

## Modern Research and Acupuncture

“There is sufficient evidence of acupuncture’s value to expand its use into conventional medicine.”  
-National Institute of Health, 1997 Consensus of Acupuncture

**Acupuncture** has been employed as a health care modality for over 3000 years. Practitioners of this ancient medical practice have experienced clinical success with a variety of health conditions. Today, acupuncture is receiving wide acceptance as a respected, valid, and effective form of clinical care.

When most people think about acupuncture, they are familiar with its use for pain control. But, acupuncture has a proven track record of treating and addressing a variety of endocrine, circulatory, and systemic conditions. Acupuncture and modern medicine combined together have the potential to support, strengthen, and nurture a patient back to vital health and well-being.

**What** is known about the physiological effects of acupuncture? Over the last a few decades research has been carried out seeking to explain how acupuncture works, and what it can and cannot treat.

The 1997 National Institute of Health (NIH) Consensus of Acupuncture reports that “studies have demonstrated that acupuncture can cause multiple biological responses, mediated mainly by sensory neurons to many structures within the central nervous system. This can lead to activation of pathways affecting various physiological systems in the brain as well as in the periphery.”<sup>1</sup>

The NIH Consensus also suggests that acupuncture “may activate the hypothalamus and the pituitary gland, resulting in a broad spectrum of systemic effects. Alteration in secretion of neurotransmitters and neurohormones and changes in the regulation of blood flow, both centrally and peripherally have been documented. There is also evidence of alterations in immune functions produced by acupuncture.”<sup>2</sup>

**Below** are current theories on the mechanism of acupuncture:

- 1. Neurotransmitter Theory** – Acupuncture affects higher brain areas, stimulating the secretion of beta-endorphins and enkephalins in the brain and spinal cord. The release of neurotransmitters influences the immune system and the antinociceptive system.<sup>3,4,5</sup>
- 2. Autonomic Nervous System Theory** – Acupuncture stimulates the release of norepinephrine, acetylcholine, and several types of opioids, affecting changes in their turn-over rate, normalizing the autonomic nervous system and reducing pain.<sup>6,7</sup>

3. **Gate Control Theory** – Acupuncture activates nonnociceptive receptors that inhibit the transmission of nociceptive signals in the dorsal horn, “gating out” painful stimuli. 8
4. **Vascular-interstitial Theory** – Acupuncture manipulates the electrical system of the body by creating or enhancing closed circuit transport in tissues. This facilitates healing by allowing the transfer of material and electrical energy between normal and injured tissues. 9
5. **Blood Chemistry Theory** – Acupuncture affects the blood concentrations of triglycerides, cholesterol, and phospholipids, suggesting that acupuncture can both raise and diminish peripheral blood components, thereby regulating the body toward homeostasis. 10

According to a study published in the Archives of Internal Medicine, 51% of medical doctors understand the efficacy of acupuncture, and more medical doctors refer patients to acupuncturists more than other alternative care provider. 11

The NIH Consensus on Acupuncture further states, that clinical experience, supported by research data, suggests “acupuncture may be a reasonable option for a number of clinical conditions.” 12

Evidence also points to positive clinical trials that “include addiction, stroke rehabilitation, carpal tunnel syndrome, osteoarthritis, and headache.” The Consensus also mentioned that acupuncture treatment may be helpful for other conditions such as asthma, postoperative pain, myofacial and low back pain. 13

**This** ancient health care system is proving itself as an effective modality for a wide variety of problems. So much so that the National Center for Complementary and Alternative Medicine (NCCAM) awarded 8 grants that directly relate to acupuncture, Chinese herbal medicine research, totaling more than \$9.5 million dollars.

“One of the advantages of acupuncture is that the incidence of adverse effects is substantially lower than that of many drugs or other accepted medical procedures used for the same conditions. As an example, musculoskeletal conditions, such as fibromyalgia, myofacial pain, and tennis elbow, or epicondylitis, are conditions for which acupuncture may be beneficial. These painful conditions are often treated with, among other things, anti-inflammatory medications (aspirin, ibuprofen, etc.) or with steroid injections. Both medical interventions have a potential for deleterious side effects but are still widely used and are considered acceptable treatments. The evidence supporting these therapies is no better than that for acupuncture.” 14

**Acupuncture** works as an effective alternative and adjunct treatment modality. It is a safe, effective, and natural approach to help regain and maintain health and well being.

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**Acupuncture & Fertility** – A study published in the journal *Fertility & Sterility*, found acupuncture improves pregnancy success rate by 50% in women undergoing in-vitro fertilization. Paulus W. et. al, influence of acupuncture on the pregnancy rate in patients who undergo assisted reproduction therapy. *J. Fertility and Sterility*, 2002 April;77(4):721-4

**Acupuncture & Insomnia** – In the treatment of insomnia, acupuncture yields significant results with a total effective rate of 90.44%, improves the quality of sleep and overcomes complications induced by sleep medication. Sok, SR, et. al., The effects of acupuncture therapy on insomnia. *J. Adv. Nurs.*, 2003Nov, 44(4): 375-84. *J. Traditional Chinese Medicine*, 2002 Dec. 22 (4): 276-77

**Acupuncture & Gastritis** – A study from the Guangxi College of Traditional Chinese Medicine concluded that acupuncture was effective in the treatment of chronic gastritis. Resulting in a 95% effective rate. *J Traditional Chinese Medicine*, 2003 Dec.;23(4):278-79.

**Acupuncture & Shoulder Pariarthritis** – Acupuncture is effective in the treatment of shoulder peri-arthritis, Of the 210 subjects studied, 158 were cured, 40 improved and 2 showed no significant improvement. *J Traditional Chinese Medicine*, 2003 Sept.;23(3):201-02.

**Acupuncture & Fibromyalgia** - A study conducted by the University of Washington and the Center for Health Studies at Group Health Hospital, suggests that more than half of all participants had clinically meaningful improvements in pain (46%), fatigue (51%), sleep (47%), and general well-being (45%). Another study suggests that acupuncture demonstrates positive change in the Visual Analogue Scale, myalgic index, number of tender points, and improvement in quality of life based on the SF-36 questionnaire. *Soc. for Acupuncture Research - Tenth Ann. Symposium 2003*;29. Targino, RA., et. al., *Curr Pain Headache Rep.*, 2002 Oct.;(5):379-83.

**Acupuncture & Blood Pressure** - Patients treated with acupuncture had an overall decrease in the level of systolic pressure during and after treatment. *J Traditional Chinese Medicine*, 2003 Mar.;23(1):49-0.

**Electro-Acupuncture & Immune Function During Chemotherapy** - Electro-acupuncture can strengthen immune function, hematopoietic function and improve appetite, sleep, alleviate pain, and digestive distress. Another study suggests acupuncture is able to normalize the pattern of leukocytes. *J Traditional Chinese Medicine*, 2002 Mar.;22 1):21-3. Mori, H., et. al.. Unique modulation by electro-acupuncture in humans possibly via stimulation of the autonomic nervous system. *Neurosci Lett.*, 2002 Mar.1;320(1-2);21-4.

**Acupuncture & Chronic Migraine** - Patients who received acupuncture to treat chronic headaches, particularly migraines, experienced the equivalent of 22 fewer days of headaches per year, used 15% less medication and missed 15% fewer days of work. Another study systematically reviewed 22 randomized controlled trials, concluding acupuncture "has a role in the treatment of recurrent headaches," and can lead to other various clinical benefits for patients with chronic headache. Vickers AJ, et al. *BMJ*, 2004 Mar. 27;328(7442). Cephalgia, Nov.; 1999.

**Acupuncture & Depression** - All subjects receiving acupuncture for major depression significantly improved to a greater extent than those not receiving treatment. Another study suggests that electro-acupuncture can produce the same therapeutic results as some drugs, but with less side effects and better symptomatic improvement. Acupuncture Treatment for Major Depression, The Tenth Annual Symposium of the Soc. for Acupuncture Research, 2003. *J Traditional Chinese Medicine*, 2004 Sep.;24(3):172-6.

**Acupuncture & Allergies** - Acupuncture had an extensive action against type I allergic reaction, and the curative effect of the patients receiving acupuncture was higher than in the desensitization group in allergic asthma, allergic rhinitis and chronic urticaria. *J. Traditional Chinese Medicine*, 1999 Dec.;13(4):243-8.

**Acupuncture & Morning Sickness** - Acupuncture administered to pregnant women before opioid pre-medication significantly reduced postoperative sickness up to 6-8 hours, and acupressure applied to specific acupoints reduced morning sickness. In the 2002 issue of the *Journal of Birth*, a study found that acupuncture is an effective treatment option for women experiencing nausea and other pregnancy related discomfort without adverse side effects. *Acu. and Electro-Therapeutics Research*, 1990;15(3-4):211-5.

**Acupuncture & Asthma** - Symptoms of bronchial asthma were markedly improved after acupuncture treatments, and the dosage of patients' medication was gradually reduced. Another study suggests improvement of the quality of life for patients with clinically stable, chronic obstructive asthma when conventional care is combined with acupuncture. *J Traditional Chinese Medicine*, 1998 Mar.;18 (1)27-0. *J Altern. Comp. Med.* 2003.

***Acupuncture is recognized by the National Institute of Health (NIH) and the World Health Organization (WHO) to be effective in the treatment of:***

- **Addiction - alcohol, drug, smoking**
- **Anxiety**
- **Arthritis**
- **Asthma**
- **Bronchitis**
- **Carpal Tunnel Syndrome**
- **Chronic fatigue**
- **Colitis**
- **Common cold**
- **Constipation = Dental pain**
- **Depression**

- Diarrhea
- Digestive trouble
- Dizziness
- Dysentery
- Emotional problems
- Eye problems
- Facial palsy/tics
- Fatigue
- Fertility
- Gingivitis
- Headache
- Hiccough
- Incontinence
- Indigestion
- Irritable Bowel Syndrome
- Low back pain
- ' Menopause
- <sup>1</sup> Menstrual irregularities
- Migraine
- Morning sickness
- Nausea
- Osteoarthritis <sup>1</sup> Pain
- PMS
- Pneumonia
- <sup>1</sup> Reproductive problems
- <sup>1</sup> Rhinitis
- Sciatica
  - Seasonal Affective Disorder (SAD)
- Shoulder pain
- Sinusitis
- Sleep Disturbances
- Smoking Cessation
- Sore throat
- Stress
- Tennis Elbow
- Tonsillitis
- Tooth pain
- ' Trigeminal Neuralgia
- Vomiting
- Wrist pain

1,2,12,13,14 National Institute of Health (NIH) - National Institutes of Health Consensus Conference on Acupuncture, Program & Abstracts (Bethesda, MD, November 3-5,1997). Office of Alternative Medicine and Office of Medical Applications of Research. Bethesda.

3 Neuro-acupuncture, Scientific evidence of acupuncture revealed, 2001 Cho, ZH., et al., page 128.

4 Acupuncture - A scientific appraisal, Ernst, E., White, A., 1999, page 74.

5 Acupuncture Energetics - A clinical approach for Physicians, Helms, Dr. J., 1997, page 41-42.

6 Anatomy of Neuro-Anatomical Acupuncture, Volume 1, Wong, Dr. J., page 34.

7 Han, J.S. "Acupuncture Activates Endogenous Systems of Analgesia." National Institutes of Health Consensus Conference on Acupuncture, Program & Abstracts (Bethesda, MD, November 3-5,1997). Office of Alternative Medicine and Office of Medical Applications of Research. Bethesda.

8 Neuro-acupuncture, Scientific evidence of acupuncture revealed, Cho, ZH., et al., page 116.

9 Acupuncture Energetics - A clinical approach for Physicians, Helms, Dr. J., 1997, page 66.

10 Acupuncture Energetics - A clinical approach for Physicians, Helms, Dr. J., 1997, page 41.

11 Astin, JA., et. al., A review of the incorporation of complementary and alternative medicine by ' mainstream physicians. Arch Intern Med., 1998;(158):2303-10.