## Why Does the Way We Attend Affect Painful Muscles?

In fight-or-flight mode, muscles are tense. Research has found changes in muscle cells that suggest oxygen deprivation results from tension. How we attend affects the brain's EEG, which in turn releases muscle tension, increases blood flow, and changes a host of other functions associated with sympathetic autonomic nervous system activity and increase of parasympathetic activity.

It's easy to understand the need to alter and broaden the way we attend to the external world but harder perhaps to understand the concept of paying attention differently to internal feelings and sensations, because our reactions to these are often unconscious and automatic. The placebo effect may, in fact, be a result of unconsciously changing how we attend to our internal experiences. It's a powerful phenomenon: in many double-blind studies of antidepressants and other psychoactive drugs, the placebo group fares as well as or better than the group taking the actual medication. This demonstrates the powerful self-healing mechanisms we have, and the effect is usually ascribed to a patient's expectation or belief that he or she will get better. There's no consensus on what the physiological mechanism underlying the placebo effect is, but a good case can be made that it is mediated by a shift in attention. When patients are given a sugar pill placebo they release their lock on a narrowobjective attention to their symptoms and include a more diffuse-immersed form of attention as they begin to merge with signs of illness, allowing symptoms to dissolve and supporting improved health.

The process of dissolving pain begins by establishing a physically quiet, low-frequency style of attention. Once clients in diffuse attention have objectified their pain and the space in, around, and through it, they imagine moving toward the pain, eventually merging with it. The sequence of attention styles usually necessary for pain dissolution begins with the client in narrow-objective attention and at least somewhat averse to full and direct experience of the pain. The client is first guided to include in his peripheral awareness a diffuse attention to all available senses in space. This is developed while attention is centered in feeling his/her pain and feeling the space that pervades all sensations. Keeping this diffuse attention in awareness, the second step is to narrow and objectify the pain by physically feeling its location in the body, feeling its shape, and feeling its intensity (on a zero-to-ten scale). The third step establishes a clearer, more direct objective attention to the pain with a simultaneous diffuse experience of space and sensations as a background. The fourth attention change involves creating the permissive conditions for merging one's conscious awareness into the center or heart of the experience of pain, thus allowing it to spread, diffuse, dissipate, and dissolve over a period of one to thirty seconds.

Repression and chronic avoidance of pain causes an immense energy drain, and once pain has been dissolved it frees up energy for other things. Clients who have dissolved their pain – physical or

emotional – using neurofeedback-trained attentional skills often feel more centered, as if they have slipped back into their own "skin" after a long absence.