**Salt, Water, and Stress: How to Prevent Peak Week Disaster!**

For those new to the competing scene, peak week is simply the last week of your contest prep that leads into your show. If you are embarking on your first contest prep or have never done a peak week and have competed before, you will hear any and all crazy tips, tricks, and manipulations to tighten and “dry out” your physique to bring the best you on stage come show day! Well… that’s the plan anyways. Instead you may find yourself saying, “I looked better last week than I did on show day, I don’t know what went wrong, I felt so flat” or “I couldn’t get a pump”, and even “I peaked too late”, the list goes on and on! While I can’t pinpoint exactly where you went wrong, I can assume that if you did any of the following, you took away from bringing your best package.

**Do NOT overstress**

First and foremost, do NOT overstress peak week. As blunt as this is going to sound, if you are not ready one or even two weeks out from a show, then peak week is not going to fix that. In fact, doing all these “guru manipulations” your coach has you perform will just make you look worse. Let’s say you are ready in time and peak week has come, at best you may look 3-5% better if done perfectly, but can look 15-20% worse if not. Okay, okay I know I just said not to stress, yet I just said possibly the most terrifying statement to an athlete, but hold on. I’m not saying the last week won’t be stressful and to even the most seasoned competitor, the nerves can get to us. Plus the body is a complicated organism so even if something worked last time, there’s a chance it may not work as well this time! This is why I urge you to keep things simple!

What to do:

Plan out your week ahead of time, eliminate variables (such as the ones listed below) to reduce risk of mishaps, and pay attention to your body during the final weeks. If you are traveling, do not wait until the last day to pack, to shave your body, or to have all your food ready to go. Have a list of all appointments and meetings well in advance and make sure to pack extra of everything you may need. Pay attention to your body during the last month and notice when you feel your best, look your best, and what time of day this happens. Bypassing a peak week and simply treating show day as another day and capitalizing when you know you look your best can very well save the headache and stress of trying to time everything correctly. This works exceptionally well for categories such as men’s physique and women’s bikini, where the level of conditioning and posing on stage is less extreme to that of other divisions.

**Do NOT eliminate sodium**

If you are an experienced competitor, you may be familiar with hearing that you should eliminate sodium in the later parts of the week or even have a specific loading/depleting regiment for sodium leading up to your show day. The idea behind this is that sodium will make you look “puffy/watery” on stage and blur your definition. So the solution; cutting sodium equals a more dry and defined look-- makes sense right?

Let’s talk science for a second: (briefly and as simply as I can)

Water follows sodium. The body controls sodium levels hormonally through the kidneys. This hormone is called Aldosterone, and when sodium levels drop, this hormone is released, preventing any additional sodium to be excreted through urine. When this hormone is present, sodium is retained and water, since it follows sodium, will be retained.

Additionally, sodium is a transporter of nutrients into the cell, namely potassium. Without potassium in the cell, the muscles can and will cramp—not the best thing to happen on stage when flexing! Both sodium and potassium play crucial roles in regulating intra and extracellular water levels (the water inside the cell and the water between the cell and skin) and require a specific ratio to perform their functions correctly.

Another crucial role sodium plays in the body, is that it regulates blood volume. Have you ever have a high sodium meal and a few hours later notice your forearms looking like a roadmap of veins?! Have you ever cut sodium during a peak week and notice that on show day you are lacking vascularity? Sodium allows for a higher uptake of nutrients and oxygen while excretion of lactic acid—all things important for when you are trying to pump up back stage and hold your posing on stage.

 A typical peak week protocol will call for a heavy carbohydrate load later in the week after a strict depletion to fill out muscles and create a tight pumped up look. The issue when individuals deplete sodium is that, it disrupts the intake of carbohydrates into the muscle by down regulating a transporter called SGLT-1 (sodium-glucose-transporter-1). Without sodium, this transporter cannot function properly and ineffectively stores the surplus of carbohydrates. As I will mention next, water also follows carbs, now creating a soft watery look without a pump!

What to do:

Keep your sodium right where it’s been your entire prep. The only time it may be beneficial to manipulate sodium would be to increase it a few hours prior to stepping on stage to allow for increased vascularity and pump.

**Do NOT cut water:**

Another common practice for athletes to do, often times given by their coach, is to cut out water the last day, or even 2 days before a show. This is not only terrible advice, but extremely dangerous! Again, the idea is that by removing water thus dehydrating the body, you will have a dryer physique on stage. The ironic part is, the opposite is true! It is very common for physique athletes to go through a carbohydrate depletion and loading phase during peak week. A typical protocol would be to deplete carbohydrates for 3-4 days, priming the body to absorb them back into the muscle at a higher ability than usual for 2-3 days following. Carbohydrate depleting and loading is a strategy that can be beneficial, (will be discussed in next article), but in conjunction with water and sodium manipulation can spell disaster!

As does water follows sodium, water also follows carbohydrates. When athletes are told to deplete water and simultaneously load up on carbohydrates, the carbohydrates cannot be properly stored into the muscle, and will sit outside the cell, creating a “watery”/soft look. When carbohydrates get stored into the muscle, they store ~3g of water for each gram of glycogen. This creates a full and round look that presses the muscle against the skin. Have you ever had a high carbohydrates meal and the day after have a crazy pump at the gym?

Eliminating water reduces the volume of the cell and inhibits the carbohydrates from being shuttled into the cell creating a flat and soft look—not what we want! If you feel that you looked watery or soft on show day after keeping water intake high, then there are two reasons that are most likely the case; you took in too many carbs or you were not lean enough.

What to do:

Keep water intake constant throughout your week and even elevated as you begin to load your carbohydrates and do not be afraid of drinking water on show day.

Stepping on stage can be a nerve racking experience for first time and even experienced athletes. We train years to create a physique that we are proud of and then diet down for months for it to be displayed and scrutinized on stage. We want to do well and we want to look our best! This calls for a “do anything to win” mentality, so when we are told to perform odd tricks and manipulations, we do it because that’s what we are told has to be done; regardless if it makes sense to us. It’s what the earlier generations did and these methods have been passed down from elites to coaches, now to you. The problem is that this information has since then been disproven as we gain more understanding on how the body functions, yet the misinformed are still unaware or too ignorant to accept change. This is the beginning of a series of articles that I hope will allow you to both learn and challenge the way of thinking you have come to accept. For those who are experienced and have utilized these methods and may think they have worked for you, I challenge you to be open to the possibility that even though you looked great, that you could have even looked better by keeping your final week simpler.