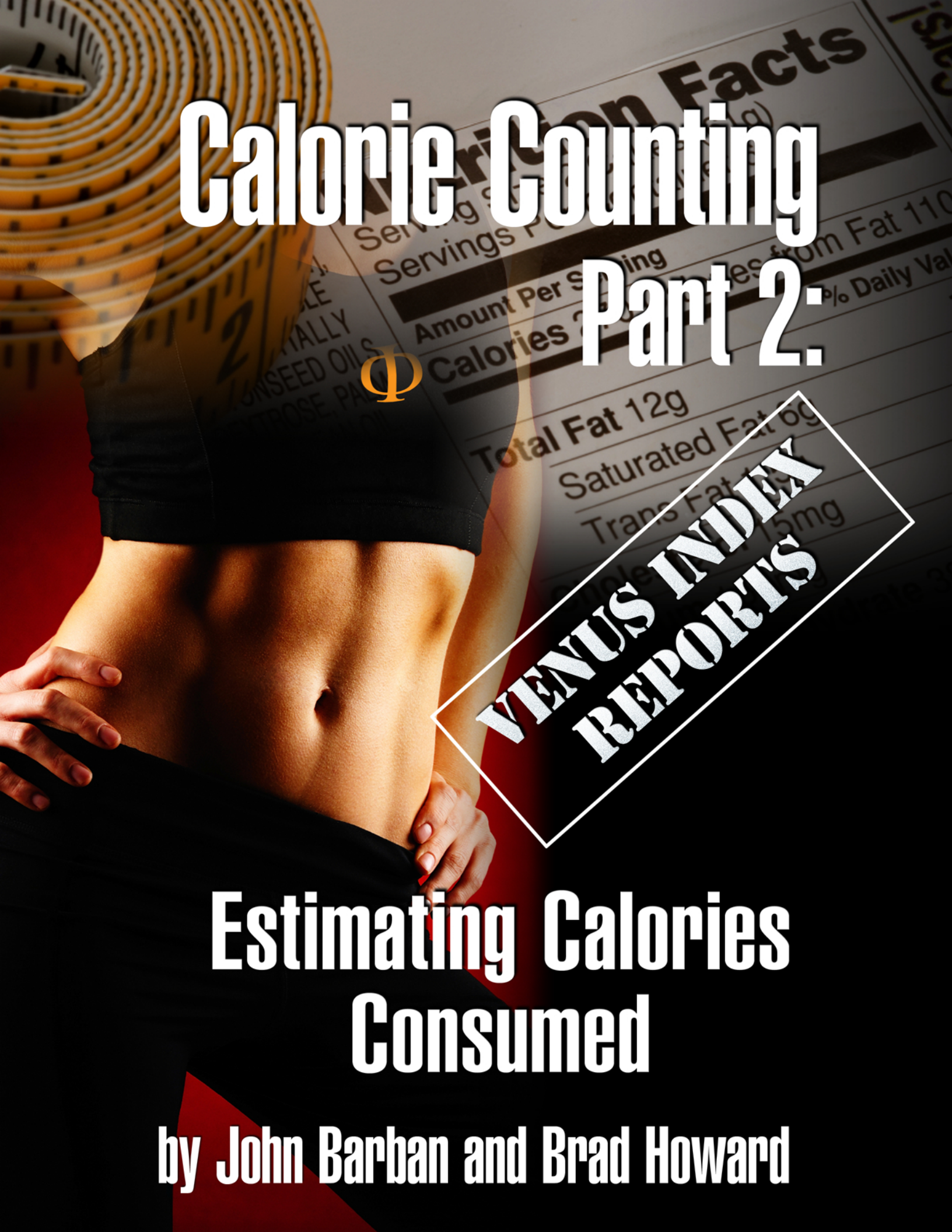
Calorie Counting
Part 2:
VENUS INDEX REPORTS
Estimating Calories Consumed
by John Barban and Brad Howard

Venus Index Podcast - Calorie Counting Errors Part 2 Intake

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 and today we're going to talk about Part 2 of Calorie Burning and we're going to talk about the intake side and most specifically talk about the errors that you can make while counting calories. This one is a little bit more complicated but let's talk about labels first.

John Barban: Okay, so when people are trying to count the calories and you can never actually count exactly how many calories you've consumed and we'll explain why. Even if you think you've measure everything perfectly, you've accounted for every calorie written on every label, there's still errors and so that's why when I see people post on a form or write on their blog that they consumed exactly 753 calories, I'm like "No you didn't. You're probably within 200 calories of that but there's no way you could know that and we're going to explain why.

So in general there are different labeling laws in different countries and on those labels the amount of calories need to be rounded so you may not even have the exact calorie count on the label just simply because the law dictates that within 5 calories the company or the item needs to be rounded so little things like that you'd never know so if you think that you are counting calories that specifically, well think again. You can't even know how many calories are in a food item based on some of the labeling laws. Granted it would be close but every little error adds up like if it's constantly rounding up or rounding down, you know 5 calories up here and there by the end of the week that's a couple hundred calories missing and you know that mistake could add up. And beyond the actual rules of labeling, there

are many things that go on in food production where overages have to be accounted for. There are always ranges with foods so if you went in and bought a protein bar and it said it's an 85gram protein bar and for 85 grams it's 300 calories....You eat that protein bar and you think, "I had 300 calories." Well did you actually weigh the protein bar to see if it weighed 85 grams?

I went into a store and did this and I found that some of them were as high as 110 grams so all of that extra mass is food and if you ate it you have way more calories than the protein bar said so let's say you were "counting your calories meticulously" and you counted that bar as 300 calories as it said, well if you didn't validate that the bar actually weighed 85 grams you have no idea that it was actually 300 calories or 400 calories and in some cases you could be eating 100 more calories if the bar had that much of an overage and I tested about twenty different protein bars and every one of them was heavier than the package said. Heavier by different degrees but the point was that it was heavier and in cases of packaged foods like that, manufacturers are obliged to produce at least what the package says, and since you can never-with standard manufacturing- you can never be 100% sure, the machine is never going to spit out exactly 85 grams. It's going to spit out as close to 85 grams as possible and you know when it's mixed, whatever the prepackaged food is and as a manufacturer they are obliged to produce what they said they were going to give you. In other words there is going to be some amount of error but they always have to error above what they said they were going to give you so if they say the bar is going to be 85 grams, they can't have a few come off the line at 75 grams. Everything has to be at least 85 grams if not more so manufactures account for the margin of error by erring on the side of giving you too much instead of too little and that's just how it works.

If you get a muffin at your favorite coffee shop and on the little menu profile they give you with the online nutritional calculator their chocolate chip muffin says it's 350 calories and you're like "Yep, I had 350 calories this morning." Well was that muffin actually the size that the calorie guide says it is or did you weigh the muffin and find out it was 20% bigger in which case you would have had 400 calories. So these little errors constantly add up and that's why we always say calorie guessing is all you can ever really do but you can never really count calories because there is no way of ever really knowing how many calories are in everything you eat and these errors can just go on and on and on and I mean we can get into other ones but this is part of the reason you have to always add in your own biased assumption that you've eaten more than any label has ever said or that any calorie counting database says because there's just so many mistakes you can make with each food item.

Brad Howard: All right and again what we're trying to do is basically provide the kind of rigorous proof of why we advise everybody to start at BMR. Like I said we are not making up our- we have this "rule" okay and it's not really a rule but more of a guideline and that's if you are trying to lose always start at BMR or whatever your calculated BMR is based on a couple of equations even knowing that there are some errors. What are some of the other errors?

John Barban: There is the idea of rounding on labels, there is the idea of overages like we said where companies are always accounting for what they produce. Anything that is mass produced they are going to error it on the higher side than the lower side as far as what's actually being delivered versus what's said that's in there so in those cases you end up with more calories than that thing even says.

Brad Howard: I was going to say and then there is that rounding error where nothing ever has like two calories it's always 5 calories.

John Barban: Yeah and that's the thing. There's a rounding error and then there is the error in the estimation of how many calories are in the item itself at all so there is actually an estimation error built into the actual food stuff itself so even if the package says it has 80 grams in there and whatever the item is supposed to be 300 calories at 80 grams and the thing actually does have 80 grams you still can't be 100% sure that it actually has 300 calories because the mix of the food item that's in there without taking it to a lab and combusting it to test, you still can't be sure that there was actually 300 calories. You can only guess that based on their initial test that every other consecutive batch is an identical homogenous batch that produced 300 calories per 80 grams so again my point while you might be sitting there "Oh how different can it be it's 10 calories one way or the other," well you know maybe but when you are dealing with thousands and thousands of calories in and out of your body every week, 10 calories here and there over the course of a week as you keep adding up errors could be the difference between gaining or losing a pound of weight if you're trying to decrease the amount of calories you eat by 200 or 300 a day.

Well if you are doing it that tightly that you are constantly working off a ten or twenty percent error every time you try to count, that could wipe out all of the "deficit" you are trying to build so if every time you eat, if you eat three or four times a day but you are making a five or ten percent calorie error every time on the way in and you are making another five or ten percent calorie counting error on what you think you burned, that doesn't take more than 150 calories error on the intake side and a 150 calorie error

on the burn side or what you think you burned to add up to a 300 calorie error so if you multiply that by 7/8 days, there's your pound of fat you are not losing. So I think when everyone says they are dieting but it's not working, and calorie counting is not working it's because there's too many inherent errors in trying to count calories at all such that you have to assume, you always have to assume you're eating more calories than any way of counting will ever account for and you'll always have to assume you're burning less calories than any calculator could ever account for and when you learn to make both of those assumptions then you'll realize it's the only way to do it.

Then when you go back and actually do your calorie counting, so when you account for how many calories you have consumed just automatically add 10 or 15percent on top of it. And when you look at how many calories you burn based on the cardio machines, based on textbooks, based on BMI calculators just automatically assume you have burned 10 or 15% less, and if you function on those two assumptions now your numbers will probably work to your favors such that you can start losing weight. But until you make those assumptions, it is very easy to just get to the point where it feels like nothing will ever work.

Brad Howard: Sure and you have to remember that these errors compound on top of each other so it is not just 10% across the board, you got a 10% error here and then you have got another 15% error which compounds on top of the other 10%, so it scales up really quickly.

John Barban: You are trying to make precise measurements with imprecise calculators. If you are stating that you have eaten a certain amount of calories and you are not rounding it off to literally whole numbers like 1500,

1600, if you actually think you ate "1524 calories" you are being a little ridiculous. There is no way you could ever know you ate that exact number of calories. It is more realistic to say I ate around 1500 or somewhere between fourteen and 1600...that is about as close as you could ever know. And same with how many you burn in a day...if you think you burned exactly 2,122 calories today...well, no you didn't. It's more realistic to say you burned somewhere around 2000ish because if you try to show me how you calculated anything beyond rounding it to 2000ish, I can show you how that is impossible to calculate. And what no one is really getting is this is an equation with unknowns on both sides.

You can never know how many calories you actually burned, not any closer than a couple of a hundred calories one way or the other and you can never know how many calories you consumed any closer than about 200 one way or the other. So without embracing and understanding that that is really how much degree of flexibility you need on both sides it'll be hard to reach your weight loss goals. Because if that is the case, if it is roughly a 200 calorie range you need to give yourself when you estimate how many calories you eat per day and again another 200 calorie range you need for guessing how many calories burned in a day...then how the hell do you think you can shoot for anything less than a 400 calorie deficit a day and be accurate if your error range is 400 calories a day?! See what I mean? Like if your error range is bigger than the deficit you are even trying to create, what you think you are calculating can completely be washed away in the errors.

Brad Howard: Yeah exactly that is why people think this does not work or because you know the inherent error is coming into it or completely negating the actual deficit that you are trying to create. The other thing that people do a lot of times and this is guys and girls, is they make out these

calculations because they are trying to find out how much food they get to eat and so it is almost that everybody when they do that they tend to overestimate what they think they get.

John Barban: The activity calculations are wildly inaccurate for the BMI calculators. If you ever use those calculators always set the activity thing to zero because if you ever saw the way they calculate the activity, nobody is as active as their calculators would ever suggest, you would have to be a lumberjack who is chopping trees down all day…actually that is one of the ways they derive activity factors.

So yeah everyone is trying to cheat their way up, Howard you do it really well, you said that you eat to (if you say you have 700 calories a day or a 1000 calories a day), what you are doing is setting your target more or less at what labels tell you are a 700 calories as your limit. So if you are shooting for 700 calories today you tell yourself you're shooting for 700 calories that I can at least imagine that the calorie count on the label is telling me but in reality in the back of your head you know that it's probably somewhere around 900 to 1100 that you are actually eating and that is the better way of viewing it…like if I am shooting for a 1200 calorie a day I might end up at 1400, 1500 for all I know.

But if I set my target at 1200, meaning anything that I could possibly use as a guide like labels and maybe a calorie counter for some food that does not have a label…based on everything that I have eaten and all the data I can collect on it, if I set my site at 1200, I am likely eating about 1500. So in the sense I am accounting for that error, I set my goal below what it might actually be.

Brad Howard: I just set it is a beacon, I know that there are so many errors that I just kind of understanding overall how many calories are in stuff and how it's always underestimated. So like if I see a muffin or something I am just going to assume that thing is probably 500 calories. Probably not true but I am just going to assume it anyway so and that is just how I have done it and it works well. I mean it gives you a lot of flexibility and again this is just the way I do it, you do not have to do it that way.

John Barban: I have been coaching Ali on a mini cut down for Venus and we had a lot of discussions over coffee on what we are eating because we were both cutting down at the same time and she gets a little envious when we eat like a lot of the same meals and a lot of the same events, so like we have a coffee yeah and we go to dinner but the thing is I just get to eat more than her and still we end at the same deficit because I am bigger than her. And it's not a lot more like i will only have another five or six hundred calories a day I could eat compared to her and still lose weight. So it is pretty close, but every time we go out I just get to have a few more bites than her...and then we came to the realization that the world and the serving sizes in the food service world are calibrated to guys not girls. Because it is almost as if there is always a size that I can order that works for me whereas she almost always has to eat half a serving or eat something always smaller than what is available. Whereas if it was calibrated to her size like the world and the food we get served, it is as if I would always have to order triple, you see what I mean.

So it is almost completely unfair to girls and my sister said the same thing, she has been cutting down and she's like "You know what? It seems like everything is built to feed dudes and not girls." And the smallest item you can order is still too big at least for when a woman is trying to cut down

even the smallest thing is still is too big, but it kind of fits for me and then I was like "Yeah you know what? That's not really fair for you guys. And I didn't even consider it until we crossed that bridge," and sort of everything we ran into worked better for me than her.

Brad Howard: Sure. Oh yeah. I guess the next topic is macro nutrients over-obsession.

John Barban: Oh Yeah. Protein, carbs and fat etc.

Brad Howard: And trying to kind of manipulate that based on the higher metabolic cost to actually digest protein and people are taking that into consideration when they are eating and so on.

John Barban: It's such a minor effect. It makes no difference.

Brad Howard: Right and here's the other thing, there's two things I want to talk about. I want to talk about absorption and digestion because obviously you and I know because we both have read exactly how the 4 calories per gram of protein came around, the 4 calories per gram of carbs came around, the 9 calories per gram of fat came around. These are averages across all proteins, across all carbohydrates, across all fats. It's not that every single thing of protein has 4 calories per gram like Whey protein and steak is totally different, and the other thing about it is a lot of the things that people are trying to account for in the digestion-absorption, they've already been accounted for in these calculations.

John Barban: Yeah, it's like people are trying to undo something we've already figured out. It's a bit of the blind leading the blind- I don't really know how to describe it. It's people who don't have a background in this stuff or haven't studied it at a higher level slowly finding out little tidbits and facts. But if you have a fact without having it fit into the overall theory of the science that it comes from, well then that single fact is useless. But once you have it in context it starts making more sense. So it's people seeing two or three pieces of the puzzle without seeing the other five hundred pieces and they just look at those two pieces and they think "Oh, protein does this, oh, carbohydrates do that." No, no, no; fit it all into the puzzle and then you'll see why what you thought was answers turns out to be more like "Oh, it doesn't really matter in the bigger picture."

And almost all of this nutritionism information floating around the inter-webs and in fitness magazines is coming from somebody that has never seen the whole puzzle but rather gets their hands on one puzzle piece and writes an article about it and then they conclude something like "And that's why you need to eat more protein, or and that's why Whey protein's better, and that's why you should eat casein protein at night" yadda yadda. But in reality they're just looking at this one little piece of the puzzle and someone's like "Wait a minute, fit that into the whole puzzle and now what does it mean?" And then you stick it into the whole puzzle and you realize it's just an irrelevant piece, it's just not that important anymore.

Brad Howard: Well let's talk about the protein thing because I got a couple examples I want to give as far as errors. For instance if you were to believe that there's a 30% kind of metabolic factor that you can add in so you can eat 30% more protein and the first thing you go do is think, "I can eat more eggs and whey" which what you don't understand is that whey and eggs are

absorbed and digested differently and those factors don't apply to them and you just shot your goal by 30%.

John Barban: Yeah it's more like meat proteins and things like that yeah.

Brad Howard: Yeah, exactly it's like steak and stuff like that. But then, it doesn't even stop there because now you start getting into how you cook it. Something that's cooked well done is more easily digestible than something that's cooked medium rare.

John Barban: Yeah, yeah. It's not across the board and that's why trying to be too picky and too fine with it is not going to get you anywhere.

Brad Howard: Yeah it changes when you start adding all that stuff in because remember again, these things start to compound on each other so you've got digestive rates, you've got absorption rates, you've got the rounding errors, you've got portion errors, you've got all these things kind of playing against you and you are trying to tease all these things out and figure out what "the trick" is.

John Barban: And as far as weight loss goes, was any of these things really the point? None of this is really going to have that much of an effect.

Brad Howard: That's why we only talk about total calories for the most part and not even worry about macronutrients.

John Barban: I don't even understand the macronutrient argument. I'd like to see someone actually pull off a macronutrient ratio of 30:40:30 or, any ratio you want, I'd like to see someone actually do it for a day, even one day, and prove to me they actually nailed it for the day. It's probably almost impossible to know how many grams of protein, carbs and fat you had at each meal. That is absurdly difficult to know. Because you need to spreadsheet everything you ate - talk about being obsessive - because a piece of bread isn't just carbs, there's some protein in there, there's a little bit of fat.

Pasta is not just carbs, there's some protein in there too. There are very few food items that are just a carb, a protein or a fat. They all have some kind of mix. So if the theory of macronutrient 'partitioning' (or whatever the hell the theory even is) if some ratio is really supposed to do something, then you would need to know the exact breakdown of everything you eat. How the hell could that possibly matter? How could that ever actually work? I mean nobody in any of our contests has ever cared about that at all and they all got in amazing shape so clearly, it's irrelevant. But that's something other 'nutrition professionals' will teach their poor unassuming clients. And that's something people have thought about and at some point people have worried about it. So much of it is just cumbersome nonsense. It's something to read about I guess? I don't even know what the point of all that stuff is.

Brad Howard: Yeah, best case scenario, it's a guesstimate. All across the board.

John Barban: Yup.

Brad Howard: I mean you would literally have to have a scale, you would have to read up on everything, you would have to do research on every piece of food, you'd have to cook everything a certain way, you'd have to eat raw food, you'd have to understand the fiber content and what the different types of fiber would do to all of that stuff. Literally, you would have to get that meticulous and it would literally probably consume 60% of your day and it might net you 3 extra pounds over the course of a long cut down.

John Barban: So it's just much ado about nothing.

Brad Howard: It just gets superfluous for the most part. That's why we're talking about all these errors and things like that because we just want to give you a realistic look at it

I have a saying and it's really funny, I said it one time and John liked:

"The big picture is really bigger than anybody can picture."

John Barban: Yeah that's the best statement I have ever heard, and especially as it relates to all of this health/fitness/diet stuff.

Brad Howard: Yeah, I mean, when it comes to this the big picture is bigger than anybody can picture. Everybody is looking at all the little nuances and all the supposed hormonal effects and stuff like that. People start talking about insulin like "Oh, You can't eat carbs because it spikes up insulin." Well guess what? Protein increases insulin too, at the same rate. For the most part, especially talking about hormones and stuff like that, you are getting one side of the story and it's only the side of the story that they want you to hear. It's not the other side and the person you are hearing it from may not really even know what they are talking about. They just do

not have enough of the education, they know enough to spin something to make it sound interesting to you but most of the time you are just being misled by someone who is also misled. In some cases they annoyingly do it, in some cases they actually do not know that they are misleading you which is probably the worst. People who do not know what they do not know are dangerous.

John Barban: Yeah, I mean we freely admit it when we don't know an answer.

Brad Howard: In many cases nobody knows and they are still doing research on it, they are still teasing out information every day. They are still finding out that different hormones do different things.

John Barban: Some people just cannot bring themselves to say "I don't know". Researchers do it all the time but researchers are not just selling anything to anybody because they get the fact that a lot of times the answer is simply "I just don't know".

Brad Howard: Yeah and then the final part of it all that I guess people really have to kind of wrap their hands around is that none of these things happen in a vacuum. So you do not get to pull the string on one thing on one hormone, or one particular part of your life without it affecting something else. I mean you would like to say the cycle of the web of things that happens, everything is dependent on everything else.

John Barban: Yeah so the point is to simplify it…I guess we might wrap this one up so to wrap the whole thing up as far as calories in goes. Simplifying

it would be to always assume you are eating more than any way of calculating would say. If your goal is losing weight and if you make that general assumption, you will be doing all right...and no matter what a calculator says or what a package says or what your food data base says, just assume the food you eat has got 10 or 15% more calories than it says. If you use that general assumption you will always being going in the right direction. A ten or fifteen percent over estimation should account for any error built into the packaging, built into your calculation, anything like that...and that will at least erase any of those built in errors and get you back on track to how many calories are likely really in whatever it is you just ate.

Brad Howard: Yeah I mean this is not a walk in the park and so again we have the mentality to get the fat off as fast as possible. But one of the other reasons we have this mentality is because you know trying to eat in a deficit sucks as it is, but trying to eat in a deficit and then not getting results sucks way worse. I mean there is nothing worse than that, feeling like you are depriving yourself and not getting any results out of what you are doing, that is frustrating so I mean that just double sucks.

John Barban: You already know what the end point is. You might as well go for the gusto and every waking day try to figure out and maneuver in and out and then try to get the fat off as fast as possible while still going out and attending social occasions.

Brad Howard: It will work itself out on its own.

John Barban: Yeah over time. And that is the whole point. I mean looking at things on an hour by hour or even a day by day basis is too acute of a timeline to look at things, and that is why we look at things on a week and on a month basis because it makes more sense.

You drive yourself nuts if you look at it too acutely because at what point does it end? If the macro nutrients matter on a daily basis why wouldn't they matter from one meal to the next meal. Then if they matter on a meal to meal basis do they matter with each spoonful? It just gets too ridiculous.

Brad Howard: And so with that argument the absolutely best food for anybody to ever eat would be a paste, some type of paste.

John Barban: Some sort of calculated mash that has the exact mix of protein carbs and fats, such that every time you take a bite it has got exactly what you needed but that is ridiculous no one would believe that is the right way to eat. So the idea is living a real life, an enjoyable life and still getting the body shaping changing results that you really want.

Brad Howard: Yeah I mean a lot of the advice out there that is kind of coming around is for when you are at very low bodyfat percentages, around 18-19%.

John Barban: Yes something like that.

Brad Howard: So you could probably get to twenty, nineteen percent just using just normal strategies like what we are talking about today. Now you

know if you want to go leaner than that, then that is when some of the other things come into play and some of the other kind of, ideas that we will talk about later on.

John Barban: That is a totally different podcast and quite frankly most people are not even interested in getting that lean. I mean we are talking that is ripped.

Brad Howard: Yeah a lot of the advice people are following they don't need until they are interested in getting to an advanced degree of leanness.

John Barban: Simplicity…that's what we are after.

Brad Howard: Cool man. All right so for John Barban, I am Brad Howard and make sure you meet us in our next podcast.

THE END