



The “Slow Carb Diet” and Distance Running: Case Study 1

By Rick Miller
Co-Editor: *Faster Than Forty*
www.fasterthanforty.com
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Introduction

In Timothy Ferriss’ best-selling book *The 4-Hour Body*, one of the cornerstone tactics he prescribes for increased fitness and overall health is called the Slow-Carb Diet. I elected to test the Slow-Carb Diet in two scenarios – immediately prior to beginning a training cycle, then again during a training cycle – to provide some baseline data on how this diet might affect performance in a distance running program.

Because I am a sample set of one, I am not presenting these results as scientific research. We’d need a few hundred people – in very similar situations to mine – to test this with scientific validity. Rather, I am presenting in objective detail how I implemented the diet, what physical changes I experienced, and some tips and tricks for others to follow if they wish to implement this diet in conjunction with a running program.

My Background

A detailed account of my running background is available in the “About Us” section of the *Faster Than Forty* Web site, so I will not recount it here. In brief, I am a former Division-I collegiate track and cross-country runner who now runs recreationally and quasi-competitively (local road races, rarely at 100% effort). See Table 1 for specific running and fitness-related statistics.

In early 2010 I was diagnosed with a Haglund’s deformity, an abnormal bone growth (or bone spur) on the heel bone of my right foot, underneath my Achilles tendon. I had suffered the same injury on my left foot in 2004, and I endured Haglund’s exostectomy surgery in early 2005 to remove the spur and reposition the heel. It was a painful surgery with a 12-month recovery cycle – including nearly three months in a leg cast/walking boot.

By mid-2010, the deformity in my right foot had become so painful that I could no longer run; so my fitness activity was limited to cardio on a stationary bike and weight lifting. Despite the expected long recovery cycle, I elected to have the Haglund’s surgery on my right foot to correct the problem on January 14th, 2011. Because my limited fitness activity for most of 2010 caused me notable weight gain (at least 13lbs), and because I expected a long recovery cycle with very limited fitness activity following my surgery – which I feared would cause more weight gain – I planned to modify my diet immediately post surgery.

Table 1: Rick Miller Relevant Physical Characteristics

| | “Normal-State” 2006-2009 | “Pre-Surgery State” January 14, 2011 |
|--------------------------------|---------------------------------|---|
| Age | 35-39 | 40 |
| Height | 6’2” | 6’2” |
| Weight | 190-200lbs | 213lbs |
| Avg. Weekly Running Mileage | 30-40 | 0 |
| Avg. Mile Pace (Training Runs) | 6:45-7:15 | NA |
| Avg. 5K Time | 19:00 | NA |
| Total Cholesterol | 204 | 210 |
| LDL Cholesterol | 116 | 81 |

Prelude to the “Slow-Carb Diet”

Immediately after surgery on January 14th, 2011, I implemented a caloric-restriction diet. Because I don’t have the patience or discipline to measure portions and count calories, I approached this with a very simple methodology: I simply prepared (and ate) 25-50% less of my normal meals. Table 2 illustrates my typical “normal-state” diet and immediate post-surgery diet.

Prior to surgery, my average daily total caloric intake given my “normal” diet was 2,985 calories. By habit, my diet never fluctuated much on weekdays (occasionally I would substitute salmon for some of the chicken dishes – resulting in +50 calories). However, the list of meals in the “normal” diet in Table 2 does not account for weekends, during which my diet varied wildly and included alcohol and other high-calorie indulgences.

Post-surgery, when I restricted my calories, I lowered my average daily intake to 1,795 calories – a 40% reduction. This sounds drastic, and under normal circumstances it probably would be, but I also went from expending an average of 700 additional calories per day due to exercise to expending *nothing* due to exercise. (In fact, because I was confined to the couch for the first 7-10 days of my recovery, I didn’t

even expend any “walking around” calories.) I really wasn’t hungry, and it didn’t hurt to prepare less food or throw away excess portions. I estimate that my net caloric deficit from January 15th, 2011 (the day after surgery) until February 20th, 2011 (the day I started the Slow-Carb Diet) was about 500 calories per day. This resulted in about 5lbs of weight loss – actually probably a little closer to 7lbs because my pre-surgery weekend diet was pretty high-calorie.

It was during my extended couch time that a friend tipped me off to *The 4-Hour Body* and the Slow-Carb Diet that author Timothy Ferriss presents therein.

When planning my recovery from surgery, I expected I would experience a period of “appetite dissonance” during the extended time in which I was off the couch and moving around (usually via crutches) but still unable to work out. Although caloric restriction was easy when I literally didn’t move for days on end, I figured it would become very difficult when I gradually resumed day-to-day tasks – and without exercise, I wouldn’t burn enough calories to offset my renewed food intake. The Slow-Carb Diet seemed like a way to mitigate this, and the experiment was on!

The Concept of the Slow-Carb Diet

First, if you haven’t read *The 4-Hour Body*, I recommend it. Although I’m not convinced (yet) that *all* the diet, training, and supplementation tactics author Timothy Ferriss presents work as well as he describes, I have reason to believe that a number of them do – and he offers no shortage of research data to back up his positions. Read the book for the details, but the gist of the Slow-Carb Diet is as follows:

- First, avoid all *white* carbohydrates. Foods like bread, rice (white or brown), cereal, pasta and potatoes are out. You’ll replace those carbs with beans and legumes. You’ll also be upping your protein intake – and to a degree, your fat intake – to replace some of the lost calories.
- Some dairy is out. Milk is definitely out (even skim) because of its insulinemic response, and cheese should be used minimally. Oddly, cottage cheese is okay.
- Fruit is definitely out. Ferriss has some strong opinions on fruit and its principal sugar, fructose. No fruit and no fruit juices. (Red wine is okay in moderation: 1-2 glasses per day.)
- One day out of every seven, you can go completely off the wagon and binge on anything! This sets off a host of hormonal changes that prevent your body from fully adapting to the new diet and the binge day is supposed to keep you burning fat.

If white carbs, dairy, and fruit are all out, then what’s in? Almost all meats, all vegetables (including tomatoes and avocados – technically fruits), eggs, and beans/legumes. Nuts are allowed, but Ferriss warns about eating too many. Although this is technically not a caloric restriction diet, foods like almonds and other nuts are so calorie-dense that it’s possible to go overboard.

Ferriss places a lot of emphasis on eggs and spinach because they contain substances that trigger enzymatic reactions in the liver that stimulate fat loss and muscle generation. He uses egg whites in many instances but still takes in a notable amount of whole eggs. He also relies heavily on salsa and a variety of seasonings to spice up his food because most marinades are sugar- or fructose-based.

That's basically it. On the surface, the diet is not complex.

Table 2: Rick Miller "Normal" and Caloric-Restriction Diets, Prior To Going "Slow-Carb"

| | Normal | | Caloric Restriction | |
|-----------------------------|--|----------|---|---------|
| Breakfast Option A | 2 servings, Frosted Mini Wheats | 400 cal | 1.5 servings, Frosted Mini Wheats | 300 cal |
| | 20 oz skim milk | 225 cal | 16 oz skim milk | 180 cal |
| | Half cup blueberries | 30 cal | Half cup blueberries | 30 cal |
| Breakfast Option B | 3 packets, Quaker Instant Oatmeal | 450 cal | 2 packets, Quaker Instant Oatmeal | 300 cal |
| | 16 oz skim milk | 180 cal | 16 oz skim milk | 180 cal |
| | Half cup blueberries | 30 cal | Half cup blueberries | 30 cal |
| Lunch Option A | Turkey Sandwich (1.5 servings of Oscar Mayer smoked turkey w/white bread, 2 slices of Jarlsberg Lite Swiss, Miracle Whip, honey mustard, tomato slice, spinach greens) | 400 cal | Turkey Sandwich (1 servings of Oscar Mayer smoked turkey w/white bread, 1 slice of Jarlsberg Lite Swiss, Miracle Whip, honey mustard, tomato slice, spinach greens) | 330 cal |
| | 2 servings, 4% milk fat cottage cheese | 220 cal | 1 serving, 4% milk fat cottage cheese | 110 cal |
| | 1 packet Cheez-it Rite Bites | 100 cal | 1 packet Cheez-it Rite Bites | 100 cal |
| | 16 oz skim milk | 180 cal | 12 oz skim milk | 135 cal |
| Lunch Option B | 1 can Campbell's Chunky Soup | 250 cal | 1 can Campbell's Chunky Soup | 250 cal |
| | 2 pieces white toast (with Country Crock spread) | 190 cal | 1 piece white toast (with Country Crock spread) | 95 cal |
| | 2 servings, 4% milk fat cottage cheese | 220 cal | 1 serving, 4% milk fat cottage cheese | 110 cal |
| | 16 oz skim milk | 180 cal | 12 oz skim milk | 135 cal |
| Lunch Option C | 12" Subway Tuna Sandwich, w/cheese and veggies | 1160 cal | No option | |
| | Propel Sports Water | 25 cal | No option | |
| Dinner Option A | Lawry's marinated grilled (6oz) chicken salad w/one-half tomato, 1/2-cup peppers, 1 cup spinach, 1/2 cup shredded cheese, 2 servings wishbone dressing | 560 cal | One-half Lawry's marinated grilled chicken salad w/one-half tomato, 1/2-cup peppers, 1 cup spinach, 1/2 cup shredded cheese, 2 servings wishbone dressing | 280 cal |
| | Store-bought donut or pastry | 290 cal | Skinny Cow ice cream | 140 cal |
| | 16 oz skim milk | 180 cal | 12 oz skim milk | 135 cal |
| Dinner Option B | 4 servings angel hair pasta, 1/2 jar Prego tomato sauce, 4 servings Kraft grated parmesan | 1120 cal | 3 servings angel hair pasta, 1/3 jar Prego tomato sauce, 2 servings Kraft grated parmesan | 780 cal |
| | 16 oz skim milk | 180 cal | 12 oz skim milk | 135 cal |
| Dinner Option C | 1 Lawry's-marinated (6oz) chicken breast | 190 cal | 3/4 Lawry's-marinated chicken breast | 145 cal |
| | 2 servings brown rice w/Country Crock + brown sugar | 395 cal | 1 serving brown rice w/Country Crock + brown sugar | 200 cal |
| | 2 servings Green Giant steam-in-bag vegetables | 100 cal | 1 serving Green Giant steam-in-bag vegetables | 50 cal |
| | Propel Sports Water | 25 cal | Propel Sports Water | 25 cal |
| Daily Snacks Option 1 | 4 Quaker Chewy Granola Bars | 380 cal | 3 Quaker Chewy Granola Bars | 270 cal |
| Daily Snacks Option 2 | 3 packets Cheez-it Rite Bites | 300 cal | 2 packets Cheez-it Rite Bites | 200 cal |

The “Slow Carb Diet” Test: Case Study 1

I recognized two scenarios to the Slow-Carb Diet as I would apply it:

- Scenario 1 tests the effects of the diet prior to my resuming a regular running program. I started the diet the same weekend I started physical therapy to regenerate the strength and proper range of motion in my surgically repaired foot – so I was up and moving around much more than when I was conducting the caloric-restriction diet, but I was *far* from what I consider active. One goal of the test was to see if the Slow-Carb Diet would continue, or accelerate, the weight loss I realized during caloric restriction (while hopefully letting me eat more); a related goal was to see how much weight I could lose prior to resuming a distance running program. My rationale was: If I can lose some extra weight before resuming running, I may decrease my risk of injury and alleviate the torture that is “getting back in shape.”

Simply put, Scenario 1 tests to see if the diet works (i.e., causes weight loss) and if it proves beneficial when it’s time to start running again.

- Scenario 2 will test the effects of the Slow-Carb Diet once I return to a regular running program. I will publish a separate paper in 2012 to present the effects of the diet during Scenario 2.

In the following section, I describe my experience with the diet at a broad level. My specific meals and their related calorie counts are presented at the end of this paper.

Week 1 (Sunday, February 19th)

I begin the Slow-Carb Diet with a lot of optimism. I’ve never had too much of a sweet tooth, and although you have to give up a lot of different types of food on this diet, the foods you can eat are all foods I like. I love meat (of any variety); I love eggs, and I have no issue with vegetables. I already eat a fair amount of spinach (see Table 2).

However, I start off on an ominous foot when I wake up Sunday morning and realize I have no eggs. I eat a bowl of oatmeal; thus delaying my official start to the Slow-Carb Diet until lunch, which is a burrito bowl at Chipotle (no rice, no cheese, but with sour cream and guacamole). After Chipotle, I hit the grocery store and stock up on items I realistically will need to stick to the diet. Sunday dinner is a grilled chicken salad similar to the type I always eat – but I season the chicken with Montreal rub instead of a Lawry’s marinade, and I mix a simple dressing with Dijon mustard and vinegar.

One of the selling points of this diet is that there are *no* caloric restrictions. As long as you are eating approved foods, you can eat as much as you want; thus, you should not feel hungry between meals or suffer too much of a craving for the foods you give up. Ferriss repeatedly advises, “If you feel hungry, eat more.”

I decide to try and follow the diet to the letter of the law in Week 1. My first breakfast is a one-egg, two-egg-white scramble with salsa and a butt-load of spinach teased with lemon juice. It tastes fine but certainly not exciting. I struggle to eat all the spinach both from boredom and because I feel pretty full.

By midmorning I'm feeling hungry. I drink a lot of water and try to ignore the hunger until I can go to Chipotle for a burrito bowl for lunch. Lunch is great, but by late afternoon I'm hungry again. I'm also craving things I don't usually think much about: cookies, cake, ice cream. I'm not yet 30 hours in, and I'm not very happy. I reread the Slow-Carb chapters in *The 4-Hour Body* to make sure I'm not missing anything. I drink some Propel Zero both to hydrate and because I think I can trick my body into thinking I'm having something sweet. Dinner is a grilled salmon salad.

Tuesday morning I add a side of black beans to the egg scramble and spinach. It helps, but taste-wise it's still an underwhelming meal. By midmorning I'm hungry again. I fix up some hard-boiled eggs, and they take the edge off. For lunch I have a can of tuna (water-based) mixed with chopped onions, chopped tomatoes, and a conservative spoonful of Miracle Whip. (I assume the Miracle Whip is egg-based like real mayonnaise and thus is fair to eat – wrong!) I add a side of black beans with black pepper to give some flavor. Moderately helpful. I'm craving something sweet again, so I wash it down with a Propel. By mid afternoon I'm hungry once more, so I start popping almonds. After dinner I return to the *4-Hour Body* to start looking for cheat codes. I notice that Ferriss allows small doses of peanut butter and sugar-free Jello to offset cravings and snacking, so I head out to the grocer to pick up some organic PB; I opt for sugar-free chocolate pudding instead of a fruit-flavored Jello. This is probably cheating, but I'm angry and don't care. It leaves very little caloric footprint.

By Wednesday I'm settling into the diet. I'm discouraged to find that Propel contains sucralose – on Ferriss' banned substances list – and I'm even more discouraged to read the ingredients on the Miracle Whip label... there's a host of things in there that are absolutely no-go when Slow-Carbing. (This problem is easily remedied with a trip to the store for real mayo.) Breakfast is still really boring, and I'm clearly not eating enough to prevent cravings during the mid mornings and mid afternoons, so I start adding extra veggies and some meat to my egg/egg-white scrambles. This works out okay.

When I weigh in on Friday, I'm at 202 to 203lbs¹ – down 10lbs from my pre-surgery weight and an additional 3-4lbs from the weight I lost by severely restricting calories post surgery.

Saturday is my cheat day, but when I wake up I don't have a huge desire to dash off to Dunkin Donuts like I thought I would. Instead I have some oatmeal and order a pizza for lunch. Dinner and post-dinner is a smorgasbord of appetizers, bar food, and beer.

Week 2 (Sunday, February 26th)

I'm prepared to start Week 2 right. I've stocked up on eggs, added a bunch of McCormick seasonings to the cabinet, and picked up some cinnamon and sour cream to try and spruce up the black beans. I also buy more almonds.

¹ My gym has two scales, a digital scale and an old-school mechanical beam scale. There is a 1.5-3.5lb discrepancy between the two, with the beam scale weighing in consistently lighter.

I have a bunch of early morning conference calls this week, so I fail in one important aspect of the diet on at least a couple of days: eating 30-60 minutes after waking up. I'm also becoming a slave to almonds and sugar-free chocolate pudding. I'm probably relying on them more than Ferriss intended. I haven't shied away from the cottage cheese either. It's hard to tell if I'm going overboard calorically because I'm not eating the snack foods in measurable amounts – a few forks full of cottage cheese here, a few small handfuls of almonds there...

My favorite meal by far is dinner. It's the closest to what I'm used to eating, and the variety of McCormick rubs make things pretty interesting.

I have to fly to Albuquerque, NM for the U.S. Track and Field Championships on Friday, so I weigh in on Thursday night: 200 to 201lbs. I also notice a larger gap in my waistband. Not as much progress as Week 1, but still moving in the right direction.

Week 3 (Sunday, March 6th)

I'm still in Albuquerque, NM to start the week. My *Faster Than Forty* coauthor, Mark Gomes, is racing in the Masters 800-meter run on Sunday.

I was very liberal with my Week 2 "cheat day" – breaking Slow-Carb at about 3:30 Saturday afternoon for a candy bar then settling into Kelly's Brew Pub on Nob Hill to watch basketball and nosh on jalapeno poppers, knowing full well we will celebrate after Gomes' race on Sunday. After Kelly's, I headed downtown with some other guys in town for the meet, where we have a few beers.

On Sunday after the race, we eat at La Crepe Michel (very good). It's about 2 p.m., and I scarf down a variety of lunch crepes and deserts. I'm pushing the limits of "cheat day" even by very liberal standards. Later, the dinner menu at the Artichoke Cafe offers a no-carb menu, so I'm back to being Slow-Carb legal by luck more than by design.

Getting home late Monday morning, I easily fall back into the Slow-Carb routine. Lunch is a burrito bowl at Chipotle; dinner is a variant of grilled chicken salad; breakfast the next morning is an egg/egg-white scramble with veggies. I'm back on the cycle.

I can't quite solve the hunger-between-meals problem, however. I'm still sucking down cottage cheese, almonds, sugar-free Jello, and peanut butter & celery as snacks in between meals. I'm not worried about calories; if anything, I'm afraid that my body has adapted to reduced caloric intake (possibly from my caloric restriction diet weeks earlier) and that my metabolism is slowing down. I am worried that the sugars in the peanut butter and the non-sugar sweetener in the diet Jello are enough to throw off the effects of the Slow-Carb Diet.

I add grilled steak to the dinner salad rotation.

Week 3 is also the first week where I am "consistently" in the gym. I visit three days of the seven and complete 22-25 minutes of cardio on the exercise bike and light upper-body lifting in each session. (Not

real workouts, by my standards, but my physical therapist has given me the okay to gradually get my body ready for a return to intense physical activity.)

I weigh in on Friday between 199.5 and 201.5lbs – barely any additional weight loss. This makes me angry. Instead of rebelling on cheat day, however, I indulge in a few store-bought Danishes for brunch, then nothing off diet until I go out to watch hoops with some buddies and drink a dozen or so beers. I vow to think up a way to kill the snacking problem, and I arrive at two solutions: turkey bacon and sliced turkey breast.²

Week 4 (Sunday, March 13th)

I have my Slow-Carb system down now, and in Week 4 I develop a few tricks and techniques that make the diet much less onerous.

For breakfast, I implement two new tactics: On the days when I absolutely have to roll out of bed and onto a conference call with little more than 15 minutes prep time, I drink a Muscle Milk Light protein shake. (This is a Ferriss-approved tactic, and the shake has 20g of protein versus 4g of fat and 10g carbs –acceptable levels.) On the days when I have a little more time to prepare, I add pre-grilled chicken to my egg/egg-white scrambles. This kills the hunger between breakfast and lunch.

I develop a routine of Monday/Wednesday/Friday burrito bowls at Chipotle and Tuesday/Thursday no-carb tuna salads at home. My late afternoon snack cravings are down to a few almonds, or maybe a few forkfuls of cottage cheese. It took four weeks, but I may have solved the snack craving problem.

I am allowed in the gym four times this week: Monday/Wednesday/Friday and again on Saturday morning. When I weigh in Friday night, I score between 195lbs and 199lbs on the beam scale and digital scale, respectively – down 2-4lbs from the prior week. The weight loss has resumed now that I've ironed out some of the kinks in the diet.

Week 5 (Sunday, March 20th)

I have three 7 a.m. meetings this week, which contribute to behaviors that ultimately cause problems. First, I continue to drink the Muscle Milk shakes on meeting mornings, but instead of returning to the kitchen and preparing a real Slow-Carb breakfast once I'm free, I just skip it altogether. Second, on the mornings when I prepare a traditional breakfast, I take to skipping the beans and spinach – instead preparing only the omelets (egg + egg whites, tomatoes, onions, and grilled chicken).

By Tuesday I notice that at mealtimes I'm not really that hungry and I don't finish my dinners. However, I drink Muscle Milk shakes before and after my three sessions in the gym. The gym sessions are the only bright spot of the week. I'm back to full strength in my weight routines and I've upped my cardio to an average of 35 minutes on the bike.

² It is hard to find no-sugar turkey breast, but Boar's Head reports no carbs and less than 1.5% sugar in its products. Foster Farms (Costco) reports less than 2% sugars. Applegate Farms (Peapod) appears to be completely sugar free.

When I weigh in Friday night, and am between 196lbs and 200lbs on the beam and digital scales, respectively. I've gained a pound back. It's possible that some of this is muscle gain from the increased lifting, but I plan to get back to the traditional Slow-Carb diet for Week 6 to see if I've really begun to plateau or if I can continue to drop weight. Given my college racing weight (153lbs), I suspect I have a lot more room to drop – even though my target weight is nowhere near my college weight. I've built a lot more muscle since college, and I'll be happy with 190lbs or less.

Week 6 (Sunday, March 27th)

I notice several funny things starting to happen in Week 6. First, the cravings for sweets and carbs that I hadn't really felt since Week 1 are back with a vengeance. I'm fairly disciplined in dealing with them: 3-4 celery sticks with peanut butter or one 4oz sugar free cherry Jello cup, but this is probably tied to funny thing number two: My appetite is almost non-existent.

I'm struggling to finish my egg/egg-white scrambles in the mornings, and I'm eating about half a serving of black beans and half a serving of spinach (if that) with them. Lunch is consistent: three days of burrito bowls at Chipotle, two days of no-carb tuna salads, and I have no problem eating these. And I certainly had no problem at a business lunch on Wednesday, at The Gage restaurant on Chicago's Michigan Ave., where I had where I had broiled white fish. Dinners are grilled chicken or grilled salmon salads – meals I typically love – but I'm not finishing them either.

I am drinking more Muscle Milk Light protein shakes (1-2 per day), but at 150 cal, it's not likely these are responsible for my lack of hunger... especially because of funny thing number three.

I'm in the gym five days in Week 6. I'm lifting at 100% capacity – in fact I even set a couple of PRs in two exercises (rows and machine crunches). However, I'm sluggish during a couple of the cardio sessions. Also, I run for the first time at physical therapy. Granted it is in the Alter G anti-gravity treadmill, and my total run time is about 2 minutes, but these are the first steps I've moved at sub 7-minute-mile pace in 8 months.

I weigh in at 194-198lbs on the two scales at the gym – down 2lbs from last week. Although I was certain I had reached a plateau again, the Slow-Carb program was apparently still working. However, my calorie count is probably down as well, due to the number of meals I failed to complete.

Week 7 (Sunday, April 3rd)

Mentally and emotionally, I feel like the wheels are coming off the bus. After a fun Week 6 Saturday cheat day (Dunkin Donuts in the morning, a Southwest BBQ Burger at The State in Lincoln Park, plus too many Miller Lites to count during the NCAA Final Four), I have no desire to play out the string for the final couple of weeks of this diet. I'm good about breakfast on Sunday – 2 eggs over easy and 6-8 slices of turkey bacon – but I cheat during dinner at Big Bowl and have half a portion of rice with my Yellow Curry Chicken with Green Beans. I cheat again with a couple of Guinness on a date Monday night, when it seems inappropriate to make my lady-friend drink beer by herself. On Tuesday I can't help but have a cheddar roll at Shaw's Crab House, a Chicago staple.

It is becoming apparent that my inability to finish breakfasts is psychological, not because of a slowing metabolism. At one of my Chipotle lunches I eat two burrito bowls. I'm still snacking on almonds and sugar-free Jello intermittently. I replace a couple of dinners with Muscle Milk Light protein shakes, but more out of boredom and a busy social schedule than anything else.

In the gym, my weight work is getting even stronger. My cardio work is hit or miss. I run for 6-7 minutes at sub-7:00 pace one day on the Alter G, but I don't recover well due to soreness in my surgically repaired foot. I am not looking forward to weighing in on Friday night, but I'm pleasantly surprised: 191.5-195lbs. Taking the average of the two measures, I'm down 20lbs since my surgery exactly 11 weeks ago. This gives me the incentive I need to finish out Week 8 of the diet because, despite the minor setback with the foot this week, I'm fairly confident I'll be starting my running program in what would be Week 9. (Remember, this test scenario was only meant to measure the diet's effectiveness *prior* to beginning a running program.)

Week 8 (Sunday, April 10th)

The thought of eating diet-approved meals still bores me nearly to the point of skipping them (although I don't). However, knowing this is the last week of the diet – the bell lap, so to speak – I feel compelled to put my head down and see it through. I remain “on protocol” with breakfasts of Slow-Carb-recommended egg + egg-white omelet's or protein shakes, lunches of tuna & diced veggie salad or Chipotle burrito bowls, and dinners of grilled chicken or grilled salmon salads.

I'm in the gym three times, and my weight-lifting routines continue to go well, but cardio becomes a surprising problem. I complete a moderate 30 minutes on the exercise bike before a 45-minute weight session on Monday, but when I return to the gym on Wednesday for a bike interval workout, I can't make it through the warm up. I can't pedal at my regular tension setting nor at my regular cadence (about 95 RPM). I get off the bike and walk around then try again, but before I reach the 7-minute mark, I bag it. I come back on Thursday and make nearly 20 minutes, but it's a lackluster effort. It's possible that slow-carbing may have a deleterious effect on cardio training – the sequel to this paper will examine that in more detail.

I weigh in on Thursday (a day early due to travel) and get readings of 190lbs and 193lbs on the two scales at the gym – for an average of 191lbs. I'm 22lbs less than my pre-surgery weight, 15-17lbs of which is attributable to the Slow-Carb Diet.

Realizing that I'm coming to the proscribed end of this diet, I start to think about which habits I will keep (if any) as I return to consuming traditional carbohydrates. Because the Slow-Carb dinner salads are so close to my regular dinners – and because the McCormick seasonings taste as good as any fructose-based marinades I had used in the past – I will likely keep my dinners in the Slow-Carb format. I can see maintaining my thrice-weekly visits to Chipotle for lunch, but I'm ready to swap the tuna and veggie salads for a more traditional turkey sandwich a couple of times per week, and I already predict bringing back my beloved oatmeal for breakfast at least two days per week.

Although I do not plan to begin the second Slow-Carb test until my running output reaches 40-50 miles per week, I'll continue to monitor my weight and other vitals. I will document any noteworthy changes in the sequel to this paper.

Conclusions

After eight weeks of maintaining fairly consistent behavior, I've reached the conclusions below.

- The Slow-Carb Diet appears quite effective if you are looking for a reliable way to shed weight. In an eight-week span I averaged roughly two pounds of weight loss per week. The diet also appears quite effective in burning fat. Most of the weight I lost came from my waist line (down from a snug size 34 waist to a loose size 33 waist), and at the end of the diet I noticed ab-muscle definition and visible veins in my forearms. These were not visible prior to the diet.
- The Slow-Carb Diet requires some will power, but it is not impossible to stick to. The once-a-week cheat day is an invaluable emotional tool that helps keep you focused for the six days you must stay on diet. I should reiterate: prior to this diet I had never attempted any other documented diet plan.
- The biggest drawback to this diet is how boring the meals get after a certain period of time. After an initial shock period in Week 1, I settled into the diet without much stress until the final couple of weeks. But by weeks 7 and 8, I had severely tired of the diet and needed a break.
- Following the diet results in lower caloric intake by default because most of the approved foods are *not* calorie-dense. Depending on how drastically you adopt the lowest-calorie foods – or if pure boredom causes you to skip meals – you run the risk of slowing your metabolism and negating the diet's weight-loss benefits. However, I spoke with several nutritionists at Rush University's Department of Clinical Nutrition, and many components affect the rate at which metabolism may be slowed (age, lean muscle mass, etc.) I concluded that on weeks I hit a plateau, I was likely cutting calories to drastically.
- I was able to shave nearly 11% off my total body weight using a combination of caloric restriction and the Slow-Carb Diet – and I believe almost all of that weight was body fat. However, it is important to note that I had fat to spare. I do not think the typical high school or collegiate track athlete could expect these types of results (and hopefully they're already fit enough that they shouldn't need too). Until I conduct the second phase of my research, it's too soon to speculate if younger runners (or runners who don't need to drop weight) will see any other benefits to employing this diet. While my weight training didn't appear to suffer in any way, some early indicators imply that endurance training could be adversely affected.
- My LDL cholesterol did increase on this diet, but remained "near optimal" as defined by the American Heart Association (<129 mg/dl)

Table 3: Rick Miller Relevant Physical Characteristics, Post Slow-Carb Diet

| | "Pre-Surgery State" January 14, 2011 | Post Slow-Carb Diet |
|--------------------------------|---|----------------------------|
| Age | 40 | 40 |
| Height | 6'2" | 6'2" |
| Weight | 213lbs | 191lbs |
| Avg. Weekly Running Mileage | 0 | 0 |
| Avg. Mile Pace (Training Runs) | NA | NA |
| Avg. 5K Time | NA | NA |
| Total Cholesterol | 210 | 201 |
| LDL Cholesterol | 81 | 109 |

Recipes and Nutritional Counts

Table 4: Rick Miller Slow-Carb Diet Meals and Calorie Counts

| | | |
|-----------------------|--|---------|
| Breakfast Option A | Egg/egg-white omelet (1 egg, 2 egg whites, ¼ cup diced tomato, ¼ cup diced onion, black pepper) | 155 cal |
| | Spinach (1.5 cups, cooked) | 62 cal |
| | Black Beans (2 servings) | 220 cal |
| Breakfast Option B | Egg/egg-white omelet (1 egg, 2 egg whites, ¼ cup diced tomato, ¼ cup diced onion, black pepper, ¼ cup grilled chicken, ¼ cup chopped spinach) | 277 cal |
| Breakfast Option C | Muscle Milk Light (8.25 fl oz) protein shake | 150 cal |
| Lunch Option A | Chipotle chicken burrito bowl (black beans, mild/medium salsa, sour cream, guacamole, lettuce, peppers & onions) | 640 cal |
| Lunch Option B | “Breadless Tuna Sandwich” (2 cans tuna w/water; 1 cup diced tomato; ½ cup diced onion, ½ cup diced peppers, 1.5 servings real mayonnaise) | 631 cal |
| Dinner Option A | “Miller’s Southwest Chicken Salad” – McCormick mesquite-rubbed grilled chicken (6oz), 1 cup tomato, ½ cup peppers, 2 cups spinach, 1/2 serving crushed almonds, refried black beans, sour cream | 728 cal |
| Dinner Option B | “Miller’s Grilled Salmon Salad” – Morey’s marinated salmon filet (6oz), 1 cup tomato, ½ cup peppers, 2 cups spinach, 1/2 serving crushed almonds, 2 servings chilled black beans, balsamic vinegar | 703 cal |
| Dinner Option C | “Miller’s Grilled Sirloin Salad” – McCormick Montreal Steak-rubbed sirloin (12oz), 1 cup tomato, ½ cup peppers, 2 cups spinach, 1/2 serving crushed almonds, balsamic vinegar | 918 cal |
| Daily Snacks Option A | 4 oz sugar-free Jello pudding (chocolate) | 34 cal |
| | 1.5 servings 4% milk fat cottage cheese | 165 cal |
| | 1.5 servings Emerald dry roasted almonds | 225 cal |
| | 1 cup Lipton green tea | 0 cal |
| Daily Snacks Option B | 1 hard-boiled egg | 70 cal |
| | 2 servings no-sugar-added Boar’s Head roast turkey | 120 cal |
| | 1.5 servings Emerald dry roasted almonds | 225 cal |
| | 8.25 oz Muscle milk Light | 150 cal |
| Daily Snacks Option C | 5-8 large celery sticks | 25 cal |
| | 1 serving organic peanut butter | 180 cal |
| | 1.5 servings 4% milk fat cottage cheese | 165 cal |
| | 1.5 servings Emerald dry roasted almonds | 225 cal |
| | 1 can Diet Dr Pepper | 0 cal |

My average daily caloric intake on the Slow Carb Diet was 2235 calories – notable higher than my intake when I conducted the caloric restriction diet (1795 calories per day on average) and notably lower than my pre-surgery diet (2985 calories per day on average).³

I think it’s interesting that with pure caloric restriction I averaged about 1.5lbs of weight loss per week; while slow-carbing I averaged roughly 2lbs of weight loss per week – even though I consumed about 440

³ Note: I didn’t always eat all Option A meals on the same day. Sometimes I would eat Option A for breakfast, Option B for lunch, etc. However, the average daily caloric intake is roughly the same.

more calories per day. As my recovery from surgery progressed along the 8-week timeline that I was slow-carbing, I did increase my exercise levels – but at *best* I estimate I burned about 300 calories per day due to exercise.

Tips and Tricks For Success

The Slow-Carb Diet may seem challenging at first, but you can mitigate most of the difficulty with some simple preparation:

- Designate one day per week as your “prep day.” Prep day is the day you go to the grocery store and do all the pre-work for most of your meals. If you chop all your vegetables in one session, grill some of your meat, and hard boil a half-dozen eggs all at once – then store these foods in reusable plastic containers for easy access for meal prep during the week, you’ll be much less likely to skip certain aspects of meals or cheat altogether. I made Sunday my prep day because it fit my schedule and it seemed to make sense because Saturday was my cheat day.

Do not underestimate the importance of prep day!

- Make sure you have all the necessary recurring tools and ingredients in place before you start. I recommend having ample supply of the following items prior to starting the diet:
 - 8-10 ZipLock (or similar) reusable plastic containers, 16oz and 32oz sizes; cylinders for vegetables and rectangles for storing meats
 - Several varieties of McCormick Grill Mates seasonings (be sure to read the ingredients label and avoid the SKUs with high sugar content)
 - 1 or 2 Rubbermaid (or similar) BPA-free water bottles
 - Ground cinnamon
 - Ground black pepper
 - Balsamic vinegar (for low-carb dressings)
 - Ice
- Drink extremely cold water. With dairy and fruit juice off the table (and diet soda sort of off the table), you’re not left with much to drink but water... and water is pretty boring. However, I found if you make it cold enough, water isn’t that bad. Use ice. Lots of it.