

How to Customize Paleo for Particular Needs: Case Studies — Part 2

Okay, another case study, this is A.S., a 30-year-old male, active on a daily basis. He does five days of exercise per week, generally consisting of heavy weightlifting and light cardio with some pickup basketball, football, soccer, and softball, depending on the season. He's 6'5" and 180 pounds, wants to put on five pounds of muscle mass, and his exercise had been limited by a lower back injury, but he'd been returning to his normal workout routine when he started seeing me.

He was generally in good health but not sleeping well due to having two young children, three years old and eight months. He'd been working a job that required routine travel, making it difficult to maintain a healthy diet. He had a very low appetite in the morning despite going to the gym at 5:30 in the morning five days a week, and usually didn't eat his first meal until lunch. So he was struggling with significant drops in energy, particularly in the afternoon, experiencing sugar cravings and occasionally getting headaches in the afternoon. He was having mood swings along with dips in energy, and he occasionally reported feeling so tired that he was actually sick to his stomach.

After analyzing his food intake, we discovered that A.S. was significantly undereating on most days during the week, so this is another example of undereating and low calorie intake and the effect that that can have. Since he was skipping breakfast and not eating much at lunch or dinner, his calorie intake could be as low as 1,200 calories on some days. Now to put this in perspective, for someone at his size and weight, and for his activity level and his goal of adding weight, his calorie intake should be at least 2,800 to 3,000 per day, if not more, and with approaching an intake of at least 150 grams of protein per day, 280 grams of carbs, and 120 of grams of fat per day, so this would be about 16 ounces of meat, six cups of starchy foods like potatoes, sweet potatoes, rice and fruit, and two tablespoons of added fat at each meal.

So we determined that he needed to start eating a really protein-rich breakfast, despite having a poor appetite in the morning. You'll find that a lot of patients will resist this initially, because it's not fun to eat when you're not hungry, but the good news is that in most cases, after a patient starts doing this for a few days, they will begin to wake up feeling hungry, so it's only a few days of discomfort that they have to put up with. He was also instructed to balance his calorie and macronutrient intake across all three meals as much as possible, rather than eating a huge amount at any particular time during the day.

After just a few days of working towards this new dietary intake, he reported feeling significantly more energetic. His mood swings, headaches, and sugar cravings disappeared completely. He struggled at first with increasing his food intake, but after a few weeks of effort, he felt more satisfied after meals and more balanced energy throughout the day, and he's now able to train five

days a week without feeling poor energy during workouts, and he also is experiencing much better performance and recovery at the gym.

Okay, this case study is M.C., a 20-year-old white female who presented with unintentional 10-pound weight gain, poor athletic performance, fatigue, mood swings, and blood sugar dysregulation. She reported feeling low appetite most of the day but suddenly having a major hunger episode in the afternoon several days a week, and that episode was associated with anxiety, mood swings, and fatigue, and eating helped improve her symptoms during those episodes. She also complained of hypothyroid symptoms despite normal thyroid labs. Her TSH was 1.89, including constipation, hair loss, and weight gain. She said her doctor said she might have hypoglycemia. She was taking Reclipsin for controlling PMS symptoms. She had mild insomnia as well as daytime drowsiness despite getting eight to nine hours of sleep nightly.

So this is another patient that had been following a very-low-carb Paleo diet for the past year, and at the same time she had started participating in CrossFit four times a week. She avoided all starchy vegetables and fruit, and grains and sugars, and consumed high levels of protein at each meal. She reported that at first that regimen worked well for her, and you'll find this is often the case. She lost excess weight, got fitter, and felt good about how she looked and felt, but six months into the program she started to steadily gain weight despite her high activity level and her strict adherence to this low-carb Paleo diet, and she reported that going low-carb had decreased the frequency of her bowel movements and eventually reduced her energy at CrossFit performance. So she was aware of the change, but what often happens in this case is a patient will start a low-carb diet, they'll feel a lot better initially as she did, and then six months later they'll start to feel worse, and they won't actually connect it to the low-carb diet, because in their mind it's something that made them feel a lot better, so this is something you need to be on the lookout for, and in M.C.'s case, the weight she lost initially eventually returned and even increased over baseline after a year of being on this really low-carb diet and doing CrossFit four times a week.

Crossfit training days	Non-training days
2200 calories	1900 calories
160-220 g carbs	100-150 g carbs
120-140 g protein	120-140 g protein
75-110 g fat	75-110 g fat
(30-40% carbohydrates, 20-25% protein, and 30-45% fat.)	(She was instructed to add 1 cup of non-starchy vegetables to each meal.)

So after looking at her three-day food diary, we found that she was significantly undercreating in both calories and carbohydrates. Her average calorie intake was about 1,400 to 1,600 calories a day, with less than 50 grams of carbohydrate on most days. I suggested that she increase, especially on her CrossFit training days, to 2,200 calories per day, with 160 to 220 grams of carbs,

120 to 140 grams of protein, and 75 to 110 grams of fat, which works out to 30 to 40 percent of calories as carbohydrate on her training days, 20 to 25 percent protein and 30 to 45 percent fat. On her non-training days, we set her goal at 1,900 calories, 100 to 150 grams of carbs, 120 to 140 grams of protein, and 75 to 110 grams of fat. So lower calorie intake overall and lower percentage of those calories as carbohydrate on the training days. And she was instructed to add one cup of non-starchy vegetables to each meal.

3 Complete Multi w/ Cu & Fe (Designs for Health)

1 Tri-Magnesium (Integrative Therapeutics)

1 Pure Vitamin C 1000 mg (Allergy Research Group)

1 Ther-Biotic Complete (Klaire Labs)

1 Zinc Supreme™ (Designs for Health)

1 Stress B-Complex (Thorne Research)

1 Vitamin D3 Complete with A and K2 (Allergy Research Group)

We also tried some basic nutrient support with her, some magnesium multi, which I don't typically use but we'll use over the short term in some patients, a higher dose of vitamin C and zinc and B complex, and vitamin D as well as some probiotics, because I think over time she was under-eating and was not getting enough nutrients.

After two weeks of adjusting her diet and supplements, she felt more energetic, her bowel function improved, she had a complete cessation of mood swings and food cravings, and she improved performance at CrossFit. Her weight initially increased four pounds, but then came back down to baseline within a few days. After two months, though, her weight had decreased a little bit, her digestive symptoms significantly improved, and she felt like her body composition was a lot better despite her weight not having changed in a huge way. She was performing well in the gym, sleeping well, her energy and moods had stabilized, and she was no longer experiencing those hunger episodes and energy crashes in the afternoon.

Another thing you want to do in this situation is have a discussion with the patient about the type of exercise that they're doing. In M.C.'s case, doing CrossFit four times a week was probably not the best option given her symptoms and what was going on with her, so part of her change was adjusting her workouts at the CrossFit gym, not doing the WODs, the more intense workouts four times a week, doing a little bit less activity, which can be hard for patients at a CrossFit gym

because of the competitive nature of the training there, and some gyms are more open to modifying the protocols than others, so you might have to advise the patient to find a different gym, one that's a little bit more open to working with people, depending on what their particular needs are. And that's tricky because sometimes patients have developed a community of friends at the gym, and it's hard for them to walk away from that.

Ideally, though, you'd want to be matching the patient's fitness program and activity levels with their particular needs, which are based of course on what's going on with their body and their current symptoms. So in this case, her activity level was too high given what was going on, and we had to dial that back a little bit in order for her to get better. Okay, that's it for now. We'll be covering some more case studies as we go, and I'll see you next time.