Insomnia: Mind-Body Therapies

May 1, 2015

Sleep!
(A CME Opportunity for Physicians)
Harvard Medical School, Boston

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Mind-Body Medicine
Mind and Body Practices

Mind and body practices are a large and diverse group of techniques that are administered or taught to others by a trained practitioner or teacher. Examples include acupuncture, massage therapy, meditation, relaxation techniques, spinal manipulation, and yoga.

FEATURED:

Acupuncture: What You Need To Know
Information about acupuncture, including safety and effectiveness as well as tips on finding a qualified practitioner and resources for more information.

Meditation: What You Need To Know
This fact sheet provides information about meditation for conditions such as high blood pressure, anxiety, depression, and pain.

Yoga for Health
This fact sheet provides a general overview of yoga and suggests sources for more information.

For Consumers
General Information
- Acupuncture Information
- Spinal Manipulation and Pain
- Massage Therapy Information
- Meditation Information
- Placebo Effect Information
- Relaxation Techniques for Health: What You Need To Know
- Spirituality in Cancer Care
- Tai Chi Information
- Yoga Information
See more ▶

For Health Professionals
General Information
- NCCAM Review Analyzes Evidence on Brain Effects from Chronic Pain and Mind and Body Approaches

NCCIH Clinical Digest
- Clinical Digests: Children’s Use of Complementary Health Approaches
- Clinical Digests: Weight Control and Complementary and Integrative Approaches
- Clinical Digests: Meditation for Health
- Clinical Digests: Yoga for Health
- Clinical Digests: Complementary Health Approaches for Chronic Pain
Putting the patient at the center of care, in order to address the full range of physical, mental, emotional, social and spiritual influences affecting health.

Are You Working Too Hard?

An interview with Dr. Benson by Bronwyn Fryer
Managers apply pressure to themselves and their teams in the belief that it will make them more productive. After all, stress is an intrinsic part of work and a critical element of achievement; without a certain amount of it, we would never perform at all.

Quick Links
- Research Subjects Needed
- Next CME Training
- Latest BHII Newsletter
- Mind Body News
- Connect With Us
- Programs and Events

Stress and the Relaxation Response: The Fundamentals of Mind Body Medicine
This interactive 4-week course provides valuable, evidence-based insights on the basic principles of mind body medicine. Enhance your clinical practice by helping your patients understand the science of how stress impacts health.

The course provides an overview of mind/body interactions and a deeper understanding of how mind body therapies decrease stress and enhance well-being. It strengthens your knowledge and clinical skill set for recognizing early warning signs, weighing the relative risks of various conditions, and ultimately
Mind-Body Practices

• Yoga
• Tai Chi/Qi Gong
• Meditation
• Breath regulation
• Progressive muscle relaxation
• Guided imagery
• Autogenic training
Physical Postures and Exercises

- static postures
- isometric
- stretching of trunk and limbs
- wide variety of limb and trunk movements
Breathing Exercises

- long, slow and deep
- abdominal
- patterned and paced
- segmented
- alternate nostril

“Okay, you've got the breathing down, but wouldn't you be more comfortable in a different workout suit?”
Meditation

- relaxed focused attention on breathing, words, senses
- passive exclusion of ruminating thoughts

PENNY FOR YOUR LACK OF THOUGHTS.
Relaxation Techniques

- progressive muscle relaxation
- muscle relaxation with guided imagery

"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!"
Prevalence of Practice
"In addition to 16 cup-holders it comes equipped with four dedicated yoga mat storage areas."
Yoga Journal Survey 2012

Practicing = 20.4 M
Interested = 104.1 M

Percent of the Population
“Thanks for getting active with me!
I hope you’re enjoying your McDonald’s®
Yourself!Fitness® Workout DVDs.”

Check out this website for great ways to make the most of your workouts.

Click on a DVD to get more information about each workout.

Try the NEW Asian Salad — a new way to cool down after exercise.

ACHIEVE BALANCE.
The Go Active™ Happy Meal® for adults features MAYA, your own virtual fitness trainer, who gives you a customized workout on 1 of 4 Yourself!Fitness™ DVDs when you order any Premium Salad and drink.
I do yoga in my suite. Doctor’s orders.

It’s a good conversation starter at breakfast. Almost as good as the complimentary waffles.
SPECIAL ISSUE

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

JANUARY 20, 2003
Yoga
Meditation
Deep Breathing
Progressive Relaxation
Yoga
Meditation
Deep Breathing
Progressive Relaxation

Yoga, Tai Chi & Qi Gong Practice
U.S. Adult Population

How is it we’re the most successful species on the planet, yet we need to pay people to remind us to breathe and drink water.
Psychophysiology
“...physiologically Yogic meditation represents deep relaxation of the autonomic nervous system without drowsiness or sleep ...”

CBF of long-term meditators was significantly higher (p < .05) compared to non-meditators in the prefrontal cortex, parietal cortex, thalamus, putamen, caudate, and midbrain…The observed changes…appear in structures that underlie the attention network and also those that relate to emotion and autonomic function.

Yoga, Brain Structure and Pain

These findings reveal the possibility to increase resilience and to slow the decline of fluid intelligence and brain functional architecture and suggest that mindfulness plays a mechanistic role in this preservation.

"Meditation isn't what you think."
...people’s minds wandered frequently, regardless of what they were doing.

...people were less happy when their minds were wandering than when they were not
Meditation & the Default Mode Network

Yoga, Thalamic GABA, Mood & Anxiety

Yoga as an Alternative and Complementary Approach for Stress Management: A Systematic Review

Manoj Sharma, MBBS, MCHES, PhD, FAAHB

Abstract
Stress has become a global public health problem. Yoga offers one possible way of reducing stress. The purpose of this study was to look at studies from 2011 to May 2013 and examine whether yoga can be an efficacious approach for managing stress. A systematic search of Medline, CINAHL, and Alt HealthWatch databases was conducted for quantitative articles involving all schools of yoga. A total of 17 articles met the inclusion criteria. Six of these were from the United States, 3 from India, 2 from the United Kingdom, and 1 each from Australia, Brazil, Germany, Iraq, Sweden, and Taiwan. Of the 17 studies, 12 demonstrated positive changes in psychological or physiological outcomes related to stress. Despite the limitations, not all studies used a randomized controlled design, had smaller sample sizes, had different outcomes, had nonstandardized yoga intervention, and had varying lengths, yoga appears to be a promising modality for stress management.

Keywords
yoga, mind–body interventions, stress, anxiety

Received May 28, 2013. Accepted for publication August 1, 2013.
Yoga Practices
(postures, breathing, relaxation, meditation)

Mind-Body Awareness
↑Mindfulness
↑Attention
↑Concentration/Cognition
↑Self/social Awareness

Self-Regulation
↑Emotion Regulation
↑Stress Regulation
↑Resilience
↑Equanimity
↑Psychological Self-Efficacy

Physical Fitness
↑Flexibility
↑Strength
↑Balance
↑Respiratory Function
↑Physical Self-Efficacy

Behaviors, Mental State, Health & Performance
↑Mood, ↑Well-Being, ↓Psychological Disorders,
↑Positive Behaviors, ↓Negative Behaviors, ↑Physical Health,
↑Cognitive/Academic Performance, ↑Relationships, ↑Quality of Life
Okay, your posture’s very good. Now, relax, concentrate, and slowly let go of your cell phone.
Insomnia
"No wonder you have insomnia . . . lying there awake all night."
Models of Primary Insomnia

- Conditioning
- Emotional Arousal
- Cognitive Arousal
- Physiological Arousal
Physiological Arousal in Insomnia

Adam K et al, J Psychiatr Res, 1986

Bonnet MH & Arand DL, Sleep, 1995

Johns MW et al., Psychosom Med, 1971

Insomnia as Disorder of Hyperarousal

“Taken together, evidence … supports the contention that primary insomniacs suffer from a disorder of hyperarousal and that the elevated arousal produces the poor sleep and other symptoms reported by patients. It is therefore suggested that new treatment strategies directed at reduction of arousal level be considered in these patients.”


“Treatments for insomnia, such as relaxation, exercise training, and some medications, have in common a shift away from sympathetic nervous system dominance and toward parasympathetic activation. As such, these treatments may provide long-term benefits over and above short-term improvement in reported sleep quality.”

Mind-body interventions were able to improve sleep efficiency and total sleep time. Most can ameliorate sleep quality; some can reduce the use of hypnotic drugs in those who are dependent on these drugs.

According to the studies we selected, self-reported sleep was improved by all mind-body treatments, among them yoga, relaxation, Tai Chi…
Relaxation Treatments for Insomnia

Meta-analysis

Sleep Onset Latency

Wake Time After Sleep Onset

Average WASO (minutes)

Pre Treatment

Post Treatment

Follow Up

Effect size = 0.83

Effect size = 1.20

Effect size = 0.06

Effect size = 0.28

Meditation as a Treatment for Insomnia


MBSR as a Treatment for Insomnia

Mindfulness Meditation and Improvement in Sleep Quality and Daytime Impairment Among Older Adults With Sleep Disturbances
A Randomized Clinical Trial

David S. Black, PhD, MPH; Gillian A. O’Reilly, BS; Richard Olmstead, PhD; Elizabeth C. Breen, PhD; Michael R. Irwin, MD

Published online February 16, 2015.

Figure 2. Estimated Pittsburgh Sleep Quality Index at Preintervention and Postintervention
CBT VS. TAI CHI FOR LATE LIFE INSOMNIA AND INFLAMMATORY RISK

Cognitive Behavioral Therapy vs. Tai Chi for Late Life Insomnia and Inflammatory Risk: A Randomized Controlled Comparative Efficacy Trial

Michael R. Irwin, MD\(^1\); Richard Olmstead, PhD\(^1\); Carmen Carrillo, MPH\(^1\); Nina Sadeghi, BS\(^1\); Elizabeth C. Breen, PhD\(^1\); Tuff Witarama, BS\(^1\); Megumi Yokomizo, BS\(^1\); Helen Lavretsky, MD\(^1\); Judith E. Carroll, PhD\(^1\); Sarosh J. Motivala, PhD\(^1\); Richard Bootzin, PhD\(^2\); Perry Nicassio, PhD\(^1\)

\(^1\)University of California, Los Angeles – Cousins Center for Psychoneuroimmunology, Semel Institute for Neuroscience and Department of Psychiatry and Biobehavioral Sciences, David Geffen School of Medicine, Los Angeles, CA; \(^2\)University of Arizona, Department of Psychology, Tucson, AZ

FOR THE THIRD TIME IN AS MANY DAYS, TED NODS OFF DURING LATE-NITE YOGA...
Yoga for Sleep
**Sleep in Yoga Practitioners**

Mean, standard deviation (SD) and rank mean (RM) in the control and yoga groups, as well as U-statistic and $p$-value.

<table>
<thead>
<tr>
<th>Variable</th>
<th>Control group</th>
<th>Yoga group</th>
<th></th>
<th></th>
<th></th>
<th>U</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Mean</td>
<td>SD</td>
<td>RM</td>
<td>Mean</td>
<td>SD</td>
<td>RM</td>
<td>U</td>
</tr>
<tr>
<td>Hormone</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>ACTH (pg/mL)</td>
<td>28.02</td>
<td>26.88</td>
<td>10.50</td>
<td>18.28</td>
<td>8.29</td>
<td>11.20</td>
<td>42</td>
</tr>
<tr>
<td>Cortisol (µg/mL)</td>
<td>14.21</td>
<td>5.94</td>
<td>9.56</td>
<td>18.58</td>
<td>7.01</td>
<td>14.94</td>
<td>41</td>
</tr>
<tr>
<td>DHEA-S (µg/dL)</td>
<td>118.18</td>
<td>58.86</td>
<td>12.45</td>
<td>137.15</td>
<td>53.08</td>
<td>14.16</td>
<td>69.5</td>
</tr>
<tr>
<td>Subjective Sleep Quality (SSQ)</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>PSQI score</td>
<td>4.25</td>
<td>1.38</td>
<td>14.13</td>
<td>2.92</td>
<td>1.60</td>
<td>9.08</td>
<td>27</td>
</tr>
</tbody>
</table>

### Sleep in Elderly Yoga Practitioners

<table>
<thead>
<tr>
<th>Domains of PSQI</th>
<th>Yoga group (N=35) Mean±SEM</th>
<th>Non-Yoga group (N=30) Mean±SEM</th>
<th>P</th>
</tr>
</thead>
<tbody>
<tr>
<td>Duration</td>
<td>0.9714±0.1122</td>
<td>1.300±0.1528</td>
<td>0.1293</td>
</tr>
<tr>
<td>Disturbance</td>
<td>1.000±0.07101</td>
<td>1.600±0.09097</td>
<td>&lt;0.0001</td>
</tr>
<tr>
<td>Latency</td>
<td>1.086±0.1554</td>
<td>2.533±0.1642</td>
<td>&lt;0.0001</td>
</tr>
<tr>
<td>Day disturbance*</td>
<td>0.3143±0.09849</td>
<td>0.6333±0.1694</td>
<td>0.2041</td>
</tr>
<tr>
<td>Sleep medication*</td>
<td>0.05714±0.03981</td>
<td>0.2333±0.07854</td>
<td>&lt;0.05</td>
</tr>
<tr>
<td>Efficiency</td>
<td>0.2000±0.1216</td>
<td>0.8667±0.1244</td>
<td>&lt;0.0001</td>
</tr>
<tr>
<td>Overall quality</td>
<td>0.2286±0.07201</td>
<td>0.8333±0.08419</td>
<td>&lt;0.0001</td>
</tr>
<tr>
<td>PSQI-total</td>
<td>3.771±0.3623</td>
<td>8.000±0.4315</td>
<td>&lt;0.0001</td>
</tr>
</tbody>
</table>

Mann-Whitney U test (To compare the sleep quality of Yoga and non-Yoga groups). *Day dysfunction due to sleepiness. **Need medicines for sleep, PSQI= Pittsburgh sleep quality index.

Yoga on Sleep in the Elderly

Subject CH

- Sleep Onset Latency
- Number of Awakenings
- Total Sleep Time
- Total Wake Time
- Sleep Efficiency
- Sleep Quality
Sleep Diary Data

Sleep Onset Latency

Baseline Wk 1-2 Wk 3-4 Wk 5-6 Wk 7-8 Followup

Average Sleep Onset Latency (minutes)

20
30
40
50

Sleep Efficiency

Baseline Wk 1-2 Wk 3-4 Wk 5-6 Wk 7-8 Followup

Average Sleep Efficiency (%)

70
75
80
85
90

Total Wake Time

Baseline Wk 1-2 Wk 3-4 Wk 5-6 Wk 7-8 Followup

Average Total Wake Time (hr)

0.8
1.0
1.2
1.4
1.6
1.8
2.0
2.2
2.4
2.6

Total Sleep Time

Baseline Wk 1-2 Wk 3-4 Wk 5-6 Wk 7-8 Followup

Average Total Sleep Time (hr)

5.5
6.0
6.5
7.0
7.5
8.0
8.5
9.0
Multicomponent Cognitive Behavioral Treatment for Insomnia


**TABLE II**

<table>
<thead>
<tr>
<th>Session</th>
<th>Components of the Multifactor Behavioral Insomnia Intervention</th>
</tr>
</thead>
<tbody>
<tr>
<td>Session 1</td>
<td>Sleep education and cognitive restructuring concerning sleep (ie, recognizing, challenging, and changing distorted, inaccurate attitudes and beliefs about sleep requirements, attributions, effects of sleep loss, and subjective perception of amount of sleep obtained).</td>
</tr>
<tr>
<td>Session 2</td>
<td>Medication withdrawal (ie, gradual reduction of dose and then medication nights under the patient's physician supervision as behavioral techniques are learned and implemented) and sleep hygiene (ie, reducing alcohol, caffeine, and nicotine use, increasing late-day exercise but not within 3 hours of bedtime, and establishing a regular wind-down period prior to bedtime).</td>
</tr>
<tr>
<td>Session 3</td>
<td>Sleep scheduling (ie, employing a regular arising time, only allowing naps of less than 45 minutes duration and no later than 4 PM, and limiting time in bed to 1.5 hours beyond the average sleep length, as calculated from weekly sleep diaries, to improve sleep efficiency).</td>
</tr>
<tr>
<td>Session 4</td>
<td>Modified stimulus control (ie, using the bedroom for sleep or relaxing activities only, going to bed only when drowsy, and, if not asleep within 20 to 30 minutes, opening eyes and engaging in relaxing activity in bed or another room with no attempt to sleep until drowsy again [repeat as necessary]).</td>
</tr>
<tr>
<td>Session 5</td>
<td>Relaxation response (ie, a set of integrated physiologic changes that are consistent with reductions in sympathetic nervous system activity and that are elicited when an individual engages in a repetitive mental activity [eg, muscular relaxation and breathing focus] and passively ignoring distracting thoughts”) combined with stimulus control (ie, if not asleep within 20 to 30 minutes, opening the eyes and engaging in a relaxing activity until drowsy). Patients were instructed to elicit the relaxation response daily for 2 weeks and then daily and at bedtime or upon awakening thereafter.</td>
</tr>
<tr>
<td>Session 6</td>
<td>Cognitive restructuring for stress management (ie, recognizing, challenging, and changing distorted negative cognitive appraisals concerning daily stressors).</td>
</tr>
<tr>
<td>Session 7</td>
<td>Maintaining and enhancing therapeutic gains (ie, employing an overall review of the multifactor behavioral intervention, the importance of compliance, and the follow-up data to facilitate coping appraisals regarding maintenance and enhancement of therapeutic gains).</td>
</tr>
</tbody>
</table>

## Multi-component Behavioral Treatment for Insomnia


### TABLE III

<table>
<thead>
<tr>
<th>Posttreatment Improvements in Sleep and Sleep Medication Use</th>
</tr>
</thead>
<tbody>
<tr>
<td>Patients reporting improved sleep (n = 102)</td>
</tr>
<tr>
<td>Significant improvement</td>
</tr>
<tr>
<td>Moderate improvement</td>
</tr>
<tr>
<td>Slight improvement</td>
</tr>
<tr>
<td>No improvement</td>
</tr>
<tr>
<td>Sleep worse</td>
</tr>
<tr>
<td>58%</td>
</tr>
<tr>
<td>33%</td>
</tr>
<tr>
<td>9%</td>
</tr>
<tr>
<td>0%</td>
</tr>
<tr>
<td>0%</td>
</tr>
<tr>
<td>Patients reporting sleeping medication reduction or cessation (n = 68)</td>
</tr>
<tr>
<td>Eliminated medication</td>
</tr>
<tr>
<td>Reduced dosage or increased number of medication-free nights</td>
</tr>
<tr>
<td>No change</td>
</tr>
<tr>
<td>Increased medication use</td>
</tr>
<tr>
<td>38%</td>
</tr>
<tr>
<td>53%</td>
</tr>
<tr>
<td>9%</td>
</tr>
<tr>
<td>0%</td>
</tr>
<tr>
<td>Patients reporting maintenance or enhancement of improvement in sleep at 6-month follow-up (n = 70)</td>
</tr>
<tr>
<td>Improvement enhanced</td>
</tr>
<tr>
<td>Improvement maintained</td>
</tr>
<tr>
<td>Sleep worse</td>
</tr>
<tr>
<td>47%</td>
</tr>
<tr>
<td>43%</td>
</tr>
<tr>
<td>10%</td>
</tr>
</tbody>
</table>
Insomnia Treatment
Behavioral vs. Pharmacological

Figure 2. Changes in sleep-onset latency as measured by sleep diaries. CBT indicates cognitive behavior therapy.

Figure 3. Changes in sleep efficiency as measured by sleep diaries. CBT indicates cognitive behavior therapy.

# Mindfulness and CBT Treatment for Insomnia

## Table 1. Long-term Effects of Treatment

<table>
<thead>
<tr>
<th>Measures</th>
<th>Baseline</th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Mean</td>
<td>SD</td>
<td>Mean</td>
<td>SD</td>
<td>Mean</td>
<td>SD</td>
</tr>
<tr>
<td><strong>Sleep diaries</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Total sleep time, min</td>
<td>384.19</td>
<td>63.76</td>
<td>382.41</td>
<td>59.39</td>
<td>390.33</td>
<td>72.13</td>
</tr>
<tr>
<td>Total wake time, min</td>
<td>100.21</td>
<td>60.84</td>
<td>42.56&lt;sup&gt;a&lt;/sup&gt;</td>
<td>32.93</td>
<td>49.23&lt;sup&gt;a&lt;/sup&gt;</td>
<td>34.64</td>
</tr>
<tr>
<td>Sleep onset latency, min</td>
<td>33.15</td>
<td>23.69</td>
<td>15.58</td>
<td>10.13</td>
<td>20.37</td>
<td>15.03</td>
</tr>
<tr>
<td>Wake time after sleep onset, min</td>
<td>42.94</td>
<td>45.32</td>
<td>14.04</td>
<td>12.80</td>
<td>17.01</td>
<td>16.23</td>
</tr>
<tr>
<td>Terminal wakefulness, min</td>
<td>24.12</td>
<td>21.76</td>
<td>12.93</td>
<td>16.93</td>
<td>11.85</td>
<td>17.19</td>
</tr>
<tr>
<td>Time in bed, min</td>
<td>483.41</td>
<td>78.14</td>
<td>424.97</td>
<td>53.03</td>
<td>439.36</td>
<td>75.81</td>
</tr>
<tr>
<td>Sleep efficiency, %</td>
<td>79.97</td>
<td>10.17</td>
<td>89.93&lt;sup&gt;a&lt;/sup&gt;</td>
<td>7.97</td>
<td>88.93&lt;sup&gt;a&lt;/sup&gt;</td>
<td>7.95</td>
</tr>
<tr>
<td>No. of awakenings</td>
<td>2.37</td>
<td>1.82</td>
<td>1.28</td>
<td>1.33</td>
<td>0.87</td>
<td>0.62</td>
</tr>
<tr>
<td>Sleep quality</td>
<td>5.85</td>
<td>1.09</td>
<td>6.49</td>
<td>1.13</td>
<td>6.79&lt;sup&gt;a&lt;/sup&gt;</td>
<td>1.30</td>
</tr>
<tr>
<td>Daytime sleepiness</td>
<td>4.18</td>
<td>1.84</td>
<td>3.97</td>
<td>2.04</td>
<td>3.54</td>
<td>1.88</td>
</tr>
<tr>
<td>Daytime tiredness</td>
<td>4.21</td>
<td>1.63</td>
<td>4.23</td>
<td>1.75</td>
<td>3.49&lt;sup&gt;a&lt;/sup&gt;</td>
<td>1.79</td>
</tr>
</tbody>
</table>

MINDFULNESS MEDITATION FOR CHRONIC INSOMNIA

A Randomized Controlled Trial of Mindfulness Meditation for Chronic Insomnia

Jason C. Ong, PhD; Rachel Manber, PhD; Zindel Segal, PhD; Yinglin Xia, PhD; Shauna Shapiro, PhD; James K. Wyatt, PhD

1Department of Behavioral Sciences, Rush University Medical Center, Chicago, IL; 2Department of Psychiatry and Behavioral Sciences, Stanford University Medical Center, Palo Alto, CA; 3Department of Psychiatry, University of Toronto, Toronto, ON, Canada; 4Department of Biostatistics and Computational Biology, University of Rochester Medical Center, Rochester, NY; 5Department of Counseling Psychology, Santa Clara University, Santa Clara, CA

SLEEP, Vol. 37, No. 9, 2014

Mindfulness and Insomnia—Ong et al.

Graphs showing changes in total wake time, PSAS change score, and ISI change score over baseline, post, 3 months, and 6 months for MBSR, MBTI, and SM conditions.
NCCAM is now NCCIH

Learn more about our new name

What does NCCIH do?
We conduct and support research and provide information about complementary health products and practices.

Research Results

- Human Body Microbes Make Antibiotics, Study Finds (September 11, 2014)
- Genetically Modified Yeast Strains Produce Opioid Drugs (August 24, 2014)
- Multiple 60-Minute Massages per Week Offer Relief for Chronic Neck Pain (June 2, 2014)

News

- NIH complementary and integrative health agency gets new name (12/17/14)
- Advisory Council 54th Meeting Agenda—February 6, 2015
- Message From the Director: NCCAM Has a New Name! (01/15/15)
- Drs. Jerome Groopman and Pamela Hartzband to speak at NIH on medical decision making NCCIH presents "When Experts Disagree: The Art of Medical Decision Making" (01/15/15)
- Message From the Director: Beware of “Alternative” Claims for Ebola (09/11/14)
RESEARCH HIGHLIGHTS

Dr. Khalsa and the ARPF were the first to recommend an integrative or holistic program for building a healthier, stronger brain, thus slowing the development of cognitive decline. Since then, the ARPF’s 4 Pillars of Alzheimer’s Prevention have been incorporated by other Alzheimer’s groups and this concept is now considered mainstream. Indeed, the ARPF is now partnering with the FINGER study (Finnish Geriatric Intervention Study to Prevent Cognitive Impairment and Disability), the largest study in history on Alzheimer's prevention.

Studies
Reversal of Memory Loss
Kripalu Institute for Extraordinary Living

Changing the World Through Yoga Research

What if we were to make yoga widely available to schoolchildren and their teachers? To those who are sick as well as their caregivers?

Yoga has the potential to change our world—both through the alleviation of suffering and the creation of vast opportunities for self-fulfillment. Those of us who practice yoga know this is true. But in order to imbue the transformational effects of yoga deeply into our society, we must combine the gifts of yoga with scientific validation. This is what the IEL is doing!

Did you know that the IEL is developing and rigorously evaluating yoga-based programs to transform schools and health care? Teams of Kripalu yogis and leading scientists are joining together to make the case that yoga can transform our world and build the programs to make it happen.

Please find out more about our work by reviewing the information throughout this website. If you can, we urge you to make a donation (at right) to support one of our projects. You can bring the gift of yoga to schoolchildren and to so many others who might not otherwise have access to yoga.
About The Kundalini Research Institute

Established on February 1, 1972 by Yogi Bhajan, Ph.D., Master of Kundalini Yoga, the Kundalini Research Institute is entrusted with The Teachings of Yogi Bhajan. KRI, a non-profit corporation, safeguards the purity, integrity, and accuracy of the Teachings of Yogi Bhajan by:

- Developing 3 levels of International Yoga Teacher Certification
- Preserving the teachings legacy for the future online Library of the Teachings
- Awarding the KRI Seal of Approval to products that successfully meet the standards of KRI Review
- Providing services and resources for Kundalini Yoga students and teachers via online services and upgraded Yoga Bhajan Products

Kundalini Yoga, the Yoga of Awareness, was brought to the West by Yogi Bhajan in 1968. Yogi Bhajan taught that, through the practice of Kundalini Yoga and meditation, your glandular and nervous systems are stimulated, and your capacity for creative potential is heightened. You gain inner vitality to compensate for the adverse effects of stress so you can excel in life.

Kundalini yoga classes are a dynamic blend of postures, pranayam, mantra, music and meditation, which teach you the art of relaxation, self-healing and elevation. Balancing body and mind enables you to experience the clarity and beauty of your soul. No previous experience in yoga is required for you to achieve results with your very first class.
“Now, when I can’t sleep I can watch a little TV.”