



# In a caloric deficit and not seeing a scale weight drop

## Resultz1

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You are following your diet and training hard but the darn scale is not moving! What is the deal?!?!? This article will address 5 reasons why this may be going on and offer some solutions to address them.



### Complete Honesty

By far this is the most common that I have seen over the past 20 years of doing nutritional analysis for clients. Our brains are wired to gravitate toward pleasure and away from pain including psychological pain. NOBODY wants to look back and say they messed up or could have done something better because it can be more than our psyche can endure. This explains why some victims of horrible crimes cannot remember or why someone who commits a horrible crime has amnesia of the event, it's just too psychologically damaging. So when we "cheat" or fall off our nutrition plan our bodies are hard wired to downplay the negative ramifications, ESPECIALLY IF YOU ARE NOT TRACKING/LOGGING your intake. Typically in the past my wife and I both have found ourselves rationalizing our eating behavior with statements like "I only had a handful and I didn't eat all day" "I didn't even taste the alcohol in that drink" "I needed the extra calories to increase my metabolism" "With all that cardio we did in the morning there no way we went over" We have also forgot about nights out all together until our Inbody assessment shows us the facts "oh yeah we did go on that cabin trip 3 weeks ago, I forgot about that" Tracking your intake at all times will not only help keep you honest but also give you

### Hormones & Sleep

Sleep is HUGELY underrated to the point where people are proud of being sleep deprived "I'll rest when I'm dead" or "I get up at 4 am to train" "or pulling an all nighter" is all considered hardcore. The bottom line is, if you are not getting enough sleep, especially REM sleep, then you can pretty much forget about seeing results. Why?

The 3 most influential hormones in terms of fitness are growth hormone (GH), testosterone, and cortisol levels. In adults, growth hormone secretion is at its peak shortly after the onset of sleep-- that is during the first phase of slow-wave sleep (SWS) or Stage 3 sleep. Sleeping 7-8 hours per night can help to ensure you get enough cycles of SWS to promote GH secretion. Fewer hours of sleep and not receiving enough bouts of SWS will also deprive your body of testosterone. This means trouble because the testosterone hormone is associated with increasing muscle mass. In a 2008 study showed that poorer sleep quality was associated with lower testosterone levels, causing unfavorable differences in body composition compared to those with better overall sleep quality. Ever wonder how infants GROW so quickly? They sleep... A LOT!



Sleep-deprived individuals have been shown to have increased cortisol levels the next evening, between 37-45% more than previous days. We will discuss cortisol more next.

### Cortisol

Cortisol, or the stress hormone, has a bad reputation however it is widely misunderstood. Cortisol does a lot of great things for us including helping control blood sugar levels, regulate metabolism, reduce inflammation, and assist with memory formulation. It also has a controlling effect on salt and water balance and helps control blood pressure. ... All of these functions make cortisol a crucial hormone to protect overall health and well-being. The issue with cortisol is when it is **CHRONICALLY ELEVATED** for prolonged periods of time. This can result in a metabolic disaster. So what happens when cortisol is elevated for a prolonged period of time? From a physique standpoint inflammation will drastically increase causing water retention or bloatedness, recovery time will decrease, energy can be low, sleep suffers, and you just feel blah and puffiness, not good!

**Symptoms of**  
**HIGH CORTISOL LEVELS**

 <b>WEIGHT GAIN</b> (ESPECIALLY AROUND THE ABDOMEN/STOMACH)	 <b>HIGHER SUSCEPTIBILITY TO INFECTIONS</b>
 <b>A PUFFY, FLUSHED FACE</b>	 <b>HIGH BLOOD PRESSURE</b>
 <b>MOOD SWINGS</b>	 <b>ACNE OR OTHER CHANGES IN THE SKIN</b>
 <b>INCREASED ANXIETY</b>	 <b>HIGHER RISK FOR BONE FRACTURES &amp; OSTEOPOROSIS</b>
 <b>FATIGUE/POOR SLEEP</b> (INCLUDING FEELING "TIRED BUT WIRED")	 <b>MUSCLE ACHES AND PAINS</b>
 <b>INCREASED URINATION</b>	 <b>CHANGES IN LIBIDO</b>
 <b>IRREGULAR PERIODS &amp; FERTILITY PROBLEMS</b>	 <b>EXCESSIVE THIRST</b>

Since cortisol is a hormone that is signaled in response to stress then chronically elevated stress can lead to chronically elevated cortisol levels. Generally the stress does not step from 1 place but several stressors are elevated. The most common stresses are:

1. Prolonged caloric restriction combined with prolonged increase in activity. This is very common with athletes as they tend to eat less and workout more in preparation for athletic events within their season.
2. A lot of LISS Cardio Low Intensity Steady State cardio done in large quantities will elevate cortisol (as will most forms of exercise) however due to the lower intensity your anabolic hormones (testosterone, growth hormone) are generally unaffected. Over time this can lead to muscle loss. Compare elite distant runners with sprinters and the differences in muscularity are apparent.

3. Relational/Work/Family stress & anxiety  
Exercising individuals tend to view stress as mainly physical however emotional stress tends to get the better of us more often because it is prolonged and ongoing. A job promotion or demotion, a marriage or struggling relationship, moving, traveling, sick family member, kids birthdays and events etc are all examples both positive and negative events that increase our stress and anxiety.

### Water & Squishy Fat

Second to our first point this is the second most common reason why the scale doesn't move when we think it should. Lyle McDonald proposed a theory several years back that pointed out that our fat cells will temporarily fill with water as we never oxidize the fat itself but what's "burned" is the triglyceride inside the fat cell. As these fat cells fill with water 2 things happen. The first is there is not any net weight loss and the second is your fat deposits go from semi firm to squishy looking (water is not as dense as fat) This alarms a lot of people as it may look like cellulite. This phenomenon is reported to occur especially in circumstances where rapid fat loss is occurring. Generally a large increase in water for 2 days will flush they water out of the fat cells and the scale drops however in leaner individuals it can sit for awhile.



Also remember that water itself has a weight to it. I drink a gallon per day which is 8.34 lbs. In 2016 I dropped 18 lbs in 22 hours of pure water weight to prepare for a powerlifting event (not a great idea!) A cup of water is so easy to drink quicker than a shot and that's ½ pound right there. A large carbohydrate meal will shuffle large amounts of water into the cells (which is a good thing) causing intracellular water retention. Sodium can cause us to retain water as well which is not in itself a bad thing but it will impact our weight. For athletes ACUTE inflammation is a large cause of water retention. I recently completed an 100 reps of back squats at 225 lbs in less than 11 minutes. The inflammation and water retention from that workout increased my scale weight 4 lbs for several days following! This is why athletes, especially physique athletes should taper down their training before major competitions. Women in their menstrual also tend to hold more water as does abnormally high estrogen levels. Bottom line, don't get tied to the scale, its not the always greatest indicator of your effort and results! Feel free to email questions or topic to [nutrition@resultz1.com](mailto:nutrition@resultz1.com)