

POWER UP  
SPORT SCIENCE

» By Pedro van Gaalen, Editor

# RED-HOT RECOVERY

## ■ NEAR-INFRARED LASER TREATMENT AS A TOOL TO AID RECOVERY FROM EXERCISE AND INJURY

**O**ptimal recovery hinges on a myriad factors. To briefly recap, we need to eat the right types of food at the right times after training; give our bodies the time they need to adapt and rebuild between sessions; get sufficient sleep; and engage in regular soft tissue manipulation techniques – massage or foam rolling – to reduce adhesions and increase blood flow.

Now there is a new element that both serious and recreational athletes can add to their recovery matrix to aid recovery – Near-Infrared Laser Therapy (NILT).

According to Neil Hermann, the co-founder and co-owner of The Laser Beautique brand, NILT has a number of uses in the context of recovery, sports therapy and injury

rehabilitation. "These treatments help to reduce inflammation and increase blood circulation. This aids the removal of exercise metabolites and ensures that more nutrient-rich blood 'floods' the treated area to aid repair and tissue regeneration."

The main mechanism by which this treatment affects cell and organism biology, which is invisible to the human eye, generates heat as the radiation is absorbed by the tissue being treated.

Hermann states that this technology has the potential to increase the speed at which muscle cells regenerate "by 200-

400 times". As such NILT, which also has applications in terms of skin tightening and improving cellulite, is already used extensively in physiotherapy rooms across the country to aid recovery from injury. However, in the context of maximising inter-workout recovery, NILT as a proactive treatment tool is still in its infancy.

The trend is growing though according to Hermann, who is currently assisting top level rugby players in trialling the technology to aid recovery. "It offers a suitable alternative to hot/cold contrasting, it reduces the risk of injury, helps alleviate persistent muscle cramps and spasms, and it also assists with the management of joint pain. These are all highly beneficial attributes to any active individual."

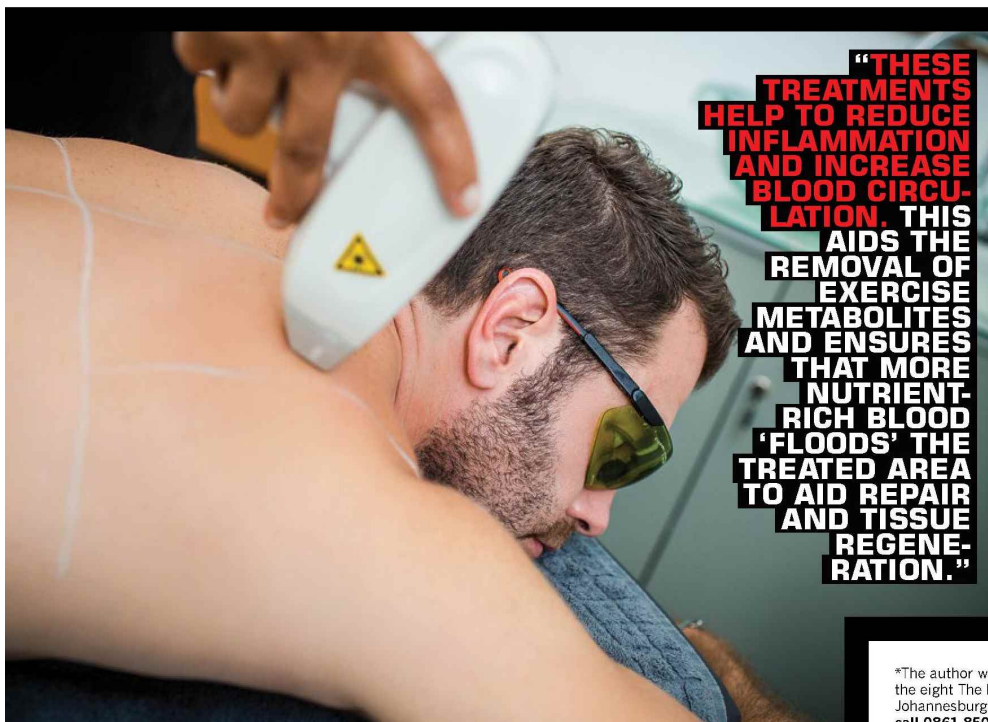
Hermann adds that while NILT treatments are often very similar, if your aim is to boost recovery you need to pay special attention to the hardware being used. "At The Laser Beautique, we use

imported technology – a machine called the Soprano by leading laser manufacturer Alma Lasers. The Soprano offers patented In-Motion technology which allows our technicians to treat using an in-motion technique that gradually accumulates energy or heat in an area allowing for a pain-free yet aggressive treatment."

Hermann uses the following analogy to explain the benefits of In-Motion technology and the treatment technique that it enables: "If you were to draw a boiling-hot bath you would burn yourself when you got in. However, if you draw a lukewarm bath, get in and gradually increase the temperature you would have a much higher tolerance to the heat, often without any associated pain. This In-Motion technology and the combination of the Soprano's power output of 1300nm, its power control of 30-100 Watts and surface size of 18cm<sup>2</sup> also enables technicians to penetrate the tissue to a greater depth than the more common near-infrared lights or machines found in physio rooms. Variable settings cater to different heat tolerances, but still allow clinicians to apply a highly therapeutic amount of energy. These attributes are what make these treatments so effective."

As the treatment is non-invasive athletes can train again on the same day and carry on with their normal routine. "We already have a number of bodybuilders and cyclists who previously came in for hair removal who now incorporate these treatments into their recovery regimens with great success," he concludes.

Treatment times vary according to the size of the person, the number of muscles targeted, the client's sensitivity to heat and his pain tolerance. The Laser Beautique treatments usually take 45 minutes to 1 hour for a full leg treatment. A back and neck treatment takes roughly 45 minutes. Smaller muscles can be targeted in under 30 minutes. ■



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\*The author was invited to experience a treatment at one of the eight The Laser Beautique branches currently operating in Johannesburg, Pretoria and Cape Town. For more information call 0861 850 851 or visit [www.thelaserbeautique.co.za](http://www.thelaserbeautique.co.za)

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