

## Nutrition: Thyroid Disorders - Part 5

Hey, everybody, in this presentation we're going to talk about a case study for thyroid disorder. S.V. was a 27-year-old female, 5'7" tall, 140 pounds, and she presented with Hashimoto's thyroiditis. Her TPO antibodies were significantly elevated, over 1,300 IU per mL, and she complained of low energy, brain fog, headaches, cold hands and feet, insomnia, and anxiety, all pretty typical hypothyroid symptoms. She'd been following a very-low-carb Paleo diet and strictly avoiding gluten for the past two years, and that change had made very little difference in her antibody production, and her symptoms had gotten worse over the past few months. She was also doing CrossFit pretty intensively, four to five times per week. Her main goal was to eliminate her thyroid symptoms and reduce her thyroid antibodies; the only time she had ever experienced a drop in thyroid antibodies was when she experimented with a ketogenic diet; however, her symptoms actually got worse during that time.

S.V. had a somewhat stressful job, and as I mentioned was doing CrossFit workouts four to five times a week. She was 5'7" and weighed 140 pounds, and I established that she was likely undereating both calories and carbohydrates given her stress and activity levels. CrossFit's a highly glycolytic activity that increases glucose demands on the body significantly, so in addition to adding Paleo starches like sweet potatoes, plantains, fruit, taro, yuca, etc., I also asked her to incorporate nutrient-dense foods like liver and shellfish to increase her micronutrient intake, and I asked her to experiment with adding in non-Paleo carbohydrates like white potatoes, buckwheat and even white rice because given her intense activity level and what was going on, I was concerned that she wouldn't be able to get adequate amounts of carbohydrates unless she added these foods in.

Because of the stress of her job and her CrossFit participation, stress management and sleep hygiene in particular were key factors in her treatment plan. She was really burning the candle at both ends and not getting enough rest and not doing anything at all to manage her stress. So she added in daily meditation and mindfulness practice, she bought some blackout curtains and started committing to get to bed by 10 p.m., whereas previously she would sometimes go to sleep as late as 1 a.m. She always had to wake up early to get her kids ready for school, so it's really making her bedtime earlier that made the difference in terms of sleep duration. And then she reduced her CrossFit workouts to three times a week; I would have preferred fewer than that, but she was really connected to her gym and that's what her social environment, which of course you have to consider as well because that's an important part of the healing process, but she also reduced the intensity of the workouts that she was doing. And fortunately, this particular gym that she worked out had some understanding of the effects of overtraining. It's not always true of CrossFit gyms, but this one was aware of that and they allowed her to continue but at a lower intensity.

After increasing her total calorie and carbohydrate intake to a moderately high percentage of calories, she was getting about 35 to 40 percent of calories from carbohydrate, and she was

getting more calories overall, focusing on stress management with a daily meditation and mindfulness practice, getting more sleep, reducing the number of days of CrossFit and also the intensity of her workouts, she experienced a pretty dramatic improvement in her symptoms. She no longer had any cognitive symptoms, her body temperature normalized, and her mood became stable. Her antibody count did decrease; it was still elevated, but it dropped into the low hundreds, if I recall, and we decided to do some additional testing for other factors that could provoke immune dysregulation, like GI pathology, heavy metal toxicity, mold, etc., to further decrease her antibody production, but her symptoms were almost completely gone and she felt normal for the first time in years. Her performance at the gym significantly improved, and she began making gains in strength after being on a plateau for months. She was sleeping through the night and waking up feeling refreshed. Okay, that's it for now, see you next time.