

The Effects of Extra Ventilation after Exercise on Recovery Process

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ABSTRACT This study aims at accomplishing some applicable investigations into the issue of whether any voluntary extra ventilation applies during active recovery process, and also, if an exhausting exercise has any effect on recovery. Seven males participated in the study as volunteers. The volunteers were made to carry out exhausting exercises with incremental running test on treadmill, twice on different days. The active recovery process was traced on the treadmill for a period of 13 minutes, following the application of both exercises. Extra voluntary ventilation for a minute long was applied during the second exercise in addition to the first exercise, at the beginning of the recovery process, and at 4th, 8th, and 12th minutes. The amounts of mean VO₂, VCO₂, respiratory frequencies, oxygen saturation, lactic acid of the volunteers were determined during recovery process. The increase in VCO₂ levels was determined to be significant. The increase at 4-5th, 8-9th, and 12-13th minutes on recovery respiratory frequency after the final testing was also determined to be significant. The decrease reported for the LA levels at 9th minute of recovery which was determined after extra ventilation application was found to be significantly different. There was a significant negative correlation between the LA levels at the 5th minute of the final testing, and respiratory frequency taken immediately after relevant exercises and at 4th, 8th, and 12th minutes. It has been considered that the extra ventilation of 4 phases, each one minute, has put some positive influence on the recovery process, affecting VCO₂ egression and LA removal.