

Heat training in the Sauna

The heat in Death Valley in July is extreme. The official weather station is located at Furnace Creek where it can reach 130-degrees. But, in micro-climates, like the Stovepipe Wells area, it is always hotter. Since running in suffocating heat on 200-degree pavement presents health and safety issues, I strongly recommend that all runners take heed and do some type of heat training. I rate its importance in the race survival equation equal to, and possibly greater than race pacing, food or fluid intake.

There are a number of ways to train for the repressive heat that one encounters during the Badwater Ultramarathon. One effective method is to train in the desert as presented by Dr Ben Jones. Another is to simulate the heat conditions by running in layers of clothing as suggested by Stephen Simmons. Articles by these two gentlemen are posted on the Badwater.com website. Either method or a combination of both will help you acclimate and contribute to a successful trek across Death Valley.

When desert heat is not available and one has problems running in lots of clothing, there is the Tom Crawford/Richard Benyo's bake in the sauna option. I have used their method and firmly believe that it has been a key factor for my eleven Badwater finishes.

- 1. The sauna serves two extremely important functions:** First, it prepares the body to deal with the blistering heat in Death Valley. Secondly, but equally important, it gets the body used to drinking and processing the large volume of liquids you are going to need to survive and finish this incredible race.

2. Train every day: Although you may have to take a day off to hydrate or rest, a daily blast works best. Dry saunas simulate Death Valley conditions, but if a steam sauna is available use it at least one day a week. If the race is held in humid zones I would spend at least half the sessions in the steam sauna. Sometimes storms lash the Badwater area and it becomes extremely hot and humid. Fortunately, I have rotated between dry and steam saunas and have been ready for anything. It has made a difference.

3. The goal is to stay in the heat of the sauna for as long as possible: When I rigorously workout in the sauna I have to leave it too soon, which defeats the purpose (Remember, at Badwater, you are in sauna-like heat all day with no doors to escape). I have better results sitting on the planks doing a light abdominal workout. I save my harder workout for the daily run, which I do first and then use the hot box. Running after a sauna session is extremely difficult. Save this time for hydrating.

- Some athletes have favorable results using treadmills and stationary bikes inside the sauna. (The extremely elevated heart rate is a concern and may stress the body too much).
- Dr Lisa Stranc-Bliss has had success (first woman 34-hour Badwater 2007) using an infrared sauna, which she says “the lower temperatures penetrates deeper and heats the body from the inside just as the sun does.” She is able to stay in much longer in the 130-145 degree range.

4. Be patient: Most saunas top out at the 160-180 degree range. The first few days are the hardest and hottest. After fifteen minutes it becomes overbearing and its time to leave. But, as time goes by you will be able to stay in longer. By the fourth week, you should be able to handle 30-minutes or more at 180-degrees. I use the sauna at a more relaxed level throughout the

year, which helps me ease into the extensive four-week regimen listed below.

- 5. Drink, drink, drink:** It is important to hydrate while inside the sauna to replace all the liquids you copiously sweat out. This simulates race conditions and after three weeks the body has been trained to process all the liquids it is going to need.
 - I usually take in three 2-liter bottles of ice water. Two bottles are for drinking and the third is for rinsing the body; it acts as a coolant for a minute or so, which helps you stay in the sauna longer.
- 6. Endurolytes:** I take a few endurolytes while in the sauna. They restore the potassium, magnesium and sodium that I sweat out. I would not run Badwater without them. They work.
- 7. Time element:** You may be pressed for time because of all the training. Everyone has run more than enough mileage, so skip a run or two and just bake in the box. Besides, heat training is much more important.
- 8. Recovery:** After the sauna I lay on a bench for about ten minutes as the body continues to sweat. After the elevated heart rate returns to normal levels, its time for a cool shower and an evening of hydrating. Liquid intake is essential. It enables you to properly train each day.
- 9. Heat training in the sauna should take no more than four weeks and usually three are sufficient:** When you get unexpected goose bumps at work/home or when it's 100-degrees but feels like eighty, you are acclimated. It is best to stop sauna training at least three days before the race. Don't worry; it takes weeks to loose the saunas heat benefits. It's now time to hydrate.

10. Race Day: Pace yourself, lather up with Kiehl's sun protecting skin products and wear a Sun Precautions or similar type suit and hat (long sleeve Capsilene shirts work well) during the heat of the day. It makes a big difference if you keep the jacket and hat wet. We use a super-soaker (large squirt gun) and I get sprayed with cold water every mile. If the suit dries out it may keep out the ultra violet rays, but it tends to retain the heat and you start baking.

11. Sample four- week sauna training:

Day	Minutes	Temperature
1	15	160
2	15	160
3	15	160
4	15	160
5	20	160
6	20	160
7	20	110 (steam)
8	25	160
9	25	160
10	25	110 (steam)
11	25	160
12	30	160
13	30	160
14	30	160
15	35	160
16	35	160
17	40	160
18	40	160
19	40	160

20	30	110 (steam)
21	45	160
Day	Minutes	Temperature
22	30	170
23	40	170
24	45	170
25	30	180
26	35	110 (steam)
27	40	180
28	45	180

That's it. Regardless of the schedule or method you select, any heat training will make running Badwater more tolerable.

Hopefully everyone will complete this incredible race, because crossing the finish line at Badwater is as good as it gets.

Good Luck.

Arthur Webb

Badwater finisher

98, 99, 00, 01, 02, 03,* 04, 05, 06, 07, 08

* Honorable mention

Runerof100@aol.com