



How to Get Rid of Cellulite

**VENUS INDEX
REPORTS**

by John Barban and Brad Howard

John Barban: Welcome to the Venus Index podcast. I'm John Barban and with me is a good friend, Bryan Chung. He is a plastic surgery resident and he has his PhD in sports medicine. Bryan is our go-to expert on certain things that I and Brad don't necessarily have enough background information on, so I'm glad we got Bryan around to help out with some of these topics. Today's topic is cellulite and fat storage in general. We'll be focusing on the way women store fat and what cellulite even is. Bryan thanks for being here and I guess we'll just throw that right over to you; what actually is cellulite because I don't know that word really means a whole lot to everybody.

Bryan Chung: Yeah, cellulite is a sort of a slang term. It doesn't really have any medical meaning, so if you see a physician or plastic surgeon and you say, "I've got cellulite on my bum and I really want to get rid of it." They know what you're talking about only because they know what the slang means, but medically it has no meaning. It is fat.

John Barban: So what exactly is it?

Bryan Chung: So when you store fat in your body, if you're a man or a woman, fat is stored in little globules. So when you look at fat in it's raw form like if you would cut, (when you are doing surgery, for instance), and you cut the skin and you look at the fat underneath, they are all these little tiny globules of fat and the globules are stored in little tiny compartments of connective tissue, and it's not true fascia but I'm just going to call it loose connective tissue to be simple, and so your fat isn't like one big Jell-O

mould. It's not like one huge compartment of fat. It's like tons and tons of tiny compartments.

John Barban: Like bumpy compartments. It's not like one big smooth water balloon.

Bryan Chung: Yeah, exactly. It's like a whole bunch of water balloons stored in these tiny little cubicles under your skin.

John Barban: Right.

Bryan Chung: In men, these cubicles are not very well organized. They're sort of chaotically arranged cubicles, but in women the cubicles are arranged quite neatly actually in sort of vertical orientations. So the compartment starts, if you can visualize, like a cubicle starting with the ceiling as your skin and then the bottom as sort of what's called the underlying fascia.

John Barban: Deep into your body.

Bryan Chung: Then there are like four walls that go straight from the ceiling down to the floor whereas in guys the ceiling could be jagged or could be cross hashed. The walls may not even be straight, so the size of the cubicle is kind of set in stone, so to speak. You can modify it a little bit, but not a whole lot generally. So when you start to accumulate fat, the walls of the cubicle don't really change a whole lot except that they start bulging because there's more fat inside the cubicle, and so then what ends up

happening is you start getting this dimpling appearance because you can imagine the ceiling of this cubicle stretching upwards and the walls are staying the same length.

John Barban: Right.

Bryan Chung: Does that make sense?

John Barban: Yeah, it makes sense. It's kind of like having a sandwich, and if you squish it down, the insides of the sandwich bulge out the sides.

Bryan Chung: Yeah, except in this case the sides can't bulge.

John Barban: So it bulges at the top and the bottom, so if you would turn the sandwich sort of vertical.

Bryan Chung: Yeah, and so what it is, when you see "cellulite" on a woman, it's basically the bulging of the fat through the ceiling of those little cubicles of fat because the walls are bound down to the fascia, like the length of the walls stays the same.

John Barban: So the fat literally cannot disperse sideways. It has to disperse straight up.

Bryan Chung: Yeah because there's fat on either side of the wall, so if it bulges out it's just pushing against other fat. The only way it can go is up

because it can't go down either because there are organs and stuff in the way.

John Barban: Right, exactly.

Bryan Chung: So when it displaces, it has to displace upwards and because those walls are anchored firmly down to the floor of the cubicle, they're not going to bulge anywhere so that's going to bulge upwards, and so you get that dimpling effect because the walls themselves are bound down.

John Barban: So they're rigid and inflexible.

Bryan Chung: Yeah.

John Barban: And then we only see the dimpling when there's enough fat to cause that bulge.

Bryan Chung: That's right.

John Barban: So there is an amount of fat that could fit inside, I guess you could say the cubicle storage unit that wouldn't cause a bulge, right?

Bryan Chung: That's right.

John Barban: And so when we cross that line of too much, it starts pushing up and then that's where you get your dimpling effect. Until you just brought that up, I didn't realize how different the actual physical structure

of the fat on a man versus a woman. I didn't know it was that much different. I mean, obviously, girls, women, in general, seem to have the "cellulite problem" more than guys do. I guess I never thought enough about it. Clearly there had to be a structural difference; otherwise, why would that only happen in one gender more than the other. Okay, so then what is it that we can do about getting rid of the fat?

Bryan Chung: The key to losing the dimpled look in the "cellulite" is basically to lose fat, to decrease the volume of fat that's in each of those compartments because if there is not enough fat to bulge the cubicle, then you're not going to get that dimpled appearance.

John Barban: So essentially there's no special protocol for "cellulite" than any other form of fat. It's just fat reduction in general.

Bryan Chung: Yeah, or surgery.

John Barban: Oh, okay. All right, well let's talk about that. The surgery first and then we will get to other things.

Bryan Chung: So there are two ways that you can try and address cellulite. One is liposuction which sucks the fat out of all the little cubicles, but that's sort of not necessarily the best way to address cellulite from what I understand...but I don't have enough experience with liposuction for the purposes of getting rid of the dimpled look enough to really say one way or the other, but it is one possibility. The other way that you can get rid of cellulite is actually to inject more fat into the area so that you're sort of

smoothing out the appearance of the dimpled look. So you're putting fat just over where the dimples are and trying to smooth out the appearance without actually going through any fat reduction.

John Barban: Which kind of sounds like not the best idea.

Bryan Chung: Well, I think it all depends on what your goals are overall. If you just want to lose the dimpled appearance and you don't care how – well, I don't want to say how fat you are, but I guess that's the only way I can really think of saying it without...

John Barban: Well, if it's not a concern to you that you're actually adding even more fat to your body to get rid of that bumpy look.

Bryan Chung: Yeah, well, they would just sort of take fat from somewhere else in your body and then they inject it into the little dimply spots to make the contour smooth.

John Barban: Right. So it's not like you're getting huge or anything, it's just smoothing out that one area.

Bryan Chung: Yeah.

John Barban: But if you continue to gain, and let's say you gain some more weight, would the dimpling just come back in that area?

Bryan Chung: I'm not really sure, actually. I guess it depends on how much of the fat takes when you inject it into the area. You may end up with a different kind of irregularity at that point because the fat that you inject, some of it will die and some of it will survive because it's sort of a fat graft. And if that fat gets bigger, well, I don't really know what happens at that point.

John Barban: Interesting.

Bryan Chung: Yeah.

John Barban: Do we even know like how low or high or what percent body fat dimpling can start? I guess it must just be different for everybody.

Bryan Chung: It's different for everybody and it's somehow related to hormone receptor distribution and age because a lot of the times the dimpling can start in adolescence and sometimes it starts later in life like around 35-45-ish. So there's a period of time where you're sort of dimple-free and then at some point in your life you become dimpled for some reason or another, whether it is hormonal related, or whether it's fat-gain related. It's not entirely clear.

John Barban: And I guess we're trying to paint this picture here and at least come to a conclusion that no matter what the cause and what your predisposition is, we agree that there is an amount of fat you can lose to remove this. I wonder if there's a threshold where you're going to get rid of

that look or you can be pretty low in fat everywhere, but the dimpled area just sort of stays to the bitter end?

Bryan Chung: The short answer is, yes, you can reduce the dimpled appearance if you're fat level in that area of your body is low enough that the fat isn't bulging through the ceiling of the little fat compartments. The problem is that generally cellulite appears in places where you tend to store fat first (because of that whole first on last off principle), and it's the last place you're going to lose a lot of fat. So the rest of you might be really, really lean and you have this, "stubborn fat," which we have revisited time and time again, (although I guess for the first time on the Venus podcast). And so this "stubborn fat" is going to linger and the dimpled appearance is going to linger until that fat level goes down enough that it's not bulging through the ceiling of the fat compartment.

John Barban: So the final answer on that then is, yes, we can reduce it by reducing body fat. However, it's going to take probably longer in that area if it's likely to be in one of those "first on last off" type areas. So in relation to other parts of your body, you maybe seeing progress everywhere else and you're wondering why that one section almost seems to just not lose the fat, but really it's just the fact that that area loses fat slower.

Bryan Chung: Yeah, it's the last place that your body is mobilizing fat.

John Barban: And it doesn't mean it's not mobilizing it at all. It's just probably mobilizing it at a much slower rate.

Bryan Chung: Yeah, exactly and so then the dimpled appearance persists because you're not losing it that quickly in that area and there's no way to change that, really.

John Barban: Yeah, we can't spot reduce fat as much as we would like to. We just really can't. Even if you took some kind of supplement or even a drug that somehow 'seems' to mobilize fat easier or better, it still does it systemically. In other words it's going to mobilize it from everywhere. So you may be increasing your overall rate, but the percentages of the areas of the body that hold it longer is still going to hold it longer, so the whole thing kind of goes in step. So the places that your body mobilizes fat easier, even with the supplement, the ratio will stay the same. Does that make sense?

Bryan Chung: Yeah, exactly, like there's nothing that you can do to make the cellulite go away before the rest of you is lean, if that make sense. If the cellulite is in a place where it's sort of last to lose.

John Barban: Right. So what I was trying to say is any drug or supplement that could speed it up is speeding it up all over your body.

Bryan Chung: Yeah.

John Barban: So those other areas of your body it will happen even faster and then...

Bryan Chung: Theoretically they will happen faster.

John Barban: Let's just assume the drug or supplement worked, it wouldn't reverse it such that the other areas of your body wouldn't burn fat and the cellulite "area" would, but rather the entire process would move quicker if it worked.

Bryan Chung: Yeah, exactly. I know there are cellulite creams out there as well where you're supposed to rub them on your skin and they're supposed to somehow improve the appearance of your skin.

John Barban: Yeah.

Bryan Chung: Some of those are based on the idea that your skin also loses elasticity as you age and they're claiming that by restoring elasticity in your skin with a cream, (which I'm not aware if you can actually do), that that would also help...Going back to our example of 'cubicles of fat': if you imagine a little cube and the rigidity of the ceiling determines how much it's going to bulge, right? So if your ceiling is made of concrete then it's not going to bulge a whole lot whereas if it's made of Saran Wrap it's going to bulge more.

John Barban: So the concept is the cream could somehow...

Bryan Chung: It makes the ceiling more rigid and therefore not bulges as much.

John Barban: Yeah, I highly doubt that. My take is that those things are a local irritant and the area becomes slightly inflamed and that smoothes it out for some short duration of time.

Bryan Chung: So it may be the case that some of the creams might be like a skin irritant that causes a little bit of swelling in the skin, but I think for the most part the creams just don't actually work.

John Barban: Okay Bryan we're going to try to finish this thing up. So I think the creams are a local irritant. I'm not really sure that they do much besides just cause inflammation for a short period of time, and what did you have to add to that?

Bryan Chung: I think the only thing I had to add to that was that I think that for a lot of creams it's just a hoax and they just want you to buy the cream. They only need you to buy it whether you use it or not or whether it works or not.

John Barban: So they're just marketing it. Yeah, they're just based on hope and that you never follow up with it to find out if it even works or not.

Bryan Chung: Yeah, that you'll buy it once and then never buy it again.

John Barban: Yeah, a trial is enough. Sure. Okay, so then where else are we going with this? We talked about creams. We've talked about the fact with the various surgery options are goal dependent. And then just losing fat in general is probably the least invasive way to get rid of cellulite?

Bryan Chung: Yeah, and probably the most long-lasting way to do it, if you're consistent.

John Barban: All right, and then I guess touching back on the entire fat distribution thing, how women generally store fat differently than men in the lower body versus the upper body. We get this question a lot, girls don't want to have a scrawny-looking upper body while they're still trying to lose weight from around their legs, and that touches on what we've already spoken about. Guys have it kind of in their gut and girls have it more on their butt and hips and thigh areas (where it's first on last off), so it's just going to take longer to get rid of that fat. And as it has been described, having the scrawny-looking upper body, part of that is not training your upper body at all. You can't lose fat all over the place and if we know that you're going to lose it quicker in your upper body than your lower body, if you're not doing any sort of weight training, you are going to end up with that imbalanced scrawny look...and that's sort of what we're trying to mitigate against with the workout.

Bryan Chung: Yeah, I totally agree. The thing you have to keep in mind with women is that a lot of their fat is stored directly under the skin whereas with guys it's not all stored under the skin. There's a significant amount of fat that's stored under the abdominal wall, and so there may not be a whole lot of fat under the skin but you can still sort of have that hard gut look in a guy whereas with women they're not storing a lot of fat under the abdominal wall so they have to work at losing it under the skin as well.

John Barban: What you're trying to say is guys can store quite a bit of fat without getting to the point of having that kind of dimpled look just because of where it's stored.

Bryan Chung: Yeah.

John Barban: I guess what you would call visceral fat but under the abdominal wall. It's not 'pressing' against the skin so to speak, so it's not going to even have the potential to produce that dimpled cellulite look.

Bryan Chung: Exactly.

John Barban: Well, okay, so we're painfully trying to wrap this thing up with all of the technical difficulties here. So I apologize if we both sound like we've sort of strayed from the train of thought that we started with. Even though this call is only half an hour it has taken us over an hour to get it done because we keep getting cut off and re-connecting here. So what's our take-home message as far as cellulite goes?

Bryan Chung: So I think it's similar to our message with the whole stubborn fat issue: it should go away provided your fat levels are low enough, and if you reach the point where you feel like everything else is exactly where it should be except you have this tiny area that just won't go away, then you probably just have more work to do and it's not just some horrible trick of divinity that's keeping it there.

John Barban: Yeah, as much as you may not want to admit it, you just have a bit more to go still. And I guess I'll add to that, if you worry about having an imbalanced look, that's where the workout comes in to balance your look. So if you feel as though you're upper body and your lower body are out of balance and you feel like you still need some work to get rid of weight on your lower body, well that's the whole point of doing weight training. It's to balance that look out, and that's what we're after. I mean the whole point is proportion and shape. It's not weight loss at all cost. Okay, well, thanks Bryan. I mean, hopefully the next time we do this it would be a bit smoother than this one.

Bryan Chung: Yeah.

John Barban: For Bryan Chung, I'm John Barban, and that's your Venus Index podcast.