



## Studies Explore Massage as Medicine

By [ANDREA PETERSEN](#)

While massage may have developed a reputation as a decadent treat for people who love pampering, new studies are showing it has a wide variety of tangible health benefits.

Research over the past couple of years has found that massage therapy boosts immune function in women with breast cancer, improves symptoms in children with asthma, and increases grip strength in patients with carpal tunnel syndrome. Giving massages to the littlest patients, premature babies, helped in the crucial task of gaining weight.

Is massage just for pampering or does it have true biological effects? A recent study showed muscles rebounded better if massaged after exercising to exhaustion.

The benefits go beyond feelings of relaxation and wellness that people may recognize after a massage. The American College of Physicians and the American Pain Society now include massage as one of their recommendations for treating low back pain, according to guidelines published in 2007.

New research is also starting to reveal just what happens in the body after a massage. While there have long been theories about how massage works—from releasing toxins to improving circulation—those have been fairly nebulous, with little hard evidence. Now, one study, for example, found that a single, 45-minute massage led to a small reduction in the level of cortisol, a stress hormone, in the blood, a decrease in cytokine proteins related to inflammation and allergic reactions, and a boost in white blood cells that fight infection.

"There is emerging evidence that [massage] can make contributions in treating things like pain, where conventional medicine doesn't have all the answers," said Jack Killen, NCCAM's deputy director.



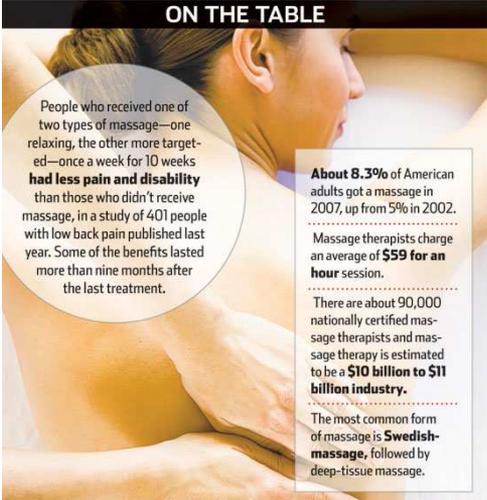
Most of the research is being done on Swedish massage, the most widely-available type of massage in the U.S. It is a full-body massage, often using oil or lotion, that includes a variety of strokes, including "effleurage" (gliding movements over the skin), "petrissage" (kneading pressure) and "tapotement" (rhythmic tapping).

### Research Findings

- A full-body massage boosted immune function and lowered heart rate and blood pressure in women with breast cancer undergoing radiation treatment, a 2009 study of 30 participants found.
- Children given 20-minute massages by their parents every night for five weeks plus standard asthma treatment had significantly improved lung function compared with those in standard care, a 2011 study of 60 children found.
- A 10-minute massage upped mitochondria production, and reduced proteins associated with inflammation in muscles that had been exercised to exhaustion, a small study last month found.

Another common type of massage, so-called deep tissue, tends to be more targeted to problem muscles and includes techniques such as acupressure, trigger-point work (which focuses on little knots of muscle) and "deep transverse friction" where the therapist moves back and forth over muscle fibres to break up scar tissue.

Massage is already widely used to treat osteoarthritis, for which other treatments have concerning side effects. A study published in the Archives of Internal Medicine in 2006 showed that full-body Swedish massage greatly improved symptoms of osteoarthritis of the knee. Patients who had massages twice weekly for four weeks and once a week for an additional four weeks had less pain and stiffness and better range of motion than those who didn't get massages. They were also able to walk a 50-foot path more quickly.



**ON THE TABLE**

People who received one of two types of massage—one relaxing, the other more targeted—once a week for 10 weeks **had less pain and disability** than those who didn't receive massage, in a study of 401 people with low back pain published last year. Some of the benefits lasted more than nine months after the last treatment.

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**About 8.3%** of American adults got a massage in 2007, up from 5% in 2002.  
 .....  
 Massage therapists charge an average of **\$59 for an hour** session.  
 .....  
 There are about 90,000 nationally certified massage therapists and massage therapy is estimated to be a **\$10 billion to \$11 billion industry**.  
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 The most common form of massage is **Swedish-massage**, followed by deep-tissue massage.



A 2010 study with 53 participants comparing the effects of one 45-minute Swedish massage to light touch, found that people who got a massage had a large decrease in arginine-vasopressin, a hormone that normally increases with stress and aggressive behaviour, and slightly lower levels of cortisol, a stress hormone, in their blood after the session. There was also a decrease in cytokine proteins related to inflammation and allergic reactions.

Mark Hyman Rapaport, the lead author of the study and the chairman of psychiatry and behavioral science at the Emory University School of Medicine in Atlanta, says he began studying massage because, "My wife liked massages and I wasn't quite sure why. I thought of it as an extravagance, a luxury for only people who are very rich and who pamper themselves." Now, Dr. Rapaport says he gets a massage at least once a month. His group is now studying massage as a treatment for generalized anxiety disorder.

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*This is an extract of an article appearing in on Mar. 13, 2012, on page D1 in some U.S. editions of **The Wall Street Journal**, with the headline: Don't Call It Pampering: Massage Wants to Be Medicine.*