



# HEAT ACCLIMATION

If it is hot and humid on the marathon day but it has been cool leading up to the race,

## **YOUR BODY WILL NOT BE PREPARED!**

It takes between 4 and 10 special sessions (eg. exercise in a hot environment) to have your body properly adapted to the heat.

Heat acclimation can be accomplished using “passive” and “active” sessions. Passive sessions mean **sitting** in the heat, active sessions mean **exercising** in the heat.

## **YOUR BODY ADAPTS TO THE HEAT BY:**

- Allowing plasma volume to increase by 12% allowing enough blood to supply the muscle and skin
- Sweating begins at a lower temperature.
- Sweat rate increases 3X to 4L/hr with more even distribution over the body (increases cooling and decreases need to vasodilate skin vessels).
- Sweat is more dilute → less salt is lost.
- You will reduce your sodium lost per hour by 3 times by becoming heat acclimated.

**IF YOU ARE NOT HEAT PREPARED THEN REDUCE RACE PACE, 20-40 SEC LESS/MILE IS NOT UNCOMMON**