1. Question from Ankit:

Robb,

I have to say you have been a lifesaver. I was on the road to diabetes and other health problems like the rest of my family (who are vegetarian). I attended your seminar in Atlanta and I'm a bit confused with some information overload. I'm a bit confused on what fuel the body will use and when it will use the fuel. This is my current understanding:

- 1) Body converts carbs in to glucose to be used by either the muscle or liver. The excess go to adipose tissue (aka fat).
- 2) doing a low carb ketogenic diet your body converts fat and protein into ketones (i'm not sure when you use fat and when you use protein)
- 3) in a crossfit style of workout it seems like we use up the glucose but after the glucose stores in the muscle and liver are used up i'm a bit confused on where the fuel comes from. From what i read it comes from glucose produced form amino acids (aka muscle).
- 4) moderate activity like walking will use ketones from fat production if the glucose isn't available.

I'm not exactly sure how you get your body to use ketones as a primary fuel even if you are doing the high workload WODs. My hunch is that if you keep carb intake below 50 grams a day then you have to really up the protein intake maybe even beyond the 1 gram per body weight.

My question really is when does your body use glucose(from stores, or from muscle), when does it use ketones (from fat, or from protein). Or am I way off on the mechanism?

2. Question from Alex:

Hi Robb,

Your site and podcasts are awesome. You can count me as another one of your few fans from the Midwest (Michigan). I started doing Crossfit, but quickly switched to Starting Strength once I realized how bad my numbers were in terms of base strength. I made even more gains when I switched to paleo, with my only cheat coming from beer (I'm a college kid), but I try to avoid it.

My question:

What do you think about the website 70sbig.com? It's run by some of the guys from Rippetoe's gym. They advocate calories and protein by any means necessary, and although they tend to praise paleo, it seems that cheeseburgers and the gallon of milk a day are regularly mentioned. Is it okay to do something like that diet for 6 months while I work on my base strength? Is it a bad idea to build my body with such unhealthy food, even if I go back to paleo to maintain it?

I plan to switch to crossfit football programming once my strength goals are reached. I'm 5'11", 170, and my last SS workout included sets of 215x5 for squats. Not fat, not super lean either.

3. Question from Kevin:

Diana Hsieh, of Modern Paleo fame, suggested you may have interest or ideas regarding this question.

I've recently read and put into practice the ideas in Dr. McGuff's book Body By Science. And he is very clearly in favor of adequate recovery time between workouts, using your time under load numbers to determine if your getting enough recovery, the assumption is you should improve every workout.

However throughout my life I'd found that when dealing with muscle soreness a good remedy to make alleviate the discomfort was some light or even moderate exercise of those same muscle groups. Almost every time I've done that I've felt better immediately (loosened up the stiffness) and found that the soreness subsided by the next day.

So my question is if you have any ideas regarding muscle soreness? And do you think doing a light workout to follow up and relieve discomfort may actually harm or delay your overall goal of increasing strength?

4. Question from Amanda:

I just recently got linked in to the podcasts and have been gleaning a lot of great information, so thanks for all that you do!

I have been grasping at straws for the last couple years attempting to pinpoint what is going on with my body and am running low on possible solutions. A little background:

- -31 year old female
- -5'7", 140, ~18% bf
- -Follow Brand X scaled WOD, 3 on 1 off
- -Teach 4 indoor cycle classes per week
- -I take a deload week about every 12-16 weeks
- -Sleep averages about 7 hours/night
- -Started paleo about 9 weeks ago, was relatively low carb before that
- -Average ~1800-2000cals/day; but I don't count
- IF 14-16 hours a couple times/week

I suffer, and have for many years, from chronic constipation. I also was on Depo Provera injections for 8+ years due to uterine fibroids. I stopped the injections about 5 yrs ago and have not had a cycle since. I've seen 2 gynocologists who don't seem to have an issue with that as long as I am not trying to conceive. I have had my thyroid checked twice and been declared WNL. (also suffer from cold intolerance, pale skin, coarse hair, dry skin, low energy, among other symptoms). I worked with a Naturopath and determined iodine deficiency, started supplementing and still no real difference. The dr I saw about the constipation said take stool softeners and eat more fiber; didn't work. I finally saw an acupuncturist for 3 months and even with weekly treatments, herbs and teas I saw no change. I am heading to a gastroenterologist this afternoon to chase this rabbit down yet another hole.

I've heard you talk about estrogen dominance and am now wondering if that's an issue to further explore. I know it's a very long post, but I'm pretty much at a loss as to where to turn, who to listen to and what else to try. Thanks in advance for any information you can give me. Might this be a record for the longest podcast question in history???

5. Question from Tim:

Hi Robb & Andy; absolutely in love with the podcast. I'm 19 years old and have recently decided to embrace the whole primal lifestyle, havinfg previously been an endurance junkie i'm beginning a more strength orientated deal along with the diet which i'd already been rolling with. Anyway...

- 1. In the last podcast you mentioned hyper insulin production (regarding the gum situation) and i wondered if this could be used to positive effect if confined to a very short time like consuming a large quantity of high G.I crabs immediately pwo?
- 2. Bearing in mind my past (excessive cardio, not enough food) are there any suggestions regarding my diet/training if i'm trying to add serious muscle? (I'm currently badly underweight, as in unhealthy, and have high cortisol levels & reduced immune function according to my bloods)

Dammit, got loads i'd like to ask but i'll leave it at that for now. Keep up the good work!

6. Question from Duncan:

Hi Robb, Andy,

Have been following your work for a few years now (I'm loving the podcast, by the way) and am hoping you can help.

I'm based in London, UK, and have recently had a blood test that has given the following result:

Cholesterol (Fasting): 4.8 mmo1/1

Trigliceride: 0.62 mmo1/1

HDL: 1.37 mmo1/1 LDL: 3.15 mmo1/1

My doctor is now telling me to take Benecol daily to reverse the HDL/LDL numbers as he says the ratios are currently not good.

I have two questions:

- 1 how good/bad are theses results in reality?
- 2 is there an alternative to Benecol, something with less additives?

7. Question from RatherRipped:

Regarding UC. I had a sudden onset in September, which has not gone away. I train hard at Crossfit and wonder if fatigue not diet is the problem. I know that auto-immune conditions can be stress and fatigue related.

But, I began the Paleo diet in May/June with phenomenal results, and I am following a very simple program. Compliance was and is quite good, but I do eat a high amount of fruits.

I wonder if at my age, 56... am I over training. I know that my sleep is disrupted by the CF routine and my recovery is terrible. At 4 days per week maybe I am doing too much? Maybe I need to scale more. I love the lifting and strength aspects of CF, mainly because it makes me look better and it facilitates natural weight loss.

I would like to hear feedback on this – health longevity performance. Everything is great except for the UC, which represents ill health.

8. Question from Becky:

Hi Rob,

I've been listening to your podcasts since the beginning, and first I want to say thanks so much for all that you do. I have a question about cortisol, and I'm hoping you can help me out because I'm at the point where I'm not sure what else to do!

I've been doing paleo for about 8 months now, but my body composition (BF%) still isn't where I want it to be. I feel like I've tried everything I can think of – eliminated fruit, under 30g of carbs a day (which is usually cauliflower or broccoli at dinner only), went off birth control pills – but I haven't seen much difference. I feel like the one thing left that could be a problem is cortisol levels. I do Crossfit workouts about 4 times a week and play indoor soccer 2 times a week. My sleep is definitely less than optimal. Do you think that's my problem, or is there something I'm missing? These changes have only been within the last month, so do I need to wait longer to see results? Should I just try sleeping longer or are there supplements to take to help lower cortisol levels?

Thanks so much for any help you can give!

9. Question from Adam:

Hey Robb,

I attended one of your last nutrition certs in Monrovia, and loved the info. I am in the Navy, and gave a nutrition lecture to all of the PFA (Personal Fitness Assessment) failures in my squadron (some folks couldn't pass the fitness test, but most were out of height/weight standards). Several of the people have taken part or all of what I told them on board and have seen significant results.

One of the attendees talked to me after the lecture about his problems, and I wanted to see if you could help him out.

He is 38. He only gets about 4-6 hours of sleep a night. Anything longer than 4-6 hours, and he will wake up and have trouble getting back to sleep. He has an abnormally low heart rate (sleeping heart rate of 46, normal heart rate of 54-56). The doctors have him on caffeine pills, and without those, he says he will just "zone out" on the drive home and drive off of the road. The doctors say all of his tests are normal (heart stress test, EKG, some kind of radioactive dye test). He is 5'8", and weighs 202 lbs. He is about 23% body fat, and carries his weight in the mid section, mostly love handles. The docs say his cholesterol is 1 to 1, good to bad, whatever that means. A heart specialist said if he continues having problems, they need to check the electrical current to his heart.

I talked to him about metabolic derangement, hyperinsulinemia, paleo, and the zone. I also talked to him about cortisol issues and advised him to get more sleep. He has a lot of trouble getting to sleep at night, and is tired all day. I gave him some melatonin to try (always helps me get to sleep when I have trouble) and talked to him about the Natural Calm magnesium (he hasn't bought any yet). Normally when he wakes up, he is very disoriented and groggy, and it takes him 20 minutes or so to wake up enough to even get in the shower. He said the melatonin made him even more sluggish the next morning. He can't get to sleep before 1-2AM. He gets drowsy in the afternoon, and then is wide awake in the evening. He doesn't actually get tired until about 4am, so it is a struggle to get to sleep even at 1am. He has worked nights before, but he has been on the day shift for 5 or so years.

Have you ever heard of a low heart rate issue and a "zoning out" situation that requires caffeine pills? The Navy docs are scratching their heads about all of this, so I wanted to see if you could help the guy out. Thanks in advance for the help