

# How to Customize Diet and Lifestyle for Common Health Conditions: Case Assignments – Part 3 (Answers)

## CASE #1: DIABETES AND OTHER BLOOD SUGAR DISORDERS

### **Answer:**

Recommend that A.D. cut down significantly on his carbohydrate intake. This will help with the high blood sugars as well as his weight. A very-low-carb diet (<10 percent CHO) could work well for this patient; however, given that he has not paid too much attention to his diet until now, it might be better to start him off at around 15 percent of calories as carbohydrates. Recommend that he slowly decrease his carbohydrate intake until it is within this range to avoid a drastic change that might deter him from ever trying it. The patient is currently eating out a lot, so also recommend a whole food/Paleo diet along with this lower carbohydrate approach. A calorie intake of about 2,200 is appropriate and will induce weight loss. Recommend that the patient monitor glucose levels at home to determine carbohydrate tolerance. Also recommend that this patient reduce his workload if possible and at least try to mitigate stress at the office by incorporating stress management techniques daily. Nutrients that may be useful include chromium and alpha-lipoic acid. Make sure patient is also getting enough micronutrients from his diet by eating a whole food diet that includes plenty of healthy meats, fats, and vegetables. Also recommend that the patient incorporate a regular exercise regimen consisting of both strength training and cardio and reduce sitting time (perhaps by working at a standing desk). General movement should also total of approximately 10,000 steps per day.

## **CASE #2: THYROID DISORDERS**

**Answer:**

Begin reintroduction of foods eliminated on AIP diet, especially eggs with the yolks. Since she was eating primarily meat and non-starchy veggies, she was on a very-low-carb diet, which can decrease conversion of T4 to T3 and impair thyroid function. Suggest eating at least 20 percent, and preferably 25 to 30 percent of calories as Paleo-friendly carbs (starchy plants and fruit). Encourage consumption of Brazil nuts (one to three per day) for selenium and seaweed (one nori sheet daily) for iodine. Reduce goitrogenic food consumption to one to two servings per day and reintroduce non-goitrogenic starches like white rice and potatoes to replace daily sweet potato intake. Consider adding desiccated liver pills or supplementing with vitamin A. Encourage cooking vegetables thoroughly and limiting raw vegetables. Increase prebiotic foods such as cooked and cooled starches, fruits, and FODMAP-containing vegetables if tolerated. Recommend two to three egg yolks daily for extra choline and fat-soluble vitamins to support liver function. Increase fatty fish consumption (salmon, sardines, tuna) to four servings per week. Check calorie intake and ensure adequate consumption to promote normal metabolic rate. Encourage stress reduction techniques such as deep breathing, body scanning, meditation, gratitude journaling, and/or yoga. Help patient find a technique that works best for her.

## **CASE #3: AUTOIMMUNE DISORDERS**

### **Answer:**

Recommend that the patient begin an autoimmune Paleo diet, making sure to include organ meats, herbs and spices, fish and seafood, fresh veggies and meat/pork/poultry, and seaweed. Once the patient has been on an autoimmune Paleo diet for at least 30 days, you may try introducing some of the restricted foods that are otherwise healthy like dairy or nightshade vegetables. If the patient reacts to these foods, take them out again. Patient's caloric intake should be about 1,800 calories, with at least 15 percent of calories from protein to enhance glutathione production. Patient should consume at least one pound of fatty cold-water fish per week for EPA/DHA content. Supplements could include glutathione (as liposomal or s-acetyl glutathione), vitamin D (as her level is low, want to get her to 40 to 50 ng/mL), curcumin (Longvida form), and probiotics and prebiotics. Patient should also be evaluated for dysbiosis with stool testing and treated appropriately to ensure a healthy gut microbiome. Encourage exercise, especially things like yoga, tai chi, or water exercises. Work up slowly given that the patient is currently not exercising. Ensure that the patient has friends and family in her life to provide pleasure and connection and avoid social isolation. Finally, acupuncture may be useful for this patient as well.

## **CASE #4: HPA AXIS DYSFUNCTION**

**Answer:**

Recommend 2,000- to 2,200-calorie-per-day diet, depending on exercise. Recommend that the patient slowly works up to this level, as she is eating a significantly lower amount of calories currently. She will likely do better with a higher carbohydrate intake; recommend starting at about 30 percent and potentially raising if she continues endurance exercise. Encourage regular meals throughout the day—at least three full meals, plus snacks if needed. Given her sleep issues, she will likely do well with a bedtime snack—have patient try this and see if it helps her fall asleep more easily. Counsel patient on reducing exercise, at least while she is recovering from HPA axis dysfunction. Encourage activities like walking, yoga, tai chi and a couple short sessions of weight lifting per week. Patient should also implement a stress reduction program on a daily basis—meditation, deep breathing, MBSR, etc. Recommend that the patient also incorporate healthy sleep habits like using orange glasses, dimming lights, not watching TV, and choosing gentle activities for their nighttime routine. Finally, this patient would benefit from general adrenal-supporting nutrients such as vitamin C, magnesium, and B vitamins. She would also do well with adaptogens. Licorice may be useful given that both her free and metabolized cortisol levels are low.