

## Rolfing® May Have an Abrasive Reputation, *but this 50-year-old form of bodywork can help you move with ease and grace. Georgia Jacobs takes a step.*



This year, '70s and '80s retro crept from the catwalks to the fitness arena as celebrities like Madonna and Geri Halliwell attributed their svelte physiques to yoga, Pilates and ballet. Another throwback from the macramé era, Rolfing – a unique soft tissue manipulation technique developed by Columbia Professor Ida P. Rolf – is now gaining ground in Japan. Rumored to be a painful form of deep

tissue massage, this kissing cousin of chiropractic work with surrounds a quirky name realigns the myofascial (soft tissue) webbing that surround bones, joints and muscles that become out of whack due to aging, gravity, emotional stress, injuries, and poor posture. Imbalanced connective tissue can not only zap your energy but may cause chronic pain, headaches, slouching, decreased athletic performance, superficial breathing, and even the blues. So if you're looking to put the spring back in your step and pep in your spirit, one of Tokyo's Rolfers can lend a hand.



### Rolf and Roll

Rolfing takes its name from Ida, whose pioneering work spanned 50 years until her death in 1979. A native New Yorker, Rolf graduated from Barnard College in 1916, moving on to Columbia University where she earned a Ph.D. in biochemistry. She became interested in alternative medicine in Geneva, where she studied homeopathy in the late '20s and began to develop what she eventually dubbed structural integration. Rolf's many success stories earned her media acclaim, and in 1967, the first guild was formed in Colorado. Today,

the Rolf Institute of Structural Integration in Boulder serves as the official headquarters, where new practitioners are trained and a certified. Although once perceived as experimental, as early as the mid-'90s, the Wall Street Journal and Newsweek reported that the technique was covered by some US insurance plans—although not in Japan—and it's currently embraced by physicians, physical therapists and fitness trainers across the globe.

Because the technique involves kneading, it's often confused with other forms of muscle therapy. But Florida chiropractor and fitness trainer Ginger Southall, D.C., says there's a difference. "Rolfing, or structural integration, is often lumped under the category of 'massage,' but is actually a unique entity unto itself. It involves a distinctive technique that stretches tight and thickened fascia: the thin sheath of connective tissue that links the muscular system throughout the body. Often problems with this fascial network manifest as chronic soft tissue injuries, buildup of scar tissue from surgery, injury or intense training and even muscular tightness and inflexibility as commonly seen in the hamstrings," she explains.

The treatment generally involves 10 sessions that reorganize the fascia from head to toe, inside to outside, lending the skeletal and muscular structures more support and allowing sticky fascial

sheaths to slide back and forth with ease. The end result is improved posture, flexibility and breathing, as well as the correction of prohibitive patterns of movement.

“Rolfing can accomplish in ten sessions what it takes five years to accomplish with yoga,” says Tokyo-based Nobuko Fukada, owner of Life Harmony and certified Rolfer since 2000. Although Rolfing has been endorsed by famous athletes, pianists, guitarists, and other such people who have used it to cure injuries and achieve higher performance, everyone can benefit from it, according to Fukada. The institute in Colorado recommends a 10-session cycle, usually over 10 weeks. However, Fukada says specific problems can perhaps be addressed in two to three sessions. “Since each person is unique, there is really no magic number of sessions,” she says. Dedicated to working women, Fukada has even created a special treatment (one to two sessions) tailored to stiff arms and shoulders. In general, she says ten sessions is enough to make significant changes in the body; however, it is not uncommon for a client to return six to twelve months after a cycle for follow-up work or when they feel stiffness settling back in somewhere.

Rolfing has a psychological element as well. Rolfer Yoshitaka Koda, who has been practicing in Japan 10 years, compares patterns of movement to memories stored in the structure of the body. “You hold your body in a certain way because of a past experience. Any posture has an emotional content. Otherwise the body is just a machine,” says Koda. For example, slumped shoulders can be a coping mechanism to counteract childhood fears. People who have been Rolfed often report that the treatment has a significant effect on their outlook and self-awareness. But, according to Koda, the feeling of release doesn’t mean the problem is fixed, particularly if the client continues with old ways.



Before and After Rolfing®  
*Photo courtesy of the Rolf Institute*

## Shape Up

Rumors of Rolfers roughing up their patients abound, but speaking to those who have had the therapy dispels myths of severe pain. “It could be very intense. A friend once called it black

and blue massage. But it wasn't to a point where I wanted to stop. It was strange because there would be certain places like the forearm, where you wouldn't think there was muscle, but it was obvious I was holding something there," says New Yorker Charles Walters, a 55-year-old personal finance consultant.

Pianist Leon Fleisher, who lost the use of his right hand due to a repetitive stress injury, regained the ability to play concertos with all ten fingers after undergoing Rolwing®. He told The New York Times his muscles felt like "petrified rock" before the therapy but stresses to some extent the cure lies in the discomfort. "It requires active participation on the part of the patient because when you feel soreness, your tendency is to contract and protect it. But you have to give in to the pain and relax under it." Both Fukada and Koda insist Rolwing should never entail significant pain. "A sensitive and skillful practitioner can change long-standing physiological patterns without causing great discomfort to the client," Fukada says.

A course begins with an analysis of posture, and many Rolwers take before and after photos of a patient's front, back and sides, pointing out any existing imbalances. The therapist then begins to systematically smooth and loosen tight tissue. Although each of the 10 sessions is designed to meet specific goals, the experience can vary depending on an individual's needs.

While Rolwing has not been widely available in Japan, all that is about to change. Lead Instructor Cornelia Rossi from Brazil, and assistant instructor Valerie Berg from the US, have been conducting a seminar here in Tokyo in which 12 of the first Japan-trained Rolwers will be officially certified by the institute and will join the 11 here and 1,200 worldwide.

The cost ranges from ¥12,000-¥15,000 per session, each of which lasts one and a half to two hours, a small investment for the plethora of benefits structural integration can provide. Fukada likes to quote the doctor herself. "Dr Rolf said Rolwing is unnecessary only if you are Fred Astaire. It can help anyone who wants to find and experience an increased sense of balance in his or her body," she says. Article From Metropolis On-line Health & Beauty Section 02/19/02.

## Physiological Psychology

The area of experimental known as physiological psychology has evolved in the 1990s. Increasingly, the field is being referred to as behavioral neuroscience, replacing physiological psychology and biological psychology. Nonetheless, the goals of psychologists in this field remain the same: to utilize basic research to explain behavior in physiological terms, working on the assumption that for every behavioral event there is a corresponding physical event or series of events.

The physiological psychologist (or behavioral neuroscientist) is also concerned with the functioning of the adrenal glands and with the physical processes involved in sensation. Although physiological psychology is concerned with physical organisms, it is distinguished from such life sciences as physiology and biology by its focus on behavior. Researchers may investigate questions such as how the brain controls physical movements or regulates eating; the role of sex hormones in violent behavior; the effects of drugs on memory and personality; the physiological basis for sleep and dreaming; and the areas of the brain devoted to language

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functions. Physiological psychology overlaps with the field of neurobiology, which is the study of the nervous system and its functions. A related field is psychopharmacology, the study of drugs and behavior.

Another sub field of physiological psychology, psychophysiology, deals with the measurement of physiological responses as they relate to behavior. Practical applications include lie detector tests; clinical tests of vision and hearing; tests of brain activity in individuals with mental retardation and neurological and behavioral disorders; and biofeedback training. Gale Encyclopedia of Psychology, 2nd ed. Gale Group, 2001.

## Child Psychology

Child psychologists study human development from the earliest stages of life through adolescence and adulthood. These scientists focus on many areas of growth. In the early years of life they include motor skills, perceptual analysis and inference, language and speech, social behavior, and the emergence of basic emotions of fear, sadness, anxiety, shame, and guilt.

The two important strategies for studying development include the longitudinal study in which a particular group of children is studied over a long period of time, sometimes from infancy through adulthood. The second method, which is more popular because it is less expensive, is called the cross-sectional method. In this strategy a group of children or adolescents at a particular age are studied at that age. In order to compare different ages, different samples would be studied but no group would be studied over time.

The major question that developmental psychologists wish to understand is how the maturational forces that are inevitable interact with experience to produce the behaviors, skills, and motives that we observe. For example, all children will develop an ability to speak and understand language before they are three years of age. However, in some cultural settings, children display this skill soon after the first birthday, while in others it might be delayed until the second or third birthday.

A related problem that puzzles child psychologists has to do with the temperamental factors children inherit that make a contribution to their individual personalities. Here, too, the puzzle is to understand how these inherited temperamental biases and experience in the family and with other children contribute to the traits the child develops.

Prior to Sigmund Freud's writings which became popular after the turn of the century, most Western explanations of the differences among children were attributed to temperament or constitution. Freud changed this by arguing that family experience was the more important determinant of differences in children's moods, emotions, and symptoms. Freud believed that those experiences in the family made the child vulnerable to conflicts over hostility and sexuality. The intensity of the conflict and the defenses the child learned to deal with those conflicts were the main determinant of the child's personality. These views were very popular in the United States for the period from 1930 to 1960. However, because of the lack of strong scientific support for these theories, loyalty to these ideas has eroded in a major way.

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Erik Erikson substituted for Freud's famous stages on oral, anal, phallic, and genital a more humane set of stages which emphasized the development of attachment relations in the first year of life and more generative and creative aspects of human nature, rather than the more narcissistic and destructive.

Jean Piaget's contribution was to motivate child psychologists to pay more attention to the child's intellectual and cognitive development. However, it is fair to say that at the present time there is no overarching theory of child development. Child psychologists are working on a series of problems that cover all of the important areas of growth. It is hoped that as these facts are gathered, brilliant theorists sometime in the future will be able to synthesize this information into a coherent theory that clarifies the child's growth. Author/s: Jerome Kagan

## Bio Feed Back

A technique that allows individuals to monitor their own physiological processes so they can learn to control them.

Biofeedback originated with the field of psychophysiology, which measures physiological responses as a way of studying human behavior. Types of behavior that may be studied in this way range from basic emotional responses to higher cognitive functions. Today, biofeedback is also associated with behavioral medicine, which combines behavioral and biomedical science in both clinical and research settings. In biofeedback training, the monitoring of physiological responses is performed for therapeutic instead of (or in addition to) investigative purposes. Biofeedback has been applied with success to a variety of clinical problems, ranging from migraine headaches to hypertension.

The technique provides people with continuous information about physiological processes of which they are normally unaware, such as blood pressure or heart rate. Through special equipment, these processes are recorded, and the information is relayed back to the person through a changing tone or meter reading. With practice, people learn strategies that enable them to achieve voluntary control over the processes involved. For example, persons trying to control their blood pressure levels may see a light flash whenever the pressure drops below a certain level. They may then try to remember and analyze what their thoughts or emotions were at that moment and deliberately repeat them to keep the pressure level low. Initially, they may simply be asked to try and keep the light flashing for as long as possible and given verbal reinforcement for their efforts.

The biofeedback training may continue for several days or weeks, with the subjects trying to keep the light flashing for longer periods in subsequent sessions. Eventually they will need to produce the desired response without electronic feedback, a goal which can be accomplished through various methods. They may practice the learned response at the end of the training session or at home between sessions. There can also be random trials without feedback during the sessions. An alternate strategy is the gradual and systematic removal of the feedback signal during the training sessions over a period of time. After the initial training is completed, subjects may return to the biofeedback facility to assess their retention of the skills they have learned or for additional training.

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Biofeedback training has been used in treating a number of different clinical problems. Monitoring of patients' heart rates has been used with some success to help people suffering from heartbeat irregularities, including premature ventricular contractions (PVCs) and tachycardia, while hypertensive individuals have been able to control high blood pressure through the use of biofeedback. Clinicians have been particularly successful in their use of neuromuscular feedback to treat complaints arising from tension in specific muscles or muscle groups. Tension headaches have been alleviated through the reduction of frontalis (forehead) tension, and relaxation of the face and neck muscles has been helpful to stutterers. Feedback from muscle groups has been helpful in the rehabilitation of stroke patients and other persons with neuromuscular disorders such as foot drop. These patients may be unable to relax or contract muscles at will, and biofeedback can make them aware of small, otherwise imperceptible changes in the desired direction and allow them to repeat and eventually increase such changes.

In addition to its alleviation of physical complaints, neuromuscular biofeedback has been an effective tool in the treatment of chronic anxiety, even when it has resisted psychotherapy and medication. By learning deep muscle relaxation, anxious patients, including those suffering from related conditions such as insomnia, have seen a reduction in their symptoms. Even for patients who have been able to achieve relaxation through other means, such as meditation or progressive relaxation, biofeedback can be a valuable supplementary technique that offers special advantages, such as allowing a therapist to track closely the points at which a patient tenses up and try to learn what thoughts are associated with the tension. Biofeedback-induced relaxation of forehead muscles has also been effective in treating asthma.

Another type of biofeedback involves the monitoring of brain activity through electroencephalographs (EEGs). A reduction of seizures in epileptics has been reported through biofeedback techniques involving EEG activity near the sensor motor cortex, known as sensory motor rhythm. Brain wave activity has also been of interest in connection with alpha waves, which are thought to characterize a desirable state of relaxed alertness. Patients have been taught to increase their alpha rhythms in three or four 30-minute conditioning sessions.

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