The Hot Topic - Heat Related Injuries

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Why do I produce heat?

Heat is a by-product of doing work, like when you exercise.

Is heat production good?

Your body is programmed to maintain its temperature within a range that is optimum for survival. There are mechanisms to increase or decrease core temperature in response to under-heating or over-heating. When you run and start to produce more heat, your body will perspire to aid heat loss, thereby decreasing the temperature. But sometimes these mechanisms cannot cope with heat production, leading to heat related injuries, which can be life threatening

What are some of these injuries and how do I know if I am suffering from them?

Heat Stroke

Heat stroke is the failure of the body's thermoregulatory system to maintain the body's optimum core temperature for normal functioning.

Signs & Symptoms

- ✓ Thirst
- ✓ Headache
- ✓ Nausea
- ✓ Rapid heart rate
- ✓ Disorientation
- ✓ Dizziness

Heat Exhaustion

Heat exhaustion is the overheating of the body due to dehydration. In heat exhaustion, the runner will stop sweating, may experience difficulty walking and become disoriented.

Signs & Symptoms

- ✓ Headache
- ✓ Nausea
- ✓ Dizziness
- ✓ Weakness
- ✓ Muscle cramps
- ✓ Fatigue
- ✓ In severe cases, here may be chills, cramps and mental confusion.

What should I do if I have these symptoms?

✓ **Rest**	Find a cool shady place to rest.
✓ **Rehydrate**	Drink liquids.
✓ **Seek medical help**	Seek medical help if symptoms persist for more than 30 minutes.
✓ **Ice**	Heat stroke can be fatal. Place ice packs around the neck, groin and under your armpits. Elevate your legs and splash water on your skin to cool down.

How can I prevent or minimise heat related injuries?

✓ **Be well-hydrated**	Proper hydration is essential for peak performance and to avoid rapid deterioration in your speed and strength. It can also prevent cramps and heat stroke during your run. Depending on body weight, gender, the intensity of the run (how fast and the type of training) plus weather conditions, it is recommended that you drink 500ml of fluid about two hours prior to your run, and 250ml to 350ml every 15 minutes. Keep hydrated, especially during long runs.
✓ **Time of day**	Run early in the morning or in the early evening when the weather is not too hot.
✓ **Dressing**	One basic rule of thumb: Stay away from cotton tees and avoid nylon shorts. Cotton tees may be comfortable but when soaked with sweat, they become heavy, uncomfortable, abrasive and trap body heat. The body's natural way of loosing trapped heat and functioning optimally during a run is to perspire even more. This speeds up dehydration. Wear a comfortable top and shorts with wicking, which is designed to move moisture away from your skin This speeds up

	evaporation keeping you dry and comfortable as you run, while minimising further risk of dehydration. All good running shorts have an in-built liner of soft, lightweight wicking material, which is comfortable and provides good support without riding up.
✓ **General tips**	Do not run if you have a fever or are unwell. If you experience any pain during your run, consult your doctor.