

### **Hormones of stress - how we play into them and how to diminish their effects**

We all know what it's like to get frustrated in the middle of a traffic jam that delays our next important appointment, we know all too well how our muscles tighten and jaw clenches from being held up, or by having to confront an uncomfortable situation we'd much rather avoid.

In today's world there are so many forms of stress, unlike what our predecessors experienced. Today's stress is different than that of our ancestors. Today we are bombarded with fast paced multi tasking, so much information coming our way from all angles.

Along with a more convenient world, comes what is called chronic stress. In fact chronic stress is common among nearly 70 % of Americans today. Chronic stress can be compared to the tension involved when getting ready to run a race, but the race never starts. You find yourself in the "Ready.... set..." but "Go!" never comes.

No-one can endure chronic stress without losing power, insight, strength, and health. With most human interaction in the world, comes some form of stress, so the question isn't, how do we avoid it at all cost, but rather, how can we diffuse it?

When we pay attention with a narrow focus, we are increasing the hormones of stress in the body, and our immune functions suffer greatly. When we learn to diffuse our attention, we are able to also diffuse the levels of stress and return to homeostasis, a state of calm and ease, in spite of what may occur around us.

Many years ago, my yoga mentor would tell me, "Learn to be comfortable in the uncomfortable". By finding a place of comfort in the uncomfortable we expand our ability to find a resting place, even when all hell around us breaks loose. We learn to allow our observation to open its range, moving away from intense focus on what is causing the problem, to broadening our perspective through diffusing our focus, and including more into our perception and sensory experience.

For example, when we are stressed we get sucked into a state of mind that becomes very narrow and consumed by the problems we are facing, where it becomes quite difficult to think about anything else. Our focus becomes narrow, versus when we are at ease and relaxed, taking in more of a full sensory experience, relaxing more into our environment, attuned to everything around us, our focus includes a broader spectrum where our periphery senses are present. This is a diffused focus. It includes not only focusing on a single point, but it includes being aware of the space in between points. Sort of like the background of your mind's eye comes forward and joins the foreground.

Even quite mild acute uncontrollable stress can cause a rapid and dramatic loss of prefrontal cognitive abilities, and more prolonged stress exposure causes architectural changes in prefrontal dendrites.

There is a valid reason why yoga and meditation is always brought up in association with stress reduction, as they naturally help strengthen the parasympathetic nervous system, making it more dominant than the sympathetic nervous system. Much of this shift, moving from stress to well being, comes simply from fluid slower movement, combined with conscious, dynamic breathing. The moment we are under stress, our breathing becomes shallow. If we can learn to check our breathing at those moments, it will help us reduce some of the stress symptoms. Stress and the way we breathe are completely connected.

So learning and applying how to breathe deeper, fuller and slower as stress hormones creep up, will act as a powerful stress reducer.

But I would include another highly effective method also, called “Open focus”.

Open Focus practice helps to develop attentional skills, the most basic behavior in which we engage. Open Focus attention training encourages awareness of how you attend to the wide array of sensory experiences-and the space between those experiences. Learning to foster attention that is nonexclusive and nonjudgmental supports in integrating your experiences with openness and flexibility.

Open Focus is the name of an attention training program created by Dr Lester Fehmi, neuroscientist and psychologist from Princeton, US. Dr Fehmi found that once our whole brain activity becomes more synchronous in alpha frequency, our mental and physical health improves. He created a series of mind exercises which help to cultivate this brain wave pattern and he designed a neurofeedback EEG machine which can detect it.

On the basis of his findings, Dr Fehmi developed The four attention styles theory. This theory describes four different styles we can pay attention and relates these styles to the brain physiology.

According to Dr Fehmi, pain, stress, anxiety and life's challenges make our attention narrow and objective. It is natural to narrow our attention (focus) on pain or a problem in order to deal with it efficiently but most people overuse this style in everyday life. They are unaware that it keeps them in continuous “flight and fight” mode. Moreover habitual focusing creates an impression that the reality consists of separated objects. It is because we can focus on only one thing at the time, leaving the rest outside of our focus. It can make us feel distant, alienated and lonely.

Dr Fehmi says, we can support ourselves in relating to what's difficult in a more balanced, accepting way by diffusing (broadening, opening focus of) our attention. Diffusing allows us to see the big picture and connect (immerse) with its elements. It helps to realign with the world and to create healthy relationships. This style is linked to ‘rest and digest’ part of our physiology and makes the whole brain activity more synchronous in alpha frequency. Alpha brainwaves are associated with homeostasis and deep well being.

**For more information on open focus training techniques, you can go to:**

<https://openfocus.com/home/>