





## Women: Running into Trouble

When I look at the  guy in the gym wasting his time on forearm curls to lose weight, I don't feel sympathy. The big tough guy getting stapled to the bench by 365 pounds, when just a second ago he couldn't even handle 315 pounds — nope, no sympathy there either. The girl who spends thirty minutes bouncing between the yes-no machines (abductor and adductor machines), who is going to have trouble walking the next day — I can't muster even an iota of pathos. Nobody *told* them to do these things. But then I watch my friend, Jessica, running on the treadmill, day after day, year after year, running like a madwoman and going nowhere. Her body seems to get softer with every mile and the softer she gets the more she runs. I do feel pity for her because everybody, everywhere has convinced her that running is the way to stay slim and toned.



There's a Jessica in every gym and spotting one is easy. The woman that runs for an hour or more every day on the [treadmill](#), who every month or so sets a new distance or time goal. Maybe the goal encompasses the treadmill workouts; maybe it will be her fifth fund-raising marathon; or maybe she's competing with runners in Finland via Nike®. The goal doesn't matter, because years of seeing her on the treadmill exposes the results: she's still — I'm not going to sugar coat this — fat. Or worse, she's fatter.

I tried to rescue my Jessica from the clutches of the cardio contingent, but to no avail until a month ago when she called to tell me that a blood test had confirmed her doctor's suspicion: she had hypothyroidism — her body no longer made enough thyroid hormone. Her metabolism slowed to a snail's pace and the fat was accumulating. Now she had a culprit to blame, it wasn't the cardio causing her problems, it was her body rebelling. When Jessica asked my advice, I told her to do two things: schedule a second test for two weeks later and until then, stop all the  running.

Don't assume I'm picking on women or making fun. There are men out there who do the same, thinking cardio wipes away the gut resulting from regular weekend beer binges, but they are, in comparison, rare. I am targeting [women](#) for three very good reasons:

1. They are often intensely recruited for fund-raisers like Team-In-Training, lured by the promise of slim, trim health resulting from the month of cardio training leading to a marathon in addition to helping the charity in question
2. Some physique coaches prescribe 20-plus hours per week of pre-contest cardio for women (that's a part-time job)
3. Steady-state endurance activities like this devastate a woman's metabolism. It will devastate a man's too, but in different ways.

There's not much I hate in the fitness world — well, that's not true, I hate most things about its present state, but at the top of the list is over-prescribed cardio. I'm not talking about walking or even appropriate HIIT cardio, but the running, cycling, stair climbing or elliptical variety done for hours at or above 65 percent of max heart rate, actually anaerobic threshold is a better measure, but not practical for day-to-day use.

Trashing steady-state cardio is nothing new and the better of the physique gurus figured this out a long time ago, but even then, they only apply the no-steady-state-cardio rule to contest preparation. The non-cardio coaches fail to state the most detrimental effect, one that applies specifically to women and is a primary reason many first-time or second-time figure and bikini competitors explode in weight when returning to their normal diet. It's the same reason the Jessicas of the world run for hours per week with negative results. Studies demonstrate beyond any doubt that in women, cardio chronically shuts down the production of the

thyroid hormone, T3.<sup>1-11</sup>

T3 is the body's preeminent regulator of metabolism by throttling the efficiency of cells.<sup>12-19</sup> T3 acts in various ways to increase heat production.<sup>20-21</sup> As I pointed out, this is one reason using static equations to perform calorie-in, calorie-out weight loss calculations doesn't work—well, that's why it's stupid, actually. When T3 levels are normal, the body burns enough energy to stay warm and muscles function at moderate efficiency. Too much thyroid hormone (hyperthyroidism) and the body becomes inefficient making weight gain almost impossible. Too little T3 (hypothyroidism) and the body accumulates body fat with ease, almost regardless of physical activity level.

Women unknowingly put themselves into the hypothyroid condition because they perform so much steady-state cardio. In the quest to lose **body fat**, T3 levels can grant success or a miserable failure because of how it influences other fat-regulating hormones.<sup>22-31</sup> In addition, women get all the other negative effects, which I'll get to. Don't be surprised or aghast. It's a simple, sensible adaption of the body, especially a body equipped to bear the full brunt of reproducing.

Think about it this way: the body is a responsive, adaptive machine evolved for survival. If running on a regular basis, the body senses excessive energy expenditure and adjusts to compensate. Remember, no matter what dreamy nonsense we invent about how we *hope* the body works, its endgame is always survival. Start wasting energy running and the body reacts by slowing the metabolism to conserve energy. Decreasing energy output is biologically savvy for the body: survive longer while doing this stressful, useless activity — as the body views it. Decreasing T3 production, increases efficiency and adjusts metabolism to preserve energy quickly.

Nothing exemplifies this increasing efficiency better than how the body starts burning fuel. Training at a consistently plus-65 percent heart rate adapts the body to save as much body fat as possible. That's right, after regular training, fat cells stop releasing fat during moderate-intensity activities like they once did.<sup>32-33</sup> Energy from body fat stores decreases by a whopping 30 percent.<sup>34-35</sup> To this end, the body even sets into motion a series of reactions that make it difficult for muscle to burn fat at all.<sup>36-41</sup> Instead of burning body fat, the body is taking extraordinary measures to hold on to it. Still believe cardio is the fast track to fat loss?

But wait. By acting now, you too can lose muscle mass. That's right. No more muscle because too much steady-state cardio triggers the loss of muscle.<sup>42-45</sup> This seems to be a two-fold mechanism, with heightened and sustained cortisol levels triggering muscle loss,<sup>46-56</sup> which upregulates myostatin, a potent destroyer of muscle tissue.<sup>57</sup> Oh yeah — say good bye to bone density too — it declines with the muscle mass and strength.<sup>58-64</sup> And long-term health? Out the window as well. The percentage of muscle mass is an independent indicator of health.<sup>65</sup> Lose muscle, lose bone, lose health—all in this nifty little package.

When sewn together, these phenomena coordinate a symphony of fat gain for most female competitors post-figure contest. After a month—or three—of cardio surpassing the 20 hours-per-week mark, fat-burning is at an astonishing low, and fat cells await an onslaught of calories to store.<sup>66-72</sup> The worst thing imaginable in this state would be to eat whatever you wanted as much as you wanted. The combination of elevated insulin and cortisol would not only make you fat, but creates new fat cells so that you can become fatter than ever.<sup>73-80</sup>

I won't name names, but I have seen amazing displays of gluttony from the smallest, trimmest women. Entire pizzas disappear leaving only the flotsam of toppings that fell during the feeding frenzy; appetizer, meal, cocktails, dessert—a paltry 4000 calories at The Cheesecake Factory vanish as the wait staff delivers each. A clean plate for each return to the buffet — with that, the only thing they're taking to the food bar is a spoon and they're not coming back. There are no leftovers; there are no crumbs. Some women catch it in time and stop the devastation, but others quickly swell and realize that the supposed off-season look has become their every-season look. And guess what they do to fix it: cardio for an hour every morning and another in the

evening to hasten things...

The “cardio craze” — and it is a form of insanity — is on my hit list and I’m determined to kill it. I don’t know what else I can say. There are better ways to lose fat, be sexy and skinny for life, better ways to prepare for the stage. Women, you need to get off the [REDACTED] treadmill; I don’t care what you’re preparing for. Stop thinking a bikini-body is at the end of the next marathon or on the other side of that stage. It’s not if you use steady-state cardio to get there — quite the opposite. The show may be over, the finish line might be crossed, but the damage to your metabolism is just starting.

Don’t want to stop running, fine. At the very least stop complaining about how the fat won’t come off the hips and thighs [REDACTED] You’re keeping it there.

What about Jessica, my friend who’s dilemma spawned this article? Luckily she took my suggestion and cut the cardio. Two weeks later, her T3 count was normal. Who would have guessed?

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