

Caffeine and the Biological Debt Cycle

In today's hectic, fast-paced world, it's difficult for many of us not to be overworked, sleep deprived, and literally running on empty. You stayed up half the night cranking out that critical proposal and this morning, you're really dragging. You grab that extra monster-sized coffee with extra sugar and extra cream. You figure you can get through the day propped up on caffeine and sugar. As time goes on, you find yourself in this situation more frequently as the demands placed upon you continue to mount. Stop for a minute and think about this artificial stimulation that gets you by. Sure it helps, but do you ever have to "pay it back"?

The answer is a resounding yes! Brendan Brazier, professional Ironman triathlete, introduces the biological debt cycle in his Thrive fitness training program. When a person artificially stimulates their adrenal glands with the use of caffeine, sugar, and highly processed foods, the "high" that is experienced is undoubtedly followed by a crash which is where, biologically speaking, you "pay it back". We often react to this ensuing fatigue by reaching for more of what brought this on in the first place. Brendan describes what can become a vicious and exacerbating cycle when your body is repeatedly subjected to this artificial support. The levels of the stress hormone cortisol, produced by the adrenal glands, become elevated. Elevated cortisol levels are associated with inflammation, compromised immunity, increased risk of disease, accumulation of body fat, and decreased quality of sleep.

Instead, seek your energy from nourishment. A diet comprised of fruits, vegetables, whole grains, and legumes (beans, peas, and lentils) will provide you with a steady, longer-term supply of energy that is not followed by a crash, does not fatigue or exhaust your adrenals, and does not elevate cortisol levels.

If you find yourself spinning out of control, you can break this cycle.

To remedy this situation, take a moment to identify the current stressors in your life:

- Are you routinely using caffeine, sugar, and/or highly processed foods to get you through your day?
- Are you eating foods that do not properly contribute to the nourishment of your body but instead, provide excess protein, cholesterol, and saturated fat, none of which your body needs? All meat and dairy products provide all three and take us further away from our pursuit of dietary excellence.

- Are you exercising too strenuously that it is preventing your body from fully recovering before your next workout or are you not doing enough to stay fit from both a cardiovascular and strength standpoint?

If you answered yes to any of these questions, then slow but deliberate change is in order. Begin to wean yourself off of the artificial stimulants, take steps toward a healthier diet, and/or gradually modify your exercise regimen. There is no reason to add another element of stress on your body by making these changes too radically. Small but consistent advances toward your goal will also help you to make these positive modifications permanent.

In addition, incorporating maca into your diet will provide nourishment, not stimulation, will assist with the rejuvenation of your adrenal glands, and will help to curtail the side effects of everyday stress. Maca is a root vegetable native to the high Andes of Bolivia and Peru. It is thought to have medicinal qualities. Gelatinization of the root removes the hard-to-digest component. In this form, it is more easily digested, is more quickly assimilated, and dissolves more easily in liquids. If possible, select the gelatinized form of maca for maximum results. Maca can be found in most health food stores as well as some grocery stores. Try adding 1 teaspoon to your morning smoothie.

By listening to your body, you can become adept at providing it what it needs to perform at its very best. You will be amazed at the level of energy you are able to achieve and maintain when you are not relying on artificial forms of stimulation.

As a Plant-Based Nutrition Counselor, I provide clients with a summary of research from medical doctors in the forefront of nutrition research. It is not intended to replace competent medical advice. Notify your physician when making any significant lifestyle change such as the transition to a plant-based lifestyle, as the subsequent improvement in your health may decrease your need for certain medications. It is imperative that you do not alter your medication regimen or stop it entirely without the advice of your physician.

*I am a Plant-Based Nutrition Counselor, a graduate of **the only collegiate program in the country** focused on the medical benefits of a plant-based lifestyle from Cornell University, am certified to teach John McDougall, MD's program *The Starch Solution*, and am board certified by the American Association of Drugless Practitioners. I help people to achieve their wellness goals by providing them with the tools that they need to gain control over their health. If you would prefer individualized assistance with your weight, with a chronic, degenerative disease, with other health and wellness aspirations, or if you would like me to speak to a group, please email me at traceyeakjn@gmail.com or give me a call at 724.469.0693 to arrange a time.*

References

Brazier, Brendan, Thrive Fitness: The Vegan-Based Training Program for Maximum Strength, Health, and Fitness, Cambridge, MA, Da Capo Press, 2009