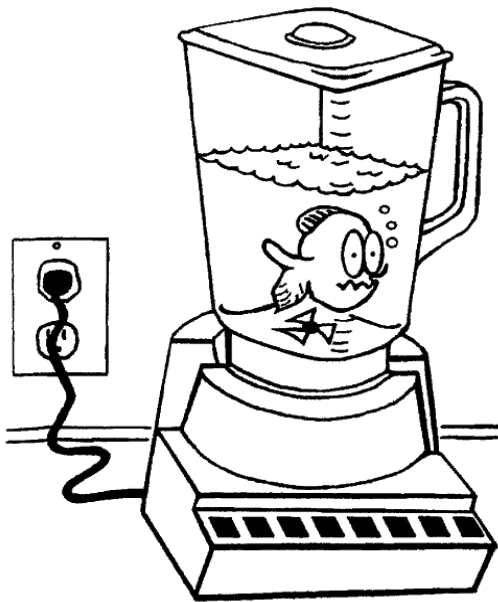


Taking an Active Role in our health and well-being: Incorporating Complementary and Integrative Medicine



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May 8, 2010

What is Stress?



**And you thought
there was stress
in your life !**

- Stress is a physical, mental, or emotional response to events that causes bodily or mental tension.
- Any outside force or event that has an effect on our body or mind.

THERE ARE ONLY
TWO TIMES
I FEEL STRESS:



DAY AND NIGHT.

Good vs Bad Stress

- Eustress – Good Stress
- stress that is healthy or gives one a feeling of fulfillment.



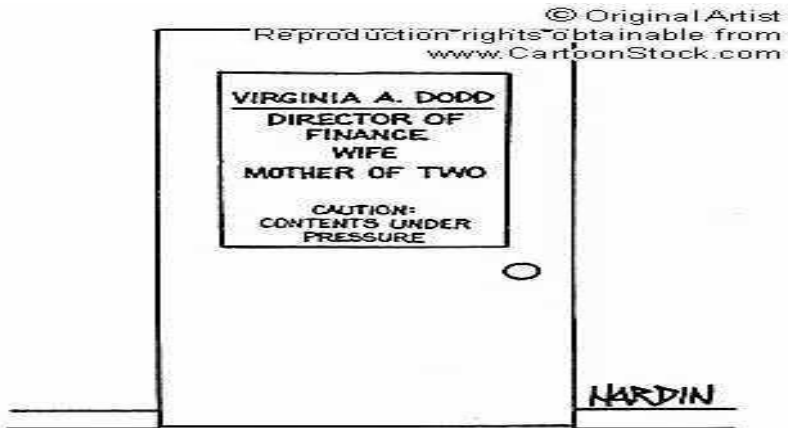
Bad Stress - Distress



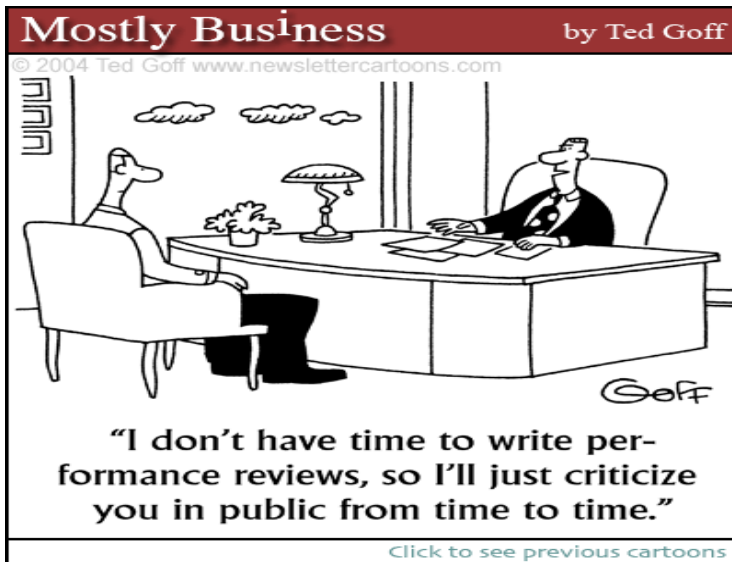
- Distress - the most commonly-referred to type of stress, having negative implications



Daily Causes of Stress



- Environmental stressors
- Family and relationship stressors
- Work stressors
- Social stressors

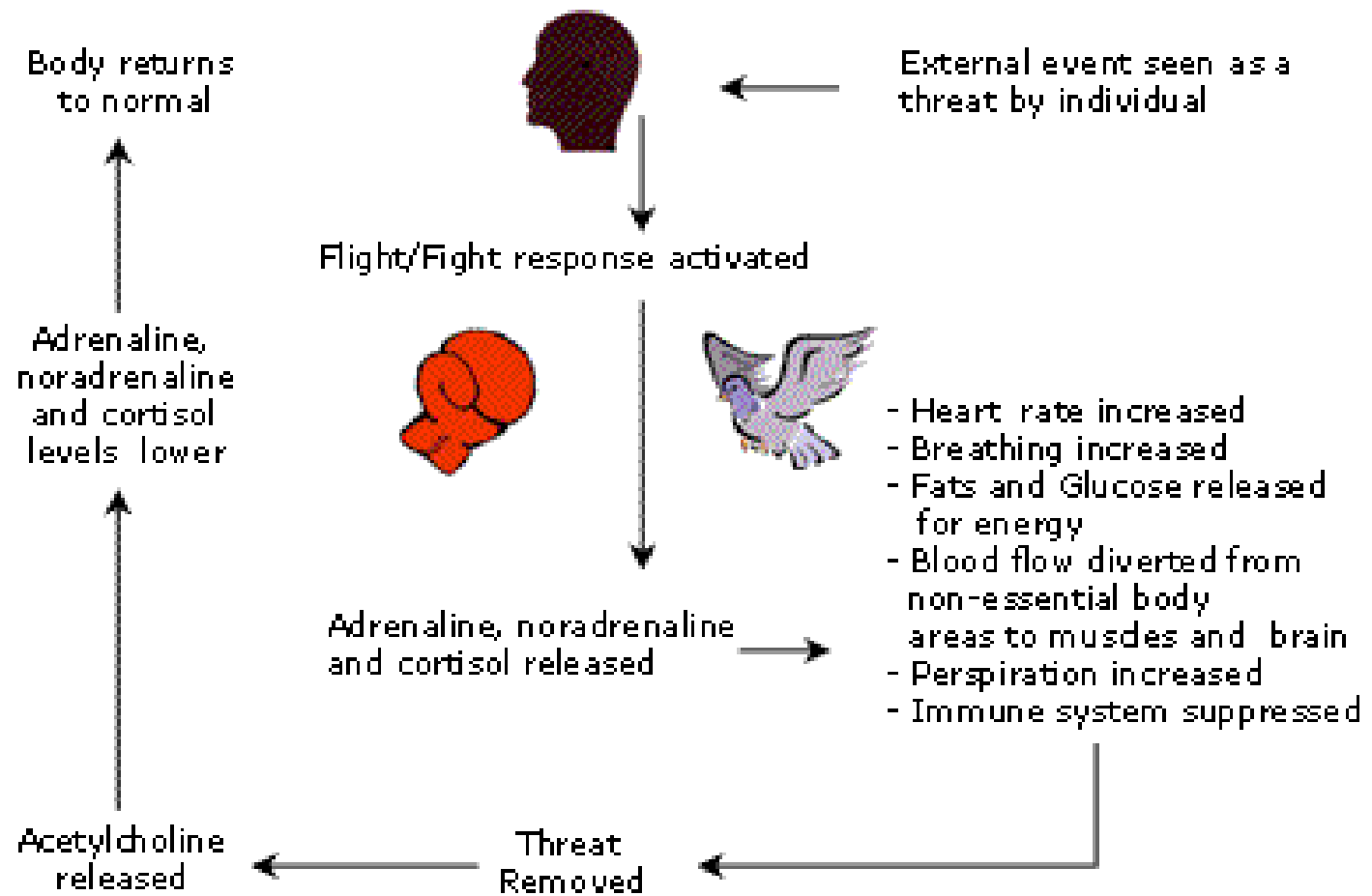


Fight or Flight Response

- Reaction to threats with a general discharge of the sympathetic nervous system, priming the individual for fighting or fleeing.

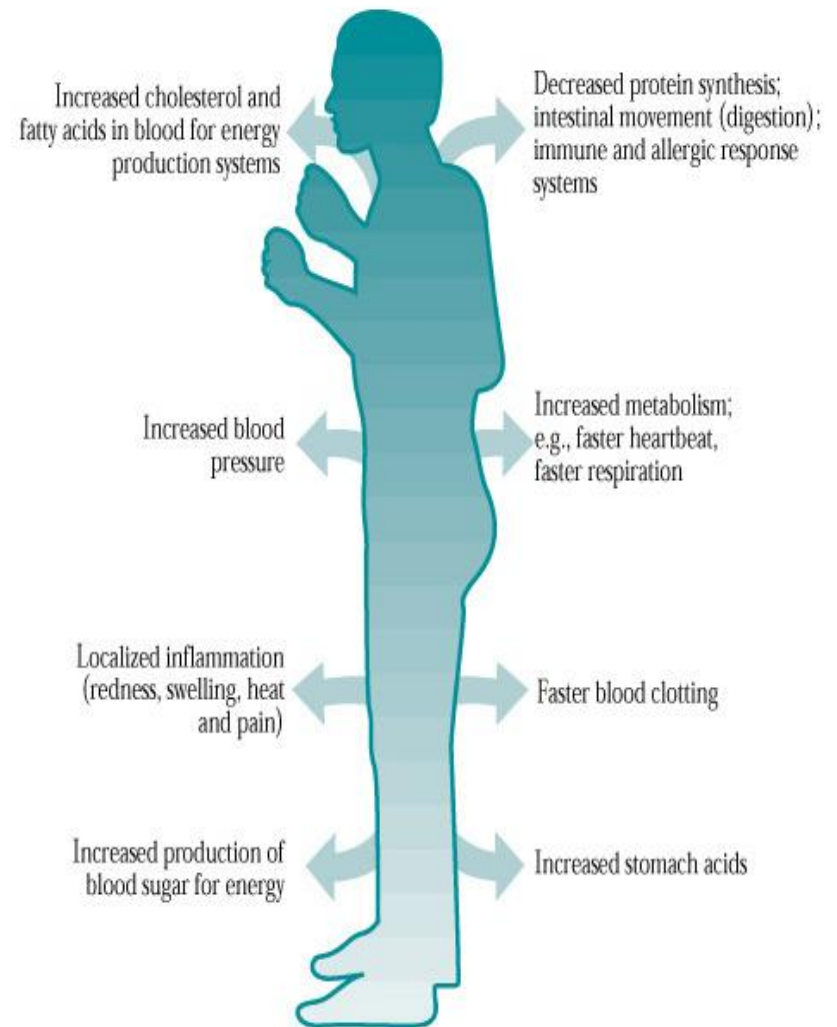


"It was the classic fight or flight response.
Next time, try flight."



What are Physical Signs of Stress?

- Somatic (physical) symptoms often reported by those experiencing excess stress include sleep disturbances, muscle tension, [headache](#), gastrointestinal disturbances, and fatigue.

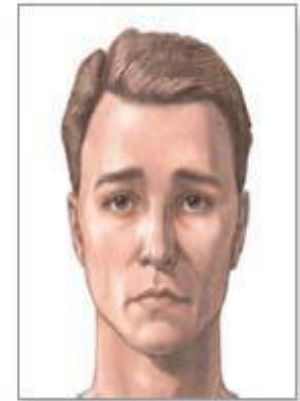


What are Emotional Signs of Stress?

- Moodiness
- Agitation
- Restlessness
- Short temper
- Irritability, impatience
- Inability to relax
- Feeling tense and “on edge”
- Feeling overwhelmed
- Sense of loneliness and isolation
- Depression or general unhappiness



Stress is caused by an existing stress-causing factor or "stressor"



Anxiety is stress that continues after the stressor is gone

Cognitive Signs of Stress



- Memory problems
- Indecisiveness
- Inability to concentrate
- Trouble thinking clearly
- Poor judgment

Cognitive Signs of Stress

- Seeing only the negative
- Anxious or racing thoughts
- Constant worrying
- Loss of objectivity
- Fearful anticipation



"I have a full-service stockbroker —
he even provides grief counseling."

Behavioral Signs of Stress



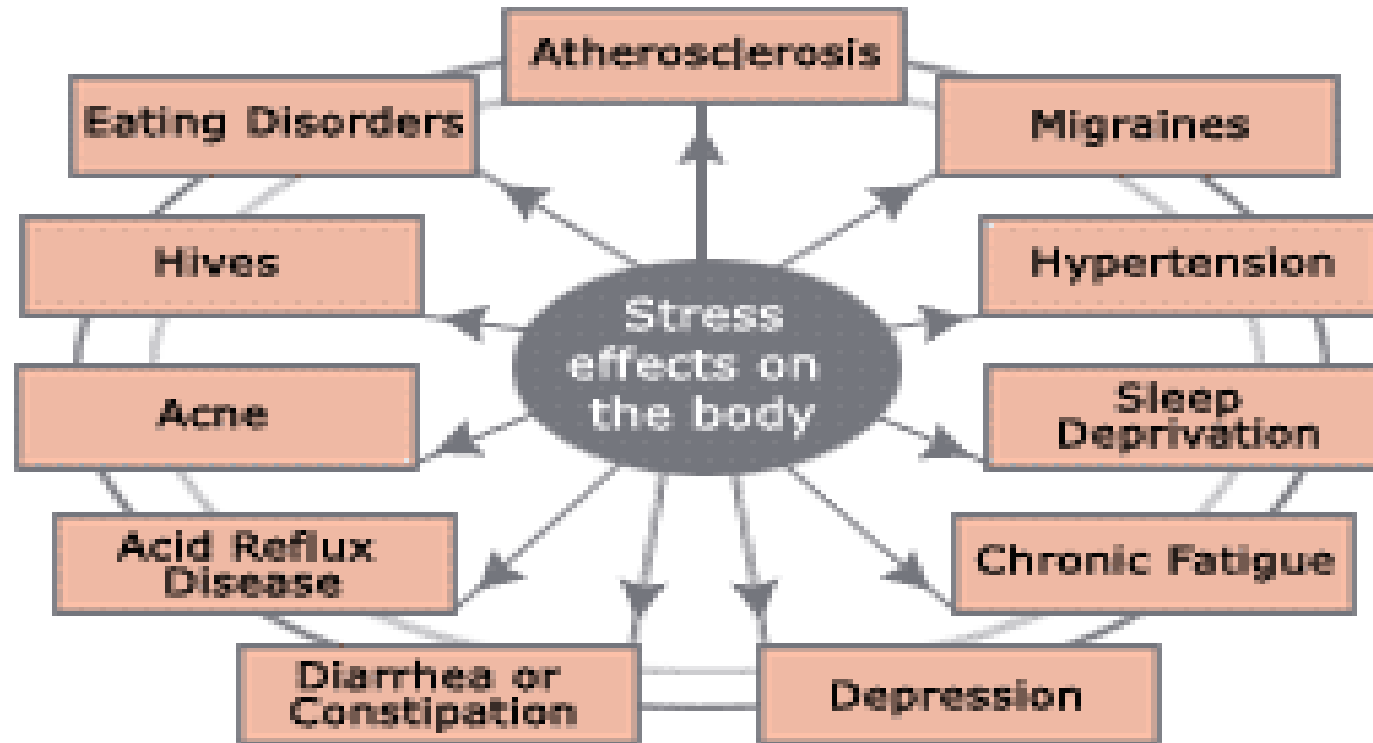
- Nervous habits (e.g. nail biting, pacing)
- Teeth grinding or jaw clenching
- Overdoing activities (e.g. exercising, shopping)
- Overreacting to unexpected problems
- Picking fights with others

Behavioral Signs of Stress

- Eating more or less
- Using alcohol, cigarettes, or drugs to relax
- Sleeping too much or too little
- Isolating yourself from others
- Procrastination, neglecting responsibilities



Stress and Physical Health



HOW TO MANAGE STRESS



Emma P. Broom, MHD

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"It's a model to study stress and anxiety—
unlike the control group, these mice all
have long commutes, dead end jobs
and out of control kids."

Stress Management



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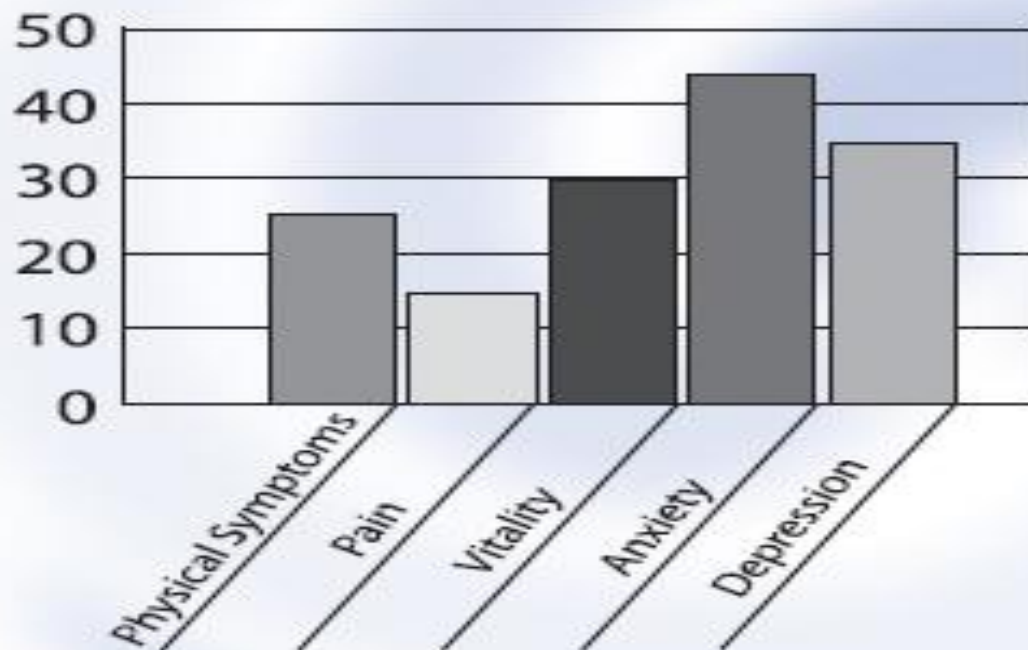


Coping with Stress

- Mind Body Medicine
- Breathing
- Imagery
- Meditation
- Mindfulness Based Stress Reduction
- Physical Exercise



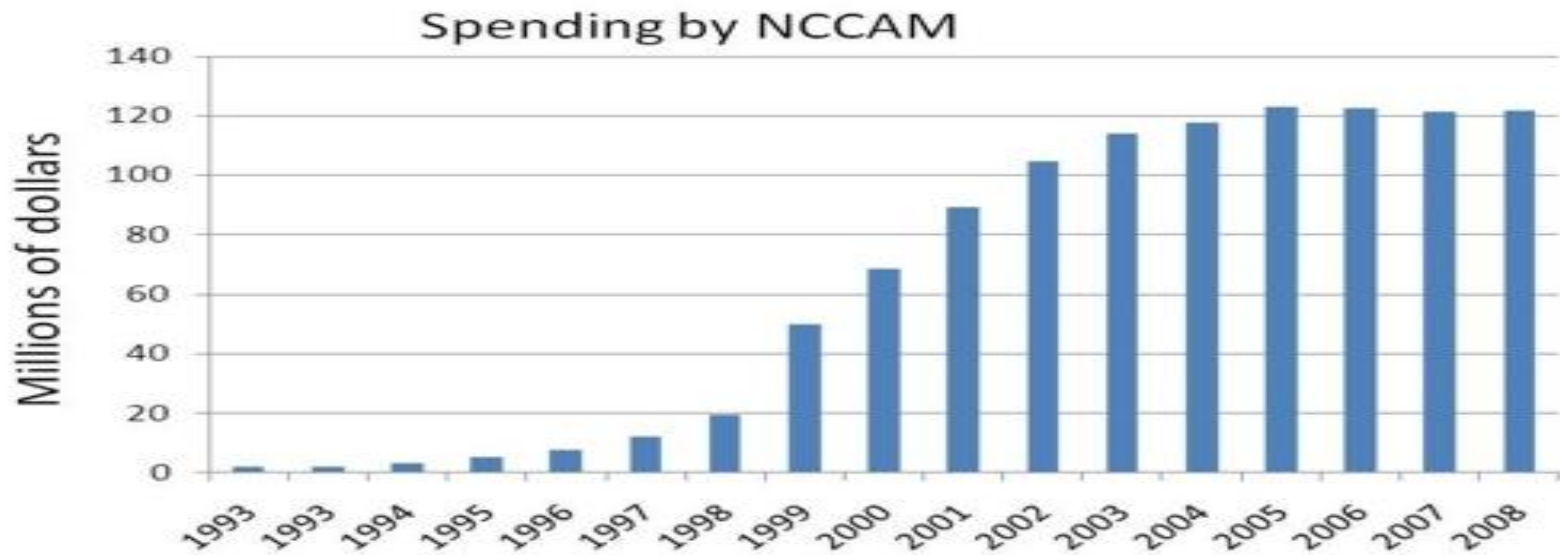
Percent improvement after 8-week MBSR program:



(Reibel DK, Greeson JM, Brainard GC, Rosenzweig S. Gen Hosp Psych, 2001, Vol 23, 183-192.)

Integrative Medicine

- Increasingly becoming an established movement in North America
- Individuals spent \$13.7 billion on CAM treatment
10.3 paid out of pocket (Eisenberg et al, 1993)
- NCCAM (within NIH) budget increasing over past 15 years



Relieving Pain

Utilization of less toxic tx's

Hopes of boosting immune system

Doing everything possible

Controlling side-effects

Increase sense of quality of life

Developing Sense of Hopefulness

Gaining more control in decision-making process

Definitions

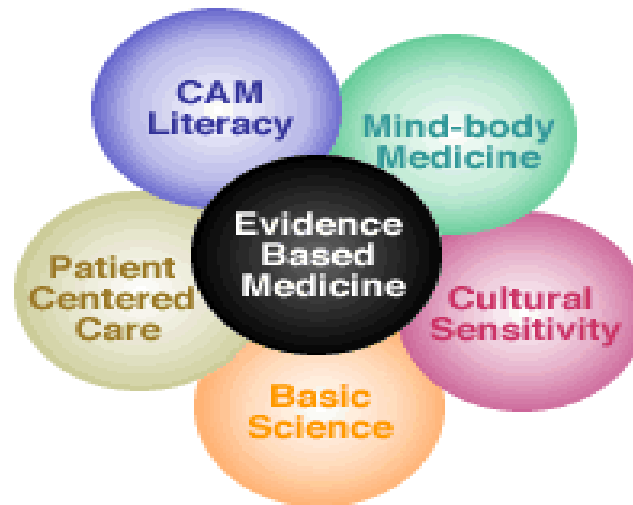
- Alternative medicine (AM) – treatment *in lieu of* conventional allopathic care (i.e., herbs vs. chemo)
- Complementary medicine (CM) - delivered **adjunctively** with **conventional care** (i.e., acupuncture before, during, after chemotherapy regimen)

Definition- Integrative Medicine

- **Integrative medicine (IM)** - is healing-oriented medicine that takes account of the whole person (body, mind, and spirit), including all aspects of lifestyle. Emphasizes the therapeutic relationship and makes use of all appropriate therapies, both conventional and complementary.

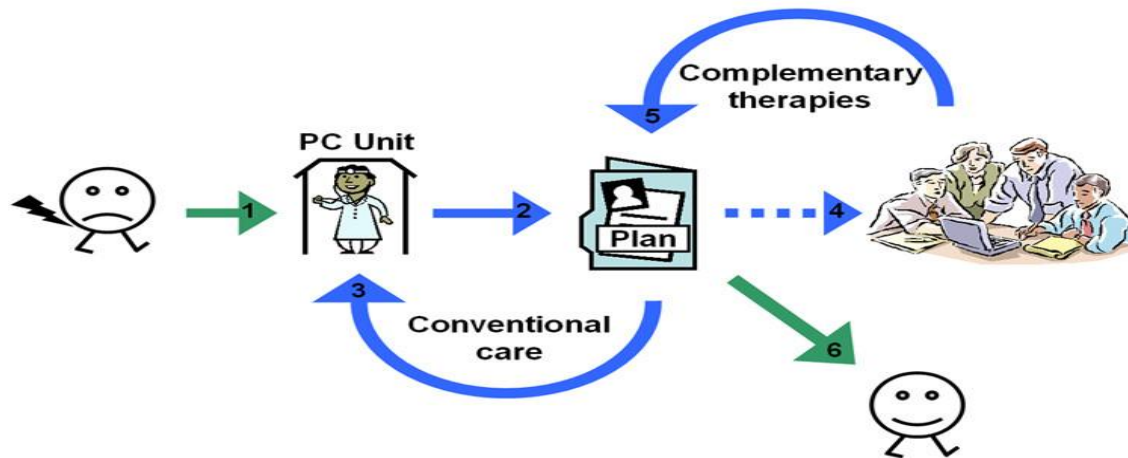
Integrative Medicine

- Aim should be one medicine synergistically combining therapies and services in a “manner that exceeds collaborative effort of the individual practices.”
 - Sagar (2006)



Health Care - Multifactorial

- Situated at crossroads of diverse professional systems, support networks, and self care
- Pt embedded in larger social, cultural, political and economic systems
 - Verhoef & Leis, 2008



Who uses Integrative Medicine?

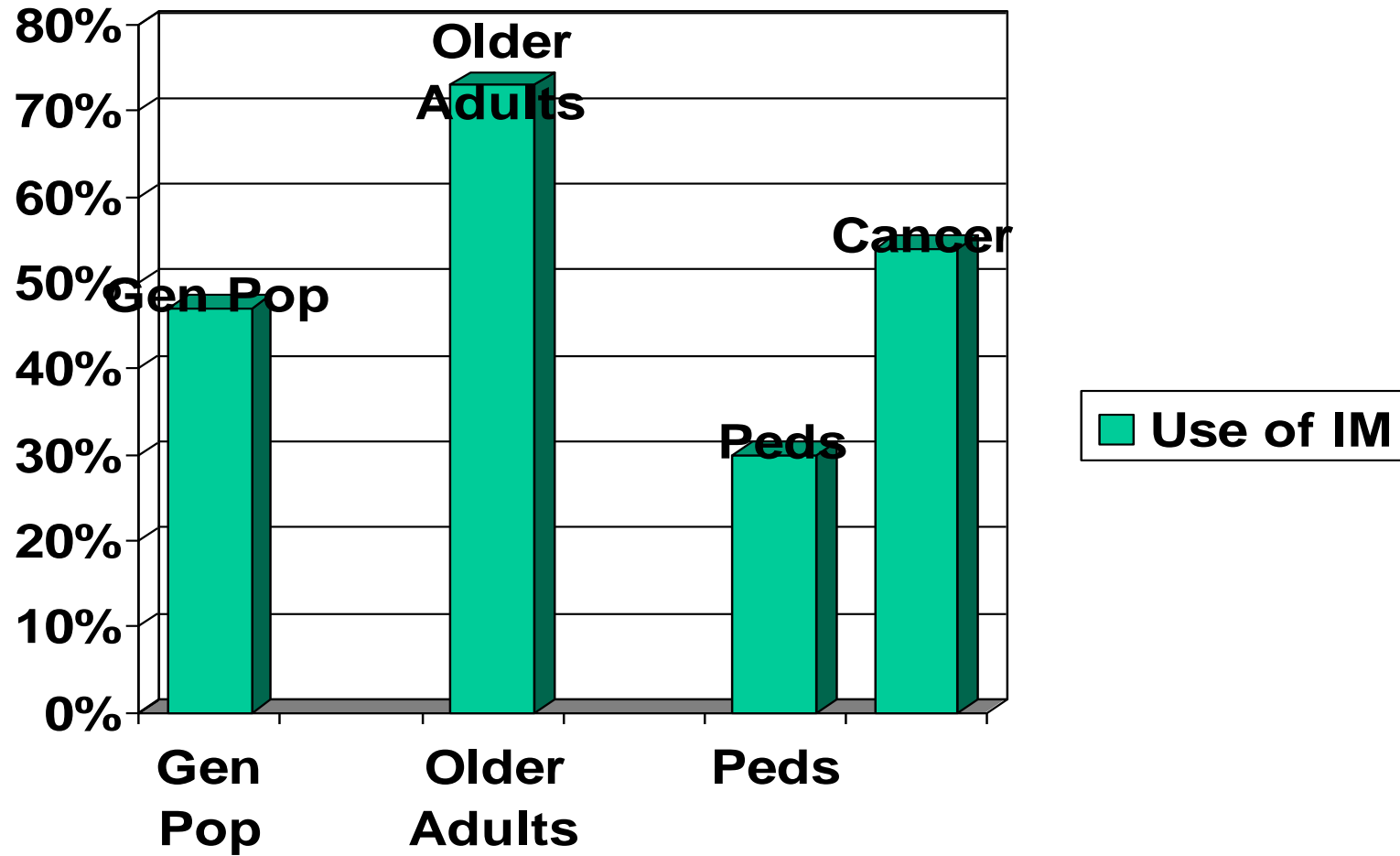
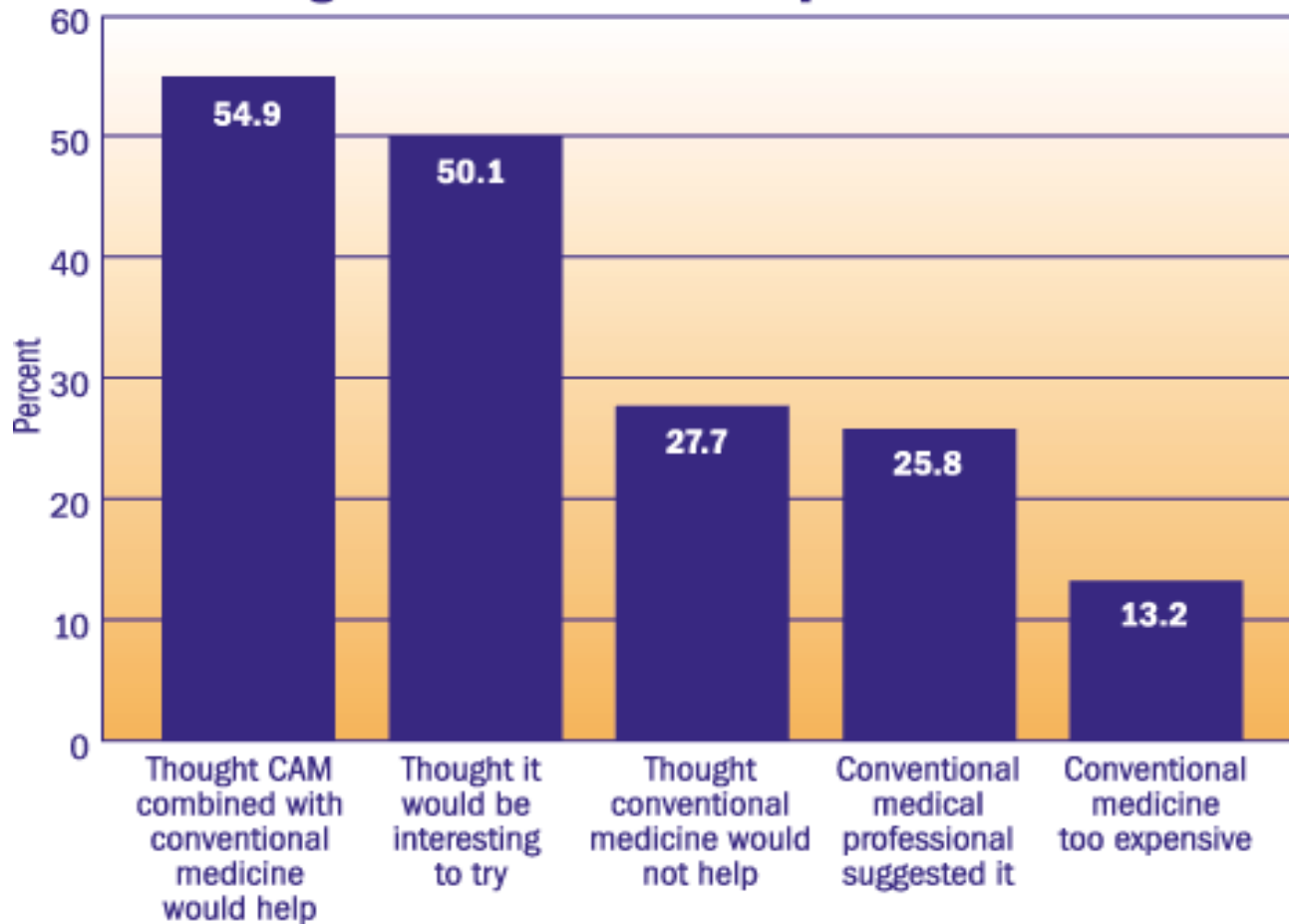
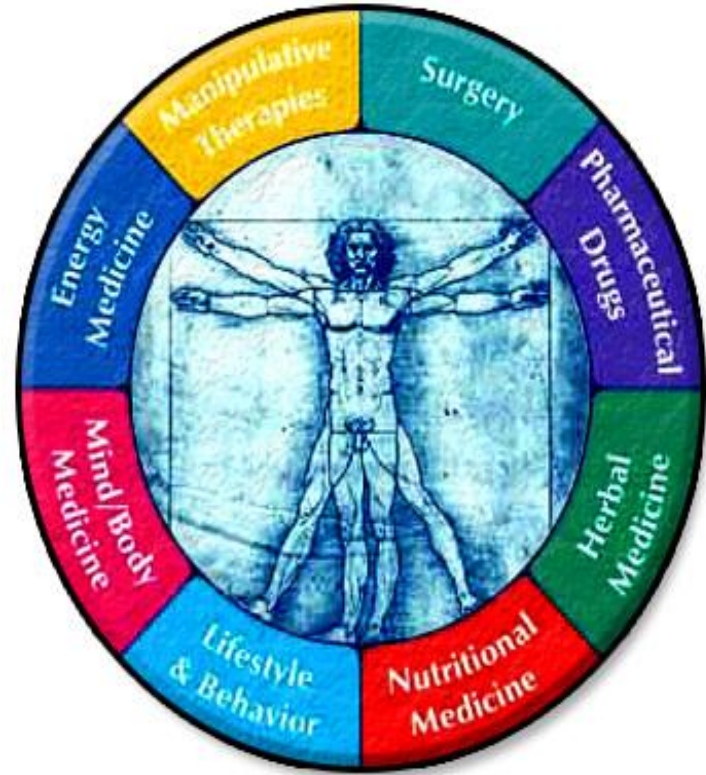


Figure 7. Reasons People Use CAM



Prevalence of IM use in cancer

- Yates et al (2005) report upwards of 91% of cancer patients surveyed reported use of at least one form of IM



Integrative Medicine

- Acupuncture
- Role of natural health products (botanicals, vitamins)
- Meditation
- Mind body Medicine
- Music Therapy
- Nutrition
- Touch Therapies



Acupuncture

- Originated 2500 years ago.
- Needle insertion, heat or pressure is applied to specific acupuncture points to cause harmony following imbalances in yin-yang and qi
- Acupuncture found effective in managing emesis specifically when involving P6 acupuncture point (Joske et al, 2006)
- RCT found less pain associated with those using acupuncture (Bardia et al, 2007).

Acupuncture

- Recent scientific research suggests acupuncture likely mediated by nervous system (no definitive mechanism established)
- Release of neurotransmitters and change in brain functional MRI signals observed during acupuncture (Han, 2003; Wu et al., 1999)



Acupuncture & Massage Symptom Management

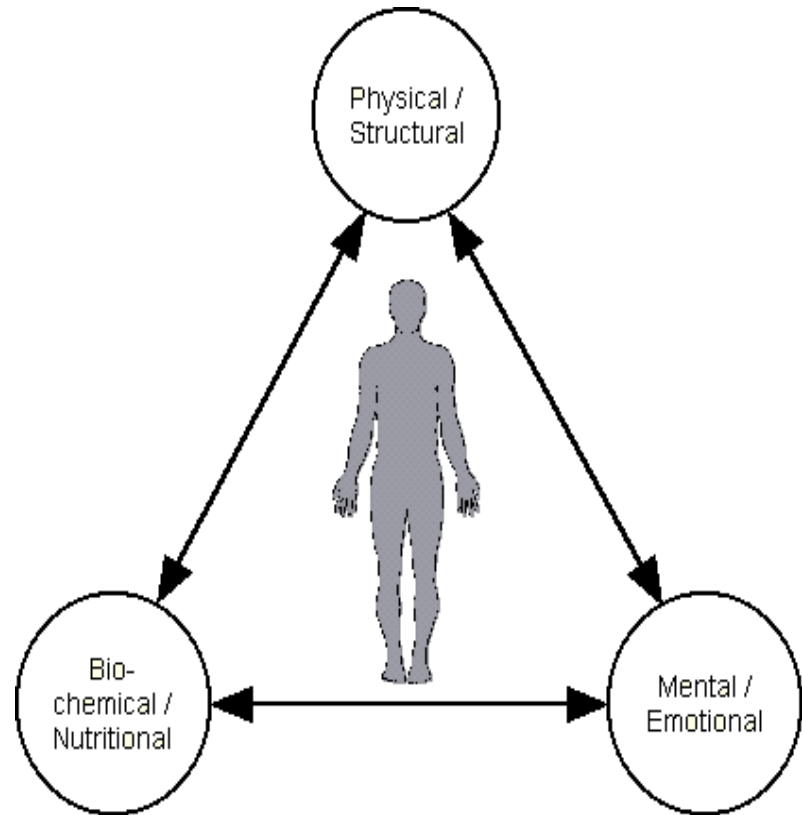


- RCT assessing effect of massage and acupuncture versus usual care in postoperative cancer patients
- 138 patients
- 93 massage acupuncture; 45 usual care
- Assessed pain, nausea, vomiting mood
- Health care utilization
- Results:
- Intervention group –
 - Decreased pain ($p=.038$)
 - Decrease in depressive mood ($p=.003$)
- Mehling et al 2007

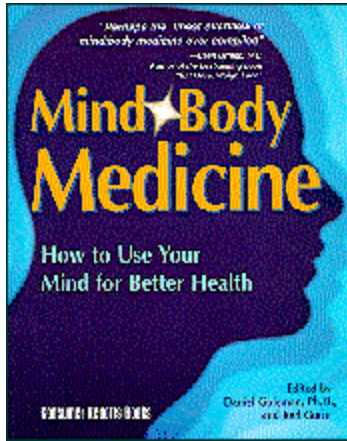
Acupuncture Studies

- Studies Support Acupuncture for
 - Nausea (Gan et al, 2004)
 - Pain (Minton Higginson, 2007; Alimi et al, 2003; Dang & Yang, 1998; Zhang et al., 1006).
 - Xerostomia (Blom et al, 1996)
 - Hot Flashes in breast cancer (Nedstrand et al, 2005; Nedstrand et al, 2006)
 - Preoperative Anxiety (Wang, Peloquin et al, 2001)

- National Institute of Health define mind body therapies as interventions designed to facilitate the mind's capacity to affect bodily function and symptoms



Evidence Supporting Mind Body Approaches



- Research supports use of mind body approaches to address 5 important aspects of working with cancer patients
 1. Psychological/emotional issues
 2. Coping with and reducing adverse effects of treatment
 3. Stimulating immunity – healing responses
 4. Reducing/relieving cancer related pain
 5. Influencing progression or outcome of diagnosis

Review of systematic reviews and meta-analysis on Mind Body Therapies (Astin et al, 2003)

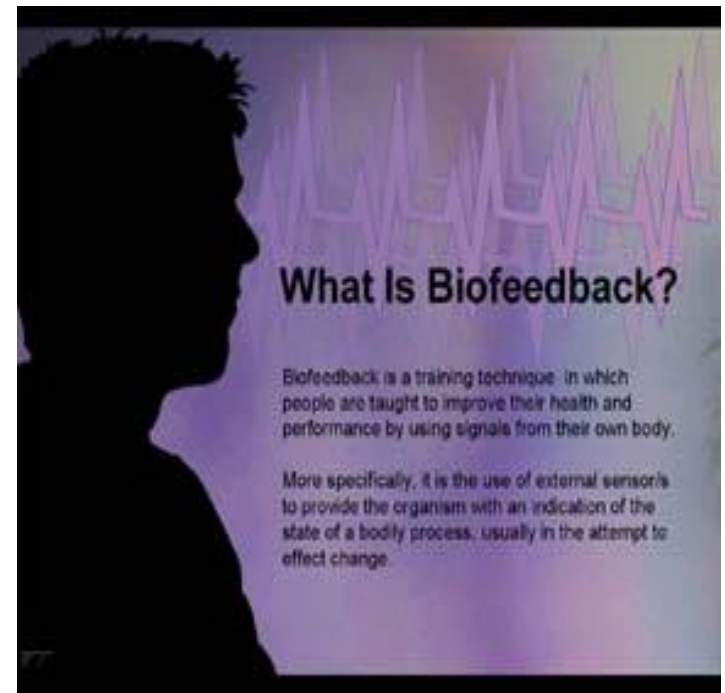
- MBT improve
 - Mood
 - Quality of life
 - Coping
 - Ameliorate disease and treatment related symptoms (nausea, vomiting, physical pain, functioning)

Mind-Body Practices

- Biofeedback
- Guided Imagery
- Hypnosis
- Meditation
- Relaxation
- Spirituality
- Yoga

Biofeedback

- **Biofeedback:** Used to **reduce stress**, this is a mind-body process that uses **monitoring equipment to provide visual or audible feedback** of activity in muscles and parts of the nervous system. This therapy helps patients distinguish between the body's stress response and relaxation.
- **Measure**
 - Heart Rate
 - Skin Temperature
 - Brain Activity



Biofeedback

- Beneficial in treating multiple medical conditions
- Studies suggest potential to improve symptoms including
 - Anxiety
 - Stress
 - Nausea and Vomiting associated with chemotherapy
 - Decrease Pain exacerbated by stress

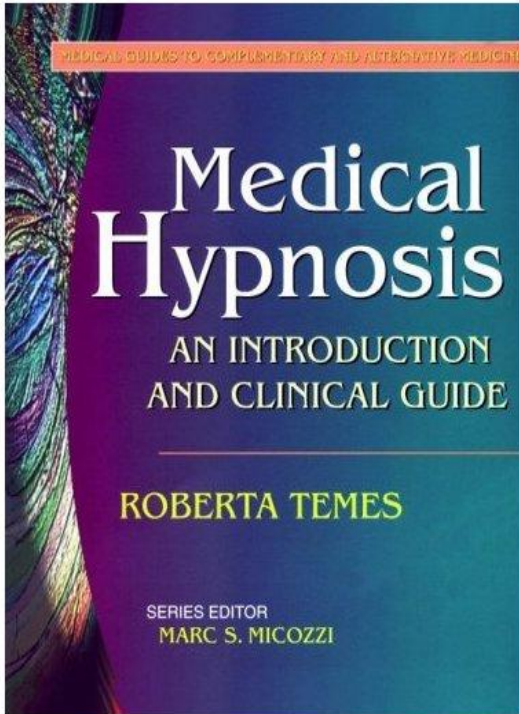
- **Guided Imagery:** A form of relaxation therapy, guided imagery uses the creation of meaningful mental images to help reduce stress and promote healing.



Guided Imagery

- Systematic Review (Gerber et al., 2006) suggested psychological therapies (including imagery) found psychological therapies positively alter immune system

Hypnosis



- **Hypnosis** from Greek word *hypnos* which means Sleep
- **Medical Hypnosis:** During this state of **restful alertness**, distractions are blocked, allowing a person to **concentrate on a particular subject, memory, sensation or problem**, which can enhance a person's control over the body's response.

Hypnosis Research

- Reduce anxiety
- Studies suggest reduces anxiety prior to medical procedures
 - Effects last up to 3 years
- Research indicates may offer relief from pain associated with cancer
- NIH cited evidence supports effectiveness of hypnotherapy in treatment of chronic pain (cancer)

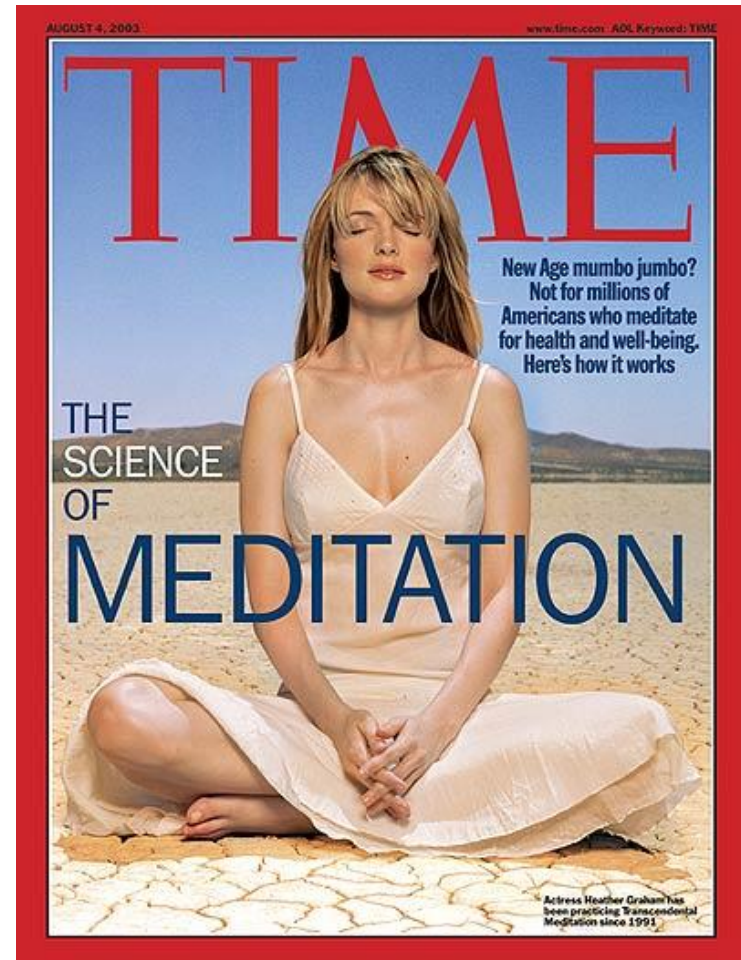
Massage Therapy



Massage Therapy

- RCT assessing use of acupuncture and massage therapy in post operative cancer patients found those in intervention group reported decreased pain and lower depressive symptoms versus usual care (Mehling et al, 2007).
- Several studies have shown massage therapy reduces pain, depression, anxiety, lower BP as well as relieving nausea (Billhult et al, 2007)
- Hernandez-Reif & colleagues (2004) found massage therapy increased NK cells in breast cancer patients.

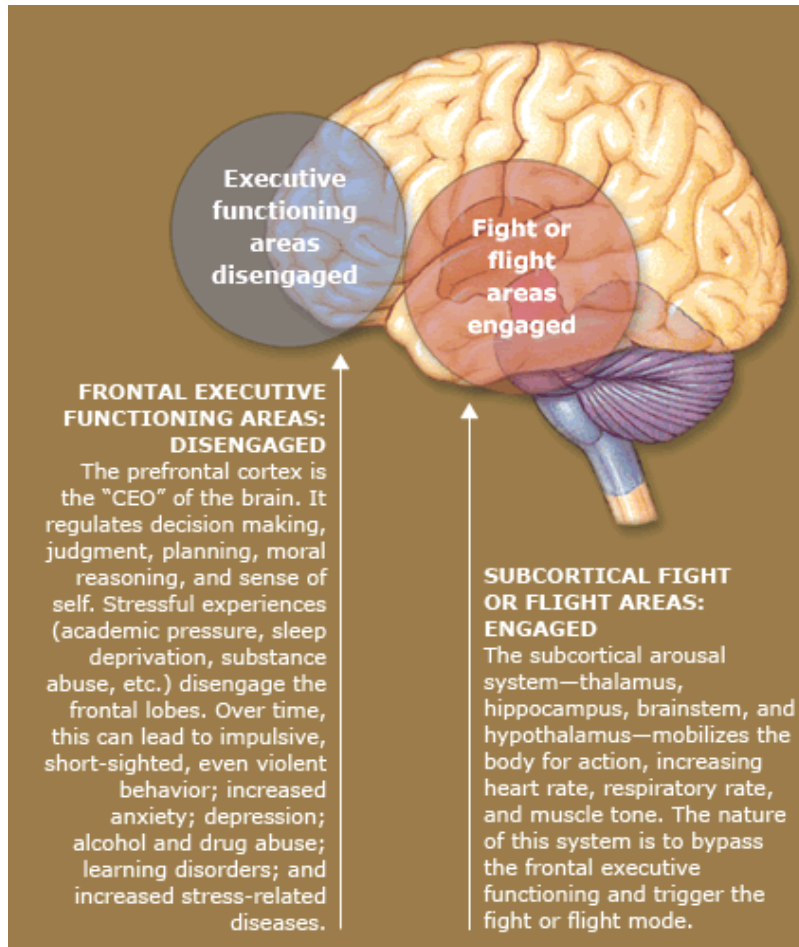
- Means of maintaining attention pleasantly anchored in the current moment
- Mental control is foundation of meditation
- Mastery believed of producing physiological & emotional change



Meditation

- Focus attention on
 - Breathing
 - Repeating word/phrase/sound
- Goal
 - Suspend stream of thoughts normally in conscious mind
- Leads to state of
- Physical Relaxation,
- Mental calmness,
- Alertness
- Psychological balance

Meditation Impact on Body



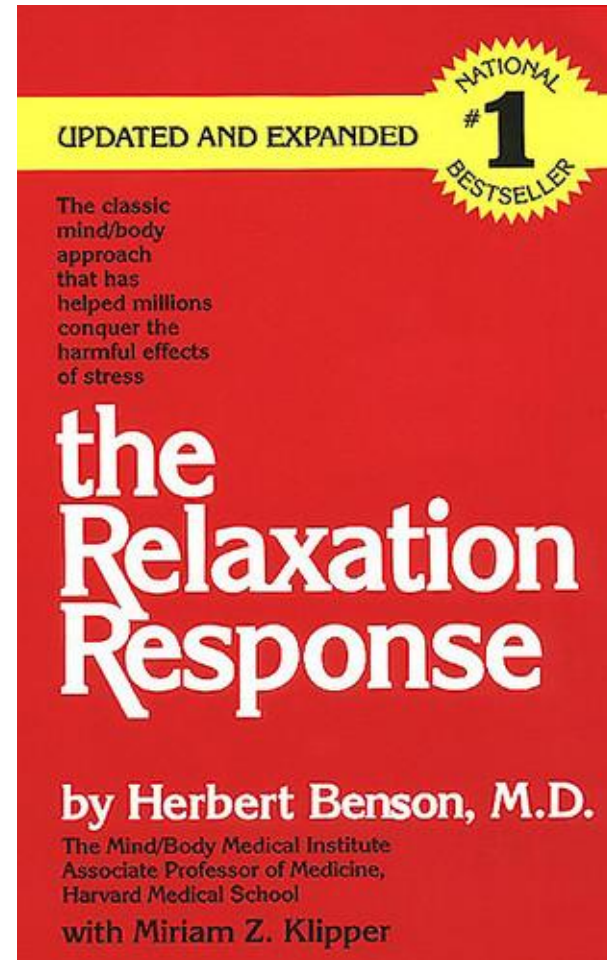
- Shown to create changes in response of the Sympathetic Nervous System (*“fight or flight”*)
- Increase parasympathetic nervous system (relaxation response)

Meditation Research

- Meditation research mixed
- Considered safe as long as don't delay medical attention for emerging or existing medical problem
- May help improve
- Anxiety and stress
- Depression
- Several medical disorders
- Fatigue
- Insomnia
- GI disorders
- Hypertension
- Arthritis
- Pain

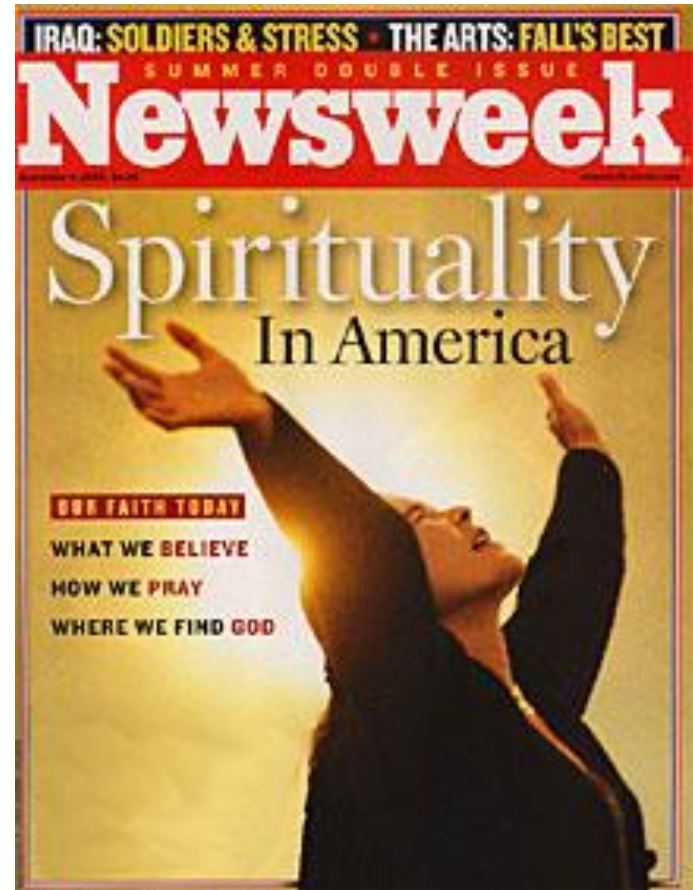
Relaxation Therapy

- Process by which reverse physiological stress reactions - muscles relax
- Outcomes:
- Pulse rate decreased
- Breathing rate decreased
- Blood pressure decreased
 - *Herbert Benson, MD*

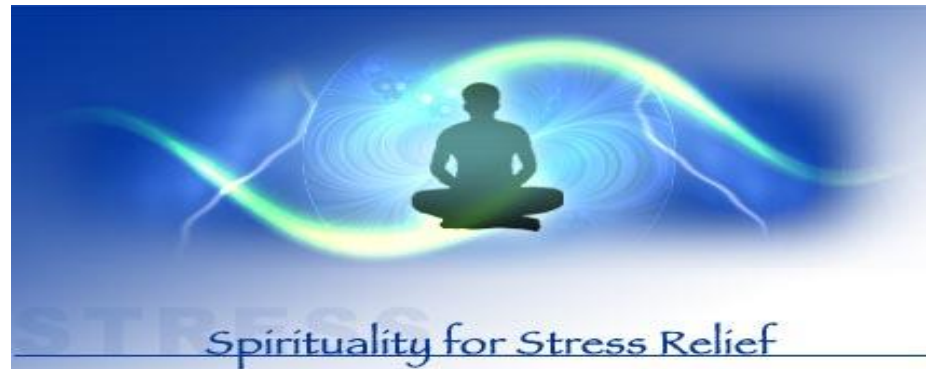


Spirituality

- Gallup Poll tracked religious beliefs for 50 years – 95% of Americans believe in God
- Spirituality is multidimensional construct
- Related to but distinct from religiosity
- Spirituality – finding deep meaning in everything including illness



- Spirituality studies suggest spiritual and religious beliefs contribute to positive health benefits including stress reduction increased sense of well being (Larson, 1992)
- Spirituality and religion can impact cancer by improving QOL, adjustment and symptom management (Stefanek et al, 2004)



Spirituality Research

- Spiritual well being significantly associated with ability of cancer patients to enjoy life
- Associated with less distress
- Longitudinal study of cancer pain and depression spirituality and well being were inversely related to depression (O'Mahony et al., 2005)





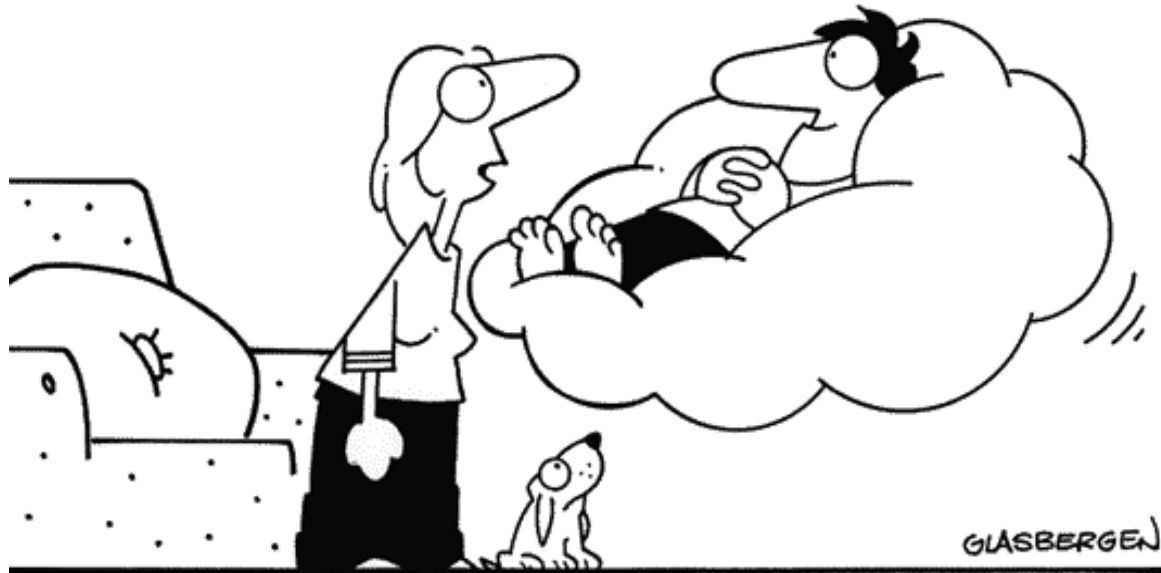
- Disciplined activity creates a union of
 - *Mind*
 - *Body*
 - *Spirit*

Yoga Research

- Randomized trial of Tibetan Yoga (TY) in lymphoma patients on psychological adjustment and sleep quality (Cohen et al, 2004)
- TY pts reported lower sleep disturbance –
 - Better subjective sleep,
 - Faster to sleep
 - Longer sleep
 - Lower sleep medications



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**“You’re getting pretty good
at this stress management thing.”**

- Thank You
- Questions?
- Comments

