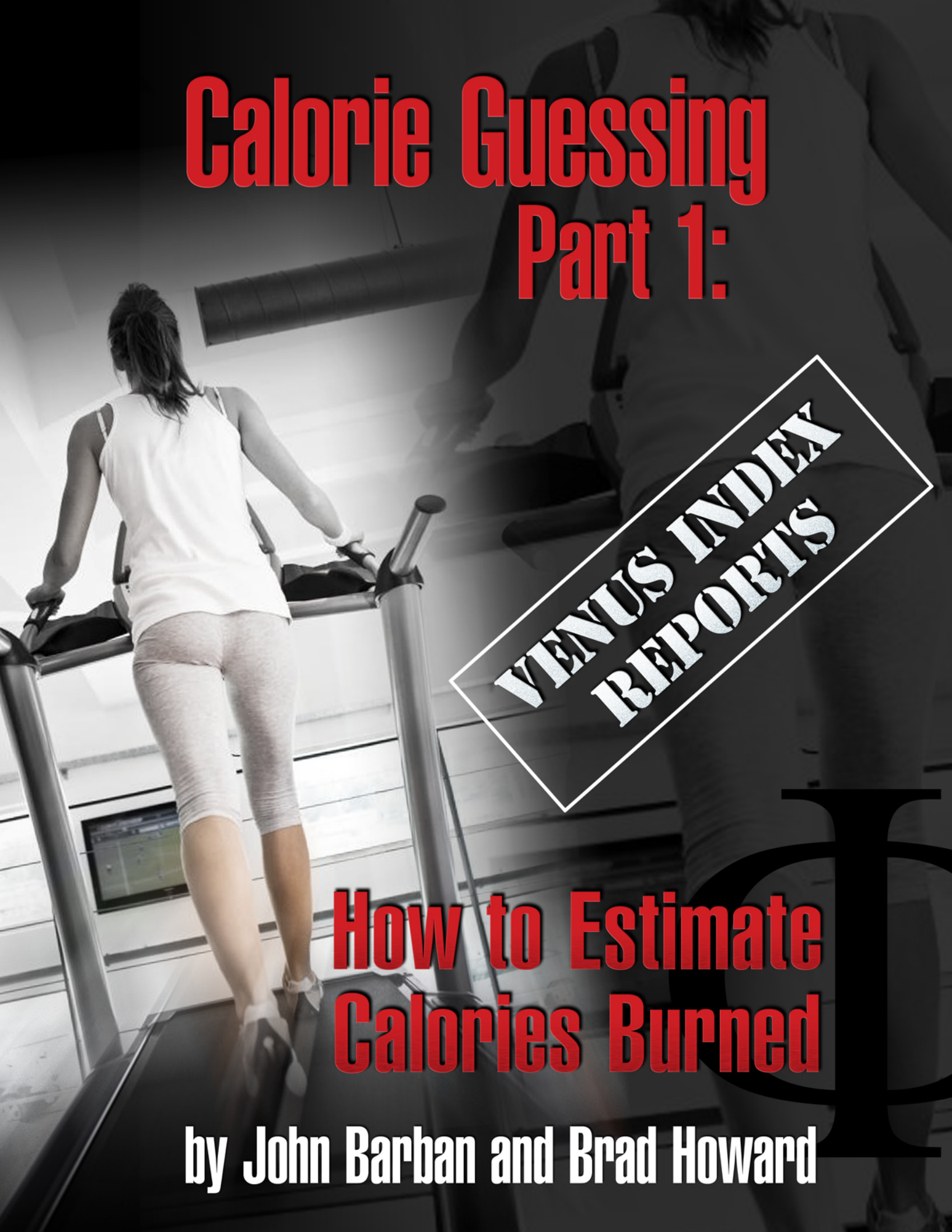
Calorie Guessing
Part 1:
VENUS INDEX REPORTS
How to Estimate Calories Burned
by John Barban and Brad Howard

Brad Howard: All right ladies, welcome once again to your Venus Index podcast. I'm Brad Howard and I've got John Barban on the phone. Today we're going to talk about why we start with BMR when we talk about weight loss or losing body fat. We'll talk about why BMR is a starting point for calculating how much food you need to eat on an "average" daily basis. In this particular podcast, we're going to talk about the burn part of the equation as far as your daily activities, how your actual metabolism works, and the mistakes and errors that come across with all of this, such as why people think their metabolism actually drops when it really doesn't. Today we're just going to talk about the burn side or the caloric expenditure side. So John, let's go ahead and start with this. What makes up the burn?

John Barban: Okay, so that's why we start at BMR. The main thing that's burning calories on the daily basis is just your sum total of your metabolism which is your basal metabolic rate. So if you don't do anything today, let's say you just have a really lazy day and you wake up and all that you do is make it to the couch and you are just watching TV. Well, just to be alive and sitting there doing nothing you' are going to burn your kind of base level of calories. You can't really go below that. I suppose with sleeping, you would burn a little bit less, but being awake and just sitting around, that's what we call basal or resting metabolic rate. Those two numbers are slightly different.

With basal, you have got to be lying down. With resting, you could be sitting up. So either way, the term that get used all the time is basal metabolic rate. So, that's the amount of calories you're going to burn if you don't do anything, if you don't get up, walk around or exercise. If you don't go to the mall or shopping and you are doing absolutely nothing besides just sitting around. So we start there because we know no matter what you

do that day, that's at least the lowest amount of calories you'll ever burn is your BMR. And we know you're going to do that everyday because as long as you're alive that's the amount you're burning. You're going to be burning that every day, so that's why we start at that amount of calories. Then anything else you do, as far as activity-wise, gets added to that calculation.

So, let's just say, hypothetically, you look up at some of our charts and you come up with 1,300 calories as your BMR for the day, and that doesn't mean that's exactly your BMR, it's just an estimate based on scientific data that someone of your height and size is likely somewhere close to 1,300. To be clear, it's impossible for you to actually know it is specifically without having it tested on lab. That's why in all of our materials, all we do is try to estimate this as best as possible and then from there you have to sort of work off at that number. So if you estimate that your BMR is, let's say, 1,300 and maybe you are 5'2 woman, from there if you do more exercise for that day, if you do anything more than just sit around for that day, you're going to burn the 1,300-plus whatever extra energy you spend in the gym walking around, or say you just had a busy day and you were just doing a lot of stuff, that all adds to your caloric burn for the day.

This is why it's difficult to rely on exercise for losing weight because you likely don't exercise every single day or you don't exercise at the same lengths or intensity each day, so the amount of calories you're burning in a day is hard to determine if your exercise isn't exactly the same every single day, but your BMR is the same every single day. So that's why we start there and then we use exercise as kind of a bonus add-on to that. At least that way, you're being consistent with the way you kind of imagining how many calories you are burning.

Brad Howard: Right. Now, there are some other assumptions that people just aren't aware of that add to why we should start at BMR. For one, the body has a natural inclination to eat up to your energy expenditure for the day, so that's why diet is so important. Let's talk about that for a second...

John Barban: Like you just said, what makes you feel hungry and what makes you feel full and not really hungry after eating is what we call our hunger satiety system. It functions on more or less energy expenditure. So if you don't do anything in a day, your BMR is all the calories that you could possibly burn because you haven't done anything on top of it. But that means you'll likely feel hungry enough throughout the day to eat up to BMR, so if your BMR again in our example is 1,300 and you've sort of don't really do much during the day, more often and not your body is going to try to want and get you to eat up to about 1,300 calories for today.

Now if you add a long exercise in where you burn an extra 500, now you're going to feel like eating 1,300-plus 500; 1,800. You're likely going to be that much hungrier, so it's pretty finely tuned. However much energy you burn in the day, your body is likely going to kind of poke you and bug you to put that much energy back. So that's why we start at BMR because trying to eat to lose weight on the days you don't exercise, you would need to go below BMR. On the days you do exercise, you'd theoretically could eat up to BMR and then create the deficit with the exercise. But in both cases you're going to be left feeling hungry because you've burned more calories than you've eaten, so the feeling will be almost the same. It's just how many calories you choose to eat and how much of a deficit you want. So in other words, you could sit around doing nothing all day and just eat 500 calories below BMR. You could picture it as a 500-calorie need-to-eat. If you eat all the way

up to BMR one day and then exercise an extra 500 calories off, you are still going to have that 500-calorie need-to-eat feeling. So in both cases the feeling will be more or less the same and you've just either eaten more and added an exercise, or eaten less but ate just below BMR but you still have that deficit.

Brad Howard: Right. Well, let's talk about the other side of the equation. So we talked about metabolism, and whenever we say metabolism, we mean BMR, correct?

John Barban: That's more or less.

Brad Howard: More or less.

John Barban: So, there's BMR and energy expenditure.

Brad Howard: Right.

John Barban: So BMR is just the amount of energy you burn just from your body just doing its thing and just being alive, and then energy expenditure, if you do nothing besides just hanging out, your energy expenditure will be your BMR, but if you add in purposeful exercise, then your energy expenditure is your BMR plus the exercise.

Brad Howard: Okay, well, let's talk about unconscious expenditure; lifestyle.

John Barban: Okay, non-purposeful expenditure. There's a difference. There are two kinds of activity that you partake in a day. It is a scientific distinction for classifying what you do from a lifestyle perspective. We can go to the gym and we can do an hour of walk and call that a workout or we can walk for an hour during the day, for example if you go shopping and let's say during work, you have a certain distance you walk at work, clearly it's still walking, right? All of this is walking. You burn the same amount of calories walking at work as you do at the gym. The difference, and to categorize this, is whether or not you have a lifestyle that you're bound to that you don't have a choice about; whether or not you have a lifestyle that causes you to burn more energy or do more exercise versus having to force it in the gym purposely and consciously by booking exercise time.

It seems as though people who have busier type jobs, like for instance I always use the example of someone who's a server who gets going at work and has a 5 or 6 hour run where they are just on their feet going and they just don't stop, that's literally like a 5- or 6-hour workout. Theoretically there's really no way you could ever mimic that in the gym because if you compared someone who has a serving job to someone who just sits at their desk. Keep in mind this is only the case if the server is busy. I don't mean the serving jobs where the server is just standing there doing nothing. I mean if you're actually busy, you're going to be moving a lot during that shift versus someone else who just sitting there.

So if you actually are walking for 3-4 hours during your shift, if the other person who just sits around at work, to recreate that amount of energy expenditure, they would actually have to book a 3- or 4-hour workout with their walking. So from a practical stand point, there's almost no workout

that could ever make up for actually having a job that has you on your feet moving around like someone who does landscaping. They burn a lot more calories during the day than any workout could ever replace because the workout would end up having to take all day. This means you would literally just have to workout all day or you just have to take on one of those types of jobs.

Brad Howard: Right, which for those people it is not just happening, and that's the whole point.

John Barban: Now, it doesn't mean that those people are inherently leaner than everyone else, but it just means that they can burn a lot of more calories at work if they choose to. But like we said, they're going to feel like eating up to that level, so it could very well be that those people just eat more if they're not losing weight. Clearly they probably are eating more because it's not the case that most people that are active all day long are perfectly lean.

Brad Howard: Yeah.

John Barban: You can gain weight having a really busy serving job, too.

Brad Howard: Right, and there are some other more scientific things that make up energy expenditures as well, but these are just the basic ones that we wanted to cover. We are going over some of the mistakes that people make with calculating calorie burn because this is where the rubber meets the road. It's why people think that their metabolism is lower than anybody else's and why they're broken and things like that. Let's talk about

measuring energy expenditure and the mistakes and error percentages involved in that.

John Barban: Okay, so with your basal metabolic rate, what makes up your metabolism is all of your lean body mass. Now, your lean body mass is made up of two major compartments. It's your internal organs and then your muscle mass. And so most people make the mistake of assuming lean body mass just means muscles, but they don't realize that all your internal organs are incorporated in the lean mass, including your bones, and they are the more with metabolic reactive tissue. So if we just had a little chunk of muscle tissue and a little chunk of liver tissue, head to head, at the exact same size, so like a little square inch of liver tissue, a live active metabolic liver tissue or a square inch of live metabolic active muscle tissue, the liver tissue would be magnitudes more active and burn way more calories than the muscle. So the reason muscle mass even matters at all is because there is just way more muscle mass on your body than there is liver tissue or kidney tissue. Comparatively speaking, even though your liver is not as big as all the muscle you have, is it metabolically way more active.

Brad Howard: Right.

John Barban: So like 80% of your metabolic rate is controlled by your internal organs.

Brad Howard: Right.

John Barban: So there's always no amount of muscle mass you can build to really affect your metabolic rate.

Brad Howard: Right. Now, it will affect it, but it's not the dramatic increase...

John Barban: The overall amount of muscle you have does have some effect on your metabolic rate, but you would need to triple or quadruple the amount of muscle that you have before it to really, really start changing your metabolic rate.

Brad Howard: Right.

John Barban: Because a pound of muscle burns about 5 calories an hour a day, but that's not much.

Brad Howard: Right.

John Barban: So if you could build another pound or you've increased your metabolic rate by about 5 calories, it's nothing.

Brad Howard: So even theoretically putting on 50 pounds of muscle (which is impossible), you would burn...

John Barban: About **250** more calories. It's just not going to do anything. It's just not really going to have any effect.

Brad Howard: Right. So, yeah, overall, I mean you're looking at basically at nil. But trust us, we're not talking about weight training because clearly there are other benefits to that, but weight training to try to increase metabolism.

John Barban: That's not one of them.

Brad Howard: Yeah, that's not.

John Barban: Now, weight training while you're dieting to maintain your muscle mass is important. There are a bunch of reasons why we do weight training, but first and foremost it is the shape of your body. The whole point of doing weights is to build muscle, shape, and tighten it, so you will have the shape that you want.

Brad Howard: Right, exactly.

John Barban: And then as far as metabolic rate, it's almost completely determined by your internal organs, and that's scalable for how big you are. So if you're a foot taller that someone else, all of your organs is bigger, too. I mean you have more muscle because the taller body has more muscle, but your organs are bigger too so you're likely going to have somewhat of higher metabolic rate simply for that reason.

Brad Howard: Right, which kind of goes back into the whole point of why husbands and some wives shouldn't eat the same amount at dinner, and we'll talk about this when we talk about eating portions. So we've got the

mistakes as far as metabolism is concerned. Let's talk about mistakes and actually measuring how much your expenditure is as far as things like body bags and the machines and...

John Barban: Well, okay, so net calories burned is something no one ever thinks about and you've got to remember that your basal metabolic rate, the amount of calories you're burning just by hanging out, just doing whatever, that's happening obviously regardless if you do anything extra. So if you calculated out that you're burning 1,300 calories a day and I don't know if that works to about 60 calories an hour. So if you're just sitting around, you're burning 60 calories an hour. If you go to the gym and do an hour of workout and the machine says it was a 350-calorie workout or that you burned 350 calories. That means that for that hour with the calculation it is doing said that during that hour you burned a total of 350 calories. It doesn't mean you burned 350 calories on top of the 60 that your metabolic rate already was. It just means that you've gone up from a 60-calorie an hour burn rate to a 360-calorie an hour burn rate. So your net difference is only about 300.

Brad Howard: 300 calories.

John Barban: Yeah, your net difference is only 300 calories or 290. I said 350.

Brad Howard: Right.

John Barban: Do you see what I mean? So you've got to subtract the extra calories you burned from what you would have burned anyways from your metabolic rate.

Brad Howard: So those calculations actually...

John Barban: It's because of the way exercise physiology textbooks and calculations, the way they determine how many calories any given exercise burns, they don't calculate out how much more it burned than your metabolic rate. They measure someone for the hour, and then they are like, "Oh, you burned 300 calories this hour." But that just means for that hour your burned 300 instead of 60.

Brad Howard: Right.

John Barban: It doesn't mean you burned 300 on top of the 60. And most people completely miss that. They just think, "Oh, if the thing said I burned 300, so that means I burned 300 more today." That would really mean you burned 300 minus 60, so that's 240 more or whatever.

Brad Howard: Right. So it makes a big deal, that's a huge error. I mean, that could be 100 or 150 calories.

John Barban: If you make that mistake three or four times a week with your calorie counting, yeah, you could make a 300- or 400-calorie error and then three weeks later, you're wondering why you only lost one pound instead of two pounds.

Brad Howard: Right. Or gained.

John Barban: Or gained. Yeah, so that's called net calorie burn, and no one thinks of that.

Brad Howard: Well, you see that a lot. People try another workout and they don't feel like they've lost any body fat, but they're gaining weight, so it must be that I'm turning fat in the muscle.

John Barban: Making these errors in the burn calculation is part of the reason why these people get discouraged and think that dieting just doesn't work with exercise, or they're losing lean mass, so they're doing all this work but they're metabolically aren't burning enough. Someone in the forum said something about being 24 calories off for the day based on her calculations, and I was thinking, "Well, that you could never know that." Like no one can ever calculate their calories that closely to know that they are off by 24 calories.

Brad Howard: Right.

John Barban: There are so many inherent errors and we're not even talking about the calories inside, we're just talking about the calories outside.

The problem we're trying to do this is both sides of the equation are unknown, and in our next podcast, we'll talk about the other side of equation. So that the equation being calories in versus calories out, you can never know how many calories you're actually eating and you can never

know how many calories you're actually burning. Unless you do it all in the metabolic lab, but if you're just not doing that, that's impossible.

Brad Howard: Right.

John Barban: So you can never actually know. Even if you read your labels, you can never actually know. We'll get into why that's actually almost impossible to do. On the burn side, everything is just an estimate. Without actually having your metabolism measured directly by calorimetry, you would never really know how many calories you're actually burning. We can only guess, and that's why we start at BMR, that's where your guess starts, it starts at BMR. From there, you experiment with food up and down and you experiment with exercise up and down until you have more or less got it.

Brad Howard: Right.

John Barban: As you over-eat and under-eat, and now this is an even more of a kicker, if you massively over-eat or massively under-eat, your metabolic rate does shift up and down slightly with it, but magnitudes lower. So if you over-eat by 2,000 calories, you might bump up your calorie burn by, I don't know, 150 or 200 so you still have the 1,800 extra calories that are going to get stored.

Brad Howard: And if you are under-eating?

John Barban: If you are under-eat by a thousand, yeah, your metabolic rate might slow down by a hundred calories, but you are still on a 900-calorie deficit, so that's good.

Brad Howard: Right, but that's a scary metabolic drop there that he's talking about with the hundred calories.

John Barban: Yeah, yeah, so the point is everything fluxes with everything else so it is really hard, and you can never pinpoint the exact number of calories you burn in a day. That's absurd.

Brad Howard: Well you have to remember there is no such thing as independent variables in this whole thing. Everything is dependent on everything else.

John Barban: Yeah, like we just said, if you eat a little bit more, your metabolic rate will go up a little bit eat. You eat a little bit less and it will go down a bit. If your body weight decreases, like if you just weigh less, you will burn less calories from doing any kind of cardio because now you are moving around with a lighter body.

Brad Howard: Okay, let's go into that really quickly

John Barban: So, if you are doing body weight dependent cardio, meaning you are moving your body, so like running, jogging, elliptical, anything where your body is moving. Biking is different because you are sitting, so it does not matter how heavy you are, but with body weight dependent cardio,

the lighter your body gets the less work you are doing, meaning the less calories you are burning. So if I'm 200 pounds and go for a ten kilometer walk, I'll burn a certain number of calories moving 200 pound with ten kilometers. But let say I have got my dieting controlled and let say I'm losing weight. Let say I'm actively losing weight, just two months later I'm a 180 pounds. Well, on that 10-K walk I have only moved 180 pounds with ten kilometers. Now, I'm burning fewer calories per time walked, and then if I dropped to 170 pounds, that same ten kilometers does even less calorie burning. So the amount of exercise you have to do as you get lighter has to go up to burn more calories. You just have to walk further because you are moving less body around, or the only other way to do it is to add weight to your body, but that is kind of really uncomfortable.

Brad Howard: Yeah, you would have to put a weight vest on.

John Barban: Yeah.

Brad Howard: Or you have to weigh yourself beforehand and then...

John Barban: If you wanted to match the calories you burned during the first when you were at your heaviest.

Brad Howard: Right, but that's what we mean, that's what matters. I mean, if everything changes, the only way to actually know and to keep everything the same would be to keep everything the same with all of your variables that you can control is the same.

John Barban: Everything is linked. You pull the string on one end and then the other side comes to, and I think that's partly why losing weight towards the end, as you get leaner and leaner, becomes more difficult because one of the other dependent variables is your psychology. When you've got 60, 70, 80 pounds to lose, it comes off fast because you are not just losing fat, you are dropping some inflammation and probably dropping some serious water retention. So the same amount of effort in calorie cutting ends up knocking a significant weight off your frame whereas if you are down with the last ten pounds, all the inflammation has gone, all the bloats have gone, there really is just a few pounds of fat to go which takes longer to do, but also when you are at that last of little stage, you probably look pretty good as far as you are concerned and you are probably like, "Oh man." It is hard to stay motivated to get those last few pounds off when in clothes you already look as good as you are going to look.

The last ten pounds doesn't really show much through clothes, it's harder for you to see the difference unless you are literally standing in front of a mirror without clothes on. It is hard for you or anyone to know what the next two months of effort or month of effort is going to be because everyone is like, "Well, you look good. Why are you going any further?" And you are like, "Well, but there is still a little bit I want to get rid of." But no one can see that. It really happens a lot on guys because especially the way men's clothes are cut.

For a guy who has got even fifteen more pounds to go, in clothes, you would never know. He would like identical if he lost the fifteen or not. Before a guy gets to a full six-pack he looks really good, he has good muscle mass and everything, but he just has to get rid of ten more pounds to really see his six-pack. Clothed, you would never know the difference. He would

just look like you have the same guy. So the social feedback you are getting with all that extra work doesn't come until someone sees you with your shirt off, no one would ever know that there was any work to do.

For girls, it is a bit different because with girls, in general, their clothes are tighter so maybe those last ten pounds show a bit more, but in general, it's not like you are going to be dropping dress sizes and pants sizes like crazy. You might drop a size, but in general, you're probably already pretty happy with your body with the way it looks when you are got that last ten to go. So I do not know that the last ten pounds are any harder than the first ten so much as psychologically the difference and how much better you are going to look is going to be kind of small, and the social feedback you are going to get, people are like, "Why you are still going, like you look good now."

Brad Howard: Yes, right when you start getting into that area of looking better naked; the clothes on versus the clothes off look, that is when the blow back starts to happen.

John Barban: Yes, because people will look at you, and you are working and working and they are looking back at you saying, "You already look better than everyone. Like what are you doing?" But they perceive you with clothes on, and you are thinking, "Well, there are a couple of spots when I see myself in the mirror. I would like to tighten those up." So you are thinking from a clothes off perspective but they are looking at you from a clothes on perspective and that's where some of, like you said, the blow back are like the lack of support comes from because they are looking and thinking you are obsessive, and you are like, "Well, in a bikini, I would still like to tighten this and that up."

Brad Howard: Right, exactly. So let's review the mistakes that you can come across from the burning side. We've encapsulated what would happen at 200 pounds versus 120 and talked about the differences in the actual burn in that aspect. So when people start losing and they think "Man, this is just getting slower and slower and slower. Am I doing something wrong? Is my metabolism is dropping?" We can actually alleviate that fear and just let the women know exactly what is going on and predict what is going to happen, so that you know so you do not freak out when the results slow and you can keep your nose to grindstone.

John Barban: Sure. Okay. So well, that is why we start with BMR because you know that's at least the minimum calories you are going to burn every day and trying to eat below BMR or at least determining your BMR is the best place to start. Then, working below that to burn fat is your most consistent and kind of stand-by go-to measurement. I would not assume that you are going to exercise every day because likely won't, but you are going to burn up to your BMR every day because as long as you are alive, that is how much you are going to burn. So that is why we always use BMR as our default.

Girls should not compare themselves to guys, and this is the big reason why women should never eat as much as guys because guys are bigger. Their BMR is just bigger because they have more lean body mass. Also, the portion sizes in the food industry in general seem to be built to guy size and not to girl size, and that is why girls who start on a weight loss journey quickly realize everything seems to be calibrated up to the size a guy would eat, but not down to the size a girl would eat. In general, portion sizes that you will ever find anywhere seemed to be more like 'for us not you', which

kind of sucks for girls because when you look at what people get served, you will usually end up having to cut way back on it versus what a guy would have to cut back on.

It's the difference between as if everything was calibrated to women and guys just have to be ordering 2 times as much to satisfy what they want. It's just sort of you guys have to eat 2 times less because everything is calibrated up to us, so to speak.

Brad Howard: Right.

John Barban: Then as far as calorie burn goes or purposeful burning in the gym, just keep in mind that every calculator you see and even the textbooks that are online when you read how many calories a particular exercise could burn, that is always the total amount burnt in that hour. That means you have to subtract with your hourly metabolic rate would have been from that number to come up with how many extra calories that you actually burned. Finally, no matter how much work you do, you could work out for ten hours a day. The point is you are going to feel ten hours hungrier; all of that extra work hungrier. So if you burn an extra thousand calories today, your body is going to bug you to eat a thousand more calories.

Brad Howard: Yeah.

John Barban: So no matter if you create the deficit just by eating less or if you create it by exercising, that nagging need to eat will be more or less the same.

Brad Howard: Right, and that means they call it working up an appetite for a reason.

John Barban: You can work up an appetite or eat down an appetite, but either way. With the appetite, you could almost argue it's just calibrated to the amount of calories that are missing, so to speak.

Brad Howard: Sure. So let's add up the errors really quickly, and then this is again, this is why we start at BMR.

John Barban: The first error is BMR itself. We cannot know it. You can only guess at it.

Brad Howard: So you are probably looking at it right there just with BMR maybe a 10% error.

John Barban: Yes. You could be. I mean if you calculate it, if our equations calculate you at 1,300, you could very well be 1,450 or 1,150.

Brad Howard: Right, exactly. So you've got 10% error there right off the bat.

John Barban: Yes, and the only way you can try to determine it is by experimentation. But again, since you cannot really know the calories in, you can only ever guess at it, so there is an error right there. The other

error is the amount of calories burned during exercise. Even the best equations still have anywhere between the 20 and 30% error. So you cannot really know how many calories you burn during exercise. You can only guess at that, too.

Brad Howard: So let's say 20% just as far as the actual equation. Now, that does not count people not subtracting out the net.

John Barban: The net, oh yeah, just subtracting out your BMR. That's kind of another a little error people keep making.

Brad Howard: So that's probably 20% error on that calculation right there. So you've got 10% error on one number, a 20% error on another number, a 20% error on another number, then if we take into account what you burned at 200 pounds versus what you burned at 150 pounds, I mean that's going to be totally different, yet people do not take that into consideration.

John Barban: Yeah, yeah, and then there's a fourth one, efficiency. If you do regular running as your form of calorie burning at least in the gym, the better you get at it, the less you burn because the body just becomes more efficient at any exercise when it does over and over again. So there's a double thing going on there. Now, if you are just a seasoned runner and you have been running for a long time, you have long since reached your peak efficiency, but people who just picked up exercise for the first time, any exercise you pick up for the first time, you are going to be horribly inefficient at, and you will burn extra calories just because you are wobbly. You are not just that good at it. As you become efficient, you literally are just so much more balanced and the better at it, you would burn less

calories doing it. You are better at it. You just don't burn as many calories as you become efficient.

Brad Howard: Which is one of the reasons intervals become less effective as people become trained.

John Barban: It happens with everything. It happens anything you do chronically, you just keep better at it.

Brad Howard: I have asked what people think about interval training. If you have been interval training for over a year, the chances are the EPOC probably is not a bit of a deal at all.

John Barban: Yes, you're burning less than you did the first time you had picked them up. It does not mean they are not burning calories, it just means you become efficient, and let's say a year ago, they managed to burn 200 calories in a session, you may be down to 170 calories. And if you are lighter, you are definitely burning less because now you are moving a lighter body around.

Brad Howard: Sure. I mean, but these are assumptions too. We are going with all these assumptions and what you can do. You can think about it with post exercise oxygen consumption too. Basically the better shape you get to, the faster you catch your breath. That's essentially what that is.

John Barban: Yeah.

Brad Howard: If you catch your breath faster, well guess what, then that effect that everybody is touting is not that a big of a deal. It's a big deal with untrained people, but in trained people, it's not a big deal. You catch your breath faster.

John Barban: Errors end up crippling your fat loss progress because you do not realize you are making them.

Brad Howard: Right, so at the end of the day, lighter people physically are just going to burn less calories just living. That is just how it is.

John Barban: Well, smaller people burn less calories. There's no other way of saying that. So if you are going to be smaller, you are going to burn less calories.

Brad Howard: Right, so...

John Barban: Given the same amount of work.

Brad Howard: Right.

John Barban: Yeah, and with fat, that does not really affect BMR, so if you lose 50 pounds of fat, your BMR is likely the same when you are the same.

Brad Howard: Yes, your BMR is the same but the work part of the equation would end up being different because you are a bigger person.

John Barban: Yeah, when you were bigger, a 10-K walk would have burned way more calories. Now, that you are smaller, that same 10-K walk burns way less calories.

Brad Howard: Exactly, and we haven't even gotten to the eating part of this.

John Barban: Oh, with the eating part, there are way more errors that side.

Brad Howard: Yeah.

John Barban: So let us just leave at this, these are all the errors you can make trying to guess how many calories you burn in a day.

Brad Howard: Right, which is why when you are trying to lose, we say do not take any exercises into consideration.

John Barban: Consider it a bonus. Completely consider it a bonus on top of BMR.

Brad Howard: Right, exactly. Consider it a bonus.

John Barban: If you do all your calculations with just BMR and consider exercise a bonus, you will be doing it right. If you have got things right under control, and you have done enough experimenting to the point where

you have at least come close to guessing at what your BMR actually is and how many calories you might be eating, then and only then can you actually really start counting how many calories you may have burned in the gym. But when I say that, you still have to consider all these errors we make in the exercise calculations. So it takes a bit of time before you can even bother to try to include exercise as your part of your burn, so to speak.

Brad Howard: Right, exactly. For the beginner, this is just easier. It's easier to start with and it makes more sense and there are just so many more errors that you can come across with and...

John Barban: You...

Brad Howard: Go ahead.

John Barban: You almost have to view it like you've got to give yourself a week or two of steady state, I guess, controlling your calories. You've got to give yourself a week or two just to learn how these errors work. You need to spend some time eating right on the button of a particular calorie level and being really consistent with that particular kind of exercise and then using our little error calculations to figure out if that exercise is even burning the calories you think it can burn. You need to do little mini-experiments just to figure out how close or not close any of your calculations even are. I don't know how you would know this stuff if you didn't spend at least two or three months trying to figure it out.

Brad Howard: Right.

John Barban: Just because an elliptical machine said you likely burned 300 calories in an hour, and lets say you would subtract your metabolic rate from that 300, so you subtract 60 from that hour. Now you think you have created a 240-calorie deficit with that exercise. How the hell are you ever actually going to measure it if you actually have a 240-calorie deficit if you did not eat exactly the same calorie level for the next ten days such that you could eventually see one pound of weight loss. You start to see how impossible this is to figure out how many calories were actually burned.

Brad Howard: Yes, and we're not even taking into consideration because I do not know if this happens, but I could see it being possible, that the equipment manufacturer actually would boost up the perceived calorie exertions so that the gym or whoever would buy more of those types of machines.

John Barban: Well, with some machines, yes. And regardless of if it's intentional, (and I would not doubt that some of them are), the thing is you can go onto different machines for the same amount of time with machines that are more or less the same style, and one will say you burned 800, and the other one will say you burned 500. How can any of that actually be accurate?

Brad Howard: Right, exactly. And you are sitting there and you are wondering why nothing is happening. This is pretty much the reason why. I mean, if you walk in the gym and pretty much over a course of six months, most of the people that stay on the cardio machines never get any results that I can physically with my eyes see. It is just never happens.

John Barban: They all look the same. The only people that ever make a change and have people look at them and go, "Whoa! You have improved" is because they've tightened the screws down on their diet.

Brad Howard: Yeah, it's always the weight training and tightening down the diet. So just to close that out, I mean trying to account for exercise, it's just way too much complexity to even worry about for somebody, especially in the beginning. I mean I wouldn't even start worrying about it to be honest until the...

John Barban: The last ten pounds maybe.

Brad Howard: Yes, the last ten. I mean maybe we should do a podcast or something around the last ten.

John Barban: Yes. I'm going through that "last ten" right now, and I have very good insights on when you can actually do this and how using exercise for weigh loss is misinterpreted or misrepresented as something people who have anything more than just five or ten to go can even bother using.

Brad Howard: Yes, and we will talk about that. Today we were just talking about errors of burning. Next time we can talk about...

John Barban: The errors of intake.

Brad Howard: Of food. Yeah, of intake, and these things are huge. They are going to blow your mind and why focusing on all the other stuff that people are focusing on or trying to focus on is really going to kill you.

John Barban: Completely missing the boat. It is like rearranging. Once you hear about the errors on intake, I always describe it as rearranging the deck chairs on the Titanic while it sinks.

Brad Howard: Yeah, exactly.

John Barban: Instead of trying to fix the hole on a boat.

Brad Howard: Right, exactly. That's exactly what it is and it's really funny. So all right, so there you go. Those are the errors with calorie burn and perceptions and things like that. So our base recommendation always is to not even include that until you are seasoned enough to understand it and where you only got about ten pounds to go, and even then...

John Barban: When you're starting, don't even include exercise as part of your calorie burn, and just work off of BMR as a start.

Brad Howard: Yes, even on the guys, and I don't know anybody that worked off...

John Barban: Exercise. Everybody just work off of BMR, like all those Transformation guys worked off of BMR as their number.

Brad Howard: Right, exactly. Finally, I will just close out with this, and we will talk about it next time. The big reason to discount exercise is because at some point you have to figure out what your maintenance levels are. That's the most important thing with actually being able to maintain is to actually understand how much you do get to eat on a week end and week out basis. Remember, we talk about weeks, and we don't talk about days.

John Barban: Yes, and that means how much you get to eat independent of any exercise because exercise is never the same. It is fluctuating and transient. Some days you don't do any, and some days you do more, so you cannot really rely on exercise. You have to kind of know, and that's a great point. You have to know how much you can eat on a day when you do not exercise. Once you know that or at least you are really close to knowing that, then you can start learning what you can get away with or not get away when it comes to exercise.

Brad Howard: Yeah, and we will talk about all of this next time because it is really important. Have you got anything else you want to talk about real quick?

John Barban: No, I'm good.

Brad Howard: All right, well, a couple of really quick things. We are going to be doing all of our interviews for all of the Adonis side winners and we're going to post them over there. We'll be doing two per week just to help give you some insights on what you need to do and just get a handle on what the guys did on that side. January is coming and it is going to be a big contest

we are cramming so that we can get you the best education we can as fast as possible. I guess that is about it. So for John Barban, I'm Brad Howard and that is your Venus Index podcast.