**ULTRA MAMMA’S CORNER**

HEAT TRAINING FOR SUMMER ULTRAS

by Nancy Shura-Dervin

What is so tough about Bulldog (besides 8,000 feet of climb and well, the distance)?

August in Southern California...

The H E A T Baby!

At least twice in the history of the Bulldog Trail Runs, the temps on race day exceeded 107-degrees. Because the Bulldog Trail Runs are held in August each year, runners typically benefit from a significant amount of heat training by running in the months of July/August. In 2011, a situation was created that led to a very high rate of problems with runners not being able to handle the heat. (1) The temps on race day peaked at 109 at base camp and

were probably even hotter deep in the canyons where there is no airflow, and (2) The weeks and days leading up to race day were unseasonably cool with "June gloom" overcast skies that didn't burn off until much into the afternoon. This means that the majority of runners were not sufficiently exposed to enough heat during their training runs, especially those who started and ended their training runs before noon.

Acclimatization: (a-kl m -t -z sh n). n. The physiological adaptation of an animal or plant to changes in climate or environment, such as light, temperature.

Heat training (aka heat acclimatization) helps the body adapt to meet the demands of exercising in the heat by increasing cardiac output and plasma volume and prepares the body for processing larger amounts of liquid that are required to cool the body in hot weather. Likewise, heat acclimatization helps you sweat sooner and in greater quantities with improved cooling effect, which helps lower working heart rate and core temperature. Last but not least, heat acclimatization helps your sweat become more dilute and spares electrolytes, minimize the salt stain effect that we see so often; therefore heat trained

athletes experience lower incidence of cramping during running. Approximately two to three weeks of diligent heat training is desirable to prepare for hot summer ultras but any amount of heat training is certainly better than none. When you first start heat training, your sweat will taste salty and will burn your eyes.

Ways to be better heat trained:

* Stop using the AC in your home and automobile. Just open your windows and get used to the heat!
* Run in the hottest part of the day! People who finish their long training runs before noon do not generally tolerate hot climates on race day! Start your training runs later in the morning or in the early afternoon so that you are training your body to tolerate the heat. You might need to run a little slower but the benefits of heat training will win out on race day.
* When you cannot run in the heat, wear layers of clothing during your runs to inhibit cooling.
* Try some hot yoga or Bikram Yoga.
* Passive sauna training; sit in a dry sauna to increase heat tolerance. You do not need to get BADWATER CRAZY here; just 15-30 minutes of the sauna exposure a few times each week will help tremendously. If you are in training mode with good training mileage, there is no need to exercise in the sauna; just grab a book or your iPod and relax but be sure to freeze some hypo-tonic (with electrolytes) fluids to drink while sauna-ing. As you become more heat ready, you will notice that you feel a little chilled while others around you do not; a good sign. Your sweat will taste watery and you will produce sweat sooner and in greater quantity. It is recommended that you stop heat training approximately one-week before your scheduled event to allow your body complete recovery from the depleting effects of heat training.

Other helpful suggestions:

* Consume electrolyte drinks during heat training sessions.
* Add electrolyte replacement tabs as needed to your heat routine.
* Avoid antiinflamatories. NSAIDS and even Tylenol can actually negatively affect your kidney function, which increase your chances of suffering from hyponatremia.
* Hydrate properly during heat sessions but be careful of over-hydration.
* Weigh yourself before and after each heat session to calculate your fluid needs (see link below).

Helpful links:

* <http://fellrnr.com/wiki/Heat_Acclimation_Training>
* <http://www.hotshotfitness.com/heat_and_desert_training.html>
* <http://heatrunning.com/sauna-training-tips/>
* CALCULATE YOUR FLUID BALANCE (Calculate Your Sweat Rate): http://www.trailrunevents.com