

Adapting to Stress

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Our systems are programmed with one main, guiding concept, **homeostasis** - the maintaining of a balance point. Just like in Nature, our body, our feelings, thought processes, and relationships *would be* harmonious. However, due to the added programming we receive from our own experiences as well as from our interactions with others, it is likely that our system has become compromised along the way. We will inevitably reach a point where our newly acquired coping skills are inadequate; and, the sooner we become aware of this, the sooner and more easily we can make adjustments.

What is our system coping with? There are constant changes in how our system is being stimulated. Various pressures are constantly affecting our system, and are being managed by our nervous system. These *countless* stimuli cause a myriad of neurological, chemical, psychological, and other adjustments in our system. Although, we may be very familiar with some of these stimuli, most are so subtle that we never really notice them. In either case, prolonged strain in our system from inadequate coping with pressure has been shown to produce debilitating symptoms, such as high blood pressure, elevated blood sugar, memory and concentration difficulties, anger issues, sleeping trouble, and many others. In order to better understand this, let's examine *the Stress Response*.

During a process referred to by researchers in the field of stress management as *General Adaptation to Stress*, the *Stress Response* follows a rather predictable path in most instances where stress and pressure are being managed. It is predominantly handled by the sympathetic nervous system. We will study this in some detail, and highlight areas where most trouble begins in terms of generating medical concerns.

First, there is an immediate response to stress. This is the **alarm phase**, where we experience the famous *fight-flight-freeze* response to the situation. Despite this alarm mechanism built into our nervous system, where the effects of stress on the body and emotions might produce a temporarily compromised state, we can be trained to respond with a centered, clear mental framework. During this phase also, *adrenaline* and *cortisol* are substances released into your bloodstream to prepare the system in managing the immediate response. These chemicals provide a boost of energy and simultaneously suspend other body functions while you are managing the alarm. Although there are some simple effects in the system that occur, learning to effectively manage pressure and cope with stress can assist the body to recover more quickly as well as to avoid any prolonged effects from overload. We will take an opportunity to further explore these long term side effects from complications in stress management and coping with pressure.

Second, the system enters the **resistance phase**. Depending on how much time and effort is required to manage the stress, our system will continue arranging and mobilizing its resources to assist us. As you can probably imagine, ordinarily our resources are limited. Our physiological resources become drained as the body's reserves of energy and nourishment are slowly depleted. Furthermore, there are a series of interrelated coping mechanisms that may become compromised. Both subtle and obvious dynamics are in play on all levels of the holistically-designed system: physical, emotional, mental, social, and environmental. While you may be

very well aware of some of these dynamic, coping mechanisms, there are many more that you are simply unaware of. The long term effects that inevitably come from system depletion, especially when manifested holistically, can make it difficult to lead a life toward the total fulfillment of your goals and dreams.

The third and final stage within the process of General Adaptation to Stress is the **exhaustion phase**. There are a whole series of symptom patterns which can be generated as a direct result of exhaustion. These have been extensively studied by mainstream researchers from a multitude of medical specialties and fields of interest. Although it's not possible to explore them in their entirety in this article, let's highlight a few of the chronic effects of exhaustion from *ineffective stress management*.

There are two symptom patterns in particular that I wish to draw your attention to. Due to the fact that cortisol (the stress hormone) blocks the insulin from metabolizing sugar, persistent high levels of cortisol from *the stress response* leads to elevated blood glucose sugar levels. This may result in the eventual development Juvenile- or Adult-Onset Diabetes, also known as **Type-2 Diabetes**. As a further complication that may result along the same lines of elevated cortisol levels is that Calcium absorption is blocked. When this mineral remains present in the blood stream rather than being assimilated properly into the body, then either or both of the following may occur: excess Calcium can bind together and form **kidney stones** OR excess Calcium (along with high cholesterol that is produced by the system under pressure) is deposited along the walls of the circulatory system leading to **arteriosclerosis** (hardening of the arteries). Proper stress management, especially during the immediate rather than the more chronic stages, may help to prevent these diseases from forming in the system.

There are a few other detrimental effects that may accumulate in the body system as a result of chronic exposure to stress, *inadequate stress management* and coping with pressure, or exhaustion from the prolonged management of a stressor. These will only be highlighted here, but may be further explored in future articles. First and foremost, stress changes the pH of the blood chemistry so that it becomes more acidic. In this environment, infections are more commonplace and the body heals much more slowly. Needless to say, it is important to keep your immune system toned up if you want to lead a healthier, happy life. Secondly, stress triggers visceral fat to accumulate and become deposited around the heart and other abdominal organs. This compromises how easily they receive circulation and nourishment, and also how these organs function in general. Finally, prolonged stress exhausts the system's overall resources, and can lead to burn out on the physical level, generalized panic and anxiety on the emotional level, and also memory and concentration impairment on the mental level.

These points outlined above should provide at least a superficial understanding of how the body manages itself during the various stages of the stress response, as well as consequences to both short term and long term exposure to stress or inadequate management of stress. We can go into more detail regarding the information presented above. Furthermore, we will also take an opportunity to explore *the Relaxation Response* in detail, so that our understanding of the coping mechanism that are both naturally occurring and also programmed as new coping skills as we develop throughout our lifetime.