

## The Primal Blueprint Podcast – Episode #14: On All Things Play with Mark Sisson

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Brad Kearns: So hello. This is your host Brad Kearns here in the Malibu studios with Mark Sisson back in action. How are you doing, Mark?

Mark Sisson: I'm doing great and ready to answer some questions today.

Brad Kearns: We received a ton of questions on SpeakPipe as well as in writing but I also wanted to get in to something that you mentioned in Tulum, during your talk. You made a lot of eyes pop out when you said and this was a random question when you said that sleep is possibly the number one, at least number two, at least in the big picture, of course diet being the other one, pursuing health and the next frontier of primal-optimized living

Mark Sisson: [00:00:51] Yeah, it is really interesting because I have been working on this for myself for the last several years, knowing, intuitively, and also through the research, that sleep was really important to maintaining good health. I have been working on my own internal sleep mechanisms and dialing in my sleep. And what I asked in Tulum, I sort of matter-of-factly said, "Let's have a show of hands. How many people here would consider themselves not getting enough sleep?" And about 90 percent of the people in the room raised their hands. It was a real revelation to me that people assume that once you get your diet down and once you get your exercise strategy, you are home free. The reality is if you haven't dialed in some of these other lifestyle elements, and sleep being a very, very crucial one, you may not be getting the health benefits that you have been seeking.

Brad Kearns: In the Primal Connection you covered quite a bit of sleep material in there and there are some really good tips. I thought maybe we could talk through some of the most important ones. And give some bullet points for people to focus on, instead of just the lip service that we hear. "You need to get 8 hours of sleep every night." It is not that simple, actually. So number 1, I think is pretty obvious.

Mark Sisson: [00:02:08] First thing I would is make sure your sleep environment is set up appropriately. That means that you eliminated the noise distractions, that you have created an environment where it is as dark as possible. 100 percent dark is ideal. I know that sometimes I am on the road and I sleep in a hotel and maybe the little green dot on the thermostat is shining through the night or there is some little light sensor that is overhead, I sometime feel like I have to cover them up to feel like I can get the full 100 percent darkness effect. In my home here in Malibu, we were lucky when we moved in that the prior owners had installed storm shutters in all of the rooms upstairs so effectively all of the rooms have blackout curtains so we put these shutters down every night. It is amazing how dark the room can get and then we have a little anti-room, a little anti-chamber, off the bedroom where I do leave the curtains open a

little bit and as it gets light in the morning, enough light creeps in, it is sort of around the corner so I am able to wake up naturally with the sun rise. Getting that first element of complete darkness is so critical to the release of melatonin. You need this melatonin, for your body to put you in that sleep mode. There have been studies that have shown that even shining lights on different parts of the body, having covered the eyes up with a mask, that you shine lights on different parts of the body, that is enough to prevent this full release of melatonin.

Brad Kearns: So this starts with sort of a primal theme because we are tuned in to the rising and the setting of the sun. We have been for millions of years. That is why you were mentioning making it so dark. It is because we have all kinds of artificial lights now.

Mark Sisson: [00:04:00] Exactly, and Formby and Wiley have in their book, "Lights Out: Sleep, Sugar, and Survival," make note of the fact that there is this seasonal requirement that we have for sleep that becomes greater than in the winter as the sun goes down earlier and comes up later, to the effect that it is probably more like 9-1/2 hours in the wintertime, down to as little as 8 hours in the summer based on this concept that you would ideally go to sleep when the sun sets and get up when the sun rises. Obviously, if you live in different latitudes, you are going to be exposed to a whole range of amounts of sun that you have in the day time. But, the idea being that if you can somehow replicate this normal rhythm whether it is, again, unwinding earlier in the day even though the sun is already gone down, not exposing yourself to the sorts of blue lights that would replicate daylight, but, in fact, expose yourself more to the yellow and orange spectrum that would be a fireplace, or candles, or even changing light bulbs in some of the lamps in the house so that you are able to continue into this sleep phase gradually and slowly where you have this release of melatonin.

Brad Kearns: [00:05:23] So when you say, "blue light," you are talking about the visible part of the ultraviolet spectrum, to be perfectly clear. So "blue light" really is, practically speaking, is pretty much all forms of artificial light like indoor light bulbs, indoor lighting, as well as the sun light, as well as the light emitted from digital screens. That is where the big problem occurs, the big mismatch occurs with genetics and evolution history.

Mark Sisson: We have created this wonderful hedonistic environment when we have, with the flip of a switch, where we can stay up all night and be entertained and not miss out on any of the fun. That challenge, for a lot of people, is very real. There is so much going on. There's good TV, there are parties, there are places to go and people to see and things to do well in to the evening simply because of this artificial light that we have created for ourselves. The challenge is, at what point do I sort of back away from that, unwind, recognize that I need to sleep, and create a strategy that allows me to get in to that sleep state, by 10:30, 11:00 or 11:30 at the latest, and, in many cases, for some people it is going to be 9:00 or 9:30, where you can get a full night's sleep. Now a full night's sleep is another topic of discussion, in and of itself.

[00:06:45] This notion where we have to have 8 or 9 or 10 uninterrupted hours, is sort of a misnomer. We can touch on that a little bit later. But the challenge that we face as modern humans living with 10,000 year old gene sets that expect us to go to sleep when the sun goes down, and here we are staying up all hours playing and having fun, thinking that somehow we can make it up later. Obviously, that weird stupid mantra of "you can sleep when you are dead," has a ring of truth to it because you may be dead sooner if you don't get enough sleep.

Brad Kearns: [00:07:18] So what is happening hormonally when you are watching that great movie or you are at the party? You are not even tired. You feel fine. What is going on inside that is causing potential trouble?

Mark Sisson: Well, a lot of times we can be emotionally involved in what we are watching or listening very visceral deep thumping of music at a party or at a rave or whatever you are choosing to stay up late to. So there is emotional involvement....it could even be the evening news, with its death and destruction and

all of the salacious stuff that is going on. There is this empathetic involvement which involves cortisol release, and adrenal and cortisol, there is the prevention of the release of melatonin. There is, in many cases, because you are eating late, the serotonin that you create through carbohydrate intake increases and that is not necessarily a good thing because the serotonin to melatonin shift is part of what we need in order to enter that sleep state. So we do get caught up in watching television late and thinking that we are unwinding from the day and thinking this is a good thing to do before we go to bed and try to sleep. In fact it is probably not good at all. It is probably counterproductive to our intending to get a good deep night's sleep.

Brad Kearns: So the melatonin is the key that is making us feel sleepy and preparing our body to actually fall asleep and get rest and cycle through the various REM phases and deep sleep phases.

Mark Sisson: Right and one of the things that happens when we travel, for instance, is we shift away from our normal 24 hour cycle. Well, we don't shift away from it, we travel away from it. Our body still wants to be on the home based 24 hour cycle. So we get to a location that is 8 or 9 or 10 time zones away from where we normally are, the body is thrown off trying to produce melatonin. It wants us to recover and to repair and to rewire all of those neuro-networks. One of the tricks that I use when I travel is I use a melatonin supplement to kind of reset that clock when I travel across many time zones. But it does sort of come back to that idea that melatonin is sort of that key sleep hormone. We want to do whatever we can to promote the timely release of it and then also, on the back end, to wake up in the morning in a manner that again shifts away from that into the production of serotonin and on with our normal day.

Brad Kearns: [00:10:01] So, if you listeners are wondering back at home if you are getting enough sleep you have a little bench mark in the morning, right?

Mark Sisson: Yeah. If you wake up refreshed and you feel like you got a good night's sleep, that is probably an indication that you got a good night's sleep. If you are one of those people who drag their ass out of bed every morning because the alarm went off and you wish you just had another hour. When I talk about living the Primal Blueprint lifestyle, much of it is about intuitive. How can I intuitively know that I am eating the right things, and I am exercising appropriately, and I am getting the right amount sleep. Waking up refreshed on a daily basis, is a good indicator that you are getting enough sleep. Conversely, waking up kicking and screaming because the alarm went off, or because someone had to rouse you from your sleep, is an indication that you are not sleeping appropriately.

Brad Kearns: So you wrote about this in detail in the Primal Connection. Briefly, if you wake up and you feel dragging, hormonally speaking, or sleep science speaking, what has happened is you haven't cycled optimally through the various phases of sleep.

Mark Sisson: Yes. There are phases of sleep throughout the night. The REM sleep is probably the main focus of a lot of people who are interested in looking at the success or failure of sleeping or the time during which your brain, literally, reorganizes the information that it has been exposed to. There is a slow wave of physical recovery that is the point at which there is some cell repair going on and some hormonal rebalancing taking place. It is interesting when you look at what it takes to live and all of the hierarchies of needs we can go a few days without water. We can go..maybe a week without water. We can go months without food. In fact there is a guy who went a year without food. We can go a long time without food. But you go even a few days without sleep, you will die. And that is how important sleep is to repair, restoration, regeneration and renewal of not just our bodies, but of our psyches, and of our neuro-networking, and the restoring of the balance of the hormones. So it is one of those crazy things we sort of take for granted. I feel like since I do fall asleep every night, I must be getting enough sleep. Or I am a person who only needs four or five hours of sleep a night. I hear that a lot. In fact, I don't think there is anybody who can survive for a long period of time on four or five hours of sleep a night. I think you are fooling yourself if you are convincing yourself of that and at some point you do have to make it up on the back end. Now how you can make it up is through naps. Naps are quite important to a lot people to make up that difference where you have a shift schedule that takes you in to the night, or whether because you are

raising kids, you don't have enough time to get quality sleep, or if you are up in the middle of the night caring for their needs, the idea that you can make up some of that difference with a nap is a very useful tool. There are napping strategies that we talk about in the Primal Connection that I think would help a lot of people make up that difference.

Brad Kearns: You said, "Napping as needed," was kind of your guideline there. That do you mean by that?

Mark Sisson:[00:13:42] If you don't need to nap, don't nap. It is funny...back in my days of high carb, sugar based diet when I was an athlete, I would need to take a nap just about every day around 2:00 TO 3:00. If I didn't nap, I couldn't function. I couldn't work at whatever job I was doing. It was sort of part of my routine. That was because I needed it. It was partly because of the diet and the fact that my nighttime sleep wasn't as efficient and effective as it could be. So I needed it then. Recently, the only time I really ever nap is on Sunday afternoons around 3:00 because my ultimate games that we have usually around 1:00. We play two hours of hard, hard ultimate. In fact yesterday, I probably had the best ultimate game I've had in six or seven years. Seven superman heroic catches. It was phenomenal. The harder I put out, the more I realize that I need to maybe take care of myself when I get home. I got home and put on a game or something and then I took a 45 minute nap. It was the most refreshing pure catch up sleep that I have had in a long time. Did it affect my evening? No, I went to bed at 10:00 o'clock last night and woke up this morning about quarter of seven feeling 100 percent refreshed.

Brad Kearns: There is a misnomer, it seems like in the sleep science that has captured this where the common conventional wisdom that says if you take a nap, you are going to mess up your evening's sleep. It is just not so. It has been proven by science.

Mark Sisson: Exactly. We say "as needed." It doesn't mean if you want to take a nap, you can't unless you need it. But typically, I recommend that people take naps if they are not getting enough evening sleep and if they do take naps, they are literally rebalancing the sodium potassium ratio, you are refreshing brain synapses. You literally do wake up refreshed. That is what is going on.

Brad Kearns: That is why it doesn't interfere with nighttime sleep since you are running around in a fog for the last six hours of the day and then kicking up your cortisol by relaxing with a movie or doing emails in to the night. You are not even in a position to, again, gracefully cycle optimally through all the phases of sleep at nighttime because you are too fried.

Mark Sisson: Exactly. [00:16:06] It is one of the things people ask me about a lot. A typical comment is, "I wake up at 2:30 or 3:00 and for some reason, I can't get back to sleep. What is wrong with me?" Well, there is nothing wrong with you. It is actually a normal cycling of sleep.

Brad Kearns: Is that the morning or the afternoon?

Mark Sisson: I am talking about in the a.m. having gone to bed at 10:30 or 11:00. They are thinking something is wrong with them because they only got four hours of sleep and now they can't go back to sleep immediately and they start to worry about the fact that they are not getting enough sleep. So the worry, itself, keeps them up. It keeps them from getting back to sleep. The reality is most of the world has exhibited a poly-phasic, or bi-phasic sleeping style for most of history. Particularly a lot of cultures in Asia, Africa..typical is to wake up and make some tea, to read a little bit, to have a conversation, to have sex, to look after the kids, to maybe even go for a walk, and then go back to sleep and pick up where you left off without worrying at all about having missed that 20 minutes of half hour in between. That is what I recommend. People will ask me, "What do I do about this?" I say maybe what you do, if you like to read, is put on one of those miner headlamps or change the bulbs in the bedroom lamps or lighting systems to a orange or yellow light and read for 15 or 20 minutes. Not something that is going to put you on edge, but something that is going to engage you enough that you will start to fall off in 15 or 20 minutes and then you will be able to sleep again.

Brad Kearns: So caveat though, is when it gets dark, you have to wind things down. So if you are burning the candle at both ends and you are waking up in the middle of the night, you have bigger issues than a random awakening. You should be comfortable. You have to get things mellowing as soon as it gets dark.

Mark Sisson: Absolutely. I love the term burning the candle at both ends because if you are actually burning a candle, you'll probably sleep a little bit better. The other thing that I notice, when people talk about waking up is if they have a couple of glasses of wine in the evening to wind down. They will fall asleep easily, but then they wake up at 2:00 or 3:00 and then they can't get back to sleep again. It is interesting to me that the Chinese, in their energy systems, in their chi diagrams, say that that is the time of night when the liver is cleansing itself. It is 2:00 or 3:00 o'clock in the morning. It is an interesting observation pulling in some of these alternative medical concepts. Back to what it takes to get a good night's sleep, it doesn't necessarily be a full uninterrupted 8 or 9 hours. It can be interrupted, provided you do it proved it doesn't disrupt the second or third phase.

Brad Kearns: [00:19:19] And back to that most popular question: How many hours do I need? You kind of answered it by saying when you wake up feeling refreshed and energized without an alarm. You mentioned that book: "Lights Out: Sleep, Sugar, and Survival." They are saying how you have to possibly vary the number of hours by the season, which makes so much sense.

Mark Sisson: Absolutely. Again, we are looking at how humans have evolved using the diurnal and circadian rhythms, which change with the season and it makes sense that we would need different amounts of sleeps at different periods of time and different times of the year. It is not unlike the fact that a lot of humans lived in an environment where, at the end of fall, there was a lot of food available, and that is one of the reasons that we are so good at converting food in to fat, is because it was timely. It was cyclical. It was seasonal, enabling us to put on a layer of fat to survive the winter coming up. All of these things make sense in the context of evolution. I have realized over the years, that I used to sort of think that if I got 10 hours of sleep that that was too much and it was decadent and I didn't need it and what am I think, because I could be doing something more productive, or I could be enjoying life and now, as I have gotten older, I realize that every once in a while, that 10 hours ...I look forward to it. It is important to me. I get a sense that I am doing myself a solid favor by doing that and I make no excuses about doing that. I think it is really important to get enough sleep.

Brad Kearns: So speaking of the food ripening in long days of summer, "Sleep, Sugar, and Survival," went into this in detail. If you happen to be interested in losing excess body fat, then sleep becomes a huge issue, because evolutionary speaking, when it is summer, and the days are long, we are programmed to consume sugar and store this fat to get ready for the winter months. So when we have the lights on, throughout 365 days a year after dark and go, go, our body thinks it summer all the time.

Mark Sisson: I couldn't say it better than that. There is a lot more to burning fat than just decreasing the amount of carbs or sugar in the diet to becoming a fat-burning beast. A lot of this has to do with the amount of sleep you get, the amount of cortisol you release, and a lot of other factors that most people aren't aware of, particularly those people that maybe hit a plateau with their weight loss strategy and they are wondering what to do next. Sleep may be the next level of involvement for them.

Brad Kearns: [00:22:04] So when you are up doing your emails at night and staring at that screen, and triggering that cortisol release, rather than the melatonin, what is happening in terms of your weight loss goals and your appetite?

Mark Sisson: For one, you are craving sugar. That is when a lot of people find themselves.....They have been good all day. They have been low carbs and they have been avoiding sugar all day, then as the evening wears on.....the refrigerator is right around the corner, the pantry is right there..and that is when the sugary snacks come out.

Brad Kearns: We had a question about that in one of our previous podcast from the listener who likes his bowl of cereal at night otherwise he is primal the rest of the time.

Mark Sisson: It is classic. It does derail a lot of people, not just in their sleep strategy, but also in their weight loss strategy. The idea would be to surround yourself with the kind of snacks if you are doing that. Snacks that are the healthier fat like macadamia nuts, coconut butter, or something like that. The staying up late and the hormonal changes that happen as a result of being continuously exposed to the blue light and to the glaring screen or to those loud noises coming out of the TV or radio, and the release of cortisol. If you are trying to lose weight, cortisol is an important hormone to get under control. If you don't maybe it is the cortisol that is having you retain a lot of weight that you ought to be losing with ease.

Brad Kearns: [00:23:31] Great. I we know why we obsess on numbers when there are so many intangible factors like waking up refreshed and energized. But in terms of the variables that affect that magic number. You mentioned you can get 10 hours some times and some times you get fewer hours. What are some of the things that can affect that?

Mark Sisson: Again, winter is a time when you probably need more sleep than you do in the summer. That is the way the world operates in terms of the amount of darkness and lightness that we are exposed to in the circadian rhythm. So don't try to necessarily average it out to 8 hours every day all year long. But get more sleep in the winter and be okay with getting a little bit less sleep in the summer if that is the way it works out for you. If you are under a lot of stress, you probably need more sleep. When I said that sleep is one of the number one components to health that is being overlooked, stress is right below sleep as being one of the number one components that we overlook. If you are under a lot of stress, and you haven't managed it well, it's probably obvious that you need more sleep to be able to deal with that stress. Ironically, people who are stressed out a lot don't get enough sleep because they worry while they are sleeping. They put themselves into this negative or positive feedback cycle where worry, for ever reason, I can't fall asleep and now I'm worried that I am not getting enough sleep and it perpetuates itself. So set the room up in a way that is going to encourage to drop off into a nice deep sleep as much as possible. If you have been training hard. If you are someone who has been working out a lot in the gym, you probably need more sleep than the average person. So pay attention to how much work you are doing. If you are an athlete, or if you are a weekend warrior, you might need more sleep on the weekends because you have been hitting it pretty hard, not having done anything during the middle of the week.

Brad Kearns: I have heard some people counter this in your talks and chats at Primalcon and so forth where they say, "I am not really tired. I do fine on six or seven hours of sleep." So to I think to reiterate, if you have those lights blasting in your brain, and spiking that cortisol, it is true you are not going to be tired. But just to get in to summary points now and the thing you said at the onset of this talk about the environment and the lifestyle habits. Maybe you can give us some memorable tips to walk away to get that sleep optimized.

Mark Sisson: [00:26:00] Sure. The environment itself. You want a dark room. You probably want it cool. Maximum of 68 degrees fahrenheit. We try to keep our around 66 and it does seem to have a major effect on that. You want to wind down as the evening starts to progress. Stop watching movies by 8:30 or 9:00 o'clock. If you are someone who is prone to going out for a stroll or having a conversation by the fireplace, or by candlelight, or reading by a yellow light, either in a miner's lamp or something that has a yellow bulb in it. That is a nice way to wind down. If you must be on the computer, you can install a program called "f.lux" which is a program that takes out light from the harsh blue light which you are normally exposed to coming out of the monitor during the daytime and yellows that light down.

Brad Kearns: It is from [stereopsis.com](http://stereopsis.com). It is free for all platforms.

Mark Sisson: Good spelling, Brad. That was great. In terms of waking up. If you can get an alarm clock that has a mild sound to it. If you need an alarm clock, don't jar yourself out of bed with a jangling noise but maybe some chirping birds, or the sound of water that gradually eases you awake. I would much prefer

that you would find a way to wake up naturally to sunlight. The hack that we have used in my house, we keep a window open that is around the corner of our dark room. So at night time it is dark, dark, dark, but as the sun starts to come up, that light starts to gradually and gently fill the room. I don't think I have wakened to an alarm clock at home for probably 5 or 6 years other than having to get up at 4:00 a.m. to drive to the airport. But even at that, I somehow find a way to program my brain to wake up five minutes before that alarm goes off every single time. It is probably a later discussion how that happens. The biggest takeaway is as the sun goes down, let your sleep happen naturally. Try to do whatever you can to honor the expectations of your hunter/gatherer genes. Go to bed or go to sleep when it is dark and wake up as the sun is rising.

Brad Kearns: Thanks for coverage of sleep, Mark. I am sure we will get some good questions on that and on the next podcast we'll hit a bunch of questions. So thank you for listening to Primal Blueprint podcast here from Malibu, California with Mark Sisson. I'm your host, Brad Kearns. Until next time.....