My name is Michael Petrarca and I am the owner of Medicine Recovery Performance. My staff and I will be taking care of all of your sports performance needs throughout the July Clay Courts Tournament. As we close in on the 2 week mark before the beginning of this tournament it is crucial that you recognize the importance of acclimating yourself to the environment you are playing in. South Florida as we all know is a hot and humid place during this time of year that being said, it is important to understand the impact your preparation can have on your performance on the court. It is our mission to have all the athletes under our care performing at their highest level. The information we are providing you about heat acclimation and hydration can be used as a guideline for not only this event, but for those in the future. I strongly recommend you read over all the content very carefully and please feel free to reach out to me with any comments questions or concerns.

Heat acclimation is your bodies ability to adapt to and reduce your heart rate, body temperature and risk of heat illness while improving your comfort and exercise capacity when exposed to heat stress. This can take anywhere from 7-14 days, that is why it is so important you begin this process now. Acclimatization occurs with repeated exposure to heat which induces profuse sweating and increased core body temperature. A minimum of 90 min of heat exposure is needed daily to maintain this process. The intensity and duration should be gradually increased throughout the acclimatization process. Aerobic sports specific exercise should be performed as opposed to resistance training. Tennis is more of an anaerobic sport as opposed to aerobic sport so please understand that this process may take a little longer if the athlete has poor aerobic capacity.

So what are the benefits of heat acclimatization and why put yourself through it? When achieved they are as follows: improved sweating and skin blood flow responses, improved cardiovascular stability (ability to sustain blood pressure and cardiac output), better fluid-electrolyte balance and a lowered metabolic rate (Périard et al., 2015; Sawka et al., 1996, 2011). Heat acclimatization is specific to the climate (desert or tropics) and physical activity level (Sawka et al., 2003). How do you know if your acclimation training is going in the right direction you may ask? The three classic signs of heat acclimatization are lower heart rate, lower core temperature and higher sweat rate during exercise-heat stress (Sawka et al., 1996, 2011; Taylor, 2014). In addition, skin temperatures are often lower and sweating starts earlier and at a lower core temperature after heat acclimatization (Nadel et al., 1974). So a great and easy way to track your acclimation rate is to keep track of you heart rate. You can use a monitor or do it the old fashion way by taking you pulse at your wrist for 15 seconds and multiplying it by 4.

With all this great information you may still ask how do I implement these strategies? I would suggest trying to replicate the environment you are going to be participating in the best you can and exposing the athlete to low intensity exercise for 90 min gradually building up to 2 hours (2 x 1hr bouts) while tracking heart rate before and after sessions to see any progress that may occur.

With all the discussion about heat acclimation it is so important that we maintain the athletes recovery with hydration and food. It is important to understand that as the athlete acclimation to heat increases so does the sweat output thus increases the athletes need to replenish these losses. **DO NOT** rely on your thirst mechanism to determine whether you need to drink water. As the athlete loses sweat they also lose electrolytes and these can be replenished with fluids and food. Its is extremely important to not skip meals or forget fluid intake before, during and after training and competition. An easy way to track and maintain your water intake and hydration status is through your weight. Find you baseline weight over your next 2 weeks and then maintain that throughout the tournament by weighing yourself pre and post match. Drink water and eat enough food to get back to that weight prior to each match. The chart below is a great indication of how poor hydration can decrease your performance.

Lastly, an easy and effective strategy to help prevent any heat related illnesses is to keep the body cool during matches. This can come in the form of utilizing the time allotted for change overs under the shade or by having a cooler court-side with towels soaked in ice water that can be placed around the neck to help down-regulate body temperature. Recovery will also begin sooner and be more effective the sooner you are able to decrease the body temperature to baseline post match.

Medicine Recovery Performance is here to provide a safe competitive environment that promotes elite athletic performance. If you would like more information about heat acclimation and hydration please see the link attached below or feel free to contact me at mike@medicine-recovery-performance.com or via phone at (603) 978-1261. I look forward to providing all your sports performance needs for July Clay Courts Tournaments.

Kind Regards,
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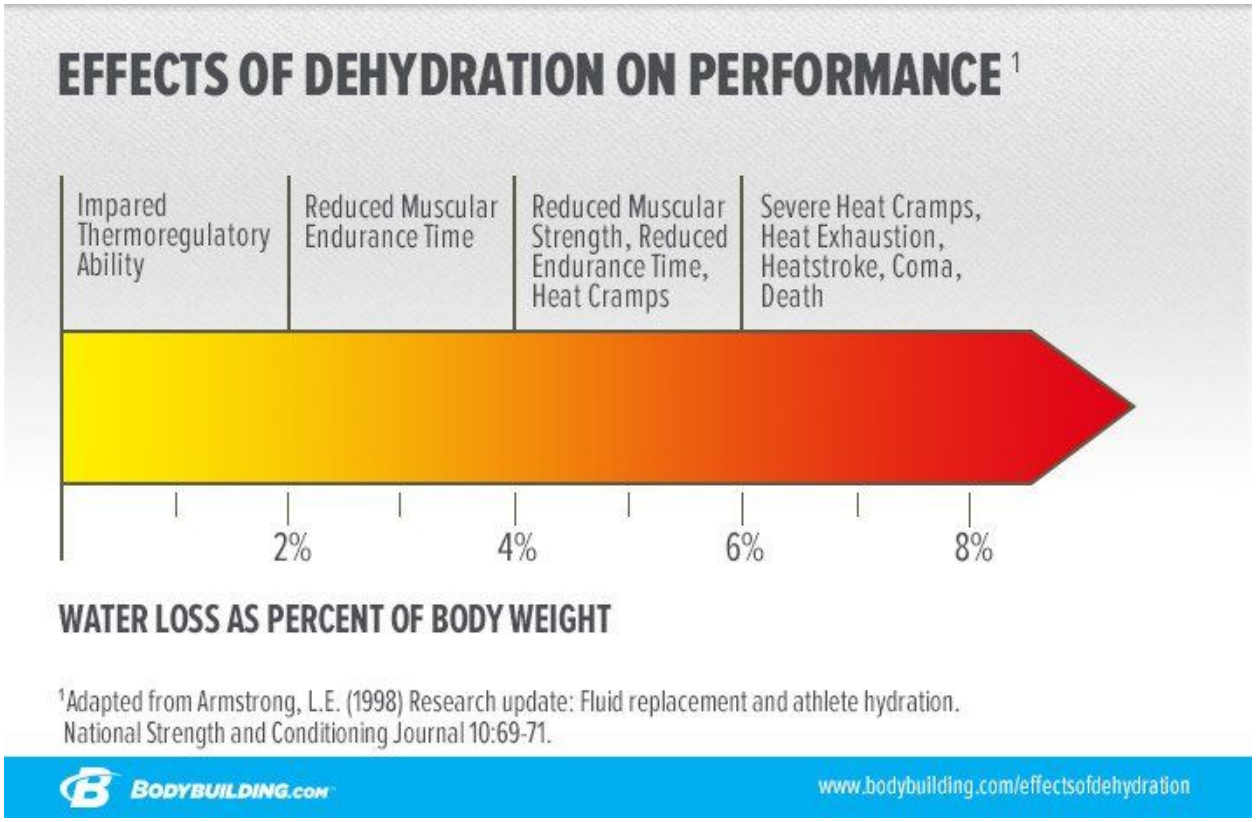

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