

# INTEGRATIVE HEALTH

## FAST FACTS

- One-third of US adults use complementary health approaches.<sup>1</sup>
- About 59 million Americans spend money out-of-pocket on complementary health approaches, and their total spending adds up to \$30.2 billion a year.
- Five of the top ten most common uses of complementary health approaches are for pain-related conditions.

## WHAT ORGANIZATIONS OFFER AND TEACH INTEGRATIVE HEALTH?

Dozens of large medical centers and hundreds of hospitals including military hospitals have embraced integrative medicine as an evidence-based approach—including Stanford, Harvard, Yale, University of Texas MD Anderson Cancer Center, Duke, the Universities of Arizona, Minnesota and California, the Cleveland and Mayo Clinics, and the Georgetown and George Washington Schools of Medicine. In fact, there are over 70 U.S. academic health centers that have integrative medicine programs that have joined a collective membership organization called the [Academic Consortium for Integrative Medicine & Health](#) for specifically focused scientific research on complementary and integrative health practices.

There is an integrative medicine specialty designation through the [American Board of Physician Specialties](#), and the National Institutes of Health (NIH) has funded the [National Center for Complementary and Integrative Health](#).

The Joint Commission, the largest U.S. accreditation body for healthcare facilities, revised its hospital performance measures for pain management to include a requirement that hospitals provide drug-free pain treatments that include but are not limited to osteopathic manipulation, chiropractic care, massage therapy and acupuncture therapy.<sup>2</sup> The American College of Physicians recently developed new guidelines for low back pain treatment, recommending the use of noninvasive, nondrug treatments before resorting to prescription drug treatment.<sup>3</sup>

## What Does the Science Show?

### Acupuncture

Research shows that acupuncture is effective for treating certain conditions, including chronic pain, symptoms of menopause, stress urinary incontinence, chemotherapy-induced nausea and vomiting, and headaches.

**Chronic Pain Relief**—There is good evidence on the effects of acupuncture for many types of pain and in fact, patients with chronic pain appear to receive the greatest benefit from acupuncture<sup>4-5</sup>.

A later analysis of the same data found that 90 percent of the benefit of acupuncture relative to controls lasted for 12 months.<sup>6</sup>

*Both studies were funded by the NIH National Center for Complementary and Integrative Health and published in prominent mainstream, peer-reviewed journals.*

**Relief from Menopause Symptoms**—A year-long, federally funded study also found that acupuncture may significantly reduce hot flashes and improve other menopause-related issues, including memory, anxiety, and sleep quality, with the benefits lasting at least six months after the acupuncture treatments ended.<sup>7</sup>

**Stress Urinary Incontinence**—Six weeks of electroacupuncture significantly improved stress urinary incontinence in the 252 women receiving the procedure compared with a similar group who received simulated (placebo) acupuncture without electrical current, according to a study published in the *Journal of the American Medical Association (JAMA)*.<sup>8</sup>

“Clearly these ancient practices are helping reveal the complexity of the links between the mind and the body.”<sup>9</sup>

- Josephine P. Briggs, MD, and David Shurtleff, PhD, of the National Center for Complementary and Integrative Health, editorial, *JAMA*, (June 27, 2017)

For in-depth analysis of the research on acupuncture's effect on a particular health concern, visit the [National Center for Complementary and Integrative Health](#) at the NIH.

## Therapeutic Yoga

**Overall Benefits**—Research shows that therapeutic yoga practice can relieve stress and lower breathing and heart rate, blood pressure, and cortisol levels, as well as improve quality of life.<sup>10-13</sup> A literature review of 120 studies on yoga found significant benefits reported in arthritis and other musculoskeletal disorders, as well as in cardiovascular endurance in healthy individuals. In patients with COPD and asthma, yoga programs focused on breath control and meditation significantly improve objective measures of lung function.<sup>14</sup>

**Pain Relief**—The stretching and flexibility that comes with yoga practice provides pain relief, with studies demonstrating its benefits in patients with arthritis, carpal tunnel syndrome and back pain.<sup>15-19</sup> In treating low back pain in a diverse urban population, yoga has been shown to have a similar effect on pain and function as physical therapy.<sup>20</sup>

**Cardiovascular Improvement**—There is also emerging evidence that yoga practice improves risk factors for cardiovascular disease, including weight, blood pressure and lipids.<sup>12</sup>

**Staving Off Dementia**—Emerging evidence points to possible benefit of yoga practice for prevention of Alzheimer's and other dementias.<sup>21-22</sup>

**Improved Mental Health**—Yoga has also been shown to improve anxiety, obsessive-compulsive disorder, major depression and insomnia.<sup>15-19, 23-24</sup>

The medical evidence is strong enough that some of the best medical centers in the country now offer yoga therapy, including the University of Texas MD Anderson Cancer Center, Memorial Sloan Kettering Cancer Center, and the Mayo and Cleveland Clinics.<sup>25</sup>

## Mindfulness-Based Stress Reduction, Cognitive-Behavioral Therapy Shown to Be Cost Effective for Chronic Low-Back Pain

Group sessions of either mindfulness-based stress reduction (MBSR) or cognitive-behavioral therapy (CBT) provide cost-effective treatment for chronic low back pain, according to new research supported by the National Center for Complementary and Integrative Health and published in the journal *Spine*. In addition, MBSR may offer substantial cost savings compared to usual care. Previous studies suggested that both MBSR and CBT may be effective for treating back pain, but until recently, the economic benefits of these interventions were unclear.<sup>26</sup>

## Massage Therapy

Specific studies find significant benefits of therapeutic massage for depression, osteoarthritis, chronic back and neck pain, chronic constipation, fibromyalgia and headaches.<sup>28-33</sup> Preterm infants who receive massage demonstrate greater weight gain and immune function than those who do not.<sup>34</sup> A review of four clinical trials found that massage may improve quality of life for those with HIV, while several studies suggest massage may reduce pain, reduce stress and improve mood in people with cancer.<sup>35-37</sup>

## Chiropractic

The evidence around chiropractic care has become stronger in recent years.

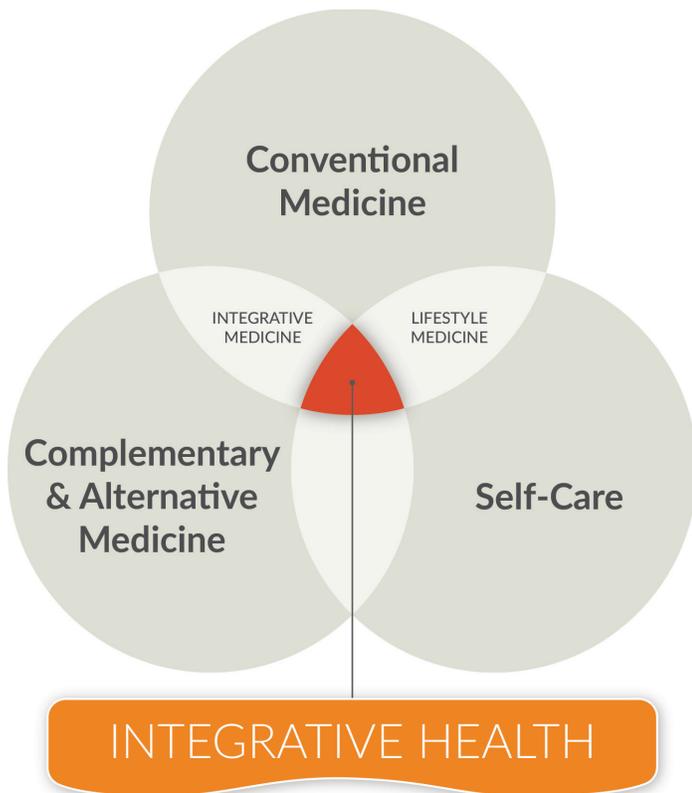
A 2017 study published in the *Journal of the American Medical Association* looking at 15 randomized control trials involving more than 1,700 pain patients found that those who underwent spinal manipulation experienced clinically significant improvement in pain by about 10 points on the 100-point scale, a treatment response similar to that seen with nonsteroidal anti-inflammatories.<sup>38</sup> Another review published in 2017 in the *Annals of Internal Medicine* found similar results.<sup>39</sup> Neither found any evidence of serious adverse events.

In February 2017, the American College of Physicians released new guidelines for the treatment of subacute back pain, recommending that patients try non-pharmacologic therapies, including massage, acupuncture, and/or spinal manipulation, as a first-line therapy.<sup>40</sup>

## Nutritional Counseling

Numerous studies find that improving diet can provide the same if not better benefits than medical therapy with less risk, fewer side effects, lower costs and shorter hospital stays.<sup>41-43</sup> Most major medical guidelines incorporate recommendations for nutritional interventions and changes as an integral part of managing chronic disease.

The U.S. Preventive Services Task Force found good evidence that medium- to high-intensity dietary counseling for patients with hyperlipidemia and other risk factors for cardiovascular disease can produce medium to large changes in the intake of the core components of a healthy diet, particularly if delivered by nutritionists, dietitians and specially trained primary health care professionals.<sup>44</sup> Similar studies have shown benefits for obesity, diabetes and hypertension. Recently, the National Health Service in Britain has launched a countrywide diabetes prevention program based on intensive lifestyle interventions.<sup>45</sup>



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