

Exercise Better With Merino



The Problem

When you exercise, your body becomes thermally challenged – you get hot and uncomfortable. To combat this, your body starts to sweat to cool you down. This is a natural response by your body, called evaporative cooling. It is the body's natural mechanism to try and maintain an optimum level of comfort.

Merino supports a high level of body comfort. It has the intrinsic ability to manage heat and moisture, which essentially reduces the peaks and troughs, maintaining an optimal level of comfort.



The Research



100%
ZQ MERINO



50% / 50% ZQ MERINO
+ MAN-MADE BLEND



100%
MAN-MADE

To better understand the fabric properties of Merino worn in the active outdoors, research was carried out at the University of Otago, New Zealand. It compared 100% Merino, 50/50% Merino/man-made and 100% man-made fibre garments.¹

The trials included athletes exercising in two conditions, hot and cold. The results showed that:

- Merino performed exceptionally well in both conditions.
- Merino was perceived as the most comfortable fibre
- Merino slowed down the onset of sweating.



SUMMER
32 °C +/- 2 °C
@ 20 +/- 2 % RH

WINTER
8 °C +/- 2 °C @
40 +/- 2 % RH

So, What Happened?

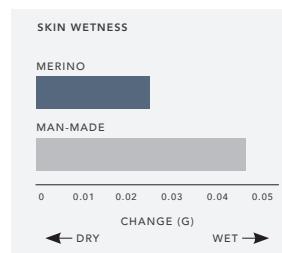
Further validation trials were carried out at Victoria University, Melbourne at the Institute of Sports, Exercise and Active Living (ISEAL) to compare a half Merino and half man-made fibre garment by an athlete running in summer exercise conditions (25°C, 50%RH).



50% / 50% ZQ MERINO
+ MAN-MADE BLEND

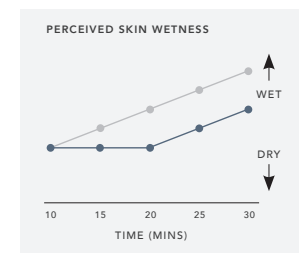
What This Means

WHAT THE TESTS SHOWED

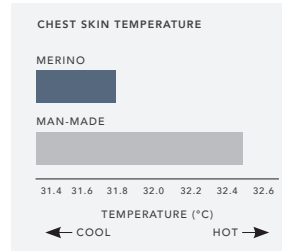


The skin under the Merino fibre side of the garment was drier.

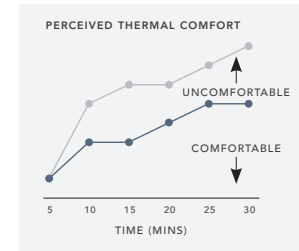
WHAT THE WEARER FELT



Skin wetness was perceived to be drier on the Merino fibre side.



The skin temperature was lower on the Merino fibre side of the garment.



Thermal comfort was perceived to be better on the Merino fibre side.

Key Takeaways

ZQ Merino is a technical fibre that has the ability to control temperature and humidity. This means you will be able to exercise longer, better, more efficiently and more comfortably when wearing Merino in both summer and winter conditions.

REFERENCES: 1. Laing, R.M., Sims, S.T., Wilson, C.A., Niven, B.E. and Cruthers, N.M. (2007), Differences in wearer response to garments for outdoor activity, Ergonomics, p1-19.