"This I believe to be the chemical function of humor: to change the character of our thought." (Lin Yutang)

"The chemicals that are running our body and our brain are the same chemicals that are involved in emotion. And that says to me that . . . we'd better pay more attention to emotions with respect to health." (Candace Pert)

Candace Pert, one of the most respected researchers in the area of mind/body medicine, noted in Bill Moyers' Healing and the Mind television series (in the 1990s) that emotions, registered and stored in the body in the form of chemical messages are the best candidates for the key to the health connection between mind and body. It is through the emotions you experience in connection with your thoughts and daily attitudes—actually, through the neurochemical changes that accompany these emotions—that your mind acquires the power to influence whether you get sick or remain well.

The key, according to Pert, is found in complex molecules called neuropeptides. "A peptide is made up of amino acids, which are the building blocks of protein. There are twenty-three different amino acids. Peptides are amino acids strung together very much like pearls strung along in a necklace." Peptides are found throughout the body, including the brain and immune system. The brain contains many different neuropeptides, including endorphins. Neuropeptides are the means by which all cells in the body communicate with each other. This includes brain-to-brain messages, brain-to-body messages, body-to-body messages, and body-to-brain messages.

Individual cells, including brain cells, immune cells, and other body cells, have receptor sites that receive neuropeptides. The kinds of neuropeptides available to cells are constantly changing, reflecting variations in your emotions throughout the day. The exact combination of neuropeptides released during different emotional states has not yet been determined.

The kind and number of emotion-linked neuropeptides available at receptor sites of cells influence your probability of staying well or getting sick. Pert notes that "Viruses use these same receptors to enter into a cell, and depending on how much of the natural peptide for that receptor is around, the virus will have an easier or harder time getting into the cell. So our emotional state will affect whether we'll get sick from the same loading dose of a virus."
This kind of conclusion from a researcher at the cutting edge of research on the mind/body connection should give you all the motivation you need to undertake the Humor Skills Training Program described elsewhere at this website. Your sense of humor helps assure that these chemical messages are working for you, not against you. "The chemicals that are running our body and our brain are the same chemicals that are involved in emotion. And that says to me that . . . we'd better pay more attention to emotions with respect to health." (Candace Pert)

It is noted in an article listed below that some research suggests that humor and laughter stimulate the production of helper T-cells, the cells attacked by the AIDS virus. If humor does help the body battle AIDS (there is presently no evidence that it does—or does not), it probably wouldn't be as a mere result of the production of more helper T-cells, since there would be every reason to expect these new cells to also be invaded by the virus. Rather, it would probably be due to the neuropeptides produced by the positive emotional state that goes along with humor and laughter.

Along these lines, Pert has noted that "The AIDS virus uses a receptor that is normally used by a neuropeptide. So whether an AIDS virus will be able to enter a cell or not depends on how much of this natural peptide is around, which . . . would be a function of what state of emotional expression the organism is in."

This research will not be exhaustively reviewed at this website, but some of the major studies will be presented to show you that there is no longer any doubt that your daily mood or frame of mind makes a significant contribution to your health—especially when the same mood or emotional state persists day after day, year after year. Anything you can do to sustain a more positive, upbeat frame of mind in dealing with the daily hassles and problems in your life contributes to your physical health at the same time that it helps you cope with stress and be more effective on the job.

We've known for a long time that good nutrition, exercise, adequate sleep, avoidance of harmful drugs, and the adoption of good sanitary habits in our daily activities aide the body's ability to do this. And we now know that doing things to build a positive attitude into your daily life is equally important. And your sense of humor is one of the most powerful tools you have to sustain a positive frame of mind--even on the tough days.

The body responds favorably to positive attitudes, thoughts, moods, and emotions (e.g., love, hope, optimism, caring, intimacy, joy, laughter and humor), and negatively to negative ones (anger, hopelessness, pessimism, anxiety, depression, loneliness, etc.). So it is important to organize your life so as to take control of keeping the balance in favor of as positive a focus as possible.

This doesn't mean that you should avoid experiencing or expressing negative emotions. You need to find ways to express whatever emotions you feel. Candace Pert, a former Chief of the Section of Brain Biochemistry of the Clinical Neurosciences Branch of the National Institute of Mental Health studies influences upon health at the neurochemical level. She noted recently that "repressing emotions can only be causative of disease."
Failure to find effective ways to express negative emotions causes you to "stew in your own juices" day after day, and this chronic immersion in negativity is what appears to produce harmful influences on health.

Your sense of humor is one of the most powerful tools you have to make certain that your daily mood and emotional state support good health, instead of working against it. Humor also helps you maintain a healthy lifestyle in general, a practice that is increasingly being recommended by health care professionals as the country shifts toward an emphasis on preventive medicine.

It is no coincidence that people are commonly drawn to humor in the midst of difficult periods in their life. They recognize from their own experience that a good laugh helps substitute a positive for a negative frame of mind. One of the most frequent comments I hear after my programs for cancer patients is something like, "You know, it's so true. There's no way I would have been able to get through all this if I couldn't laugh at some of the things that happen."

While they are talking about humor's ability to help them cope, we now know that being able to cope also influences your body's biochemistry. By learning to improve your sense of humor, you help insure that the chemical messages Dr. Pert is talking about are working for you, not against you.