

HPA-D Treatment Diet Review

You cannot successfully treat a patient with chronic illness without addressing their HPA axis. Diet and lifestyle changes should come before supplements. Patients cannot supplement themselves out of HPA-D.

The four key drivers of HPA axis dysfunction are perceived stress, circadian disruption, glycemic dysregulation, and inflammation.

- Treating HPA axis dysfunction from a functional medicine perspective means addressing the core pathologies that are causing it, such as dysglycemia or inflammation, and this requires a more holistic approach.
- It's not just about the adrenals or taking steps such as modulating exposure to light, resting, or reducing physical activity, although those all may be part of it.
- Individuals need to change their relationship with themselves and the world around them.
- Sometimes having a really good therapist who understands working with patients in this way can be a helpful thing to have on your team. If not within your clinic, consider someone who you can refer to.

Glycemic dysregulation and inflammation are two of the four key drivers of HPA-D, so a recommended diet should be anti-inflammatory and should regulate blood sugar.

Start with a Paleo template diet as it removes most foods that tend to be inflammatory. Guidelines for tweaking of a Paleo-type diet for HPA-D include a higher-protein intake overall but especially in the morning and then eating carbohydrates later in the day.

For patients who are overweight or insulin and leptin resistant, have high blood sugar or high blood pressure:

- Consider starting with a high-protein, lower-carb approach.
- If this approach has not been effective, it can often be helpful to add some Paleo-friendly carbs back into the diet.
- Avoiding snacking between meals can also help with blood sugar stabilization

For patients who are normal weight, normal glucose, and insulin sensitive or have a tendency more toward low blood sugar and low blood pressure:

- Consider starting with a high-protein, moderate-carbohydrate, moderate-fat approach.
- Also, these patients generally do better eating every two to three hours.
 - Three regular meals but snacks in between or
 - Five to six smaller meals throughout the day.

SPECIFIC MICRONUTRIENTS

Vitamin C. The adrenal glands have one of the highest tissue concentrations and greatest active uptake of ascorbic acid of any tissue in the body.

- Fruit sources: papaya, strawberries, pineapple, oranges, kiwi, cantaloupe, raspberries, blueberries, and cranberries
- Vegetable sources: broccoli, brussels sprouts, cauliflower, kale, cabbage, and bok choy

B-vitamins. Many biochemical pathways for producing steroid hormones have B vitamin-dependent enzymes.

- Top sources: liver, clams, seafood, dark leafy greens, lentils, mushrooms, spices, poultry, egg yolks, peppers, squash, nuts, and seeds

Sodium. Low intake can cause increased renin, cholesterol, triglycerides, and all cause mortality. Symptoms can include lethargy, nausea, and hypotension.

- Patients may need to reduce their potassium intake if they're eating a lot of potassium or supplementing with potassium because it opposes the lack of sodium.
- Take one-half to one teaspoon of sea salt in a glass of water upon rising.
- Add salt and/ or kelp flakes to food if needed.

Potassium. High levels are associated with lower blood pressure, and low levels or a deficiency is associated with hypertension, high blood sugar, and being overweight

- Top sources: potato, halibut, plantains, rockfish, sweet potato, beet greens, bananas, sockeye salmon, acorn squash, avocado, parsnips, pumpkins, kohlrabi, duck, and mushrooms

Calcium, zinc, and magnesium. Deficiency can lead to a number of alterations in neurotransmitter and HPA axis dysfunction. When included in multivitamin formulations, they show some stress-lowering effect in clinical studies. Magnesium is especially important. It's been shown to improve sleep, metabolic function, fatigue, and energy.

- Calcium: sesame seeds, sardines (with bones), yogurt, collard greens, spinach, cheese, turnip greens, sockeye salmon (with bones), molasses, and mustard greens
- Magnesium: oysters, liver, crab, lobster, beef, lamb, endive, pork, nuts, dark chocolate, and crimini mushrooms
- Zinc: dark leafy greens, nuts and seeds, fish (mackerel), avocados, dairy products (if tolerated), bananas, figs, and dark chocolate.

Caffeine. Most patients experiencing symptoms of HPA axis dysregulation should avoid or at least cut down on caffeine until they have fully recovered from their condition. Often, the more someone needs caffeine to function, the more likely it is not good for them.

Alcohol. Limit to two to three drinks per week during treatment, possibly in a social situation. Remember, there's a tendency for people to underreport their alcohol intake.