Drink Up

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Is your performance lagging and your workout dragging? Well you might not be properly hydrated. Read up on these reasons why you should drink up before you jettison your training program.

Metroflex Gym is considered the modern Mecca of bodybuilding. Champion bodybuilders Ronnie Coleman and Branch Warren have trained within its walls, crafting physiques that earn the admiration of millions of fans and their fellow competitors. But we forget that Metroflex which is located in the heart of Texas, where temperatures during the summer can easily eclipse 100 degrees, isn't air conditioned. It isn't like Brian Dobson can't afford to install central air, it's kept that way so only people with intestinal fortitude – hardcore bodybuilders, focused powerlifters, and serious athletes stick around. The people who aren't as dedicated and don't appreciate training hard, can drive down the road to Bally's or 24 Hour Fitness, where they can enjoy daytime television between their sets of machine bench presses in a climate controlled environment instead of seeing people with unshakable dedicationregualrly rip 600 and 700 pound raw deadlifts off the floor during their lunch break.

For the Metroflex brethren or for people sweating it out in their garage gyms, hydration is vitally important. They know this. People that don't properly hydrate become quickly become accosted by impeded performance. Dehydration which occurs when fluid intake does not sufficiently replete fluid losses can cause decrements in performance as low as 1% of one's bodyweight. For the hulking 250 pound bodybuilder busting their ass off in the squat rack, literally, may notice decreased performance at a weight loss as little as 2 ½ pounds. It is at this loss that the osmoreceptors, sensory receptors that detect changes in cellular fluid balance located in our hypothalamus, trigger the thirst sensation, which serves as an early warning to rehydrate. Things worsen beyond 1%, and everything with the exception of contracting a veneral disease can occur.

Here's a continuum of the bad things that can happen to you: dry mouth, fatigue, thirst, headache, constipation, decreased focus / mental acuity, extreme thirst, extremely dry skin that's so devoid of water in the dermis, that it sticks up when pinched, low blood pressure, increased heart rate, difficulty breathing – rapid and subcostal, fever, delirium, unconsciousness, coma, getting a Federal jury duty notice in the mail, death, and your first fantasy football pick will shred every ligament in their knee on their first play of the season, which can soil your workplace football cred and bragging rights, can be worse than death. Dehydrated individuals are predisposed to rhabdomyolysis, hyperthermia, and heat stroke.

But let's focus on not going beyond 1%, unless you're really stupid, or decide to vacation in a developing nation and gulp handfuls of water in one of its tributaries and come down with cholera. Grab a pen, a piece of paper, pull up a chair and take notes. Or more conveniently print out this list of knowledge bombs.

1. Dress appropriately. If you're training at Metroflex during the summer, it wouldn't be wise to hit the stepper while wearing your winter garb consisting of sweats to hide your Tony Siragusa-esque fatness you've acquired over the holidays. Also, to the high school football players out

there, “cold gear” is to be worn in the cold, not the heat! Read the tags of the compression gear you are purchasing and save them. Refer to the instructions while you suit up for practice. Also to all the Goth kids out there, you’re still going to sweat your pasty, sub triple digit ass off while you chain smoke your cigarettes while wearing a trench coat during the summer, as you wait for mommy outside to pick you up from the mall. But the trench coat wearers may be good, because they might have acclimatized, bringing us to number two.

2. Allow yourself to adapt to the heat. Someone who trains in an air conditioned Gold’s won’t be able to hit the ground running when they train at Metroflex for the first time. The crowd there is used to it, you’re not. Research indicates that it can take up to two weeks before getting adjusted to the heat.

3. Drink. This prudent piece of is pretty straightforward, however, this is where most go wrong. People simply don’t know how much fluid they need to consume.

The amount of fluid that’s consumed depends on pre-workout hydration and urine output. A human’s average urine output is roughly 1.5 liters per day and should always be the color of slightly diluted lemon juice. Strength coach and fellow EliteFTS contributor, Harry Selkow has stated that you “should be pissing clear by noon.” Darker colored urine usually, but not always, indicates dehydration.

The amount you should drink also depends on exercise intensity and duration. I know those two variables coupled together seemingly appeared as an answer to every question on the CSCS exam I took last year, but exercise that’s more intense produces more heat via muscle action. Example: Kroc Rows >an exercise featured in Curves circuit. The Kroc Rows will be far more intense, unless granny is strapping up for a 3 pound dumbbell row to failure at Curves.

Members at Metroflex already have the extreme temperatures working against them, so their muscles are already warm – much warmer than the members doing the same exercises and same loads down the street at Bally’s. Obviously, exercise that is more intense, such as anaerobic training, will require carbohydrates, so unless you’re pre-contest, reach for a Gatorade, instead of another bottle of waterduring your pre-workout stop at the convenience store. A carbohydrate mixture of 4-8% is ideal, anything beyond that can produce flatulence or increase your chances of blowing out a batch of fecal tadpoles while grinding a 20 rep set on the leg press. Also the amount you hydrate should be proportionate to the length of each session – if you’re hammering out a workout that consists of 20 or 30 work sets, it’d be in your best interests to keep hydrated throughout the session. You should ideally alternate a carbohydrate containing, electrolyte enriched sports drink with water throughout your workout.

Hydration Guidelines

Prior to Exercise

The adage of ingesting a minimum of a pint of fluid two hours before exercise still holds true, but if you’re practicing in football pads in the 85 degree weather at sunset in Florida, it’d be wise to drink a little more. Maybe up to 1.5 pints or greater at two hours out. Make sure your hydrated before you hit the practice field or gym. Exercise scientists suggest that individuals who are about to workout, especially in the heat, are “hyperhydrated”. Studies show that fluid absorption rates range from 0.8 – 1.2 liters per hour, meaning that pre-workout hydration is crucially important.

During Exercise

Sweat losses during one hour of exercise can easily exceed one's daily urine output, so an individual should drink throughout the session, preferably in amounts of over 8 ounces, as it empties from the stomach more rapidly, thus replenishing the body of fluids that are lost during exercise.

Following Exercise

While it may make little sense to suggest this now, because you've read what you should do prior to and during exercise, you should weigh yourself each morning upon awakening and before each session so you know exactly how much to drink afterwards. Every client I train, including weight loss clients, are required to track their weight and be a part of a Sweat Rate Test.

Here's an example with guidelines included I used to figure out a weight loss client's fluid losses and an ideal amount to replenish fluids following a session.

- Upon waking up the individual was weighed using an accurately calibrated scale registered a weight of 229 pounds. This weight was recorded at 8:48 a.m., by the client, who was only wearing boxer shorts, which weigh 0.5 – 1.0 oz.

Prior to the workout the individual, who is also one of my clients, weighed 231 pounds. This weight was recorded at 6:39 p.m. Since the weight was recorded in a busy gym locker room, my client again was weighed while wearing boxer shorts, which weigh 0.5 – 1.0 oz. The increase in weight is due to food and fluid intake throughout the day.

- Individual will complete an exercise bout typical for them lasting 45-60 minutes. During the bout record the amount of fluids ingested (if any fluids are ingested). Try to avoid the consumption of solid food during this bout.

During the workout, my client consumed 8.0 oz of lime G2 Gatorade diluted with 16 oz of water. My client also drank a 16.9 ounce bottle of water. Though no solid food was consumed, my client ingested 15 BCAA tablets throughout the workout. The tablets weigh 1g a piece, totaling 15 grams. The total fluid consumption was 40.9 oz. I should note here that my client was sweating profusely throughout the workout and between sets, we would have to wipe the floor and/or equipment down.

- Post exercise remove clothes, towel sweat off, and then reweigh to nearest half pound if possible.

My client, following a 60 minute session, which included a 5 minute cardiovascular warm up, five minutes of dynamic stretching and foam rolling, 30 minutes of lifting (using alternating supersets) and 20 minutes of interval training, was weighed post workout. The weight recorded

was 227 pounds. Though the client was wiped down with a towel following the session, he kept his boxer shorts on. I should mention that they were drenched in sweat, which could alter the post-workout weight.

- Calculate fluid loss *per hour*.

example:
beginning weight: 231 pounds (60 minutes of varied exercise at varying levels of intensity, 41 ounces fluid consumed)
ending weight: 227 pounds
fluid loss: 231 pounds MINUS 227 pounds PLUS 2.5 pounds EQUALS *2.5 pound weight loss, or 40 ounces of fluid lost* in 60 minutes. Then convert to a **per hour** value:
24 ounces/60 min = **40.0 ounce sweat rate per hour**

What's the main takeaway from this piece? Keep hydrated so your lifts won't suffer, nor will your health.

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