

HPA-D Introduction

Hey, everyone,

Welcome to the unit on HPA axis dysfunction.

In this unit, we're going to talk about the basic physiology of the hypothalamic-pituitary-adrenal (HPA) axis, how it contributes to health and disease, and how diet, lifestyle, and other health conditions lead to problems in this system. We'll also discuss how to diagnose HPA axis dysfunction, specific patterns you'll see in clinical practice, and how to address these patterns with diet, lifestyle changes, and supplements.

Another term for HPA axis dysfunction—and one that's more commonly used by patients—is “adrenal fatigue.” The concept of adrenal fatigue is problematic for a variety of reasons that I'm going to cover in more detail later in this unit. More recently, Dr. Michael Lam has coined the term “adrenal fatigue syndrome,” which is an improvement over “adrenal fatigue” alone, but is still misleading and inaccurate as a description of what's really driving the signs and symptoms we're referring to.

Whether we call this problem HPA axis dysfunction, adrenal fatigue, or adrenal fatigue syndrome, what's important for you to know is that it's extremely common in the modern world, and almost certainly something you'll have to address in the majority of your patients in order for them to recover. This is why is one of the three primary areas covered in the functional medicine track of the ADAPT training.

In fact, I'd go as far as saying that it is impossible to successfully treat any patient with a chronic health condition without addressing the HPA axis. Why? Because the HPA axis affects nearly every cell and tissue in the body. It has a particularly strong influence on the immune system, mechanisms that drive inflammation, and glucose regulation, factors that are involved in nearly every modern, chronic disease. This explains why stress is linked to a dizzying array of conditions, ranging from infertility and dysmenorrhea, to psoriasis and eczema, to IBS and IBD, to depression and anxiety, to virtually all autoimmune diseases.

As important as HPA axis dysfunction is to address, it's not always easy. Healing the HPA axis often involves making significant lifestyle changes, and even shifting the way that we relate to ourselves and the world around us. These are far more difficult changes to make than simply taking some supplements or even switching to a new diet because they require a high level of self-awareness and a willingness to examine and challenge old habits, beliefs, and patterns of behavior.

We live in a society that almost guarantees HPA axis dysfunction. Most people I know feel overwhelmed by the pace of life and the number of demands on their time. American men and women are working 12 to 13 hours more per week than we were in 1968. We're chronically sleep-

deprived: one-third of Americans get fewer than six hours of sleep a night, which is up from just 2 percent in 1965. We don't feel like we have enough time for rest and leisure, which isn't surprising given how little our culture values them. And even when we do go on vacation, many of us compulsively check our email and social media accounts.

As clinicians, one of our jobs is to model the kind of behavior that we want to encourage in our patients. If you are completely frazzled and stressed out, and you're advising your patients on how to address this in their lives, that recommendation isn't going to carry much weight. So one of the most important things you can do help your patients in this area is to make sure that you are walking the talk.

Of course this will be just as difficult for us as it is for our patients. It's something I still struggle with myself, though I've learned the hard way enough times that I'm pretty good about it overall. But as you go through this unit, I hope that learning more about HPA axis dysfunction and its connection to other health problems will motivate you to take it seriously if you're not already.

One thing I'd suggest is to run the tests I'm going to teach you to do for your patients on yourself. It's a good way to learn because you're familiar with your own body and health status, and you'll get a sense of how the test results reflect that. You'll also get to see how changes you make over time show up in the test results.

One last thing before we dive into the content for this unit. As you know, I've made an effort to focus on practical application as much as possible, and just give you as much of the basic physiology and pathology that you need to make an effective diagnosis and treatment plan.

In this unit, I'm going to dive into more detail on physiology, etiology, and pathology because there is a lot of misunderstanding and inaccurate information in the integrative and functional medicine world about so-called "adrenal fatigue" and HPA axis dysfunction. In order to adequately explain why the current approach is inadequate, you need to have a clear understanding of the mechanisms of the stress response, and how they contribute to dysfunction and disease.

In addition, you need to have a firm grasp on all of the environmental factors that contribute to HPA axis dysfunction, so you can identify them in your patients, educate them about the stress disease connection, and provide effective diet, lifestyle, and behavioral recommendations.

Of course, we will still be spending a lot of time on looking at lab results, case studies, and treatment plans. But all of this will make a lot more sense when you have a firm grasp on the underlying physiology.

Okay, that's it for now. In the next section we'll discuss the basic physiology of the HPA axis.

See you then!