



MINDFULNESS AND THERAPEUTIC STRESS RELIEF STRATEGIES FOR PEOPLE OF ALL AGES

*Relax
Manage Stress
Thrive*

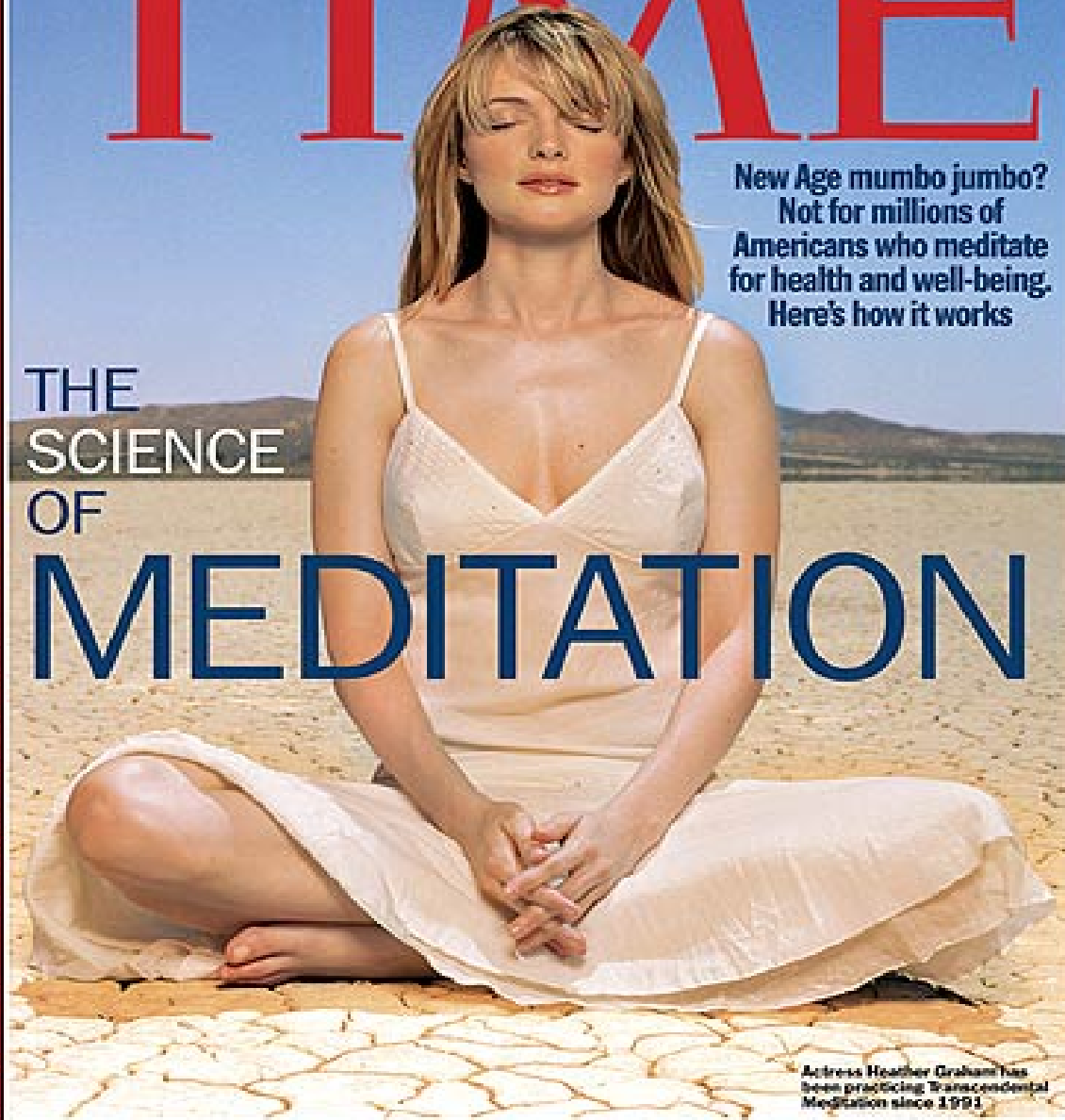
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Professor, Family and Integrative Medicine

TIME

New Age mumbo jumbo?
Not for millions of
Americans who meditate
for health and well-being.
Here's how it works

THE
SCIENCE
OF

MEDITATION



Actress Heather Graham has been practicing Transcendental Meditation since 1993

Objectives:

- Identify levels of student stress and burnout
- Describe stress basics, physiology, neuroendocrine, vagal, pathways
- Learn and practice several relaxation basics—let's have fun



What are your biggest stressors?

- The phenomenon of medical student stress
- Loss of empathy and compassion
- Signs and symptoms of burnout in up to 70%



What are your biggest life stressors?

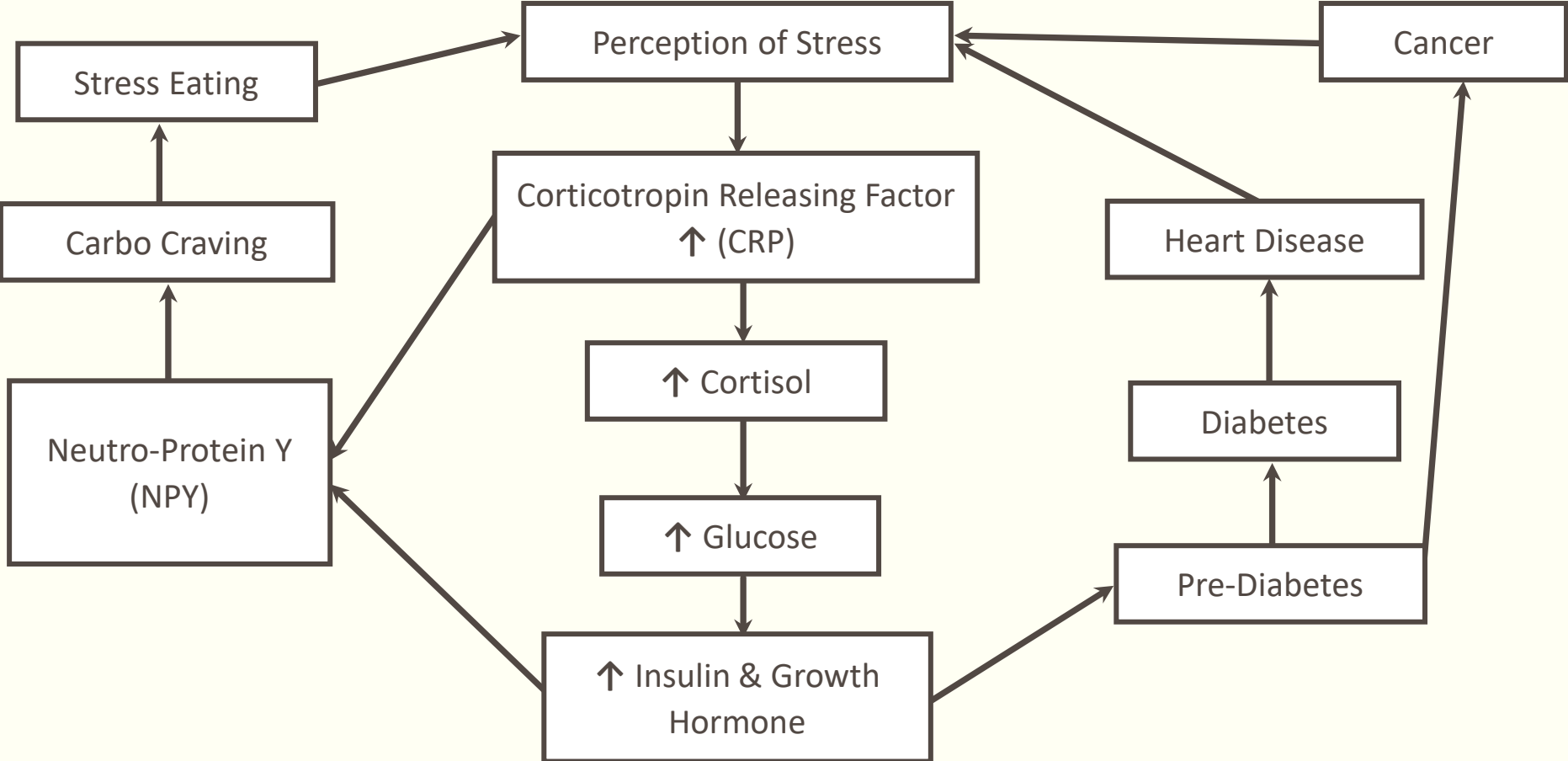
- Family and social issues
- Health issues
- Financial issues
- Spiritual and/or existential issues
- Being a medical student



What are your sources of stress

- Family and social issues
- Spiritual and existential issues
- Health issues
- Financial issues
- Navigating medical school issues

How the Non-Physical (emotion) becomes physical (disease)



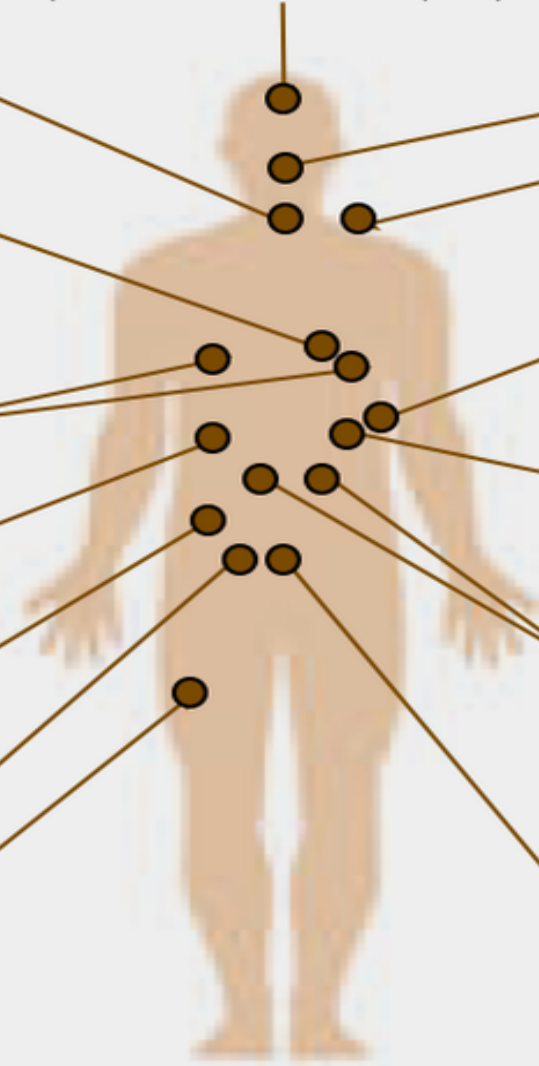
PHYSIOLOGICAL EFFECTS OF STRESS ON THE BODY

CENTRAL NERVOUS SYSTEM

ex Hypothalamus and Pituitary Gland

STIMULATES RELEASE OF HORMONES, NEUROTRANSMITTERS & NEUROPEPTIDES

Pupils: dilate, increased visceral perception



THYROID GLAND

REDUCES TSH PRODUCTION & T4 to T3 CONVERSION

CARDIOVASCULAR

ACCELERATES HEART RATE, BLOOD PRESSURE & CLOTTING FACTORS
Stronger contractions.
Oxygen & nutrients to brain & skeletal muscles.

LUNGS

RELAXES BRONCHI
To take in more oxygen. Harder, rapid breathing

LIVER

STIMULATES GLUCOSE RELEASE
Increased fuel needs

COLON

ALTERS MOTILITY & GUT FLORA
Clearance of toxic matter may occur

REPRODUCTION

GROWTH & FUNCTION INHIBITED

MUSCLE TISSUE

MUSCLES CONTRACT
Tension increases, heart and rectum contracts

METABOLISM

ACCELERATES GLUCOSE AVAILABILITY

Protein & fat breakdown

Mobilises amino acids & free fatty acids for fuel

CELL RECEPTORS

DECREASES INSULIN SENSITIVITY

BLOOD pH

BECOMES MORE ACIDIC WITH INCREASED OXIDATIVE STRESS

IMMUNE

SUPPRESSES INNATE IMMUNE ACTIVITY
Disease fighting WBCs redirected to skin & lymph nodes

MOUTH

INHIBITS SALIVATION

SKIN

BLOOD MOVES INWARDS TO HEART & MUSCLES
Skin: clammy, sweating, cool or heats, Hair: stands on end

SPLEEN

STIMULATES RED & WHITE BLOOD CELL RELEASE
Blood volume may increase between 300-400%

DIGESTION

INHIBITS ACTIVITY & MOTILITY ALTERS SECRETIONS
Decreased nutrient, absorption, enzyme output and oxygenation

ADRENAL GLANDS

STIMULATES SECRETION OF
ex Cortex CORTISOL & DHEA
Glucocorticoids for adaptation, energy, recovery
ex Medulla ADRENALINE & NORADRENALINE
Catecholamines for hyper sensitive awareness - alertness, enhanced vigilance, mental arousal, attention

URINARY

RELAXES BLADDER
Blood volume increase

Stress hormone axis activation causes release and activation of:

- Hypothalamic-pituitary hormones-- ACTH
- Adrenal cortex hormones-- corticosteroids
- Adrenal medulla hormones-- epinephrine, norepinephrine
- Alteration in post-synaptic, sympathetic tone
- Alterations in vegetative state paired with adaptive value of *flight-or-fight response*





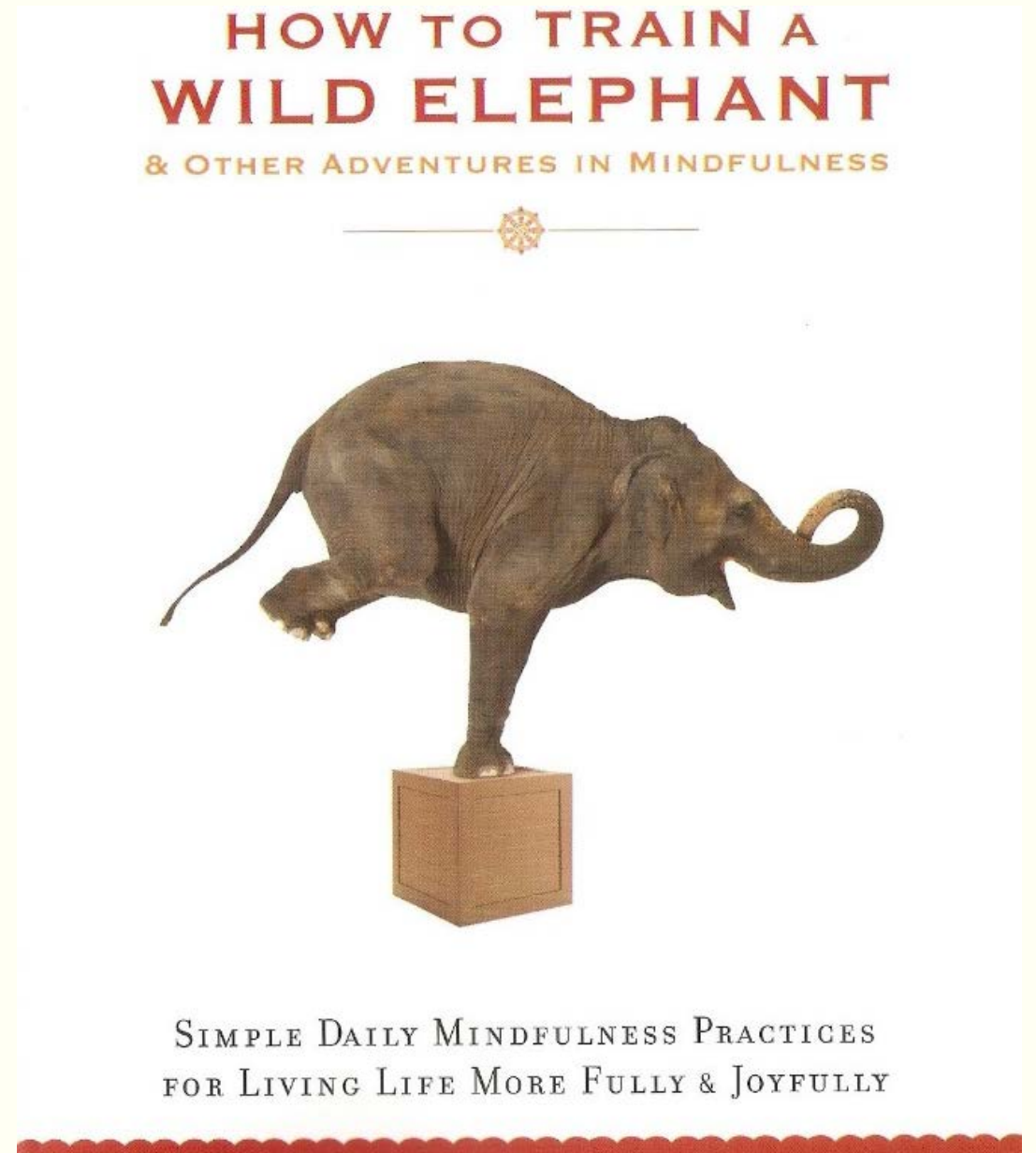
Multi-tasking?

Stressed?



A few mindfulness exercises

- **Three empty breaths**
- **Observe the color BLUE...**
- **SILLY WALKING**



Just Three Breaths

- As many times a day as you are able, give the mind a short rest. For the duration of three breaths ask the inner voices to be silent. It's like turning off the inner radio or TV for a few minutes. Then open all of your senses and just be aware---of color, sound, touch, and smell.

- Let's try this NOW



Observe the Color **BLUE**

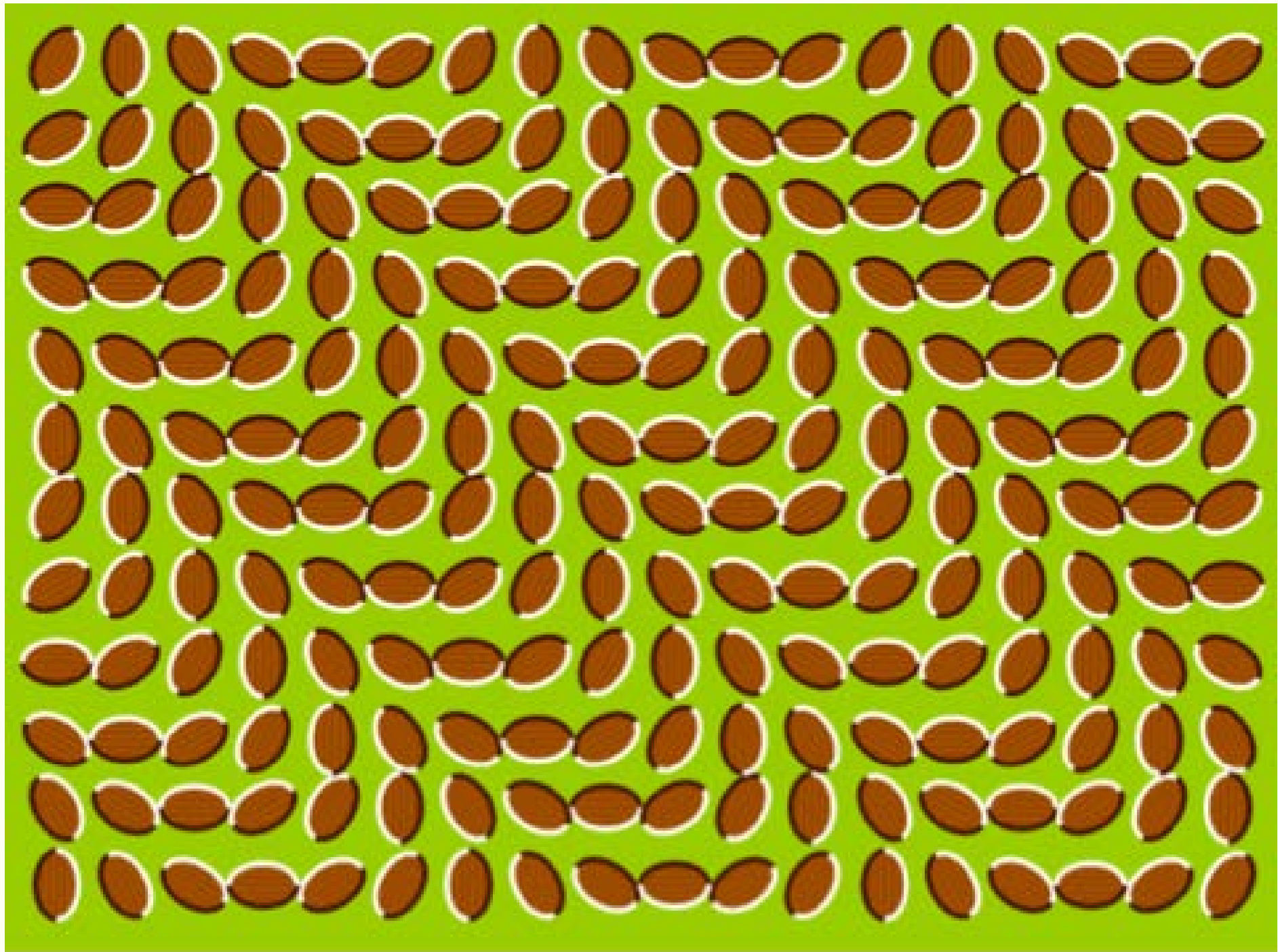
- Silly walking

[HTTP://WWW.YOUTUBE.COM/WATCH?V=IQHLQFXUK7W](http://www.youtube.com/watch?v=IQHLQFXUK7W)

- Appreciate your hands
- Mindful driving

Several times a day, especially when your state of mind is not optimal, do a silly walk of some kind...watch what happens to your state of mind or mood when you walk in a silly way





Pick Just ONE thing



“You know what the secret to life is? One thing. Just one thing. Once you figure it out, you stick to that... everything else don't mean s—.”

- Curly



Raisin' your consciousness







Relaxation Response

- Results in a decrease in these physiological effects



Total Relaxation

The Short Course in Relaxation Therapy

- **BREATHE!!**
- **FOCUS.....**



Breathe in

Basic Steps to Elicit the *Relaxation Response*

1. Focus word
2. Sit quietly in comfortable position
3. Close your eyes
4. Relax muscles
5. Breathe slowly, naturally, repeat focus word
6. Assume passive attitude
7. Continue 10-20 minutes
8. Daily practice
9. When distracting thoughts occur, return to focus word, breathing



Techniques of Eliciting the *Relaxation Response*

- Diaphragmatic breathing
- Meditation
- Body scan
- Mindfulness
- Repetitive prayer
- Repetitive exercise
- Progressive muscle relaxation
- Yoga, tai chi stretching
- Imagery



BIODOTS

Color approximations and general Interpretations of stress:

Violet 94.6°F. - Very relaxed

Blue 93.6°F. - Calm

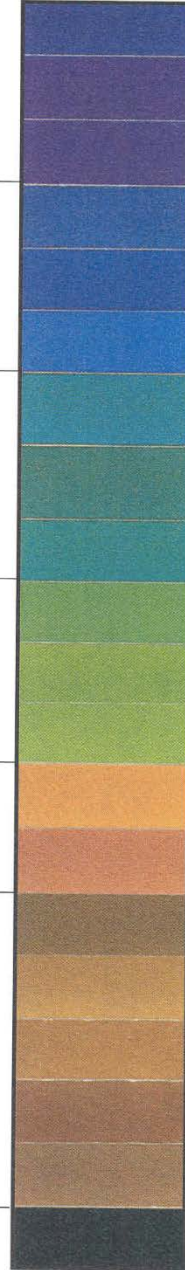
Turquoise 92.6°F. - Relaxing

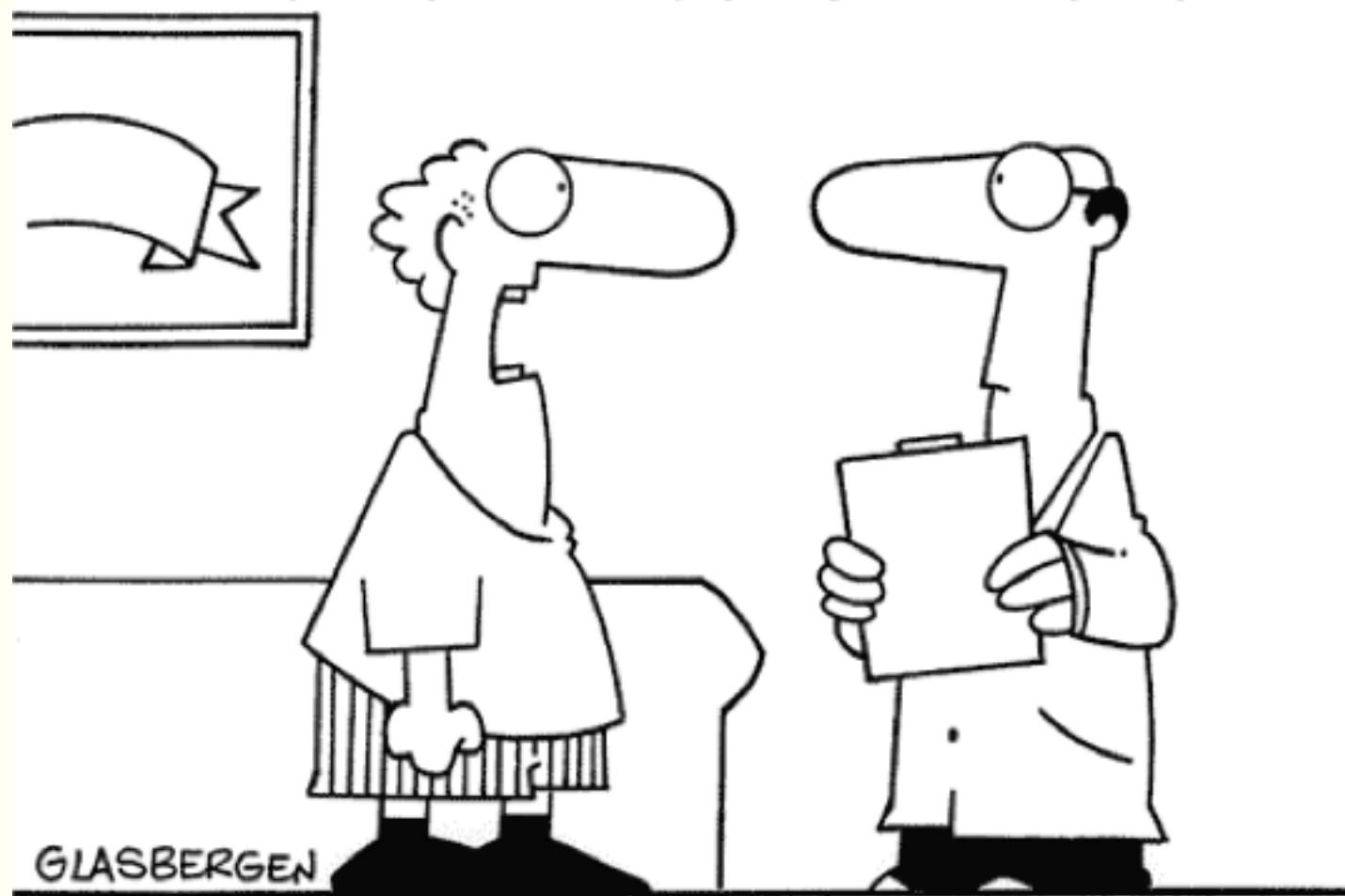
Green 91.6°F. - Involved (nml)

Yellow 90.6°F. - Unsettled

Amber 89.6°F. - Tense

Black 87°F. - Very Tense





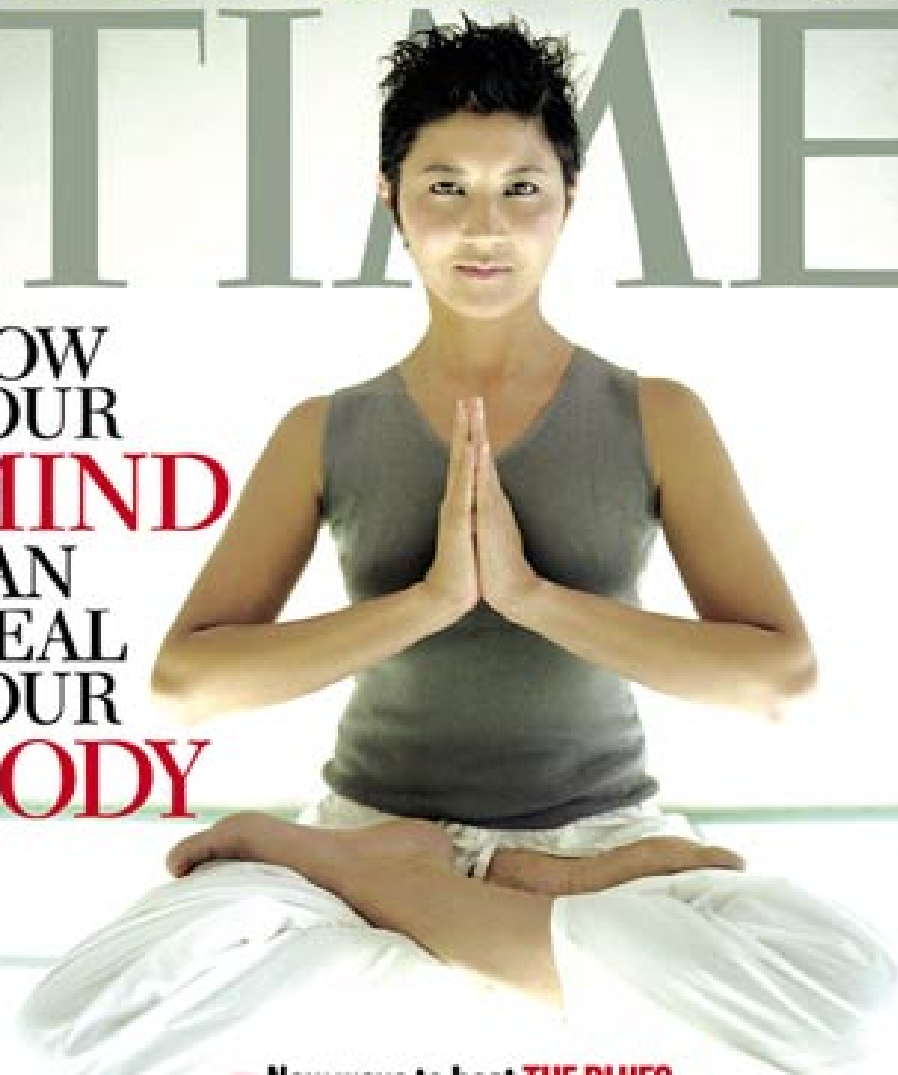
“I’m learning how to relax, doctor—but I want to relax better and faster! I WANT TO BE ON THE CUTTING EDGE OF RELAXATION!”



SPECIAL ISSUE

TIME

HOW
YOUR
MIND
CAN
HEAL
YOUR
BODY



- New ways to beat **THE BLUES**
- The link between **MENTAL** and **PHYSICAL HEALTH**
- Is **HAPPINESS** in your genes?
- Women, men and **DEPRESSION**

Styles of Coping

- Direct action: actions to alter, master, or flee stressor
- Palliation: when direct action is not possible
 - **ego defenses**: denial, rationalization
 - **medications** to reduce anxiety, BP, etc...
 - **relaxation exercises/meditation**
 - **cognitive exercises/restructure thoughts**
 - **physical exercises/deep breathing**

TYPES OF COPING SKILLS

<p>Self-Soothing (Comforting yourself through your five senses)</p> <ol style="list-style-type: none">1. <u>Something to touch</u> (ex: stuffed animal, stress ball)2. <u>Something to hear</u> (ex: music, meditation guides)3. <u>Something to see</u> (ex: snowglobe, happy pictures)4. <u>Something to taste</u> (ex: mints, tea, sour candy)5. <u>Something to smell</u> (ex: lotion, candles, perfume)	<p>Distraction (Taking your mind off the problem for a while)</p> <p><u>Examples:</u> Puzzles, books, artwork, crafts, knitting, crocheting, sewing, crossword puzzles, sudoku, positive websites, music, movies, etc.</p>	<p>Opposite Action (Doing something the opposite of your impulse that's consistent with a more positive emotion)</p> <ol style="list-style-type: none">1. <u>Affirmations and Inspiration</u> (ex: looking at or drawing motivational statements or images)2. <u>Something funny or cheering</u> (ex: funny movies / TV / books)
<p>Emotional Awareness (Tools for identifying and expressing your feelings)</p> <p><u>Examples:</u> A list or chart of emotions, a journal, writing supplies, drawing / art supplies</p>	<p>Mindfulness (Tools for centering and grounding yourself in the present moment)</p> <p><u>Examples:</u> Meditation or relaxation recordings, grounding objects (like a rock or paperweight), yoga mat, breathing exercises.</p>	<p>Crisis Plan (Contact info of supports and resources, for when coping skills aren't enough.)</p> <div style="border: 1px solid black; padding: 5px;"><p>Family / Friends Therapist Psychiatrist Hotline Crisis Team / ER 911</p></div>



What Can Be Done About Stress?

- Biological interventions
- Psychological interventions
- Social interventions





Biological Interventions

- Exercise
- Improved nutrition
- Proper sleep
- Relaxation techniques
 - progressive relaxation
 - self hypnosis
 - meditation
- Medications



**NEW
SLEEP
HABITS**



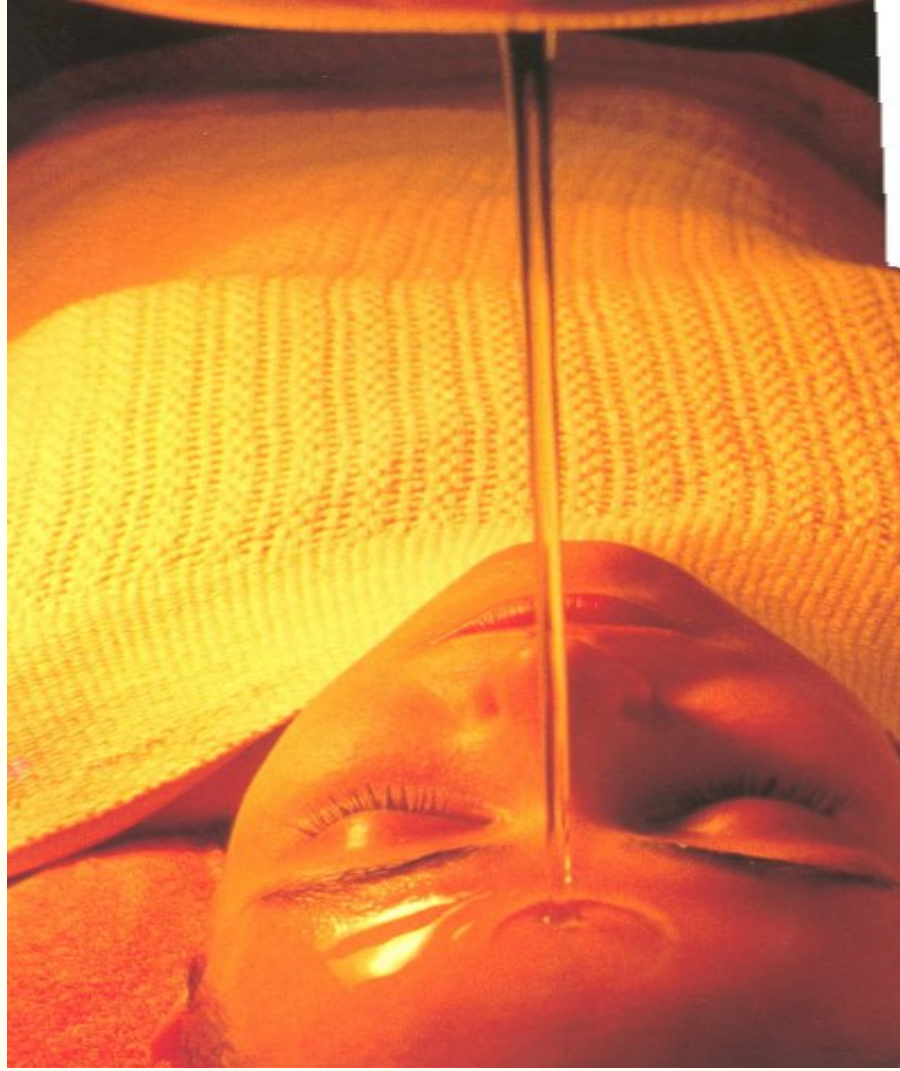
**NEW
MEDITATION
HABITS**



**NEW
FOOD
HABITS**



**NEW
EXERCISE
HABITS**



Psychological Interventions

- Coping skills training
- Identifying and preparing for stressful events
- Evaluating cognitions and expectations
- Assistance in stopping unhealthy behaviors
 - smoking cessation
 - weight control
 - drug and alcohol treatment



BREAK
THE BAD **HABITS**
AND MAKE
better ones

EXPECTATIONS
VS.
REALITY

A NEW HARBINGER SELF-HELP WORKBOOK

OVER
900,000
COPIES SOLD

The Relaxation & Stress Reduction WORKBOOK

SIXTH EDITION

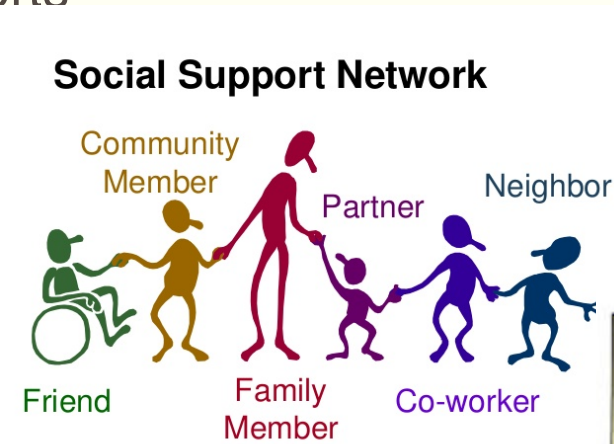
SIMPLE, CONCISE, STEP-BY-STEP DIRECTIONS FOR:

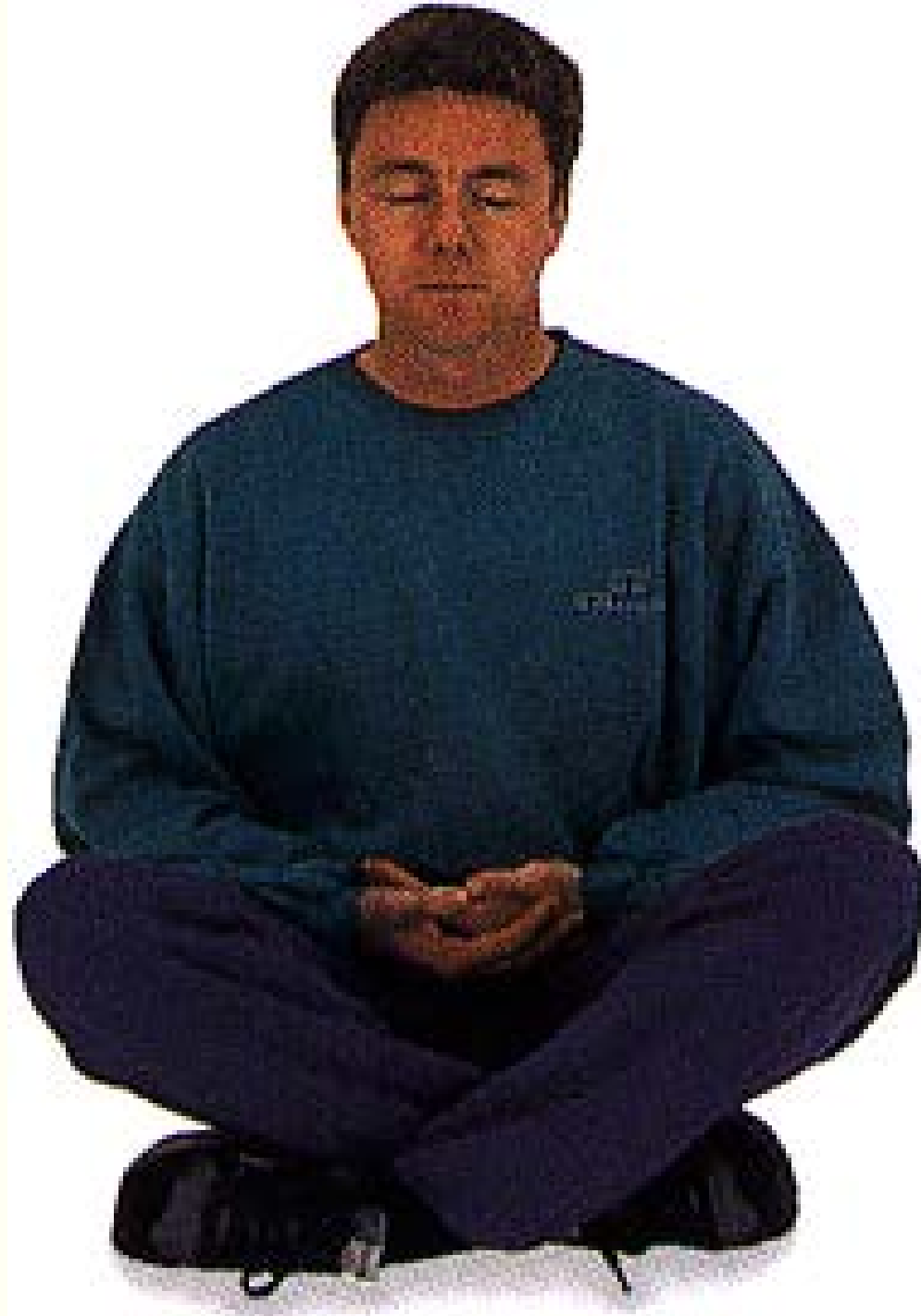
- *Mindfulness* • *Breathing* • *Progressive Relaxation* • *Meditation* • *Acceptance*
- *Focusing* • *Self-Hypnosis* • *Visualization* • *Refuting Irrational Ideas* • *Worry Control*
- *Coping Skills* • *Exercise* • *Nutrition* • *Anger Management* • *Time Management*
- *Assertiveness* • *Work-Stress Management* • *Quick Relaxers*

Martha Davis, Ph.D. • Elizabeth Robbins Eshelman, MSW • Matthew McKay, Ph.D.

Social Interventions

- Identifying and implementing social supports
- Social skills training
- Family and group psychotherapies





How do you unwind?

- Scream
- Get sick
- Get drunk
- Go to sleep



Yoga in India

ASANAS WITH PROPS

Asanas with Props

The ancient yogis used logs of wood, stones, and ropes to help them practice asanas effectively. Extending this principle, Yogacharya Iyengar invented props which allow asanas to be held easily and for a longer duration, without strain.



YOGACHARYA IYENGAR IN SETUBANDHA SARVANGASANA

This version of the posture requires considerable strength in the neck, shoulders, and back, requiring years of practice to achieve. It should not be attempted without supervision



Yoga in Wisconsin....





Or do you....

- Laugh
- Work on a hobby
- Play sports
- Meditate
- Pray
- Spend time with family and friends
- Spend time in nature





All Effective Stress Management Programs Recommend Some or All of the Following

- Exercise
- Mind-body approaches
- Time management (prioritizing)





Remember to Use These Simple Techniques

- Deep breathing/focus
- Mindfulness
- Muscle relaxation
- Music/Movement
- Meditation/Imagery



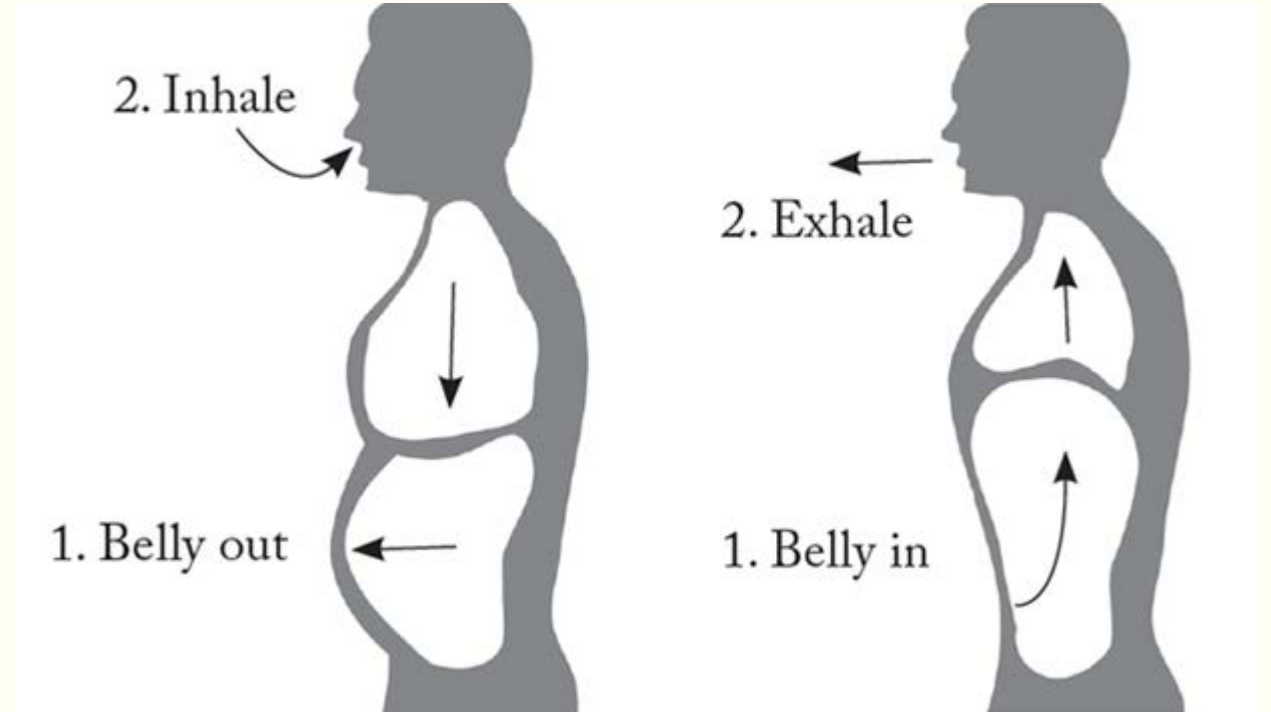
Mindfulness as “Minis”

- Pay attention to your breathing as you awake and through the day
- Notice physical signs of tension
- Take some mindful breaths to release tension
- Pay intense attention to present moment

BREATH

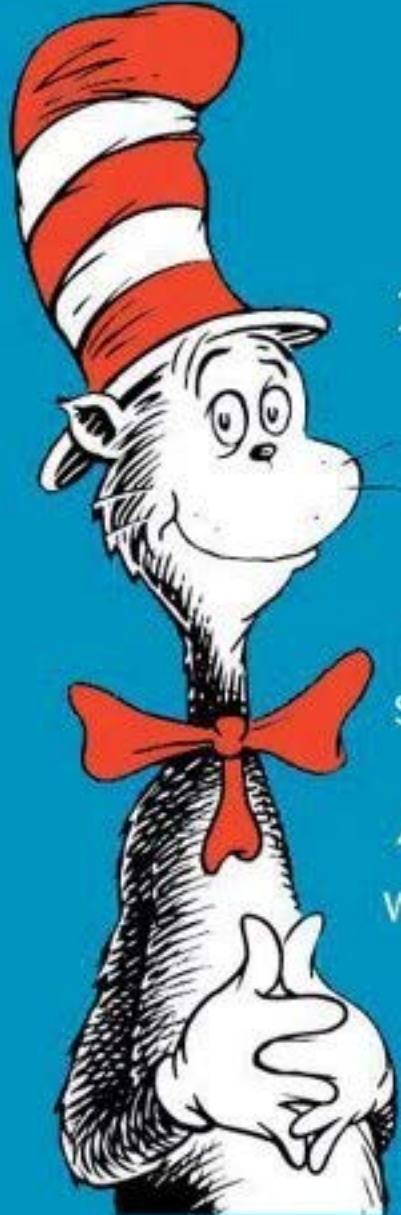
4-7-8 Breathing

- BREATHE IN for the count of 4
- HOLD for count of 7
- EXHALE slowly for the count of 8—
Whoosh
- REPEAT X4



Reasons to Learn Mindfulness and Stress Management

- To avoid burnout, compassion fatigue, loss of empathy
- To better enjoy your quality of life, your educational experiences day to day
- To learn useful techniques to share with patients who are suffering from effects of COVID and other sources of stress



5 Lessons in Life from Dr. Seuss

1. Today you are You, that is truer than true. There is no one alive who is Youer than You.
2. 'Why fit in when you were born to stand out?'
3. You have brains in your head. You have feet in your shoes. You can steer yourself any direction you choose.
4. Be who you are and say what you feel, because those who mind don't matter and those who matter don't mind.
5. Today I shall behave, as if this is the day I will be remembered.

