

# Sauna for Heat Adaptations

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Sauna bathing is similar to hard exercise in terms of the responses of your cardiovascular system and hormones involved with controlling your blood and body fluid volumes. Therefore, sauna bathing should be maintained only for as long or as hot as you feel comfortable. Above all, it should not be undertaken in a competitive manner!

People have been regularly bathing in saunas for centuries. However, some people find sauna bathing unpleasant. The following guidelines will help you gain the maximum benefits from the sauna in the safest way.

## *Guidelines for Safe Sauna Bathing*

- ◇ Do not use the sauna if you have any of the following:
  - exuding bruises or sutured wounds, hypertension, heart murmurs or other cardiac abnormalities, kidney problems, or have been taking NSAIDS (you need at least 2 weeks NSAID-free)
- ◇ Bath in the sauna (<90°C) for as long and as hot as feels comfortable, but do so in a non-defiant and non-competitive manner.
- ◇ Try not to drink while in the sauna- pour water over your neck, and on your tongue, take a cool shower and get back in, trying to stay in for at least **25-30 min. Resting heart rate will be high!! (~140-150) so adapt your training accordingly!!!! \*\*\*\*\***
- ◇ Upon exiting the sauna, slowly rehydrate over the course of 2-3 hours. Gulping down fluid in large amounts after sauna bathing will cancel out the heat stress response to the kidneys.
- ◇ Be conservative when pouring water on the stove as most of the unpleasant experiences and accidents are caused by pouring too much water on the stove.
- ◇ Do not use the sauna if you have been recently drinking alcohol, as it increases the risk of a heart attack or stroke, as well as decreasing your judgment, co-ordination and balance.
- ◇ If you have any muscle or joint ache, swelling, redness, or tenderness at rest or with light exercise, do not use the sauna.
- ◇ Remain in the seated position while in the sauna.
- ◇ Leave the sauna if you start to feel uncomfortable.
- ◇ Have a warm shower after leaving the sauna. If you want to have a cold shower, wait at least five minutes.

# PROTOCOL

There are several steps to take when using this protocol; the FIRST and MOST IMPORTANT are “the big picture” and timing.

- a) WHY are you doing this (i.e. Do you have a particular race for which you are peaking?)
- b) HOW much time do you have before the race?

Do you have a clear picture of why you are doing this? This is NOT to be done just to win Wednesday Night Worlds Valley Ride; this is to be done to give you a competitive edge for specific races.

## Timing

You want to START the sauna protocol two (14 days) weeks out from your race. This gives you seven days of protocol, and seven days of rebound adaptation.

## Specifics

### 1) Training Modification:

As using the sauna dehydrated is done to create severe stress on the renal system, your cardiovascular system will also be stress; expecting a resting heart rate of ~140-150 initially. This is HARD, so you need to drop your volume and intensity the week you are using this. **Volume- drop by 20-25%, Intensity, drop by 15%.**

### 2) Daily Schedule:

Do your usual training, and within 30 minutes get into the sauna.

**IMPORTANT POINT: DO NOT REHYDRATE!** You can do your usual protein recovery, but do not rehydrate before entering. This is the point of the exercise, to drop the partial pressure of oxygen to the kidney to stimulate EPO and plasma volume production. Try to stay in the sauna for ~30-35 min. (Please read above for safety). If you get unduly hot, step out, take a lukewarm shower, get back in. Kill the thirst drive by swishing cool water over the tongue. **IMPORTANT POINT: SLOWLY REHYDRATE OVER THE COURSE OF 2-3 HOURS!** If you gulp fluid when you exit, you kill the stimulus to the renal system.

### 3) How Often:

**Seven days in a row, after training.** If you don't train on a particular day, head into the sauna in the afternoon, when you are naturally hypohydrated. “Top up” every two weeks for 3 days, but only twice, otherwise your body becomes adapted and this protocol will not be effective.