Nutrition: Women's Health, Part 5

So let's talk about a couple of case studies. M.C. is a 20-year-old white female, presented with unintentional 10-pound weight gain, poor athletic performance, fatigue, mood swings, and blood sugar dysregulation. She reported feeling low appetite for most of the day, but suddenly having a major hunger episode in the afternoon several days a week, so like a hypoglycemic crash. This episode was associated with anxiety, mood swings, and fatigue, and eating definitely helped to improve those symptoms. She also complained of hypothyroid type of symptoms despite normal thyroid labs, including constipation, hair loss, and weight gain; of course, those are non-specific and don't necessarily mean hypothyroidism. She said her doctor thought she may have hypoglycemia. She was taking Reclipsen for controlling PMS symptoms; she had mild insomnia as well as daytime drowsiness, despite getting eight to nine hours of sleep nightly.

So she'd been following a low-carb Paleo diet for the past year, and at the same time participating in CrossFit four times a week, doing the full CrossFit thing. She avoided all starchy vegetables, fruits, grains, and sugars and consumed high levels of protein in each meal. And she reported that at first, this regimen worked well for her, she lost a lot of excess weight, got fitter, and felt good about how she looked and felt. However, about six months into that program, she started to steadily gain weight despite her high activity level and strict adherence to both the low-carb Paleo diet and the CrossFit program. So this is really, really important to understand: what works in the short term does not always work in the intermediate to long term and may even cause harm. And it's really important to explain that to patients because from their perspective, they don't even consider that their routine might be the cause of their problem because when they started it, like in this case, when she started the low-carb Paleo and CrossFit approach, she did great and felt better and looked better, and so six months down the line, when they start to experience problems, the last thing that they consider is that it's the diet and the exercise routine, because it helped them so much, and a lot of clinicians miss it too for that reason, but it's just a key principle to be aware of, that short-term therapeutic interventions that can be beneficial are not necessarily meant to be done forever and can cause harm if they are.

So, she was somewhat aware of some of the downsides of the low-carb diet, though. She reported that going low-carb decreased the frequency of her bowel movements and eventually reduced her energy in her CrossFit performance. The weight she lost initially eventually returned and even increased over baseline after a year of following that program.

After analyzing a three-day food diary, it became clear that M.C. was significantly undereating in both calories and carbohydrates. Her average calorie intake was about 1,400 to 1,600 calories daily, with less than 50 grams of carbohydrate on most days, so this highlights the importance of actually having the patient track their calorie and macronutrient intake using something like MyFitnessPal.com or NutritionData.com that makes it easy for patients to do that, and once you do that, you'll find a couple of things. You'll find that women in particular who are training, and men for that matter, are often undereating. They're just not getting enough calories to support their

activity level. And number two, you'll find that they're on a very-low-carb diet, much lower than they typically think they are, and I talked about this and wrote more about it in my e-book on low-carb diets that's available on my website for free, and we can link to it in the resources section, but often if you ask patients, they'll say, "Oh, I'm on a low-carb diet," or they won't even say that, they'll just say that they're on a Paleo diet, but when you actually investigate their carbohydrate intake, you'll find that it's often less than 10 percent of calories, or certainly less than 15 percent of calories, so I recommended that M.C. increase her food intake to 2,200 calories, so that's a substantial increase above what her average was, on the days that she continued CrossFit training. I actually recommended that she discontinue CrossFit temporarily, but she wasn't willing to do that, so we had to work with what she was willing to do. In most cases, I'm pretty successful on convincing people to take a break from it, in these kinds of situations, but she was averse to that idea.

She did modify, I was able to convince her to modify her routine, and stop doing the WODs and do a more modified approach, but this is a little bit of a tangent, but you'll find that there's a big variation in CrossFit gyms too. Some are much more aware of the dangers and effects of overtraining and others are really ignorant of that, and so hopefully you can get your patients to train at a place that is not ignorant of it, but in some cases, for patients or clients, the CrossFit gym is a source of community and friends, and so it's not so easy to make a change. Just things to be aware of.

So anyway, 2,200 calories per day on training days, 160 to 220 grams of carbohydrates, which was up to four times the amount of carbohydrates that she was eating previously; 120 to 140 grams of protein; and 75 to 110 grams of fat, so that breaks down to 30 or 40 percent of calories as carbohydrate, 20 to 25 percent as protein, 30 to 45 percent of fat. And just to put that in perspective, that means she's going to have to eat a substantial serving of starch with every single meal and probably fruit in between meals. If you ask a patient what they eat, and they say they eat eggs and bacon in the morning and some sauerkraut, and then I have a salad with some chicken at lunch, and then I have maybe some fish and half a sweet potato and broccoli or something at dinner, that's going to be less than 10 percent of calories as carbohydrate. A medium sweet potato is 37 grams, so if that's the only source of carbohydrate that they're eating in the day other than non-starchy vegetables, their total intake is going to be lower than 50 grams, and depending on their weight and their total calorie intake, that could be certainly less than 20 percent, oftentimes less than 15 percent, so they really need to be eating a serving of starch with each meal and maybe fruit in between. Non-training days, we set her goal at 1,900 calories, 100 to 150 grams of carbohydrates per day, 120 to 140 grams of protein, and 75 to 110 grams of fat. And then we had her add additional non-starchy vegetables to each meal. So as you can see, this can be somewhat time-consuming and involved, so depending on your preference as a clinician, it can be a really good idea to hook up with Paleo-friendly nutritionists; as you know, I've got two on my staff that work with me, Chelsea and Laura, and we refer patients to them. Sometimes, if it's simpler, we will do it ourselves. It's really up to you what your preference is, but I think this is underappreciated, and oftentimes, patients will not realize that this is happening, and so that's why we're kind of starting to lean in the direction of every patient that we see having an appointment with the nutritionist. We haven't implemented that yet, but we're moving in that direction.

So here's some additional supplements that could be considered in this case. Again, it depends if you're just working with patients on a nutritional basis or you're going to go ahead and do the more functional approach, where you would get more specific on the supplements, but you could consider a multi for a patient like this who's been underfed and undernourished. Magnesium would help with the constipation, vitamin C as well, probiotic, there's a lot of different options here, this is a lactic acid-based form, but you could use Prescript-Assist or Megaspore, which we'll be talking about in the gut unit. Zinc is a crucial nutrient for a number of different functions in the body and in a situation like this can be helpful. B-complex for helping to manage the stress response, and then vitamins A and D and K2, synergistic fat-soluble vitamin supplement, so again, this is something that if you weren't doing additional testing, it might be helpful, but if you are doing a full functional medicine workup you might tailor this more individually.

After two weeks of adjusting M.C.'s diet and supplemental protocol, she immediately began feeling more energetic, better bowel function, complete cessation of mood swings and food craving she was having in that afternoon period, that hypoglycemic crash, and improved performance actually at the CrossFit gym. Her weight initially went up by four pounds, but then it came back down to baseline within a few days, so that's something to warn patients about so they don't freak out if they gain a little bit of weight initially. After two months of following the program, her digestive symptoms were significantly improved. While her weight didn't really change much, she did lose a little bit of fat in areas where she wanted to lose, and she felt that she was looking leaner and no longer really felt like it was important for her to lose the additional 10 pounds that she wanted to lose, so that again is a key point: sometimes an adjustment in body image or a change in body fat distribution is more important than overall weight loss. She was performing well in the gym, sleeping well, and her energy and moods had stabilized. So this was a really great result for her.

Okay, so that was a little bit longer than we typically do for these conditions, but there's so many important considerations for women's health and I think it's a really underappreciated area, and the sex differences between men and women when it comes to diet, lifestyle, prescriptions, are underappreciated as well, so I hope this has been really helpful and given you a lot of food for thought, and I will talk to you next time.