Everyone needs a hug, and now science can explain why. Sharon Gray looks at how even the lightest touch keeps you healthy and happy.

The biology of touch

When the Beatles sang, “I want to hold your hand,” little did they know that they were really appealing for a medical boost. Forty or so years later, science has shown that physical contact benefits people by improving their health as well as their relationships.

Our sense of touch works via sensory receptors in the skin and deeper tissues. They are located in varying density over the body, but most densely in our fingertips. These receptors transmit signals to the spinal cord and brain stem.

“Touch is as important as breathing,” explains Dr. Tiffany Field, director of the Touch Research Institute at the University of Miami School of Medicine, the world’s first center devoted solely to the study of touch and its application in science and medicine. “Without it, children do not grow and develop.”

In her book, A Natural History of The Senses, author Diane Ackerman describes touch as being, “as essential as sunlight…” In the absence of touching and being touched, people of all ages can sicken and grow touch-starved.” Dr. Field agrees.

“Sensory deprivation makes people depressed and immune-compromised,” she says, “and gives them emotional pain and physical damage.”

Why? The fingertips are pointing at a hormone called oxytocin, which is affected by the way we respond to touch. It interacts with dopamine, a brain chemical that makes us feel good. Oxytocin is one of those happy hormones that helps lower blood pressure and stress levels, and can affect everything from how wounds heal to how much we trust other people.

A team from the University of North Carolina studied the effects of hugging on both partners in 38 couples. Their results showed increased levels of oxytocin and reduced cortisol, the stress hormone. Interestingly, the women recorded greater changes after the hugs, suggesting their health benefit may be more than just a tactile demonstration of love.

The benefits of massage

Research from the Touch Research Institute at the University of Miami School of Medicine suggests that touch therapy may be able to:
- decrease diastolic blood pressure, anxiety, and cortisol (stress hormone) levels in adults with hypertension.
- decrease the occurrence of headaches, sleep disturbances and distress symptoms and increase serotonin levels in adults who suffer with irritable bowel syndrome.
- reduce anxiety and depression and increase the number of natural “killer cells,” which attack tumors, in women with breast cancer.
- reduce anxiety and stress hormone levels in adults with chronic fatigue syndrome and depressed mood.
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Although as babies we are constantly touched and cuddled, as we age there tends to be less and less physical contact with other people.”

Rub it better

If you see massage as touch therapy, it’s not difficult to understand why Dr. Field’s work at the Touch Research Institute
discovers such positive benefits. One study looked at adults with Parkinson’s disease who received either massage therapy or progressive muscle relaxation twice a week for five weeks. Members of the massage group received higher physician scores on daily-living activities such as bathing, and rated themselves as having improved daily functioning and less disturbed sleep.

Over at the University of Iowa, another study is looking at whether healing touch might be able to boost the immune system of women with advanced cervical cancer and improve the body’s natural defences against the disease.

**Banishing bone-ache**

In a recent study published in the *Archives of Internal Medicine*, it was suggested that massage therapy might also be a good prescription for people with osteoarthritis. As many as 21 million people in the United States suffer joint pain, stiffness and physical disability from osteoarthritis, and it’s the most commonly reported chronic condition in elderly people. Typically sufferers are prescribed nonsteroidal anti-inflammatory drugs to relieve symptoms, but these can cause unpleasant and even dangerous side effects. Massage therapy relaxes the muscles that support the joint, increases circulation and promotes lymphatic drainage. The study of people with osteoarthritis of the knee found that one-hour, full-body massages over an eight-week period helped significantly with pain, stiffness and physical function.

Although massage has been proven in numerous studies to have significant health benefits, it can have others, too. Dr. Shelby Taylor, adjunct professor in psychology at California State University, Fullerton, believes that touch can be an important part of charisma. According to research, waitresses who subtly touch a customer as they return change tend to get a bigger tip, while initiating a handshake at a job interview or sales pitch makes you appear more appealing.

But you don’t need to be a massage therapist to influence someone’s well-being. Make someone’s day by doing something as natural as holding hands as you talk, lightly touching a shoulder, and giving – or receiving – a hug.

**Sunrise Story**

“What I do is about nurturing.”

Joyce Gass, 51, has been a massage therapist since 1986 and runs a successful private practice, Four Hands Healing Sanctuary, in Santa Monica, California. Among her clients are residents of Sunrise of Beverly Hills, where she also teaches t’ai chi.

“I had been treating one of my clients, Katherine, who’s now 80, for around 18 months before she moved into Sunrise. She had developed Alzheimer’s and had become less mobile, but her daughter-in-law wanted me to continue seeing her. Katherine can’t lie on my massage table anymore, so she lies on her bed, and I work on her legs, feet, arms, hands and face, or I massage her back and shoulders when she’s in her wheelchair. She’s always happy to see me. During the session, I can jog her into talking about her early life, which is a nice place to go for her. “Other residents at Sunrise wanted me to work on them, and they love it! They often really need their shoulders and backs worked on. I can also help blood and lymph circulation in the legs, which can be a big problem. Moving to a new living situation, new people, poor health; this can be a stressful time for seniors, and they hold on to a lot in their bodies.

“What I do isn’t deep, or intense – it’s about nurturing. So many of my clients simply aren’t being touched, and when they are, they move into a more feeling state. My clients open up to me and talk about their pains and joys, because they feel safe and protected.”

Sunrise Story