



## Effects of Cortisol on the Human Body

Our body's primitive, automatic, inherent response of "flight or fight" is to protect us from threat to our survival.

This automatic response release three main chemicals into our bloodstream; adrenaline (epinephrine), nor-adrenaline (nor-epinephrine), and cortisol. These three together influence body functions to achieve what factors are useful to achieve "fight or flight". There is a synergy between the adrenaline and nor-adrenaline

that work to achieve exactly what is needed, but cortisol is sort of the free agent in this threesome.

Cortisol's effects include:

- Increasing the respiratory rate
- Shunting blood to the large muscles and limbs
- Dilate pupils/sharpen sight
- Intensify awareness
- Quicken impulses
- Decrease pain perception
- Mobilize immune system
- Perceive everything as a threat
- Bypass the rational mind and present "attack mode" focusing on short term survival
- EXAGGERATING THE IDEA OF FEAR CAUSING FEAR TO BE MISTAKENLY PERCEIVED.

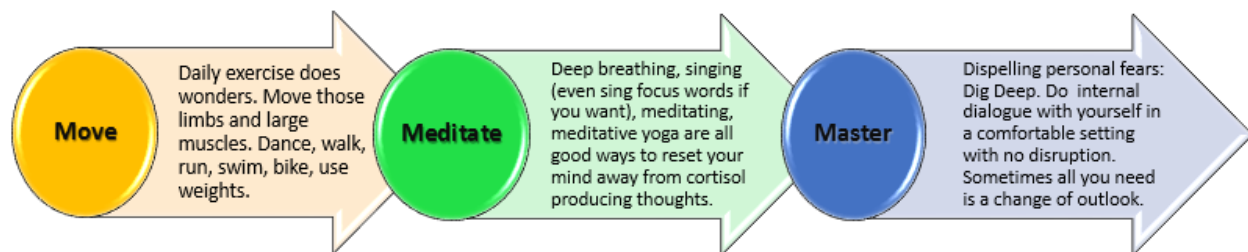
In cases of the true need for survival we respond with "fight or flight" action and the level of cortisol is used up. Confronted with most fear (what we call stress) situations of today where the immediate response is not needed or desired, there is time for our rational mind to take control. We then behave in a "civilized" manner, control ourselves and respectively handle the stress situation. In these instances cortisol lingers in our body, not being excreted, not having an "anti-cortisol" hormone to balance its effects. As is common in modern society, if the stressors consistently present themselves, new amounts of cortisol is released each time and add to the amount already in the body.

The same thing happens when someone has a “perceived fear” triggered by a thought, a situation, or a person. The amount of cortisol, having no outlet, is continuously compounded.

Maintained high cortisol levels in the body can lead to headaches, irritable bowel syndrome, high blood pressure, lowered immune system, increase in infections, chronic fatigue, depression; and autoimmune diseases such as rheumatoid arthritis, lupus, and allergies.

Another symptom of a maintained cortisol level is insomnia. This turns into a loop of infused cortisol into the body. High levels of cortisol cause insomnia. But insomnia also produces more cortisol to flood into the body, raising the level even higher.

It is important, therefore, to combat cortisol build up by a routine of exercise that uses the large muscles and limbs ( running, power walking, even a brisk walk, martial arts, biking, swimming, use of weights, etc.) and a mind reset ( yoga, meditation, affirmations, singing, deep breathing, focus words). In the instances of personal, perceived fears it is best to ferret them out and work to dispel them. (See below)



Your plan of attack may differ accordingly but some techniques that have been used are behavior/cognitive therapy, inner child work, internal dialogue, changing perception (glass half full), and of course, “become the hunter, not the hunted”.

*Book Recommendations to support this work:*

- 1) *“The War of Art”, Stephen Pressfield*
- 2) *“The Fear Project”, Jaimal Yogis*