

## **Guided Imagery**

"The imagination is probably a person's least utilized health resource," says Dr. Martin Rossman, co-founder of the Academy for Guided Imagery. "It can be used to remember and recreate the past, develop insight into the present, influence physical health, enhance creativity and inspiration, and anticipate possible futures."

All of us have experienced the effects of the imagination on the body. Getting goose bumps while listening to a frightening story, breaking out in chills at the thought of fingernails scratching a chalkboard, or becoming physically aroused from a sexual fantasy, are all examples of the body reacting to a sole stimulus - the imagination.

### ***What is Imagery?***

Imagery is simply a flow of thoughts that one can see, hear, feel, smell, or taste in one's imagination. As an inner representation of experience, as well as fantasy, imagery is rich, symbolic, and highly personal language.

Perhaps the most common human experience of imagery is worrying. Most people worry sometimes and some people worry constantly .

"If you are a good worrier," says Dr. Rossman, "and especially if you ever worry yourself sick, you may be an especially good candidate for learning how to positively affect your health with imagery, as the internal process involved in worrying yourself sick and imagining yourself well are quite similar."

Dr. Bresler, Ph.D., L.AC., former director of UCLA Pain Center, defines imagery as one of the two "higher order" languages of the human nervous system--the other being the faculty of thinking in words. Imagery is a way the nervous system stores, accesses, and processes information. It's especially effective for maintaining the dialogue between mind and body, which is the source of its power in the healing process.

### ***The Healing Power of Imagery***

Imagery has three main characteristics that lend it great value in medicine and healing:

1. It directly affects physiology.
2. Through the mental processes of association and intuition, it provides insight and perspective into health.

3. It has an intimate relationship with emotions, which are often at the root of many common health conditions.

### ***Physiological Effects of Imagery***

Relax for a moment and just imagine holding a juicy, yellow lemon. Feel its coolness, its texture, its weight in your hand. Now imagine cutting it in half. Notice the cut surfaces and the pale yellow pulp... the whiteness of the inner peel, perhaps a seed or two. Take one of the two halves and imagine lifting this lemon wedge to your mouth. Smell its lemony scent. Now imagine biting into the lemon and sucking its sour juice into your mouth.

What happened as you imagined doing that? Did you salivate or grimace? Did you have any other kind of physical reaction? Most people do--much more than if you simply asked them to salivate. This is a simple illustration of the type of physiological response that imagery can induce. If thinking of a lemon makes you salivate, what other more important effects on the physiology might certain types of imagery have? For instance, can thinking of pain relief cause endorphins to be secreted?

Research using biofeedback, hypnosis, and meditative states has demonstrated that people possess a remarkable range of self-regulatory capacities. Focused imagery in a relaxed state of mind is a common and central factor in most of these techniques.

Imagery of various types has been shown to affect heart rate, blood pressure, respiratory patterns, oxygen consumption, carbon dioxide elimination, brain wave rhythms, electrical characteristics of the skin, local blood flow and temperature of tissues, gastrointestinal motility and secretions, sexual arousal, levels of hormones and neurotransmitters in the blood, and immune system function. The healing potentials of imagery go far beyond its remarkable ability to directly affect physiology, however.

### ***Associations and Getting the Big Picture***

"Recovering from or coping with a serious or chronic illness may well demand more than simply imagining getting well," says Dr. Rossman. "It may also require changes in your lifestyle, your attitudes, your relationships, or your emotional state."

Imagery can help to develop the insight and self-awareness that it takes to deal with a chronic or life-threatening illness in more positive and constructive ways. This is due to the mental processes of association and synthesis that are central

to imagery.

Imagery tends to give us the "big picture" of a situation and can help us recognize how things are related in ways we might now expect. Becoming aware of these relationships may facilitate a shift in attitude or behavior that can be helpful in relieving, altering, or coping with illness or symptoms.

For example, Dr. Rossman tells of a woman whose chronic arm pain had not responded to medical treatment for two years. She kept seeing an image of her pain as pieces of iron. This made little sense to her until she was asked to describe the qualities of the iron. She described it as hard, cold, and rigid, and then immediately associated these qualities with her grandfather, whom she had been caring for during the past two years, as he displayed these same qualities. This association allowed her to deal with repressed feelings about her role as a caregiver and led to rapid resolution of her arm pain as well as a great deal of personal growth.

### ***Imagery and the Brain***

Imagery seems to arise from unconscious processes, body processes, and memories and perceptions from the part of the brain known as the cerebral cortex. Some imagery, however, having to do with smell or feelings, may arise from older, more primitive brain centers. Wherever its origin, imagery is believed to have its effect by sending messages from the higher centers of the brain through to the lower centers that regulate most of a person's physiologic functions, such as breathing, heart rate, blood flow and pressure, digestion, immunity, and temperature, as well as waking and sleeping rhythms, hunger, thirst and sexual function.

Recent research utilizing PET scans (a test involving radioactive material that is used to examine brain tissue) indicates what parts of the brain are active when a person is performing certain tasks. The PET scans seem to show that the optic cortex, the same part of the brain activated when a person is seeing, is activated when a person visualizes. Similarly, when people imagine hearing things, the auditory cortex is active, and when they imagine feeling sensations, the sensory cortex is active. Therefore, it appears that the cortex can create these imaginary realities and in the absence of conflicting information, the lower centers of the nervous system respond to this information.

This is one reason why health care professionals use sensory recruitment, an approach that utilizes as many senses in the imagery process as possible.

Sensory recruitment increases the subjective reality of the image and probably increases the amount of information sent through the lower brain centers and autonomic nervous system, making it more likely to elicit the desired response.

### ***Emotional Connections***

Emotions are powerful events in the body. They are physiologically distinct from one another and each affects human physiology in different ways. In fact, many physical ailments are direct manifestations of emotions that are locked within the unconscious. Says Dr. Rossman. "Through imagery you can access those emotions and consciously alter their effect on your health."

Emotions themselves are a normal, healthy response to life. Failure to acknowledge and express important emotions, however, can be an important factor in illnesses, and is unfortunately all too common. People often suppress those emotions they find the most distressing, such as fear, grief and anger. The natural expression of emotion is often suppressed by family, friends, and society, as well.

"Yet strong emotion has a way of finding routes of expression," says Dr. Bresler, "and if it is not recognized and dealt with it can manifest itself indirectly in the form of physical pain and illness, or destructive behaviors like smoking, heavy drinking, and overworking, all of which in turn lead to serious health problems."

In fact, studies in England and the United States have found that 50 to 75 percent of all problems presented to a primary care clinic are emotional, social, or familial in origin, though they are being expressed by pain or illness.

By directly accessing emotions, imagery can help the individual understand the needs that may be represented by an illness and can help develop ways to meet those needs. Imagery is also one of the quickest and most direct ways of becoming aware of emotions and their effects on health, both positive and negative. For instance, one of Dr. Rossman's patients with inflammatory bowel disease reported that she imagined her bowels being "red, inflamed, and irritated." As this image was explored, she became aware of how her bowels responded to the irritation, frustration, and anger she frequently felt. By learning to recognize what triggered her frustration, and by developing more effective means to express herself when angry, she had progressively less trouble with her bowels. She also learned to use simple relaxation and imagery to imagine her own hands gently soothing her bowels with a cooling, calming balm whenever they became upset. A few minutes of doing this would relieve her abdominal pain and leave her feeling relaxed and at ease.

## ***Imagery and Medicine in Healing***

Imagery can be a key factor in dealing with either a simple tension headache or a life-threatening disease. It is a proven method for pain relief, for helping people tolerate medical procedures and treatments and reducing side effects, and for stimulating healing responses in the body. Imagery can assist in clarifying attitudes, emotions, behaviors, and lifestyle patterns that may be involved in producing illness. It can also facilitate recovery, and be used to help people find meaning in their illnesses, cope more effectively with their health problems and come to grips with life's limitations.

Learning to relax is fundamental to self-healing, and imagery is a part of almost all relaxation and stress-reduction techniques. For many people, imagery is the easiest way to learn to relax, and its active nature makes it more comfortable than other methods of relaxation.

## ***Treating People Rather than Symptoms***

Beyond simple relaxation, imagery can have specific effects in relieving numerous common symptoms. Dr. Bresler states that because imagery is a way of treating people rather than symptoms or diseases, it can be applied to almost any health care concern. The following areas of application are some examples of where imagery can be useful, but his list is by no means complete.

Imagery is often used for relief of chronic pain, neck and back pain, allergies (including hay fever and asthma) high blood pressure, benign arrhythmias (heartbeat irregularities), stress-related gastrointestinal symptoms (including chronic abdominal pain and spastic colon), functional urinary complaints, and reproductive irregularities including premenstrual syndrome, irregular menstruation, and even excessive uterine bleeding. It can also accelerate healing and minimize discomfort from all kinds of acute injuries, including sprains, strains, and broken bones, as well as from the symptoms of the common cold, influenza, and infections. Because imagery can affect immune system function, within limits, there is a great deal of interest among researchers of mind/body medicine for applying it to a broad spectrum of autoimmune diseases including rheumatoid arthritis, ulcerative colitis, and systemic lupus, and chronic inflammatory disease with symptoms including arthritis, fatigue and skin lesions.

Finally, a great number of people with cancer have utilized imagery as part of their recovery process. Imagery as a tool in cancer therapy was pioneered by radiation oncologist, O. Carl Simonton, M.D. He used imagery as a means of

reinforcing traditional medical treatments, suggesting that his patients imagine their cancer cells as "anything soft that can be broken down, like hamburger meat or fish eggs, and their warrior white cells as "aggressive and eager for battle."

Dr. Simonton first employed this technique in 1971 with a throat cancer patient whose condition has been diagnosed as "hopeless." The man was sixty-one years old. He was extremely weak, his weight had dropped to ninety-eight pounds, and he was having trouble breathing and swallowing. Although he was scheduled to receive radiation treatment, his doctors were concerned that treating him would further deteriorate his condition.

Dr. Simonton outlined a program of relaxation and imagery for the man, instruction him to devote five to fifteen minutes three times a day. The imagery exercise consisted of imagining the radiation treatment as "bullets of energy" striking his cells, healthy and cancerous alike, with the healthy cells remaining healthy and the cancer cells dying off. The man would then visualize his cancer shrinking in size and his health returning to normal. As a result of this program, the man was able to receive radiation treatment with minimum discomfort. Halfway through his treatment, he began eating again, and regaining weight and strength. Within two months, his cancer completely disappeared.

Even when cancer patients are not cured through imagery, they report benefits from its use, including relief from anxiety and pain, increased self-esteem, and an increased sense of control over their bodies. They also report an increased ability to tolerate chemotherapy or radiation therapy. In addition, by coming to grips with the illness, they are often able to resolve personal and family issues.

In addition to being used to explore diseases and symptoms, imagery can be helpful for enhancing tolerance to medical procedures such as MRI's, bone marrow biopsies, cancer chemotherapy, and radiation. Imagery can also help prepare people for surgery and post-surgical recovery.

In fact, imagery can be applied to almost any medical situation where problem solving, decision making, relaxation, or symptom relief is useful. Imagery can be considered as an adjunct treatment to health care no matter how minor the condition. According to Jeanne Achterberg, Ph.D., establishing healing patterns is far easier when the individual is relatively healthy than when faced with a serious disease. Once someone is diagnosed as being seriously ill, the person often lacks the emotional resources and belief system to employ imagery to its best advantage.

### ***Interactive Imagery***

Beyond these relatively direct applications, "receptive" uses of imagery can have profound effects on health and medical care. These typically involve imaginary dialogues with images representing symptoms or illnesses, or with an inner store of wisdom or healing that can provide insight into the meaning of body sensations and symptoms. This can lead to better understanding of how lifestyle choices and behavior are affecting health. The following stories demonstrate how imagery can be used to help identify thoughts and fears at the root of physical pain.

Alice was a forty-year-old woman who had recently undergone cancer surgery and radiation. However, she continued to have persistent pain in her upper back. Because Doctors could not identify the problem, she decided to try guided imagery with Dr. Rossman. First, he asked her to relax and imagine herself at some beautiful place. Next she was invited to have a dialogue with an imaginary "inner advisor." Alice asked for an image to appear and saw a wise old man tending a fire. He looked like Merlin the Magician. When Alice asked him about her pain, he told her that she needed to "ask for help." Alice immediately broke into tears, for throughout her ordeal she had never asked for help from her husband or family. She realized that she had been afraid to ask for help, thinking she would be too much of a burden on them. Her "inner advisor" then told her how much better her family members would feel if they were included in her healing process. Finally, she imagined asking her husband for help and having him agree to provide it. At the end of her session, her pain had substantially decreased and she found the courage to turn to her family for assistance.

Dr. Rossman states that the receptive use of imagery as an interface language between mind and body often yields the most profound healing response. In a similar case, Dr. Bresler worked with a fifty-two-year old cardiologist who suffered from excruciating pain in the lower back after receiving successful treatment for rectal cancer. Further surgery was ruled out because the area had been so heavily irradiated, and because the man had developed tolerance to his pain medications. Reviewing the man's medical records, the doctor read that in a psychiatric workup the man had described his pain as "a dog chewing on my spine". Dr. Bresler suggested guided imagery as a way to make contact with the dog, and invited the man to imagine what the dog looked like. The patient described a "nasty little terrier" named Skippy. During the following sessions, Skippy began revealing critically important information about the patient, including the fact that he had never wanted to be a doctor but had been pressured into medical school by his mother. As a consequence, the man resented not only his mother, but also his patients and colleagues. Skippy told him that this hostility had contributed to both his cancer and to his subsequent

back pain. Finally Skippy said, "you're a damn good doctor. It may not be the career you wanted, but it's time you recognized how good you are at what you do. When you stop being so resentful and start accepting yourself, I'll stop chewing your spine." Following these insights, the man experienced an immediate alleviation of his pain, and within a few more weeks it progressively subsided to the point where he felt like a new person.

### ***The Future of Imagery***

"One of the most appealing aspects of guided imagery," Dr. Bresler says, "is that it lends itself so readily to the process of patient education and self-care. It also provides a formal methodology for increasing personal empowerment and self-control. While research studies of its cost-effectiveness are still underway, it appears to offer significant and effective benefits after only a few weeks or months of treatment."

Dr. Bresler and Dr. Rossman both predict that training in guided imagery will be an integral part of all psychotherapeutic approaches and that its benefits will become more widely available for medical and psychological problems and as a means of achieving greater personal insight, creativity, and self-actualization.