



# Mindfulness Training

## What is mindfulness ?

- **paying attention** - on **purpose** - in the moment - **without judgment** (JKZ)
- **observing** (sensing not thinking) the detail with **acceptance**
- consciously bring **awareness** to the here and now
- **manual flying** – avoiding rapid unexamined opinions, conditioned reflexes, reactions, likes and dislikes
- opposite of mindless / hippy / lazy / not 'not thinking'
- **intimacy & curiosity** - thoughts, senses, emotions, reflexes, habitual patterns
- skilful management of the **stress response**
- refinement and evolution of the mind / of your **consciousness** / **self mastery**

## Benefits of mindfulness ?

- Improved decision making via greater clarity of mind, better reasoning, less emotional
- Increased mental stability and resilience to turbulence - bounce back & outlook
- Better able to handle conflict & challenging relationships - non reaction
- Less distracted mind leading to increased productivity - focus
- Reduced stress improves energy and enthusiasm - less Cortisol
- Social Intuitiveness - ability to detect non verbal cues
- Reduced negative effects of stress response - able to shut down Cortisol production

## MINDFUL MOVEMENT

- Starting point for training the mind to focus / all about quality of intention
- Face and breath relaxed
- Least subtle form of focus of the mind = reduced chance of mind wandering
- Reduces compression and injury
- Strength + intensity without stress response
- How to helpfully approach physical / emotional discomfort.
- Super slow movement to feel more

## MINDFUL DRINKING & EATING

- **Holding:** weight, temperature
- **Looking:** really looking, pattern of colour and shape
- **Touching:** sense of movement in your muscles, outside texture, roll it, squeeze it Squeeze it ever so slightly and notice that this
- **Seeing:** highlights and shadows that change, ridges and valleys and
- **Smelling:** fragrance. With each inhalation, changes in your mouth or stomach salivation.
- **Placing:** delicate sensation of touch here, in your mouth and don ' t chew, faint flavour that may be there, any urges or impulses in the body.
- **Tasting:** single bite. Just one. flavour.
- **Chewing:** very slowly, chew: sound, of texture, of flavour, until almost nothing left
- **Swallowing:** aware of the intention
- **Finishing:** follow what is left of the raisin, moves down towards your stomach and
- How does your body feel now as you've completed that exercise?

## SCIENCE OF MINDFULNESS

### Neural plasticity

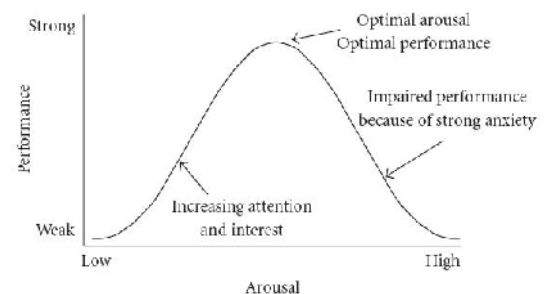
- Science of change - brain training - neurons that fire together
- Grow myelin around axons of neurons
- Four stages to changing habitual patterns
- Tendencies of mind - craving / aversion / ego / fear / miscomprehension

### Metacognition

- Our knowledge about our own cognitive processes
- Mind knowing it is thinking, feeling, sensing
- Subjective becomes objective - thoughts are not facts

### Sympathetic Response System (stress)

- Humans wouldn't be here without our 'hair trigger' stress response - fight or flight
- Problem is triggering it too much
- corticostroids => immune system degraded, make fewer neurons, overstimulate old neurons leading to shrinkage
- adrenalin and noradrenalin => inc. blood pressure, shut down of non essential neural circuits, large muscles prepared
- Yerkes Dodson curve: good stress: eustress | bad stress : distress
- parasympathetic response: oxytocin and vasopressin released
- increased secretion of immunoglobulin A (antibodies) / immune system
- blood press down, hippocampus stimulated, allowing for new memory
- digestion restored - "rest and digest"
- Meditation and mindfulness is deliberately eliciting a parasympathetic response



## SCIENCE OF MINDFULNESS CONTINUED...

### Emotional Intelligence

- Thoughts and emotions linked
- Ability to observe ones own emotions, discriminate & use them to guide
- Thoughts create neuro-peptides create hormonal / emotional releases - evoke a response
- **Role of hormones:**
  - stimulation or inhibition of **growth**,
  - **mood** swings,
  - induction or suppression of **apoptosis** (programmed cell death),
  - activation or inhibition of the **immune** system,
  - regulation of **metabolism**,
  - preparation of the body for **mating**, fighting, **fleeing**, and other activity,
  - preparation of the body for a new phase of life, such as **puberty, parenting, and menopause**,
  - control of the **reproductive cycle**,
  - **hunger cravings**,
  - sexual arousal
- Thoughts create feelings and feelings can create thoughts
- Difference between observing emotion and becoming emotion
- Living in creation not survival,
- Forebrain not hind brain, thinking creates feelings

### Epigenetics

- Biology of belief - thoughts - neuropeptides - environment around cells - expression of genes
- vehicle analogy

## MINDFULNESS IN ACTION AT WORK AT HOME

### Mindfulness in Life

- Formal versus informal practice
- Formal helps the informal - recent reminder
- Responding Instead of Reacting - deliberately eliciting a parasympathetic response
- Mindful of our own emotions enables us to have more empathy for those of others.

### Mindfulness at Work

**Emails** - 3 breaths, imagine how it will be received, envision mental and emotional response

**Calendars** - Notice sensations, overwhelming feeling and feeling overwhelmed,

- laid in stone? best use of our time? others on team? CYA culture? constant visibility is necessary for advancement? complete waste of time?

#### Creative Ideas

- meditate before brainstorming
- using front lobe to create new ideas not constrained by previous patterns of thinking or feeling

#### Time management / attention management:

- lack of focus for 10 mins on one thing reduce efficiency 20-40 % (The American Psychological Association)
- prioritize your attention and do the most important things really well.
- learn how to refocus our attention on what is most important, we become more effective, less stressed, and seem to have more time.

#### Meetings

- set intentions before meeting - calm / non reactive / open / focused
- practice of really listening rather than mental activity trying to solve or manipulate
- conscious of own body language / stress response / watch your breath
- empathy of other persons workload / objectives
- self reflection afterwards

### Mindfulness at Home

- Children - our best teachers as most challenging
- Children - sovereignty / empathy / acceptance (JKZ)

### General Practices

- Anchor your day with a contemplative morning practice & intention
- Actively look for experiences to test your mindfulness and be grateful for them
- Be aware of and avoid self catasphrophizing
- Actively seek minutes when you can focus on your breath and sensations
- Review the day's events at the close of the day to prevent stresses spilling into home life
- Before going to bed, engage in some mindfulness reading or practice

## Inspired by:

- Richard Davidson, Ph.D professor of psychology University of Wisconsin-Madison
- John Kabatt Zinn - Centre for Mindfulness
- Eckhart Tolle - Power of Now / A New Earth
- Michael Chaskalson - The Mindful Workplace
- Peter Russell: Primacy of Consciousness
- Bruce Lipton - Biology of Belief
- John Hagelin, Ph.D - Particle Physicist
- Dr. Joe Dispenza: Evolve Your Brain: The Science of Changing Your Mind
- Michael de Manicor - Director Yoga Institute
- Yoga Sutras of Patanjali
- Stephen Hawkins - Brief History of Time
- S.N. Goenka - Vipassana Meditation
- Mark Whitwell - The Promise
- Mind Up Mindfulness Program for Kids <http://thehawnfoundation.org/mindup/>
- John Kabatt Zinn - Everyday Blessings: The Inner Work of Mindful Parenting

## Links to Example Research

### Contemplative Science Research at Harvard

<http://contemplativeneurosciences.com/>

Harvard

Meditation's positive residual effects

By Sue McGreevey, Massachusetts General Hospital Public Affairs / November 13, 2012

*A new study has found that participating in an eight-week meditation training program can have measurable effects on how the brain functions even when someone is not actively meditating.*

<http://news.harvard.edu/gazette/story/2012/11/meditations-positive-residual-effects/>

'Turn down the volume'

By Sue McGreevey, MGH Public Affairs / April 22, 2011

*The positive effects of mindfulness meditation on pain and working memory may result from an improved ability to regulate a crucial brain wave called the alpha rhythm. This rhythm is thought to "turn down the volume" on distracting information, which suggests that a key value of meditation may be helping the brain deal with an often overstimulating world.*

<http://news.harvard.edu/gazette/story/2011/04/%E2%80%98turn-down-the-volume%E2%80%99/>

Eight weeks to a better brain

By Sue McGreevey, MGH Communications / January 21, 2011

*Harvard researchers at Massachusetts General Hospital find that participating in an eight-week mindfulness meditation program appears to make measurable changes in brain regions associated with memory, sense of self, empathy, and stress.*

<http://news.harvard.edu/gazette/story/2011/04/%E2%80%98turn-down-the-volume%E2%80%99/>