

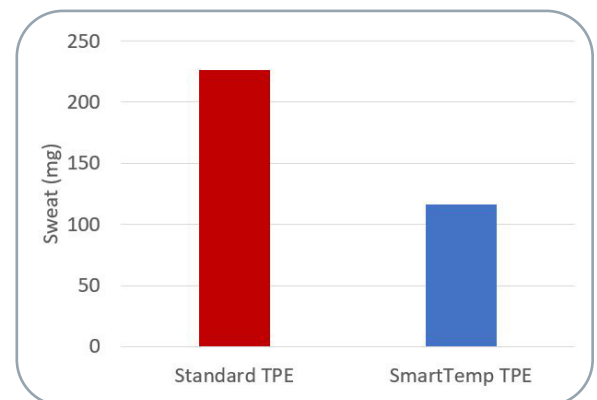
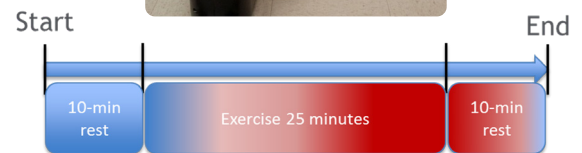
# SmartTemp TPE Heated Room Test

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## Summary

Validation of the Alpha SmartTemp® TPE Liner consisted of repeating the randomized crossover trial used to evaluate the Alpha SmartTemp Silicone Liner. Participants were asked to complete two 25 minutes exercise periods on a stationary in a room close to 90°F with 10-minute rest period before and after the exercise bout. For one of the rides, the participants wore a standard TPE liner as the control TPE liner and for the other, they wore the Alpha SmartTemp TPE Liner. The order was randomized and balanced for all participants. Temperature data was collected throughout the trial by thermocouples placed between the skin and inner liner surface. Sweat was collected after the post-activity rest period by wiping the limb with a laboratory wipe and weighing the amount of sweat collected.

The results indicated an average 48% reduction in sweat when participants wore the Alpha SmartTemp TPE Liner compared to the standard TPE liner. This decrease was statistically significant ( $p < 0.05$ ). The average skin temperature was between one degree and a half degree Fahrenheit cooler when wearing the Alpha SmartTemp TPE Liner compared to the standard TPE liner. Similarly, rise in skin temperature over the data collection period was almost one-degree Fahrenheit less when wearing the Alpha SmartTemp TPE Liner compared to the standard TPE liner. None of the temperature data reached statistical significance but had strong trends.



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