

COMPRESSION GARMENTS

What does Compression Garments do for you as a Professional Cricket Player?

We have often seen these sportsmen walking around with these funny looking pants... Some even looking as if they are wearing stockings!!! But what are these garments for and what theory is behind this phenomenon?

In addition to what we have already said, let's look at the physiology of the human body and find out how and why these compression garments work and if they do actually work...

During strenuous exercise, the body goes through some serious changes in the musculo-skeletal, cardiovascular and lymphatic systems. When we exercise, our heart rate, systolic blood pressure, and cardiac output (the amount of blood pumped per heart beat) all increase. Blood flow to the heart, the muscles, and the skin increase. The body's metabolism becomes more active, producing CO₂ and H⁺ in the muscles. We breathe faster and deeper to supply the oxygen required by this increased metabolism. Eventually, with strenuous exercise, our body's metabolism exceeds the oxygen supply and begins to use alternate biochemical processes that do not require oxygen. These processes generate lactic acid, which enters the blood stream. As we develop a long-term habit of exercise, our cardiac output and lung capacity increase, even when we are at rest, so that we can exercise longer and harder than before. Over time, the amount of muscle in the body increases, and fat is burned as its energy is needed to help fuel the body's increased metabolism.

Intense prolonged exercise produces metabolic waste heat, and this is removed by sweat-based thermoregulation. A male marathon runner loses each hour around 0.83 L in cool weather and 1.2 L in warm (losses in females are about 68 to 73% lower). People doing heavy exercise may lose two and half times as much fluid in sweat as urine. This can have profound physiological effects. Cycling for 2 hours in the heat (35 °C) with minimal fluid intake causes body mass decline by 3 to 5%, blood volume likewise by 3 to 6%, body temperature to rise constantly, and in comparison with proper fluid intake, higher heart rates, lower stroke volumes and cardiac outputs, reduced skin blood flow, and higher systemic vascular resistance. These effects are largely eliminated by replacing 50 to 80% of the fluid lost in sweat.

With the cricket schedule domestic as well as international being such a hectic one, we can therefore see why so many players are trying to get their bodies back to full potential so as to be match ready. We also know how big an influence the mental aspect of the game has become. So, for players to get their minds and bodies ready in such short periods of time, it has lend itself to a very scientific approach to help with this. Examples hereof are ice-baths and wearing of compression garments.

What are compression garments and how do they work...

Loosely defined compression clothing is any piece of clothing (top, pants, socks) that are focused on compressing the skin and particular body parts. The more sophisticated brands like Skins make sure that the pressure is specific at certain points so that the correct level of surface pressure is applied to specific parts of the body. The major listed benefits for compression clothing like compression tights are reduced buildup of lactic acid during performance, which can improve performance due to reduced muscle vibration. This provides more support for the muscles and delays fatigue. During recovery, it improves blood circulation and hence recovery. It also reduces DOMS (Delayed onset muscle soreness) – that stiffness you get after long exercise. There are some other benefits as well.

Many of the brands have added significant other benefits to their compression garments that make them worth reviewing in their own right:

- Warmth – some companies like 2XU offer a thermal version to help with consistent body warmth during warm-ups, exercise and recovery.
- Wicking – taking away the sweat. Many of the brands including Skins and Performax make sure their material is as moisture removing as possible. This enables more consistent body temperature, especially in warm temperatures or indoor sports.
- UV protection. If you exercising out in the sun make sure you seek a garment that supports your activities and has a UV protection (greater than 30).

Then, there is always the other end of the story... Some people may claim that these garments are just a fashion statement. Often people refer to compression clothing as working on the top 5 cms of the body – the brain. If you buy specific clothing and it feels good then you are likely to perform better. There is also concern the fashion requirements of children who “must have” compression shorts to help their sports performance.

There is no doubt that the combination of strong marketing and peer pressure will result in many people buying compression garments for reasons other than the scientific principles of increased oxygen flow and muscle vibration.

So, if you are serious about your sport and recovery in sport, this is a definite option for you. Just make sure you know what you need it for and that you have the right product for your specific requirements...

