - Memories
  - Physical sensations
- Interpreting
  - Visual objects
  - Auditory objects
  - Mental objects
  - Displeasure

Controlling
- "Efforting"
  - n = 19

Discontentment
- n = 14
PCC Activation
Distracted Awareness

Distraction
(n = 64)

“I’m associating …the red with sort of the… the intrusion of thought”

Interpreting
(n = 56)

…I was like, ‘Whoa that is a lot of red’ and then I noticed my mind was going ‘Whoa that is a lot of red’ and I got a little bit caught up in how I was going to explain that to you”

Controlling

Efforting
(n = 19)

“I worried that I wasn’t using the graph as an object of meditation, so I tried, like, to look at it harder or somehow pay attention more to it”

Discontentment
(n = 14)

“I brought up memories of uh, embarrassment, regret, um, interpersonal unskillfulness”
Mindfulness In Wellness ‘Works’
By Neuroplasticity of Specific Brain Regions

Figure 1 | **Brain regions involved in the components of mindfulness meditation.**
Schematic view of some of the brain regions involved in attention control (the anterior cingulate cortex and the striatum), emotion regulation (multiple prefrontal regions, limbic regions and the striatum) and self-awareness (the insula, medial prefrontal cortex and posterior cingulate cortex and precuneus).
How Stress Affects the Body
Sharon Bergquist et al TEDEd

https://www.youtube.com/watch?v=v-t1Z5-oPtU
Effects of Chronic Stress

- Irritability
- Restlessness
- Moodiness
- Feeling isolated
- Overwhelmed
- Insomnia
- Forgetfulness
- Lack of motivation

- Increased heart rate
- Increased blood pressure
- Headache
- Heartburn
- Irritable Bowel Syndrome
- Increased weight gain
Effects of Chronic Stress

• CHO craving
• Insulin Resistance
• Heart disease
• Increased susceptibility to infection
• Slow wound healing
• Acne

• Hair loss
• Sexual dysfunction
• Headache
• Muscle tension
• Fatigue
• Difficulty concentrating
• Acid reflux
Robert Sapolsky PhD
How the Type A Personality = Heart Disease Connection was ‘Discovered’

https://www.youtube.com/watch?v=JVxfcE4F9Xo&t=47s
Mindfulness in Illness
Beneficial Effects

- Anxiety
- Arthritis
- Constipation
- Cough
- Depression
- Diabetes
- G. I. Symptoms
- Headaches
- Hypertension
- Insomnia
- Menopausal symptoms
- Pain – of all kinds
- PTSD
- Side effects of cancer therapy
- Slow wound healing
A New Wisdom / Way of Being

Everyone suffers (experiences stress)
It’s the nature of human existence
Letting go, Letting be, ‘This too shall pass’
We cannot expect others to be who we want them to be, say, do, behave in that particular way

Knowing
A transaction between us & the environment

Practicing
The meaning we bring to the transaction, and our perspective can determine how we handle the stress
Jon Kabat-Zinn
How / Why He Started Mindfulness

https://www.youtube.com/watch?v=Cd_WlmLFsol
Jon Kabat-Zinn

“Perhaps ultimately, spiritual simply means experiencing wholeness and interconnectedness directly, a seeing that individuality and the totality are interwoven, that nothing is separate or extraneous. If you see in this way, then everything becomes spiritual in its deepest sense. Doing science is spiritual. So is washing dishes.”
There are only two ways to live your life

One is as though nothing is a miracle

The other is as though everything is a miracle
The End