

Additional lifestyle tips for low cortisol:

Lie down during work breaks, go to bed by 9-9:30, and sleep in as long as possible.

Dietary Guidelines for Stress

Eat only low carbohydrate (low glycemic index), whole, fresh, natural foods, oils high in Omega 3 and plenty of vegetables. Avoid hydrogenated and partially hydrogenated fats (most crackers, baked goods and peanut butter – read labels) and refined carbohydrates (sugar, concentrated sweeteners and white flour) that disrupt blood sugar and insulin balance. Eat regular meals, don't do anything else while eating (TV, work, texting), and chew every mouthful 30 times.

Dietary tips for high cortisol:

Eat less and only when hungry, have small regular meals with plenty of fresh vegetables and fruit, avoid substances that stimulate cortisol (caffeine) and insulin (sugar and refined carbohydrates), and reduce fat and overall calorie intake. For protein eat white meat, fish and vegetable sources (legumes, nuts and seeds), reduce sodium and increase potassium intake (clams, avocados, bananas, dates, figs and other fruits).

Dietary tips for low cortisol:

Eat before 10 AM and again before noon; avoid fruit in morning; eat at regular intervals and don't skip meals; at every meal and snack combine good quality protein, oil/fat and unrefined carbohydrates (whole grains, vegetables, fruit); increase protein intake with red meat and other animal protein (eggs, cheese, organ meat) and oil (cold pressed vegetable and some animal fat); include sodium (sea salt, kelp powder, sea food, seaweed, olives); and reduce potassium intake (not too much fruit).

Exercise for Stress

Exercise tips for high cortisol:

When the stress response system is in overdrive, exercise helps to normalize (reduce) cortisol, insulin, blood sugar and belly fat. Combine aerobic (vigorous walking, jogging, swimming, dancing, Zumba), anaerobic (weights, isotonic, pilates) and flexibility (yoga, stretching, tai chi), and exercise 30-40 minutes/day to comfortable capacity.

Exercise tips for low cortisol:

When the adrenals are depleted, moderate (less vigorous than for metabolic syndrome) exercise tends to normalize (raise) cortisol, blood sugar, and sodium/potassium balance. Combine aerobic (walking, swimming, dancing), anaerobic (weights, isotonic, pilates) and flexibility (yoga, stretching, tai

chi), and exercise daily just to comfortable capacity. If you feel more tired 90 minutes after exercise or the next day, cut back. Avoid competing with yourself or others or pushing to do more – keep it fun.

Dietary Supplements for Stress Support

There are several reasons why properly formulated dietary supplements designed specifically for stress and adrenal support can make a significant difference when you are walking the cortisol tightrope. Stress burns up many nutrients at an accelerated rate because the production of cortisol and other adrenal hormones, generating energy, and the shift into "fight or flight" mode to ready the body for action are all nutrient intensive processes. The adrenal glands use more vitamin C than any other part of the body, so this antioxidant is in particularly high demand. Providing the right kind of supplemental nutritional support can significantly enhance your ability to handle stress and rebound from adrenal fatigue.

Supplement support during high cortisol:

This should naturally promote balanced HPA axis function and blood sugar metabolism; help replenish the nutrients used up by stress and adrenal hormone production; and provide antioxidants and additional vitamin C.

Supplement support during low cortisol:

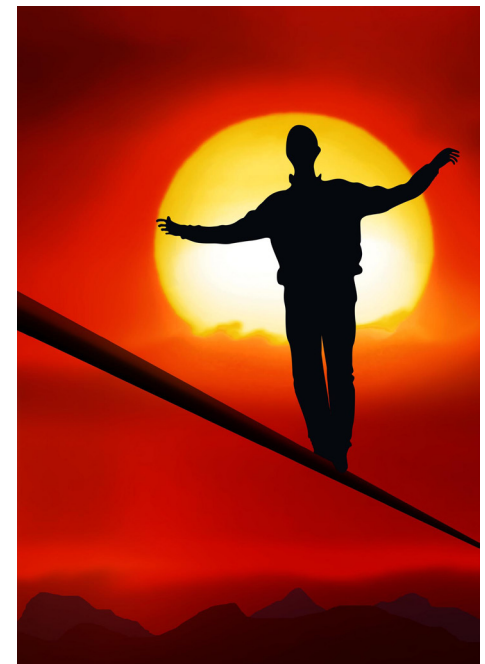
This should deeply support adrenal structure and function; enhance cortisol activity; replenish the nutrients used up by stress and adrenal hormone production; provide additional antioxidant vitamin C in a non-acidic form; and help sensitize HPA axis function.

For more information,
visit the original website resource for adrenal fatigue
adrenalfatigue.org

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Stress & the Cortisol Tightrope Walk™



Dr. James L. Wilson

21ST CENTURY STRESS AND HEALTH

A certain amount of stress can be healthy, and your body is equipped to handle it. However, the pervasive abundance of stress that most people live with during today's economic recessions, political upheavals, environmental crises and high levels of crime and violence is undermining health, as well as happiness and peace of mind.

Despite huge changes in living conditions, human biology has remained much the same over the past hundred thousand years. Your stress response system is designed for the kind of threats to survival that assaulted early man: arduous hunts, heavy physical work and exposure. Overcoming or avoiding each of these stressors required a physical "fight or flight" reaction. It was important for the stress response system to be able to quickly shift metabolic processes from maintenance and repair to action stations, and then back to normal once the stressor had been dealt with. This is how the physiological balance that sustains life and health (homeostasis) is preserved.

In contrast, the complex 21st century stress overload from economic, environmental, social and psychological factors can rarely be resolved by physical action, yet the stress response still operates as if it can. It would probably be better for your health if you could hunt down debt or outrun a demanding job. Instead, the modern stress system is often in overdrive without physical relief, making it harder and harder to maintain optimum physiological balance in today's world.

Your Stress Response System

Every time you experience any kind of stress, whether internal, like a sore throat, or external, like an angry teenager, a chain reaction is triggered that prepares you to physically respond to the stressor. It starts when the hypothalamus in your brain is alerted to a threat to your homeostasis. Your hypothalamus then signals the pituitary gland to activate stress hormone production by your adrenal glands. Adrenal hormones, particularly cortisol, affect every cell and system in your body.

After the immediate stress passes, or if stress hormones get too high, this same system alerts your hypothalamus to decrease adrenal hormone production. As your stress hormones decrease, other systems and metabolic functions return to normal. Known as the hypothalamic-pituitary-adrenal (HPA) axis, balanced functioning of this stress response

regulator is essential to your ability to cope with stress and maintain wellbeing during stressful times.

Stress and Inner Balance

Your stress response system is able to influence the systems and metabolic processes that physically prepare you for action and generate energy. Regulated by the HPA axis via adrenal hormones, the stress response intensifies cardiovascular function by increasing heart rate and blood pressure to enhance blood flow to the muscles; speeds up energy production by raising blood sugar and insulin levels; and heightens alertness and mental focus. At the same time, it slows down digestion by decreasing stomach acid, digestive enzymes, peristalsis and nutrient absorption; shifts resources away from tissue building and repair; cuts back immune activity; and lowers libido. When stress is frequent or extreme and no physical action is taken, these HPA axis regulated adjustments can disrupt optimal physiological and metabolic balance over time, as well as lower stress tolerance.

Cortisol and Stress

Cortisol is the primary instigator of the physiological changes that prepare you to react to a stressor. With each stress response, your adrenals have to produce the right amount of cortisol to shift you into "fight or flight" mode. It is also one of the chief agents used to balance body chemistry, modulating blood sugar, energy production, immune function, inflammation, blood pressure, heart rate, muscle tone, sleep cycles, fluid balance, mental focus, mood and libido, and protecting every cell in your body.

THE CORTISOL TIGHTROPE WALK™

When the HPA axis is working overtime because of continuing stress, maintaining the physiological balance necessary for good health becomes a tightrope walk between two undesirable outcomes. The problems that result from either are largely related to the levels of cortisol being produced by the adrenals:

1. High Cortisol – Metabolic Syndrome

If adrenal response to chronic stress is normal, adrenal hormone output naturally remains high. High circulating cortisol raises blood sugar (glucose), which causes more insulin to be secreted by the pancreas. Without corresponding physical action, the excess glucose does not get burned up for energy. The cells, to protect themselves from the detrimental effects of taking in too much glucose, become more resistant to insulin. This leaves high circulating glucose, insulin and cortisol, all of which can have adverse effects on health and

disrupt normal sleep cycles, digestive function, and cell building and repair. As a way to reduce the excess glucose, cortisol causes it to be stored in fat cells around your abdomen. Over time, if adrenal function remains strong, the imbalances created by chronically high levels of cortisol and glucose can lead to metabolic syndrome, a symptom complex involving high blood sugar, insulin resistance, excess belly fat, elevated cholesterol and triglycerides, high blood pressure and inflammation that, unchecked, can develop into serious, long term health problems, such as diabetes and coronary heart disease.

2. Low Cortisol – Adrenal Fatigue

If adrenal resources become depleted by frequently triggered demands of stress, the adrenal glands can dysfunction, resulting in adrenal fatigue and reduced cortisol levels. This is common in stressful times, but if the adrenal glands do not keep pace with the demands and adrenal fatigue continues, the resulting suboptimal output of adrenal hormones can have a number of adverse consequences for health, as well as exacerbate pre-existing acute illness and chronic health conditions such as hypoglycemia, allergies, asthma, autoimmune disorders, inflammation, hypothyroidism, PMS, difficult menopause and addiction. Adrenal fatigue leaves people tired (especially in the morning and mid-afternoon) foggy headed, and often trying to keep going with caffeine and salty/high fat/sweet snacks. It becomes harder to mount an adequate stress response or raise blood sugar to generate energy. Stamina, quality of sleep, immunity, mood and libido can all decline.

BALANCING ON THE CORTISOL TIGHTROPE

It is essential to your overall health and ability to handle stress that your HPA axis and adrenal glands function soundly and stay in balance. Many of the same principles for promoting and maintaining this healthy balance apply to both sides of the cortisol tightrope. Here are a few:

Lifestyle and Stress Management

Lifestyle tips for high and low cortisol:

Eliminate as many sources of stress as you can and limit contact with energy robbers (people, environments and activities that leave you feeling drained), see the stressors you can't get rid of in a more positive light, laugh more, make time to just relax (even if it's only for 10 minutes), practice some simple breathing and meditation techniques daily, prioritize, and learn to say no.